

File = dbus-shell.c

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-shell.c Shell command line utility functions.
 *
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02110-1301 USA
 */

#include <config.h>
#include <string.h>
#include "dbus-internals.h"
#include "dbus-list.h"
#include "dbus-memory.h"
#include "dbus-protocol.h"
#include "dbus-shell.h"
#include "dbus-string.h"

/* Single quotes preserve the literal string exactly. escape
 * sequences are not allowed; not even \' - if you want a '
 * in the quoted text, you have to do something like 'foo\'\'bar'
 *
 * Double quotes allow $ ` " \ and newline to be escaped with
backslash.
 * Otherwise double quotes preserve things literally.
 */

static dbus_bool_t
unquote_string_inplace (char* str, char** end)
{
    char* dest;
    char* s;
```

```

char quote_char;

dest = s = str;

quote_char = *s;

if (!( *s == '"' || *s == '\'' ))
{
    *end = str;
    return FALSE;
}

/* Skip the initial quote mark */
++s;

if (quote_char == '"')
{
    while (*s)
    {
        _dbus_assert(s > dest); /* loop invariant */

        switch (*s)
        {
            case '"':
                /* End of the string, return now */
                *dest = '\\0';
                ++s;
                *end = s;
                return TRUE;

            case '\\':
                /* Possible escaped quote or \ */
                ++s;
                switch (*s)
                {
                    case '"':
                    case '\\':
                    case '\':
                    case '$':
                    case '\n':
                        *dest = *s;
                        ++s;
                        ++dest;
                        break;

                    default:
                        /* not an escaped char */
                        *dest = '\\';
                        ++dest;
                        /* ++s already done. */
                        break;
                }
        }
    }
}

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        break;

        default:
            *dest = *s;
            ++dest;
            ++s;
            break;
        }

        _dbus_assert(s > dest); /* loop invariant */
    }
}
else
{
    while (*s)
    {
        _dbus_assert(s > dest); /* loop invariant */

        if (*s == '\\')
        {
            /* End of the string, return now */
            *dest = '\\0';
            ++s;
            *end = s;
            return TRUE;
        }
        else
        {
            *dest = *s;
            ++dest;
            ++s;
        }

        _dbus_assert(s > dest); /* loop invariant */
    }
}

/* If we reach here this means the close quote was never encountered
*/

*dest = '\\0';

*end = s;
return FALSE;
}

/**
 * Unquotes a string as the shell (/bin/sh) would. Only handles
 * quotes; if a string contains file globs, arithmetic operators,
 * variables, backticks, redirections, or other special-to-the-shell
 * features, the result will be different from the result a real shell
 * would produce (the variables, backticks, etc. will be passed

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* through literally instead of being expanded). This function is
* guaranteed to succeed if applied to the result of
* _dbus_shell_quote(). If it fails, it returns %NULL.
* The @quoted_string need not actually contain quoted or
* escaped text; _dbus_shell_unquote() simply goes through the string
and
* unquotes/unescapes anything that the shell would. Both single and
* double quotes are handled, as are escapes including escaped
* newlines. The return value must be freed with dbus_free().
*
* Shell quoting rules are a bit strange. Single quotes preserve the
* literal string exactly. escape sequences are not allowed; not even
* \' - if you want a ' in the quoted text, you have to do something
* like 'foo\'\'bar'. Double quotes allow $, `, ", \, and newline to
* be escaped with backslash. Otherwise double quotes preserve things
* literally.
*
* @quoted_string: shell-quoted string
**/
char*
_dbus_shell_unquote (const char *quoted_string)
{
    char *unquoted;
    char *end;
    char *start;
    char *ret;
    DBusString retval;

    unquoted = _dbus_strdup (quoted_string);
    if (unquoted == NULL)
        return NULL;

    start = unquoted;
    end = unquoted;
    if (!_dbus_string_init (&retval))
    {
        dbus_free (unquoted);
        return NULL;
    }

    /* The loop allows cases such as
     * "foo"blah blah'bar'woo foo"baz"la la la\'\'foo'
     */
    while (*start)
    {
        /* Append all non-quoted chars, honoring backslash escape
         */

        while (*start && !(*start == '"' || *start == '\\'))
        {
            if (*start == '\\')
            {

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        /* all characters can get escaped by backslash,
        * except newline, which is removed if it follows
        * a backslash outside of quotes
        */

        ++start;
        if (*start)
        {
            if (*start != '\n')
            {
                if (!_dbus_string_append_byte (&retval, *start))
                    goto error;
            }
            ++start;
        }
    }
    else
    {
        if (!_dbus_string_append_byte (&retval, *start))
            goto error;
        ++start;
    }
}

if (*start)
{
    if (!unquote_string_inplace (start, &end))
        goto error;
    else
    {
        if (!_dbus_string_append (&retval, start))
            goto error;
        start = end;
    }
}

ret = _dbus_strdup (_dbus_string_get_data (&retval));
if (!ret)
    goto error;

dbus_free (unquoted);
_dbus_string_free (&retval);

return ret;

error:
dbus_free (unquoted);
_dbus_string_free (&retval);
return NULL;
}

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/* _dbus_shell_parse_argv() does a semi-arbitrary weird subset of the
way
* the shell parses a command line. We don't do variable expansion,
* don't understand that operators are tokens, don't do tilde
expansion,
* don't do command substitution, no arithmetic expansion, IFS gets
ignored,
* don't do filename globs, don't remove redirection stuff, etc.
*
* READ THE UNIX98 SPEC on "Shell Command Language" before changing
* the behavior of this code.
*
* Steps to parsing the argv string:
*
* - tokenize the string (but since we ignore operators,
* our tokenization may diverge from what the shell would do)
* note that tokenization ignores the internals of a quoted
* word and it always splits on spaces, not on IFS even
* if we used IFS. We also ignore "end of input indicator"
* (I guess this is control-D?)
*
* Tokenization steps, from UNIX98 with operator stuff removed,
* are:
*
* 1) "If the current character is backslash, single-quote or
affect
* double-quote (\, ' or ") and it is not quoted, it will
quoted
* quoting for subsequent characters up to the end of the
* text. The rules for quoting are as described in Quoting
* . During token recognition no substitutions will be actually
* performed, and the result token will contain exactly the
* characters that appear in the input (except for newline
* character joining), unmodified, including any embedded or
* enclosing quotes or substitution operators, between the
quote
* mark and the end of the quoted text. The token will not be
* delimited by the end of the quoted field."
*
* 2) "If the current character is an unquoted newline character,
* the current token will be delimited."
*
* 3) "If the current character is an unquoted blank character, any
* token containing the previous character is delimited and the
* current character will be discarded."
*
* 4) "If the previous character was part of a word, the current
* character will be appended to that word."
*
* 5) "If the current character is a "#", it and all subsequent
* characters up to, but excluding, the next newline character
* will be discarded as a comment. The newline character that

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*         ends the line is not considered part of the comment. The
*         "#" starts a comment only when it is at the beginning of a
*         token. Since the search for the end-of-comment does not
*         consider an escaped newline character specially, a comment
*         cannot be continued to the next line."
*
*     6) "The current character will be used as the start of a new
word."
*
*
* - for each token (word), perform portions of word expansion,
namely
*     field splitting (using default whitespace IFS) and quote
*     removal. Field splitting may increase the number of words.
*     Quote removal does not increase the number of words.
*
* "If the complete expansion appropriate for a word results in an
* empty field, that empty field will be deleted from the list of
* fields that form the completely expanded command, unless the
* original word contained single-quote or double-quote characters."
* - UNIX98 spec
*
*
*/

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static dbus_bool_t
delimit_token (DBusString *token,
              DBusList **retval,
              DBusError *error)
{
    char *str;

    str = _dbus_strdup (_dbus_string_get_data (token));
    if (!str)
        {
            _DBUS_SET_OOM (error);
            return FALSE;
        }

    if (!_dbus_list_append (retval, str))
        {
            dbus_free (str);
            _DBUS_SET_OOM (error);
            return FALSE;
        }

    return TRUE;
}

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static DBusList*
tokenize_command_line (const char *command_line, DBusError *error)
{

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char current_quote;
const char *p;
DBusString current_token;
DBusList *retval = NULL;
dbus_bool_t quoted;;

current_quote = '\\0';
quoted = FALSE;
p = command_line;

if (!_dbus_string_init (&current_token))
{
    _DBUS_SET_OOM (error);
    return NULL;
}

while (*p)
{
    if (current_quote == '\\\\')
    {
        if (*p == '\\n')
        {
            /* we append nothing; backslash-newline become nothing
*/
        }
        else
        {
            if (!_dbus_string_append_byte (&current_token, '\\\\') ||
                !_dbus_string_append_byte (&current_token, *p))
            {
                _DBUS_SET_OOM (error);
                goto error;
            }
        }

        current_quote = '\\0';
    }
    else if (current_quote == '#')
    {
        /* Discard up to and including next newline */
        while (*p && *p != '\\n')
            ++p;

        current_quote = '\\0';

        if (*p == '\\0')
            break;
    }
    else if (current_quote)
    {
        if (*p == current_quote &&
            /* check that it isn't an escaped double quote */

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        !(current_quote == '"' && quoted))
    {
        /* close the quote */
        current_quote = '\0';
    }

/* Everything inside quotes, and the close quote,
 * gets appended literally.
 */

if (!_dbus_string_append_byte (&current_token, *p))
{
    _DBUS_SET_OOM (error);
    goto error;
}
}
else
{
    switch (*p)
    {
        case '\n':
            if (!delimit_token (&current_token, &retval, error))
                goto error;

            _dbus_string_free (&current_token);

            if (!_dbus_string_init (&current_token))
            {
                _DBUS_SET_OOM (error);
                goto init_error;
            }

            break;

        case ' ':
        case '\t':
            /* If the current token contains the previous char,
delimit
            * the current token. A nonzero length
            * token should always contain the previous char.
            */
            if (_dbus_string_get_length (&current_token) > 0)
            {
                if (!delimit_token (&current_token, &retval, error))
                    goto error;

                _dbus_string_free (&current_token);

                if (!_dbus_string_init (&current_token))
                {
                    _DBUS_SET_OOM (error);
                    goto init_error;
                }
            }

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        }
    }

    /* discard all unquoted blanks (don't add them to a
token) */
    break;

    /* single/double quotes are appended to the token,
    * escapes are maybe appended next time through the
loop,
    * comment chars are never appended.
    */

    case '\\':
    case '"':
        if (!_dbus_string_append_byte (&current_token, *p))
        {
            _DBUS_SET_OOM (error);
            goto error;
        }

        /* FALL THRU */

    case '#':
    case '\\':
        current_quote = *p;
        break;

    default:
        /* Combines rules 4) and 6) - if we have a token, append
to it,
        * otherwise create a new token.
        */
        if (!_dbus_string_append_byte (&current_token, *p))
        {
            _DBUS_SET_OOM (error);
            goto error;
        }
        break;
    }
}

/* We need to count consecutive backslashes mod 2,
* to detect escaped doublequotes.
*/
if (*p != '\\')
quoted = FALSE;
else
quoted = !quoted;

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```

        ++p;
    }

    if (!delimit_token (&current_token, &retval, error))
        goto error;

    if (current_quote)
    {
        dbus_set_error_const (error, DBUS_ERROR_INVALID_ARGS, "Unclosed
quotes in command line");
        goto error;
    }

    if (retval == NULL)
    {
        dbus_set_error_const (error, DBUS_ERROR_INVALID_ARGS, "No tokens
found in command line");
        goto error;
    }

    _dbus_string_free (&current_token);

    return retval;

error:
    _dbus_string_free (&current_token);

init_error:
    if (retval)
    {
        _dbus_list_foreach (&retval, (DBusForeachFunction) dbus_free,
NULL);
        _dbus_list_clear (&retval);
    }

    return NULL;
}

/**
 * _dbus_shell_parse_argv:
 *
 * Parses a command line into an argument vector, in much the same way
 * the shell would, but without many of the expansions the shell would
 * perform (variable expansion, globs, operators, filename expansion,
 * etc. are not supported). The results are defined to be the same as
 * those you would get from a UNIX98 /bin/sh, as long as the input
 * contains none of the unsupported shell expansions. If the input
 * does contain such expansions, they are passed through
 * literally. Free the returned vector with dbus_free_string_array().
 *
 * @command_line: command line to parse
 * @argcp: return location for number of args

```

```

* @argvp: return location for array of args
* @error: error information
**/
dbus_bool_t
_dbus_shell_parse_argv (const char *command_line,
                        int          *argcp,
                        char         ***argvp,
                        DBusError   *error)
{
    /* Code based on poptParseArgvString() from libpopt */
    int argc = 0;
    char **argv = NULL;
    DBusList *tokens = NULL;
    int i;
    DBusList *tmp_list;

    if (!command_line)
    {
        _dbus_verbose ("Command line is NULL\n");
        return FALSE;
    }

    tokens = tokenize_command_line (command_line, error);
    if (tokens == NULL)
    {
        _dbus_verbose ("No tokens for command line '%s'\n",
command_line);
        return FALSE;
    }

    /* Because we can't have introduced any new blank space into the
    * tokens (we didn't do any new expansions), we don't need to
    * perform field splitting. If we were going to honor IFS or do any
    * expansions, we would have to do field splitting on each word
    * here. Also, if we were going to do any expansion we would need to
    * remove any zero-length words that didn't contain quotes
    * originally; but since there's no expansion we know all words have
    * nonzero length, unless they contain quotes.
    *
    * So, we simply remove quotes, and don't do any field splitting or
    * empty word removal, since we know there was no way to introduce
    * such things.
    */

    argc = _dbus_list_get_length (&tokens);
    argv = dbus_new (char *, argc + 1);
    if (!argv)
    {
        _DBUS_SET_OOM (error);
        goto error;
    }

```

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i = 0;
tmp_list = tokens;
while (tmp_list)
{
    argv[i] = _dbus_shell_unquote (tmp_list->data);

    if (!argv[i])
    {
        int j;
        for (j = 0; j < i; j++)
            dbus_free(argv[j]);

        dbus_free (argv);
        _DBUS_SET_OOM (error);
        goto error;
    }

    tmp_list = _dbus_list_get_next_link (&tokens, tmp_list);
    ++i;
}
argv[argc] = NULL;

_dbus_list_foreach (&tokens, (DBusForeachFunction) dbus_free, NULL);
_dbus_list_clear (&tokens);

if (argcp)
    *argcp = argc;

if (argvp)
    *argvp = argv;
else
    dbus_free_string_array (argv);

return TRUE;

error:
_dbus_list_foreach (&tokens, (DBusForeachFunction) dbus_free, NULL);
_dbus_list_clear (&tokens);

return FALSE;
}

```

File = dbus-shell.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-shell.h Shell command line utility functions.
 *
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```

```

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02110-1301 USA
*
*/

```

```

#ifndef DBUS_SHELL_H
#define DBUS_SHELL_H

```

```

DBUS_BEGIN_DECLS

```

```

char*      _dbus_shell_unquote      (const char *quoted_string);
dbus_bool_t _dbus_shell_parse_argv (const char *command_line,
                                   int          *argcp,
                                   char        ***argvp,
                                   DBusError  *error);

```

```

DBUS_END_DECLS

```

```

#endif /* DBUS_SHELL_H */

```

```

File = dbus-signature.c

```

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-signature.c Routines for reading recursive type signatures
*
* Copyright (C) 2005 Red Hat, Inc.
*
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*
*/

```

```

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02110-1301 USA
*
*/

```

```
#include <config.h>
```

```
#include "dbus-signature.h"
#include "dbus-marshall-recursive.h"
#include "dbus-marshall-basic.h"
#include "dbus-internals.h"
#include "dbus-test.h"
```

```
/**
 * Implementation details of #DBusSignatureIter, all fields are
private
 */
typedef struct
{
    const char *pos;           /**< current position in the signature
string */
    unsigned int finished : 1; /**< true if we are at the end iter */
    unsigned int in_array : 1; /**< true if we are a subiterator
pointing to an array's element type */
} DBusSignatureRealIter;
```

```
/** macro that checks whether a typecode is a container type */
#define TYPE_IS_CONTAINER(typecode) \
    ((typecode) == DBUS_TYPE_STRUCT || \
     (typecode) == DBUS_TYPE_DICT_ENTRY || \
     (typecode) == DBUS_TYPE_VARIANT || \
     (typecode) == DBUS_TYPE_ARRAY)
```

```
/**
 * @defgroup DBusSignature Type signature parsing
 * @ingroup DBus
 * @brief Parsing D-Bus type signatures

```

```

* @{
*/

/**
 * Initializes a #DBusSignatureIter for reading a type signature.
This
 * function is not safe to use on invalid signatures; be sure to
 * validate potentially invalid signatures with
dbus_signature_validate
 * before using this function.
 *
 * @param iter pointer to an iterator to initialize
 * @param signature the type signature
 */
void
dbus_signature_iter_init (DBusSignatureIter *iter,
                        const char          *signature)
{
    DBusSignatureRealIter *real_iter = (DBusSignatureRealIter *) iter;

    real_iter->pos = signature;
    real_iter->finished = FALSE;
    real_iter->in_array = FALSE;
}

/**
 * Returns the current type pointed to by the iterator.
 * If the iterator is pointing at a type code such as 's', then
 * it will be returned directly.
 *
 * However, when the parser encounters a container type start
 * character such as '(' for a structure, the corresponding type for
 * the container will be returned, e.g. DBUS_TYPE_STRUCT, not '('.
 * In this case, you should initialize a sub-iterator with
 * dbus_signature_iter_recurse() to parse the container type.
 *
 * @param iter pointer to an iterator
 * @returns current type (e.g. #DBUS_TYPE_STRING, #DBUS_TYPE_ARRAY)
 */
int
dbus_signature_iter_get_current_type (const DBusSignatureIter *iter)
{
    DBusSignatureRealIter *real_iter = (DBusSignatureRealIter *) iter;

    return _dbus_first_type_in_signature_c_str (real_iter->pos, 0);
}

/**
 * Returns the signature of the single complete type starting at the
 * given iterator.
 *
 * For example, if the iterator is pointing at the start of "(ii)ii"

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* (which is "a struct of two ints, followed by an int, followed by an
* int"), then "(ii)" would be returned. If the iterator is pointing
at
* one of the "i" then just that "i" would be returned.
*
* @param iter pointer to an iterator
* @returns current signature; or #NULL if no memory. Should be freed
with dbus_free()
*/
char *
dbus_signature_iter_get_signature (const DBusSignatureIter *iter)
{
    DBusSignatureRealIter *real_iter = (DBusSignatureRealIter *) iter;
    DBusString str;
    char *ret;
    int pos;

    if (!_dbus_string_init (&str))
        return NULL;

    pos = 0;
    _dbus_type_signature_next (real_iter->pos, &pos);

    if (!_dbus_string_append_len (&str, real_iter->pos, pos))
        return NULL;
    if (!_dbus_string_steal_data (&str, &ret))
        ret = NULL;
    _dbus_string_free (&str);

    return ret;
}

/**
* Convenience function for returning the element type of an array;
* This function allows you to avoid initializing a sub-iterator and
* getting its current type.
*
* Undefined behavior results if you invoke this function when the
* current type of the iterator is not #DBUS_TYPE_ARRAY.
*
* @param iter pointer to an iterator
* @returns current array element type
*/
int
dbus_signature_iter_get_element_type (const DBusSignatureIter *iter)
{
    DBusSignatureRealIter *real_iter = (DBusSignatureRealIter *) iter;

    _dbus_return_val_if_fail (dbus_signature_iter_get_current_type
(iter) == DBUS_TYPE_ARRAY, DBUS_TYPE_INVALID);

    return _dbus_first_type_in_signature_c_str (real_iter->pos, 1);
}

```

```

}

/**
 * Skip to the next value on this "level". e.g. the next field in a
 * struct, the next value in an array. Returns #FALSE at the end of
the
 * current container.
 *
 * @param iter the iterator
 * @returns FALSE if nothing more to read at or below this level
 */
dbus_bool_t
dbus_signature_iter_next (DBusSignatureIter *iter)
{
    DBusSignatureRealIter *real_iter = (DBusSignatureRealIter *) iter;

    if (real_iter->finished)
        return FALSE;
    else
    {
        int pos;

        if (real_iter->in_array)
        {
            real_iter->finished = TRUE;
            return FALSE;
        }

        pos = 0;
        _dbus_type_signature_next (real_iter->pos, &pos);
        real_iter->pos += pos;

        if (*real_iter->pos == DBUS_STRUCT_END_CHAR
            || *real_iter->pos == DBUS_DICT_ENTRY_END_CHAR)
        {
            real_iter->finished = TRUE;
            return FALSE;
        }

        return *real_iter->pos != DBUS_TYPE_INVALID;
    }
}

/**
 * Initialize a new iterator pointing to the first type in the current
 * container.
 *
 * The results are undefined when calling this if the current type is
 * a non-container (i.e. if dbus_type_is_container() returns #FALSE
 * for the result of dbus_signature_iter_get_current_type()).
 *
 * @param iter the current interator

```

```

* @param subiter an iterator to initialize pointing to the first
child
*/
void
dbus_signature_iter_recurse (const DBusSignatureIter *iter,
                            DBusSignatureIter      *subiter)
{
    DBusSignatureRealIter *real_iter = (DBusSignatureRealIter *) iter;
    DBusSignatureRealIter *real_sub_iter = (DBusSignatureRealIter *)
subiter;

    _dbus_return_if_fail (dbus_type_is_container
(dbus_signature_iter_get_current_type (iter)));

    *real_sub_iter = *real_iter;
    real_sub_iter->in_array = FALSE;
    real_sub_iter->pos++;

    if (dbus_signature_iter_get_current_type (iter) == DBUS_TYPE_ARRAY)
        real_sub_iter->in_array = TRUE;
}

/**
* Check a type signature for validity. Remember that #NULL can always
* be passed instead of a DBusError*, if you don't care about having
* an error name and message.
*
* @param signature a potentially invalid type signature
* @param error error return
* @returns #TRUE if signature is valid or #FALSE if an error is set
*/
dbus_bool_t
dbus_signature_validate (const char      *signature,
                        DBusError      *error)
{
    DBusString str;
    DBusValidity reason;

    _dbus_string_init_const (&str, signature);
    reason = _dbus_validate_signature_with_reason (&str, 0,
_dbus_string_get_length (&str));

    if (reason == DBUS_VALID)
        return TRUE;
    else
    {
        dbus_set_error (error, DBUS_ERROR_INVALID_SIGNATURE,
_dbus_validity_to_error_message (reason));
        return FALSE;
    }
}

```

```

/**
 * Check that a type signature is both valid and contains exactly one
 * complete type. "One complete type" means a single basic type,
 * array, struct, or dictionary, though the struct or array may be
 * arbitrarily recursive and complex. More than one complete type
 * would mean for example "ii" or two integers in sequence.
 *
 * @param signature a potentially invalid type signature
 * @param error error return
 * @returns #TRUE if signature is valid and has exactly one complete
type
 */
dbus_bool_t
dbus_signature_validate_single (const char      *signature,
                               DBusError      *error)
{
    DBusSignatureIter iter;

    if (!dbus_signature_validate (signature, error))
        return FALSE;

    dbus_signature_iter_init (&iter, signature);
    if (dbus_signature_iter_get_current_type (&iter) ==
        DBUS_TYPE_INVALID)
        goto lose;
    if (!dbus_signature_iter_next (&iter))
        return TRUE;
lose:
    dbus_set_error (error, DBUS_ERROR_INVALID_SIGNATURE, "Exactly one
complete type required in signature");
    return FALSE;
}

/**
 * A "container type" can contain basic types, or nested
 * container types. #DBUS_TYPE_INVALID is not a container type.
 *
 * It is an error to pass an invalid type-code, other than
        DBUS_TYPE_INVALID,
 * to this function. The valid type-codes are defined by dbus-
protocol.h
 * and can be checked with dbus_type_is_valid().
 *
 * @param typecode either a valid type-code or DBUS_TYPE_INVALID
 * @returns #TRUE if type is a container
 */
dbus_bool_t
dbus_type_is_container (int typecode)
{
    /* only reasonable (non-line-noise) typecodes are allowed */

```

```

    _dbus_return_val_if_fail (dbus_type_is_valid (typecode) || typecode
== DBUS_TYPE_INVALID,
        FALSE);
    return TYPE_IS_CONTAINER (typecode);
}

/**
 * A "basic type" is a somewhat arbitrary concept, but the intent is
 * to include those types that are fully-specified by a single
 * typecode, with no additional type information or nested values. So
 * all numbers and strings are basic types and structs, arrays, and
 * variants are not basic types. #DBUS_TYPE_INVALID is not a basic
 * type.
 *
 * It is an error to pass an invalid type-code, other than
DBUS_TYPE_INVALID,
 * to this function. The valid type-codes are defined by dbus-
protocol.h
 * and can be checked with dbus_type_is_valid().
 *
 * @param typecode either a valid type-code or DBUS_TYPE_INVALID
 * @returns #TRUE if type is basic
 */
dbus_bool_t
dbus_type_is_basic (int typecode)
{
    /* only reasonable (non-line-noise) typecodes are allowed */
    _dbus_return_val_if_fail (dbus_type_is_valid (typecode) || typecode
== DBUS_TYPE_INVALID,
        FALSE);

    /* everything that isn't invalid or a container */
    return !(typecode == DBUS_TYPE_INVALID || TYPE_IS_CONTAINER
(typecode));
}

/**
 * Tells you whether values of this type can change length if you set
 * them to some other value. For this purpose, you assume that the
 * first byte of the old and new value would be in the same location,
 * so alignment padding is not a factor.
 *
 * This function is useful to determine whether
 * dbus_message_iter_get_fixed_array() may be used.
 *
 * Some structs are fixed-size (if they contain only fixed-size types)
 * but struct is not considered a fixed type for purposes of this
 * function.
 *
 * It is an error to pass an invalid type-code, other than
DBUS_TYPE_INVALID,

```

```

* to this function. The valid type-codes are defined by dbus-
protocol.h
* and can be checked with dbus_type_is_valid().
*
* @param typecode either a valid type-code or DBUS_TYPE_INVALID
* @returns #FALSE if the type can occupy different lengths
*/
dbus_bool_t
dbus_type_is_fixed (int typecode)
{
    /* only reasonable (non-line-noise) typecodes are allowed */
    _dbus_return_val_if_fail (dbus_type_is_valid (typecode) || typecode
== DBUS_TYPE_INVALID,
                             FALSE);

    switch (typecode)
    {
        case DBUS_TYPE_BYTE:
        case DBUS_TYPE_BOOLEAN:
        case DBUS_TYPE_INT16:
        case DBUS_TYPE_UINT16:
        case DBUS_TYPE_INT32:
        case DBUS_TYPE_UINT32:
        case DBUS_TYPE_INT64:
        case DBUS_TYPE_UINT64:
        case DBUS_TYPE_DOUBLE:
        case DBUS_TYPE_UNIX_FD:
            return TRUE;
        default:
            return FALSE;
    }
}

/**
* Return #TRUE if the argument is a valid typecode.
* #DBUS_TYPE_INVALID surprisingly enough is not considered valid, and
* random unknown bytes aren't either. This function is safe with
* untrusted data.
*
* @param typecode a potential type-code
* @returns #TRUE if valid
*/
dbus_bool_t
dbus_type_is_valid (int typecode)
{
    switch (typecode)
    {
        case DBUS_TYPE_BYTE:
        case DBUS_TYPE_BOOLEAN:
        case DBUS_TYPE_INT16:
        case DBUS_TYPE_UINT16:
        case DBUS_TYPE_INT32:

```

```

    case DBUS_TYPE_UINT32:
    case DBUS_TYPE_INT64:
    case DBUS_TYPE_UINT64:
    case DBUS_TYPE_DOUBLE:
    case DBUS_TYPE_STRING:
    case DBUS_TYPE_OBJECT_PATH:
    case DBUS_TYPE_SIGNATURE:
    case DBUS_TYPE_ARRAY:
    case DBUS_TYPE_STRUCT:
    case DBUS_TYPE_DICT_ENTRY:
    case DBUS_TYPE_VARIANT:
    case DBUS_TYPE_UNIX_FD:
        return TRUE;

    default:
        return FALSE;
}
}

/** @} */ /* end of DBusSignature group */

#ifdef DBUS_BUILD_TESTS

/**
 * @ingroup DBusSignatureInternals
 * Unit test for DBusSignature.
 *
 * @returns #TRUE on success.
 */
dbus_bool_t
_dbus_signature_test (void)
{
    DBusSignatureIter iter;
    DBusSignatureIter subiter;
    DBusSignatureIter subsubiter;
    DBusSignatureIter subsubsubiter;
    const char *sig;
    dbus_bool_t boolres;

    _dbus_assert (sizeof (DBusSignatureIter) >= sizeof
(DBusSignatureRealIter));

    sig = "";
    _dbus_assert (dbus_signature_validate (sig, NULL));
    _dbus_assert (!dbus_signature_validate_single (sig, NULL));
    dbus_signature_iter_init (&iter, sig);
    _dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_INVALID);

    sig = DBUS_TYPE_STRING_AS_STRING;
    _dbus_assert (dbus_signature_validate (sig, NULL));
    _dbus_assert (dbus_signature_validate_single (sig, NULL));

```

```

dbus_signature_iter_init (&iter, sig);
_dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_STRING);

sig = DBUS_TYPE_STRING_AS_STRING DBUS_TYPE_BYTE_AS_STRING;
_dbus_assert (dbus_signature_validate (sig, NULL));
dbus_signature_iter_init (&iter, sig);
_dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_STRING);
boolres = dbus_signature_iter_next (&iter);
_dbus_assert (boolres);
_dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_BYTE);

sig = DBUS_TYPE_UINT16_AS_STRING
DBUS_STRUCT_BEGIN_CHAR_AS_STRING
DBUS_TYPE_STRING_AS_STRING
DBUS_TYPE_UINT32_AS_STRING
DBUS_TYPE_VARIANT_AS_STRING
DBUS_TYPE_DOUBLE_AS_STRING
DBUS_STRUCT_END_CHAR_AS_STRING;
_dbus_assert (dbus_signature_validate (sig, NULL));
dbus_signature_iter_init (&iter, sig);
_dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_UINT16);
boolres = dbus_signature_iter_next (&iter);
_dbus_assert (boolres);
_dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_STRUCT);
dbus_signature_iter_recurse (&iter, &subiter);
_dbus_assert (dbus_signature_iter_get_current_type (&subiter) ==
DBUS_TYPE_STRING);
boolres = dbus_signature_iter_next (&subiter);
_dbus_assert (boolres);
_dbus_assert (dbus_signature_iter_get_current_type (&subiter) ==
DBUS_TYPE_UINT32);
boolres = dbus_signature_iter_next (&subiter);
_dbus_assert (boolres);
_dbus_assert (dbus_signature_iter_get_current_type (&subiter) ==
DBUS_TYPE_VARIANT);
boolres = dbus_signature_iter_next (&subiter);
_dbus_assert (boolres);
_dbus_assert (dbus_signature_iter_get_current_type (&subiter) ==
DBUS_TYPE_DOUBLE);

sig = DBUS_TYPE_UINT16_AS_STRING
DBUS_STRUCT_BEGIN_CHAR_AS_STRING
DBUS_TYPE_UINT32_AS_STRING
DBUS_TYPE_BYTE_AS_STRING
DBUS_TYPE_ARRAY_AS_STRING
DBUS_TYPE_ARRAY_AS_STRING
DBUS_TYPE_DOUBLE_AS_STRING

```



```

    DBUS_STRUCT_BEGIN_CHAR_AS_STRING
    DBUS_TYPE_BYTE_AS_STRING
    DBUS_STRUCT_END_CHAR_AS_STRING
    DBUS_STRUCT_END_CHAR_AS_STRING;
    _dbus_assert (dbus_signature_validate (sig, NULL));
    dbus_signature_iter_init (&iter, sig);
    _dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_UINT16);
    boolres = dbus_signature_iter_next (&iter);
    _dbus_assert (boolres);
    _dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_STRUCT);
    dbus_signature_iter_recurse (&iter, &subiter);
    _dbus_assert (dbus_signature_iter_get_current_type (&subiter) ==
DBUS_TYPE_UINT32);
    boolres = dbus_signature_iter_next (&subiter);
    _dbus_assert (boolres);
    _dbus_assert (dbus_signature_iter_get_current_type (&subiter) ==
DBUS_TYPE_BYTE);
    boolres = dbus_signature_iter_next (&subiter);
    _dbus_assert (boolres);
    _dbus_assert (dbus_signature_iter_get_current_type (&subiter) ==
DBUS_TYPE_ARRAY);
    _dbus_assert (dbus_signature_iter_get_element_type (&subiter) ==
DBUS_TYPE_ARRAY);

    dbus_signature_iter_recurse (&subiter, &subsubiter);
    _dbus_assert (dbus_signature_iter_get_current_type (&subsubiter) ==
DBUS_TYPE_ARRAY);
    _dbus_assert (dbus_signature_iter_get_element_type (&subsubiter) ==
DBUS_TYPE_DOUBLE);

    dbus_signature_iter_recurse (&subsubiter, &subsubsubiter);
    _dbus_assert (dbus_signature_iter_get_current_type (&subsubsubiter)
== DBUS_TYPE_DOUBLE);
    boolres = dbus_signature_iter_next (&subiter);
    _dbus_assert (boolres);
    _dbus_assert (dbus_signature_iter_get_current_type (&subiter) ==
DBUS_TYPE_STRUCT);
    dbus_signature_iter_recurse (&subiter, &subsubiter);
    _dbus_assert (dbus_signature_iter_get_current_type (&subsubiter) ==
DBUS_TYPE_BYTE);

sig = DBUS_TYPE_ARRAY_AS_STRING
    DBUS_DICT_ENTRY_BEGIN_CHAR_AS_STRING
    DBUS_TYPE_INT16_AS_STRING
    DBUS_TYPE_STRING_AS_STRING
    DBUS_DICT_ENTRY_END_CHAR_AS_STRING
    DBUS_TYPE_VARIANT_AS_STRING;
    _dbus_assert (dbus_signature_validate (sig, NULL));
    _dbus_assert (!dbus_signature_validate_single (sig, NULL));
    dbus_signature_iter_init (&iter, sig);

```

```

    _dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_ARRAY);
    _dbus_assert (dbus_signature_iter_get_element_type (&iter) ==
DBUS_TYPE_DICT_ENTRY);

    dbus_signature_iter_recurse (&iter, &subiter);
    dbus_signature_iter_recurse (&subiter, &subsubiter);
    _dbus_assert (dbus_signature_iter_get_current_type (&subsubiter) ==
DBUS_TYPE_INT16);
    boolres = dbus_signature_iter_next (&subsubiter);
    _dbus_assert (boolres);
    _dbus_assert (dbus_signature_iter_get_current_type (&subsubiter) ==
DBUS_TYPE_STRING);
    boolres = dbus_signature_iter_next (&subsubiter);
    _dbus_assert (!boolres);

    boolres = dbus_signature_iter_next (&iter);
    _dbus_assert (boolres);
    _dbus_assert (dbus_signature_iter_get_current_type (&iter) ==
DBUS_TYPE_VARIANT);
    boolres = dbus_signature_iter_next (&iter);
    _dbus_assert (!boolres);

    sig = DBUS_TYPE_DICT_ENTRY_AS_STRING;
    _dbus_assert (!dbus_signature_validate (sig, NULL));

    sig = DBUS_TYPE_ARRAY_AS_STRING;
    _dbus_assert (!dbus_signature_validate (sig, NULL));

    sig = DBUS_TYPE_UINT32_AS_STRING
        DBUS_TYPE_ARRAY_AS_STRING;
    _dbus_assert (!dbus_signature_validate (sig, NULL));

    sig = DBUS_TYPE_ARRAY_AS_STRING
        DBUS_TYPE_DICT_ENTRY_AS_STRING;
    _dbus_assert (!dbus_signature_validate (sig, NULL));

    sig = DBUS_DICT_ENTRY_BEGIN_CHAR_AS_STRING;
    _dbus_assert (!dbus_signature_validate (sig, NULL));

    sig = DBUS_DICT_ENTRY_END_CHAR_AS_STRING;
    _dbus_assert (!dbus_signature_validate (sig, NULL));

    sig = DBUS_DICT_ENTRY_BEGIN_CHAR_AS_STRING
        DBUS_TYPE_INT32_AS_STRING;
    _dbus_assert (!dbus_signature_validate (sig, NULL));

    sig = DBUS_DICT_ENTRY_BEGIN_CHAR_AS_STRING
        DBUS_TYPE_INT32_AS_STRING
        DBUS_TYPE_STRING_AS_STRING;
    _dbus_assert (!dbus_signature_validate (sig, NULL));

```

```

sig = DBUS_STRUCT_END_CHAR_AS_STRING
    DBUS_STRUCT_BEGIN_CHAR_AS_STRING;
_dbus_assert (!dbus_signature_validate (sig, NULL));

sig = DBUS_STRUCT_BEGIN_CHAR_AS_STRING
    DBUS_TYPE_BOOLEAN_AS_STRING;
_dbus_assert (!dbus_signature_validate (sig, NULL));
return TRUE;
#endif
oom:
    _dbus_assert_not_reached ("out of memory");
return FALSE;
#endif
}

#endif

```

File = dbus-signature.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-signatures.h utility functions for D-Bus types
 *
 * Copyright (C) 2005 Red Hat Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
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modify
 * it under the terms of the GNU General Public License as published
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 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
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 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
#ifdef DBUS_INSIDE_DBUS_H && !defined (DBUS_COMPILATION)
#error "Only <dbus/dbus.h> can be included directly, this file may
disappear or change contents."
#endif

```

```

#ifndef DBUS_SIGNATURES_H
#define DBUS_SIGNATURES_H

#include <dbus/dbus-macros.h>
#include <dbus/dbus-types.h>
#include <dbus/dbus-errors.h>

DBUS_BEGIN_DECLS

/**
 * @addtogroup DBusSignature
 * @{
 */

/**
 * DBusSignatureIter struct; contains no public fields
 */
typedef struct
{
    void *dummy1;          /**< Don't use this */
    void *dummy2;          /**< Don't use this */
    dbus_uint32_t dummy8; /**< Don't use this */
    int dummy12;           /**< Don't use this */
    int dummy17;           /**< Don't use this */
} DBusSignatureIter;

DBUS_EXPORT
void          dbus_signature_iter_init
(DBusSignatureIter *iter,
                                     const char
*signature);

DBUS_EXPORT
int          dbus_signature_iter_get_current_type (const
DBusSignatureIter *iter);

DBUS_EXPORT
char *      dbus_signature_iter_get_signature   (const
DBusSignatureIter *iter);

DBUS_EXPORT
int          dbus_signature_iter_get_element_type (const
DBusSignatureIter *iter);

DBUS_EXPORT
dbus_bool_t  dbus_signature_iter_next
(DBusSignatureIter *iter);

DBUS_EXPORT
void          dbus_signature_iter_recurse      (const
DBusSignatureIter *iter,

```

```

DBusSignatureIter
*subiter);

DBUS_EXPORT
dbus_bool_t      dbus_signature_validate      (const char
*signature,
DBusError        *error);

DBUS_EXPORT
dbus_bool_t      dbus_signature_validate_single (const char
*signature,
DBusError        *error);

DBUS_EXPORT
dbus_bool_t      dbus_type_is_valid          (int
typecode);

DBUS_EXPORT
dbus_bool_t      dbus_type_is_basic          (int
typecode);
DBUS_EXPORT
dbus_bool_t      dbus_type_is_container     (int
typecode);
DBUS_EXPORT
dbus_bool_t      dbus_type_is_fixed         (int
typecode);

/** @} */

DBUS_END_DECLS

#endif /* DBUS_SIGNATURE_H */

```

File = dbus-socket-set-epoll.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-socket-set-epoll.c - a socket set implemented via Linux
epoll(4)
*
* Copyright © 2011 Nokia Corporation
*
* Licensed under the Academic Free License version 2.1
*
* This program is free software; you can redistribute it and/or
modify
* it under the terms of the GNU General Public License as published
by
* the Free Software Foundation; either version 2 of the License, or
* (at your option) any later version.
*
*/

```

```
* This program is distributed in the hope that it will be useful,  
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* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
* GNU General Public License for more details.  
*  
* You should have received a copy of the GNU General Public License  
* along with this program; if not, write to the Free Software  
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston,  
* MA 02110-1301 USA  
*  
*/
```

```
#include <config.h>  
#include "dbus-socket-set.h"
```

```
#include <dbus/dbus-internals.h>  
#include <dbus/dbus-sysdeps.h>
```

```
#ifndef __linux__  
# error This file is for Linux epoll(4)  
#endif
```

```
#include <errno.h>  
#include <fcntl.h>  
#include <sys/epoll.h>  
#include <unistd.h>
```

```
#ifndef DOXYGEN_SHOULD_SKIP_THIS
```

```
typedef struct {  
    DBusSocketSet parent;  
    int epfd;  
} DBusSocketSetEpoll;
```

```
static inline DBusSocketSetEpoll *  
socket_set_epoll_cast (DBusSocketSet *set)  
{  
    _dbus_assert (set->cls == &_dbus_socket_set_epoll_class);  
    return (DBusSocketSetEpoll *) set;  
}
```

```
/* this is safe to call on a partially-allocated socket set */
```

```
static void  
socket_set_epoll_free (DBusSocketSet *set)  
{  
    DBusSocketSetEpoll *self = socket_set_epoll_cast (set);  
  
    if (self == NULL)  
        return;  
  
    if (self->epfd != -1)  
        close (self->epfd);
```

```

    dbus_free (self);
}

DBusSocketSet *
_dbus_socket_set_epoll_new (void)
{
    DBusSocketSetEpoll *self;

    self = dbus_new0 (DBusSocketSetEpoll, 1);

    if (self == NULL)
        return NULL;

    self->parent.cls = &_dbus_socket_set_epoll_class;

    self->epfd = epoll_create1 (EPOLL_CLOEXEC);

    if (self->epfd == -1)
    {
        int flags;

        /* the size hint is ignored unless you have a rather old kernel,
         * but must be positive on some versions, so just pick something
         * arbitrary; it's a hint, not a limit */
        self->epfd = epoll_create (42);

        flags = fcntl (self->epfd, F_GETFD, 0);

        if (flags != -1)
            fcntl (self->epfd, F_SETFD, flags | FD_CLOEXEC);
    }

    if (self->epfd == -1)
    {
        socket_set_epoll_free ((DBusSocketSet *) self);
        return NULL;
    }

    return (DBusSocketSet *) self;
}

static uint32_t
watch_flags_to_epoll_events (unsigned int flags)
{
    uint32_t events = 0;

    if (flags & DBUS_WATCH_READABLE)
        events |= EPOLLIN;
    if (flags & DBUS_WATCH_WRITABLE)
        events |= EPOLLOUT;
}

```

```

    return events;
}

static unsigned int
epoll_events_to_watch_flags (uint32_t events)
{
    short flags = 0;

    if (events & EPOLLIN)
        flags |= DBUS_WATCH_READABLE;
    if (events & EPOLLOUT)
        flags |= DBUS_WATCH_WRITABLE;
    if (events & EPOLLHUP)
        flags |= DBUS_WATCH_HANGUP;
    if (events & EPOLLERR)
        flags |= DBUS_WATCH_ERROR;

    return flags;
}

static dbus_bool_t
socket_set_epoll_add (DBusSocketSet *set,
                     int fd,
                     unsigned int flags,
                     dbus_bool_t enabled)
{
    DBusSocketSetEpoll *self = socket_set_epoll_cast (set);
    struct epoll_event event;
    int err;

    event.data.fd = fd;

    if (enabled)
    {
        event.events = watch_flags_to_epoll_events (flags);
    }
    else
    {
        /* We need to add *something* to reserve space in the kernel's
data
        * structures: see socket_set_epoll_disable for more details */
        event.events = EPOLLET;
    }

    if (epoll_ctl (self->epfd, EPOLL_CTL_ADD, fd, &event) == 0)
        return TRUE;

    /* Anything except ENOMEM, ENOSPC means we have an internal error.
*/
    err = errno;
    switch (err)
    {

```



```

        case ENOMEM:
        case ENOSPC:
            /* be silent: this is basically OOM, which our callers are
expected
            * to cope with */
            break;

        case EBADF:
            _dbus_warn ("Bad fd %d\n", fd);
            break;

        case EEXIST:
            _dbus_warn ("fd %d added and then added again\n", fd);
            break;

        default:
            _dbus_warn ("Misc error when trying to watch fd %d: %s\n", fd,
                strerror (err));
            break;
    }

    return FALSE;
}

static void
socket_set_epoll_enable (DBusSocketSet *set,
                        int fd,
                        unsigned int flags)
{
    DBusSocketSetEpoll *self = socket_set_epoll_cast (set);
    struct epoll_event event;
    int err;

    event.data.fd = fd;
    event.events = watch_flags_to_epoll_events (flags);

    if (epoll_ctl (self->epfd, EPOLL_CTL_MOD, fd, &event) == 0)
        return;

    err = errno;

    /* Enabling a file descriptor isn't allowed to fail, even for OOM,
so we
    * do our best to avoid all of these. */
    switch (err)
    {
        case EBADF:
            _dbus_warn ("Bad fd %d\n", fd);
            break;

        case ENOENT:
            _dbus_warn ("fd %d enabled before it was added\n", fd);

```

```

        break;

    case ENOMEM:
        _dbus_warn ("Insufficient memory to change watch for fd %d\n",
fd);
        break;

    default:
        _dbus_warn ("Misc error when trying to watch fd %d: %s\n", fd,
                strerror (err));
        break;
    }
}

static void
socket_set_epoll_disable (DBusSocketSet *set,
                          int fd)
{
    DBusSocketSetEpoll *self = socket_set_epoll_cast (set);
    struct epoll_event event;
    int err;

    /* The naive thing to do would be EPOLL_CTL_DEL, but that'll
probably
    * free resources in the kernel. When we come to do
socket_set_epoll_enable,
    * there might not be enough resources to bring it back!
    *
    * The next idea you might have is to set the flags to 0. However,
events
    * always trigger on EPOLLERR and EPOLLHUP, even if libdbus isn't
actually
    * delivering them to a DBusWatch. Because epoll is level-triggered
by
    * default, we'll busy-loop on an unhandled error or hangup; not
good.
    *
    * So, let's set it to be edge-triggered: then the worst case is
that
    * we return from poll immediately on one iteration, ignore it
because no
    * watch is enabled, then go back to normal. When we re-enable a
watch
    * we'll switch back to level-triggered and be notified again
(verified to
    * work on 2.6.32). Compile this file with -
DTEST_BEHAVIOUR_OF_EPOLLET for
    * test code.
    */
    event.data.fd = fd;
    event.events = EPOLLET;

```

```

if (epoll_ctl (self->epfd, EPOLL_CTL_MOD, fd, &event) == 0)
    return;

err = errno;
_dbus_warn ("Error when trying to watch fd %d: %s\n", fd,
            strerror (err));
}

static void
socket_set_epoll_remove (DBusSocketSet *set,
                        int fd)
{
    DBusSocketSetEpoll *self = socket_set_epoll_cast (set);
    int err;
    /* Kernels < 2.6.9 require a non-NULL struct pointer, even though
its
    * contents are ignored */
    struct epoll_event dummy = { 0 };

    if (epoll_ctl (self->epfd, EPOLL_CTL_DEL, fd, &dummy) == 0)
        return;

    err = errno;
    _dbus_warn ("Error when trying to remove fd %d: %s\n", fd, strerror
(err));
}

/* Optimally, this should be the same as in DBusLoop: we use it to
translate
* between struct epoll_event and DBusSocketEvent without allocating
heap
* memory. */
#define N_STACK_DESCRIPTOR 64

static int
socket_set_epoll_poll (DBusSocketSet *set,
                    DBusSocketEvent *revents,
                    int max_events,
                    int timeout_ms)
{
    DBusSocketSetEpoll *self = socket_set_epoll_cast (set);
    struct epoll_event events[N_STACK_DESCRIPTOR];
    int n_ready;
    int i;

    _dbus_assert (max_events > 0);

    n_ready = epoll_wait (self->epfd, events,
                        MIN (_DBUS_N_ELEMENTS (events), max_events),
                        timeout_ms);

    if (n_ready <= 0)

```

```

    return n_ready;

for (i = 0; i < n_ready; i++)
{
    revents[i].fd = events[i].data.fd;
    revents[i].flags = epoll_events_to_watch_flags
(events[i].events);
}

return n_ready;
}

DBusSocketSetClass _dbus_socket_set_epoll_class = {
    socket_set_epoll_free,
    socket_set_epoll_add,
    socket_set_epoll_remove,
    socket_set_epoll_enable,
    socket_set_epoll_disable,
    socket_set_epoll_poll
};

#ifdef TEST_BEHAVIOUR_OF_EPOLLET
/* usage: cat /dev/null | ./epoll
*
* desired output:
* ctl ADD: 0
* wait for HUP, edge-triggered: 1
* wait for HUP again: 0
* ctl MOD: 0
* wait for HUP: 1
*/

#include <sys/epoll.h>

#include <stdio.h>

int
main (void)
{
    struct epoll_event input;
    struct epoll_event output;
    int epfd = epoll_create1 (EPOLL_CLOEXEC);
    int fd = 0; /* stdin */
    int ret;

    input.events = EPOLLHUP | EPOLLET;
    ret = epoll_ctl (epfd, EPOLL_CTL_ADD, fd, &input);
    printf ("ctl ADD: %d\n", ret);

    ret = epoll_wait (epfd, &output, 1, -1);
    printf ("wait for HUP, edge-triggered: %d\n", ret);

```

```

    ret = epoll_wait (epfd, &output, 1, 1);
    printf ("wait for HUP again: %d\n", ret);

    input.events = EPOLLHUP;
    ret = epoll_ctl (epfd, EPOLL_CTL_MOD, fd, &input);
    printf ("ctl MOD: %d\n", ret);

    ret = epoll_wait (epfd, &output, 1, -1);
    printf ("wait for HUP: %d\n", ret);

    return 0;
}

#endif /* TEST_BEHAVIOUR_OF_EPOLLET */

#endif /* !DOXYGEN_SHOULD_SKIP_THIS */

File = dbus-socket-set-poll.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-socket-set-poll.c - a socket set implemented via _dbus_poll
 *
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston,
 * MA 02110-1301 USA
 */

#include <config.h>
#include "dbus-socket-set.h"

#include <dbus/dbus-internals.h>
#include <dbus/dbus-list.h>

```

```

#include <dbus/dbus-sysdeps.h>
#include <dbus/dbus-watch.h>

#ifndef DOXYGEN_SHOULD_SKIP_THIS

typedef struct {
    DBusSocketSet    parent;
    DBusPollFD       *fds;
    int               n_fds;
    int               n_reserved;
    int               n_allocated;
} DBusSocketSetPoll;

#define REALLOC_INCREMENT 8
#define MINIMUM_SIZE 8

/* If we're in the regression tests, force reallocation to happen
sooner */
#ifdef DBUS_BUILD_TESTS
#define DEFAULT_SIZE_HINT 1
#else
#define DEFAULT_SIZE_HINT MINIMUM_SIZE
#endif

static inline DBusSocketSetPoll *
socket_set_poll_cast (DBusSocketSet *set)
{
    _dbus_assert (set->cls == &_dbus_socket_set_poll_class);
    return (DBusSocketSetPoll *) set;
}

/* this is safe to call on a partially-allocated socket set */
static void
socket_set_poll_free (DBusSocketSet *set)
{
    DBusSocketSetPoll *self = socket_set_poll_cast (set);

    dbus_free (self->fds);
    dbus_free (self);
    _dbus_verbose ("freed socket set %p\n", self);
}

DBusSocketSet *
_dbus_socket_set_poll_new (int size_hint)
{
    DBusSocketSetPoll *ret;

    if (size_hint <= 0)
        size_hint = DEFAULT_SIZE_HINT;

    ret = dbus_new0 (DBusSocketSetPoll, 1);

```

```

if (ret == NULL)
    return NULL;

ret->parent.cls = &_dbus_socket_set_poll_class;
ret->n_fds = 0;
ret->n_allocated = size_hint;

ret->fds = dbus_new0 (DBusPollFD, size_hint);

if (ret->fds == NULL)
{
    /* socket_set_poll_free specifically supports half-constructed
     * socket sets */
    socket_set_poll_free ((DBusSocketSet *) ret);
    return NULL;
}

_dbus_verbose ("new socket set at %p\n", ret);
return (DBusSocketSet *) ret;
}

static short
watch_flags_to_poll_events (unsigned int flags)
{
    short events = 0;

    if (flags & DBUS_WATCH_READABLE)
        events |= _DBUS_POLLIN;
    if (flags & DBUS_WATCH_WRITABLE)
        events |= _DBUS_POLLOUT;

    return events;
}

static dbus_bool_t
socket_set_poll_add (DBusSocketSet *set,
                    int fd,
                    unsigned int flags,
                    dbus_bool_t enabled)
{
    DBusSocketSetPoll *self = socket_set_poll_cast (set);
#ifdef DBUS_DISABLE_ASSERT
    int i;

    for (i = 0; i < self->n_fds; i++)
        _dbus_assert (self->fds[i].fd != fd);
#endif

    if (self->n_reserved >= self->n_allocated)
    {
        DBusPollFD *new_fds = dbus_realloc (self->fds,

```

```

        sizeof (DBusPollFD) * (self->n_allocated +
REALLOC_INCREMENT));

        _dbus_verbose ("inflating set %p from %d en/%d res/%d alloc to
%d\n",
                        self, self->n_fds, self->n_reserved, self-
>n_allocated,
                        self->n_allocated + REALLOC_INCREMENT);

        if (new_fds == NULL)
            return FALSE;

        self->fds = new_fds;
        self->n_allocated += REALLOC_INCREMENT;
    }

    _dbus_verbose ("before adding fd %d to %p, %d en/%d res/%d alloc\n",
>n_allocated);
        fd, self, self->n_fds, self->n_reserved, self-
>n_allocated);
    _dbus_assert (self->n_reserved >= self->n_fds);
    _dbus_assert (self->n_allocated > self->n_reserved);

    self->n_reserved++;

    if (enabled)
    {
        self->fds[self->n_fds].fd = fd;
        self->fds[self->n_fds].events = watch_flags_to_poll_events
(flags);
        self->n_fds++;
    }

    return TRUE;
}

static void
socket_set_poll_enable (DBusSocketSet *set,
                        int fd,
                        unsigned int flags)
{
    DBusSocketSetPoll *self = socket_set_poll_cast (set);
    int i;

    for (i = 0; i < self->n_fds; i++)
    {
        if (self->fds[i].fd == fd)
        {
            self->fds[i].events = watch_flags_to_poll_events (flags);
            return;
        }
    }
}

```



```

/* we allocated space when the socket was added */
_dbus_assert (self->n_fds < self->n_reserved);
_dbus_assert (self->n_reserved <= self->n_allocated);

self->fds[self->n_fds].fd = fd;
self->fds[self->n_fds].events = watch_flags_to_poll_events (flags);
self->n_fds++;
}

static void
socket_set_poll_disable (DBusSocketSet *set,
                        int             fd)
{
    DBusSocketSetPoll *self = socket_set_poll_cast (set);
    int i;

    for (i = 0; i < self->n_fds; i++)
    {
        if (self->fds[i].fd == fd)
        {
            {
                if (i != self->n_fds - 1)
                {
                    self->fds[i].fd = self->fds[self->n_fds - 1].fd;
                    self->fds[i].events = self->fds[self->n_fds - 1].events;
                }

                self->n_fds--;
                return;
            }
        }
    }
}

static void
socket_set_poll_remove (DBusSocketSet *set,
                      int             fd)
{
    DBusSocketSetPoll *self = socket_set_poll_cast (set);

    socket_set_poll_disable (set, fd);
    self->n_reserved--;

    _dbus_verbose ("after removing fd %d from %p, %d en/%d res/%d
alloc\n",
                  fd, self, self->n_fds, self->n_reserved, self-
>n_allocated);
    _dbus_assert (self->n_fds <= self->n_reserved);
    _dbus_assert (self->n_reserved <= self->n_allocated);

    if (self->n_reserved + MINIMUM_SIZE < self->n_allocated / 2)
    {
        /* Our array is twice as big as it needs to be - deflate it
until it's

```

```

    * only slightly larger than the number reserved. */
    DBusPollFD *new_fds = dbus_realloc (self->fds,
        sizeof (DBusPollFD) * (self->n_reserved + MINIMUM_SIZE));

    _dbus_verbose ("before deflating %p, %d en/%d res/%d alloc\n",
        self, self->n_fds, self->n_reserved, self-
>n_allocated);

    if (_DBUS_UNLIKELY (new_fds == NULL))
    {
        /* Weird. Oh well, never mind, the too-big array is
untouched */
        return;
    }

    self->fds = new_fds;
    self->n_allocated = self->n_reserved;
}

static unsigned int
watch_flags_from_poll_revents (short revents)
{
    unsigned int condition = 0;

    if (revents & _DBUS_POLLIN)
        condition |= DBUS_WATCH_READABLE;
    if (revents & _DBUS_POLLOUT)
        condition |= DBUS_WATCH_WRITABLE;
    if (revents & _DBUS_POLLHUP)
        condition |= DBUS_WATCH_HANGUP;
    if (revents & _DBUS_POLLERR)
        condition |= DBUS_WATCH_ERROR;

    if (_DBUS_UNLIKELY (revents & _DBUS_POLLNVAL))
        condition |= _DBUS_WATCH_NVAL;

    return condition;
}

/** This is basically Linux's epoll_wait(2) implemented in terms of
poll(2);
* it returns results into a caller-supplied buffer so we can be
reentrant. */
static int
socket_set_poll_poll (DBusSocketSet *set,
    DBusSocketEvent *revents,
    int max_events,
    int timeout_ms)
{
    DBusSocketSetPoll *self = socket_set_poll_cast (set);
    int i;

```

```

int n_events;
int n_ready;

_dbus_assert (max_events > 0);

for (i = 0; i < self->n_fds; i++)
    self->fds[i].revents = 0;

n_ready = _dbus_poll (self->fds, self->n_fds, timeout_ms);

if (n_ready <= 0)
    return n_ready;

n_events = 0;

for (i = 0; i < self->n_fds; i++)
{
    if (self->fds[i].revents != 0)
    {
        revents[n_events].fd = self->fds[i].fd;
        revents[n_events].flags = watch_flags_from_poll_revents
(self->fds[i].revents);

        n_events += 1;

        /* We ignore events beyond max_events because we have
nowhere to
        * put them. _dbus_poll is level-triggered, so we'll just be
told
        * about them next time round the main loop anyway. */
        if (n_events == max_events)
            return n_events;
    }
}

return n_events;
}

DBusSocketSetClass _dbus_socket_set_poll_class = {
    socket_set_poll_free,
    socket_set_poll_add,
    socket_set_poll_remove,
    socket_set_poll_enable,
    socket_set_poll_disable,
    socket_set_poll_poll
};

#endif /* !DOXYGEN_SHOULD_SKIP_THIS */

```

File = dbus-socket-set.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/*
 * dbus-socket-set.c - used to bolt file descriptors onto a bus
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston,
 * MA 02110-1301 USA
 */

#include <config.h>
#include <dbus/dbus-socket-set.h>

DBusSocketSet *
_dbus_socket_set_new (int size_hint)
{
    DBusSocketSet *ret;

#ifdef DBUS_HAVE_LINUX_EPOLL
    ret = _dbus_socket_set_epoll_new ();

    if (ret != NULL)
        return ret;
#endif

    ret = _dbus_socket_set_poll_new (size_hint);

    if (ret != NULL)
        return ret;

    return NULL;
}

```

File = dbus-socket-set.h

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/*
 * dbus-socket-set.h - used to bolt file descriptors onto a bus
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston,
 * MA 02110-1301 USA
 */
```

```
#ifndef DBUS_SOCKET_SET_H
#define DBUS_SOCKET_SET_H
```

```
#ifndef DOXYGEN_SHOULD_SKIP_THIS
```

```
#include <dbus/dbus.h>
```

```
typedef struct {
    int fd;
    unsigned int flags;
} DBusSocketEvent;
```

```
typedef struct DBusSocketSet DBusSocketSet;
```

```
typedef struct DBusSocketSetClass DBusSocketSetClass;
```

```
struct DBusSocketSetClass {
    void (*free) (DBusSocketSet *self);
    dbus_bool_t (*add) (DBusSocketSet *self,
                       int fd,
                       unsigned int flags,
                       dbus_bool_t enabled);
    void (*remove) (DBusSocketSet *self,
```

```

        int fd);
void (*enable) (DBusSocketSet *self,
               int fd,
               unsigned int flags);
void (*disable) (DBusSocketSet *self,
                int fd);
int (*poll) (DBusSocketSet *self,
            DBusSocketEvent *revents,
            int max_events,
            int timeout_ms);
};

struct DBusSocketSet {
    DBusSocketSetClass *cls;
};

DBusSocketSet *_dbus_socket_set_new (int
size_hint);

static inline void
_dbus_socket_set_free (DBusSocketSet *self)
{
    (self->cls->free) (self);
}

static inline dbus_bool_t
_dbus_socket_set_add (DBusSocketSet *self,
                    int fd,
                    unsigned int flags,
                    dbus_bool_t enabled)
{
    return (self->cls->add) (self, fd, flags, enabled);
}

static inline void
_dbus_socket_set_remove (DBusSocketSet *self,
                        int fd)
{
    (self->cls->remove) (self, fd);
}

static inline void
_dbus_socket_set_enable (DBusSocketSet *self,
                        int fd,
                        unsigned int flags)
{
    (self->cls->enable) (self, fd, flags);
}

static inline void
_dbus_socket_set_disable (DBusSocketSet *self,
                        int fd)

```

```

{
    (self->cls->disable) (self, fd);
}

static inline int
_dbus_socket_set_poll (DBusSocketSet *self,
                      DBusSocketEvent *revents,
                      int max_events,
                      int timeout_ms)
{
    return (self->cls->poll) (self, revents, max_events, timeout_ms);
}

/* concrete implementations, not necessarily built on all platforms */

extern DBusSocketSetClass _dbus_socket_set_poll_class;
extern DBusSocketSetClass _dbus_socket_set_epoll_class;

DBusSocketSet *_dbus_socket_set_poll_new (int size_hint);
DBusSocketSet *_dbus_socket_set_epoll_new (void);

#endif /* !DOXYGEN_SHOULD_SKIP_THIS */
#endif /* multiple-inclusion guard */

```

File = dbus-sockets-win.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sockets.h Wrappers around socket features (internal to D-BUS
implementation)
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* along with this program; if not, write to the Free Software

```

```
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#ifndef DBUS_SOCKETS_H
#define DBUS_SOCKETS_H
```

```
#if defined(DBUS_WIN) || defined(DBUS_WINCE)
```

```
#ifndef STRICT
#define STRICT
#include <winsock2.h>
#undef STRICT
#endif
#include <winsock2.h>
```

```
#undef interface
```

```
#if HAVE_ERRNO_H
#include <errno.h>
#endif
```

```
#define DBUS_SOCKET_IS_INVALID(s) ((SOCKET) (s) == INVALID_SOCKET)
#define DBUS_SOCKET_API_RETURNS_ERROR(n) ((n) == SOCKET_ERROR)
#define DBUS_SOCKET_SET_ERRNO() (_dbus_win_set_errno
(WSAGetLastError()))
```

```
#define DBUS_CLOSE_SOCKET(s) closesocket(s)
```

```
#else
```

```
#include <sys/socket.h>
#include <sys/un.h>
#include <netinet/in.h>
#include <netdb.h>
#include <errno.h>
```

```
#define DBUS_SOCKET_IS_INVALID(s) ((s) < 0)
#define DBUS_SOCKET_API_RETURNS_ERROR(n) ((n) < 0)
#define DBUS_SOCKET_SET_ERRNO() /* empty */
```

```
#define DBUS_CLOSE_SOCKET(s) close(s)
```

```
#endif /* !Win32 */
```

```
#endif /* DBUS_SOCKETS_H */
```



```

File = dbus-spawn-win.c

#include <config.h>

//#define SPAWN_DEBUG

#if !defined(SPAWN_DEBUG) || defined(_MSC_VER)
#define PING()
#else
#define PING() fprintf (stderr, "%s:%s:%d\n", __FILE__, __FUNCTION__,
__LINE__); fflush (stderr)
#endif

#include <stdio.h>

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-spawn-win32.c Wrapper around g_spawn
 *
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
#include "dbus-spawn.h"
#include "dbus-sysdeps.h"
#include "dbus-sysdeps-win.h"
#include "dbus-internals.h"
#include "dbus-test.h"
#include "dbus-protocol.h"

#define WIN32_LEAN_AND_MEAN
#include <windows.h>
//#define STRICT

```

```

//#include <windows.h>
//#undef STRICT
#include <winsock2.h>
#undef interface

#include <stdlib.h>

#ifdef DBUS_WINCE
#include <process.h>
#endif

/**
 * Babysitter implementation details
 */
struct DBusBabysitter
{
    int refcount;

    HANDLE start_sync_event;
#ifdef DBUS_BUILD_TESTS
    HANDLE end_sync_event;
#endif

    char *executable;
    DBusSpawnChildSetupFunc child_setup;
    void *user_data;

    int argc;
    char **argv;
    char **envp;

    HANDLE child_handle;
    int socket_to_babysitter; /* Connection to the babysitter thread
*/
    int socket_to_main;

    DBusWatchList *watches;
    DBusWatch *sitter_watch;
    DBusBabysitterFinishedFunc finished_cb;
    void *finished_data;

    dbus_bool_t have_spawn_errno;
    int spawn_errno;
    dbus_bool_t have_child_status;
    int child_status;
};

static DBusBabysitter*
_dbus_babysitter_new (void)
{
    DBusBabysitter *sitter;

```

```

sitter = dbus_new0 (DBusBabysitter, 1);
if (sitter == NULL)
    return NULL;

sitter->refcount = 1;

sitter->start_sync_event = CreateEvent (NULL, FALSE, FALSE, NULL);
if (sitter->start_sync_event == NULL)
{
    _dbus_babysitter_unref (sitter);
    return NULL;
}

#ifdef DBUS_BUILD_TESTS
sitter->end_sync_event = CreateEvent (NULL, FALSE, FALSE, NULL);
if (sitter->end_sync_event == NULL)
{
    _dbus_babysitter_unref (sitter);
    return NULL;
}
#endif

sitter->child_handle = NULL;

sitter->socket_to_babysitter = sitter->socket_to_main = -1;

sitter->argc = 0;
sitter->argv = NULL;
sitter->envp = NULL;

sitter->watches = _dbus_watch_list_new ();
if (sitter->watches == NULL)
{
    _dbus_babysitter_unref (sitter);
    return NULL;
}

sitter->have_spawn_errno = FALSE;
sitter->have_child_status = FALSE;

return sitter;
}

/**
 * Increment the reference count on the babysitter object.
 *
 * @param sitter the babysitter
 * @returns the babysitter
 */
DBusBabysitter *
_dbus_babysitter_ref (DBusBabysitter *sitter)

```

```

{
    PING();
    _dbus_assert (sitter != NULL);
    _dbus_assert (sitter->refcount > 0);

    sitter->refcount += 1;

    return sitter;
}

static void
close_socket_to_babysitter (DBusBabysitter *sitter)
{
    _dbus_verbose ("Closing babysitter\n");

    if (sitter->sitter_watch != NULL)
    {
        _dbus_assert (sitter->watches != NULL);
        _dbus_watch_list_remove_watch (sitter->watches, sitter-
>sitter_watch);
        _dbus_watch_invalidate (sitter->sitter_watch);
        _dbus_watch_unref (sitter->sitter_watch);
        sitter->sitter_watch = NULL;
    }

    if (sitter->socket_to_babysitter != -1)
    {
        _dbus_close_socket (sitter->socket_to_babysitter, NULL);
        sitter->socket_to_babysitter = -1;
    }
}

/**
 * Decrement the reference count on the babysitter object.
 *
 * @param sitter the babysitter
 */
void
_dbus_babysitter_unref (DBusBabysitter *sitter)
{
    int i;

    PING();
    _dbus_assert (sitter != NULL);
    _dbus_assert (sitter->refcount > 0);

    sitter->refcount -= 1;

    if (sitter->refcount == 0)
    {
        close_socket_to_babysitter (sitter);
    }
}

```

```

if (sitter->socket_to_main != -1)
{
    _dbus_close_socket (sitter->socket_to_main, NULL);
    sitter->socket_to_main = -1;
}

PING();
if (sitter->argv != NULL)
{
    for (i = 0; i < sitter->argc; i++)
        if (sitter->argv[i] != NULL)
            {
                dbus_free (sitter->argv[i]);
                sitter->argv[i] = NULL;
            }
    dbus_free (sitter->argv);
    sitter->argv = NULL;
}

if (sitter->envp != NULL)
{
    char **e = sitter->envp;

    while (*e)
        dbus_free (*e++);
    dbus_free (sitter->envp);
    sitter->envp = NULL;
}

if (sitter->child_handle != NULL)
{
    CloseHandle (sitter->child_handle);
    sitter->child_handle = NULL;
}

if (sitter->sitter_watch)
{
    _dbus_watch_invalidate (sitter->sitter_watch);
    _dbus_watch_unref (sitter->sitter_watch);
    sitter->sitter_watch = NULL;
}

if (sitter->watches)
    _dbus_watch_list_free (sitter->watches);

if (sitter->start_sync_event != NULL)
{
    PING();
    CloseHandle (sitter->start_sync_event);
    sitter->start_sync_event = NULL;
}

```

```

#ifdef DBUS_BUILD_TESTS
    if (sitter->end_sync_event != NULL)
    {
        CloseHandle (sitter->end_sync_event);
        sitter->end_sync_event = NULL;
    }
#endif

    dbus_free (sitter->executable);

    dbus_free (sitter);
}

void
_dbus_babysitter_kill_child (DBusBabysitter *sitter)
{
    PING();
    if (sitter->child_handle == NULL)
        return; /* child is already dead, or we're so hosed we'll never
recover */

    PING();
    TerminateProcess (sitter->child_handle, 12345);
}

/**
 * Checks whether the child has exited, without blocking.
 *
 * @param sitter the babysitter
 */
dbus_bool_t
_dbus_babysitter_get_child_exited (DBusBabysitter *sitter)
{
    PING();
    return (sitter->child_handle == NULL);
}

/**
 * Gets the exit status of the child. We do this so implementation
specific
 * detail is not cluttering up dbus, for example the system launcher
code.
 * This can only be called if the child has exited, i.e. call
 * _dbus_babysitter_get_child_exited(). It returns FALSE if the child
 * did not return a status code, e.g. because the child was signaled
 * or we failed to ever launch the child in the first place.
 *
 * @param sitter the babysitter
 * @param status the returned status code
 * @returns #FALSE on failure
 */

```

```

dbus_bool_t
_dbus_babysitter_get_child_exit_status (DBusBabysitter *sitter,
                                         int *status)
{
    if (!_dbus_babysitter_get_child_exited (sitter))
        _dbus_assert_not_reached ("Child has not exited");

    if (!sitter->have_child_status ||
        sitter->child_status == STILL_ACTIVE)
        return FALSE;

    *status = sitter->child_status;
    return TRUE;
}

/**
 * Sets the #DBusError with an explanation of why the spawned
 * child process exited (on a signal, or whatever). If
 * the child process has not exited, does nothing (error
 * will remain unset).
 *
 * @param sitter the babysitter
 * @param error an error to fill in
 */
void
_dbus_babysitter_set_child_exit_error (DBusBabysitter *sitter,
                                       DBusError *error)
{
    PING();
    if (!_dbus_babysitter_get_child_exited (sitter))
        return;

    PING();
    if (sitter->have_spawn_errno)
    {
        char *emsg = _dbus_win_error_string (sitter->spawn_errno);
        dbus_set_error (error, DBUS_ERROR_SPAWN_EXEC_FAILED,
                       "Failed to execute program %s: %s",
                       sitter->executable, emsg);
        _dbus_win_free_error_string (emsg);
    }
    else if (sitter->have_child_status)
    {
        PING();
        dbus_set_error (error, DBUS_ERROR_SPAWN_CHILD_EXITED,
                       "Process %s exited with status %d",
                       sitter->executable, sitter->child_status);
    }
    else
    {
        PING();
        dbus_set_error (error, DBUS_ERROR_FAILED,

```

```

        "Process %s exited, status unknown",
        sitter->executable);
    }
    PING();
}

dbus_bool_t
_dbus_babysitter_set_watch_functions (DBusBabysitter
*sitter,
                                     DBusAddWatchFunction
add_function,
                                     DBusRemoveWatchFunction
remove_function,
                                     DBusWatchToggledFunction
toggled_function,
                                     void
free_data_function) *data,
{
    PING();
    return _dbus_watch_list_set_functions (sitter->watches,
                                           add_function,
                                           remove_function,
                                           toggled_function,
                                           data,
                                           free_data_function);
}

static dbus_bool_t
handle_watch (DBusWatch      *watch,
             unsigned int    condition,
             void            *data)
{
    DBusBabysitter *sitter = data;

    /* On Unix dbus-spawn uses a babysitter *process*, thus it has to
     * actually send the exit statuses, error codes and whatnot through
     * sockets and/or pipes. On Win32, the babysitter is jus a thread,
     * so it can set the status fields directly in the babysitter struct
     * just fine. The socket pipe is used just so we can watch it with
     * select(), as soon as anything is written to it we know that the
     * babysitter thread has recorded the status in the babysitter
     * struct.
     */

    PING();
    close_socket_to_babysitter (sitter);
    PING();

    if (_dbus_babysitter_get_child_exited (sitter) &&
        sitter->finished_cb != NULL)
    {

```



```

        sitter->finished_cb (sitter, sitter->finished_data);
        sitter->finished_cb = NULL;
    }

    return TRUE;
}

/* protect_argv lifted from GLib, relicensed by author, Tor Lillqvist
*/
static int
protect_argv (char **argv,
              char ***new_argv)
{
    int i;
    int argc = 0;

    while (argv[argc])
        ++argc;
    *new_argv = dbus_malloc ((argc + 1) * sizeof (char *));
    if (*new_argv == NULL)
        return -1;

    for (i = 0; i < argc; i++)
        (*new_argv)[i] = NULL;

    /* Quote each argv element if necessary, so that it will get
     * reconstructed correctly in the C runtime startup code. Note that
     * the unquoting algorithm in the C runtime is really weird, and
     * rather different than what Unix shells do. See stdargv.c in the C
     * runtime sources (in the Platform SDK, in src/crt).
     *
     * Note that an new_argv[0] constructed by this function should
     * *not* be passed as the filename argument to a spawn* or exec*
     * family function. That argument should be the real file name
     * without any quoting.
     */
    for (i = 0; i < argc; i++)
    {
        char *p = argv[i];
        char *q;
        int len = 0;
        int need_dblquotes = FALSE;
        while (*p)
        {
            if (*p == ' ' || *p == '\t')
                need_dblquotes = TRUE;
            else if (*p == '"')
                len++;
            else if (*p == '\\')
            {
                char *pp = p;
                while (*pp && *pp == '\\')

```

```

        pp++;
        if (*pp == '"')
            len++;
    }
    len++;
    p++;
}

q = (*new_argv)[i] = dbus_malloc (len + need_dblquotes*2 + 1);

if (q == NULL)
    return -1;

p = argv[i];

if (need_dblquotes)
    *q++ = '"';

while (*p)
{
    if (*p == '"')
        *q++ = '\\';
    else if (*p == '\\')
    {
        char *pp = p;
        while (*pp && *pp == '\\')
            pp++;
        if (*pp == '"')
            *q++ = '\\';
    }
    *q++ = *p;
    p++;
}

if (need_dblquotes)
    *q++ = '"';
*q++ = '\\0';
/* printf ("argv[%d]:%s, need_dblquotes:%s len:%d => %s\n", i,
argv[i], need_dblquotes?"TRUE":"FALSE", len, (*new_argv)[i]); */
}
(*new_argv)[argc] = NULL;

return argc;
}

```

```

/* From GPGME, relicensed by g10 Code GmbH. */
static char *
compose_string (char **strings, char separator)
{
    int i;

```

```

int n = 0;
char *buf;
char *p;

if (!strings || !strings[0])
    return 0;
for (i = 0; strings[i]; i++)
    n += strlen (strings[i]) + 1;
n++;

buf = p = malloc (n);
if (!buf)
    return NULL;
for (i = 0; strings[i]; i++)
    {
        strcpy (p, strings[i]);
        p += strlen (strings[i]);
        *(p++) = separator;
    }
p--;
*(p++) = '\\0';
*p = '\\0';

return buf;
}

static char *
build_commandline (char **argv)
{
    return compose_string (argv, ' ');
}

static char *
build_env_string (char** envp)
{
    return compose_string (envp, '\\0');
}

static HANDLE
spawn_program (char* name, char** argv, char** envp)
{
    PROCESS_INFORMATION pi = { NULL, 0, 0, 0 };
    STARTUPINFOA si;
    char *arg_string, *env_string;
    BOOL result;

#ifdef DBUS_WINCE
    if (argv && argv[0])
        arg_string = build_commandline (argv + 1);
    else
        arg_string = NULL;
#else

```

```

    arg_string = build_commandline (argv);
#endif
    if (!arg_string)
        return INVALID_HANDLE_VALUE;

    env_string = build_env_string(envp);

    memset (&si, 0, sizeof (si));
    si.cb = sizeof (si);
#ifdef DBUS_WINCE
    result = CreateProcessA (name, arg_string, NULL, NULL, FALSE, 0,
#else
    result = CreateProcessA (NULL, arg_string, NULL, NULL, FALSE, 0,
#endif
                            (LPVOID)env_string, NULL, &si, &pi);
    free (arg_string);
    if (env_string)
        free (env_string);

    if (!result)
        return INVALID_HANDLE_VALUE;

    CloseHandle (pi.hThread);
    return pi.hProcess;
}

```

```

static DWORD __stdcall
babysitter (void *parameter)
{
    DBusBabysitter *sitter = (DBusBabysitter *) parameter;

    PING();
    _dbus_babysitter_ref (sitter);

    if (sitter->child_setup)
    {
        PING();
        (*sitter->child_setup) (sitter->user_data);
    }

    _dbus_verbose ("babysitter: spawning %s\n", sitter->executable);

    PING();
    sitter->child_handle = spawn_program (sitter->executable,
                                         sitter->argv, sitter->envp);

    PING();
    if (sitter->child_handle == (HANDLE) -1)
    {
        sitter->child_handle = NULL;
        sitter->have_spawn_errno = TRUE;
    }
}

```

```

        sitter->spawn_errno = GetLastError();
    }

    PING();
    SetEvent (sitter->start_sync_event);

    if (sitter->child_handle != NULL)
    {
        int ret;
        DWORD status;

        PING();
        WaitForSingleObject (sitter->child_handle, INFINITE);

        PING();
        ret = GetExitCodeProcess (sitter->child_handle, &status);

        sitter->child_status = status;
        sitter->have_child_status = TRUE;

        CloseHandle (sitter->child_handle);
        sitter->child_handle = NULL;
    }

#ifdef DBUS_BUILD_TESTS
    SetEvent (sitter->end_sync_event);
#endif

    PING();
    send (sitter->socket_to_main, " ", 1, 0);

    _dbus_babysitter_unref (sitter);

    return 0;
}

dbus_bool_t
_dbus_spawn_async_with_babysitter (DBusBabysitter
**sitter_p,
                                char                **argv,
                                char                **envp,
                                DBusSpawnChildSetupFunc
child_setup,
                                void
*user_data,
                                DBusError           *error)
{
    DBusBabysitter *sitter;
    HANDLE sitter_thread;
    DWORD sitter_thread_id;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

```

```

*sitter_p = NULL;

PING();
sitter = _dbus_babysitter_new ();
if (sitter == NULL)
{
    _DBUS_SET_OOM (error);
    return FALSE;
}

sitter->child_setup = child_setup;
sitter->user_data = user_data;

sitter->executable = _dbus_strdup (argv[0]);
if (sitter->executable == NULL)
{
    _DBUS_SET_OOM (error);
    goto out0;
}

PING();
if (!_dbus_full_duplex_pipe (&sitter->socket_to_babysitter,
                             &sitter->socket_to_main,
                             FALSE, error))

    goto out0;

sitter->sitter_watch = _dbus_watch_new (sitter-
>socket_to_babysitter,
                                     DBUS_WATCH_READABLE,
                                     TRUE, handle_watch, sitter,
NULL);
PING();
if (sitter->sitter_watch == NULL)
{
    _DBUS_SET_OOM (error);
    goto out0;
}

PING();
if (!_dbus_watch_list_add_watch (sitter->watches, sitter-
>sitter_watch))
{
    /* we need to free it early so the destructor won't try to
remove it
    * without it having been added, which DbusLoop doesn't allow */
    _dbus_watch_invalidate (sitter->sitter_watch);
    _dbus_watch_unref (sitter->sitter_watch);
    sitter->sitter_watch = NULL;

    _DBUS_SET_OOM (error);
    goto out0;
}

```

```

    }

    sitter->argc = protect_argv (argv, &sitter->argv);
    if (sitter->argc == -1)
    {
        _DBUS_SET_OOM (error);
        goto out0;
    }
    sitter->envp = envp;

    PING();
    sitter_thread = (HANDLE) CreateThread (NULL, 0, babysitter,
        sitter, 0, &sitter_thread_id);

    if (sitter_thread == 0)
    {
        PING();
        dbus_set_error_const (error, DBUS_ERROR_SPAWN_FORK_FAILED,
            "Failed to create new thread");
        goto out0;
    }
    CloseHandle (sitter_thread);

    PING();
    WaitForSingleObject (sitter->start_sync_event, INFINITE);

    PING();
    if (sitter_p != NULL)
        *sitter_p = sitter;
    else
        _dbus_babysitter_unref (sitter);

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    PING();
    return TRUE;

out0:
    _dbus_babysitter_unref (sitter);

    return FALSE;
}

void
_dbus_babysitter_set_result_function (DBusBabysitter
*sitter,
                                     DBusBabysitterFinishedFunc
finished,
                                     void
*user_data)
{
    sitter->finished_cb = finished;
}

```

```

    sitter->finished_data = user_data;
}

#ifdef DBUS_BUILD_TESTS

static char *
get_test_exec (const char *exe,
               DBusString *scratch_space)
{
    const char *dbus_test_exec;

    dbus_test_exec = _dbus_getenv ("DBUS_TEST_EXEC");

    if (dbus_test_exec == NULL)
        dbus_test_exec = DBUS_TEST_EXEC;

    if (!_dbus_string_init (scratch_space))
        return NULL;

    if (!_dbus_string_append_printf (scratch_space, "%s/%s%s",
                                     dbus_test_exec, exe, DBUS_EXEEXT))
    {
        _dbus_string_free (scratch_space);
        return NULL;
    }

    return _dbus_string_get_data (scratch_space);
}

#define LIVE_CHILDREN(sitter) ((sitter)->child_handle != NULL)

static void
_dbus_babysitter_block_for_child_exit (DBusBabysitter *sitter)
{
    if (sitter->child_handle == NULL)
        return;

    WaitForSingleObject (sitter->end_sync_event, INFINITE);
}

static dbus_bool_t
check_spawn_nonexistent (void *data)
{
    char *argv[4] = { NULL, NULL, NULL, NULL };
    DBusBabysitter *sitter;
    DBusError error;

    sitter = NULL;

    dbus_error_init (&error);

    /*** Test launching nonexistent binary ***/

```



```

argv[0] = "/this/does/not/exist/32542sdgafgafdg";
if (_dbus_spawn_async_with_babysitter (&sitter, argv, NULL,
                                       NULL, NULL,
                                       &error))
{
    _dbus_babysitter_block_for_child_exit (sitter);
    _dbus_babysitter_set_child_exit_error (sitter, &error);
}

if (sitter)
    _dbus_babysitter_unref (sitter);

if (!dbus_error_is_set (&error))
{
    _dbus_warn ("Did not get an error launching nonexistent
executable\n");
    return FALSE;
}

if (!(dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY) ||
      dbus_error_has_name (&error, DBUS_ERROR_SPAWN_EXEC_FAILED)))
{
    _dbus_warn ("Not expecting error when launching nonexistent
executable: %s: %s\n",
                error.name, error.message);
    dbus_error_free (&error);
    return FALSE;
}

dbus_error_free (&error);

return TRUE;
}

static dbus_bool_t
check_spawn_segfault (void *data)
{
    char *argv[4] = { NULL, NULL, NULL, NULL };
    DBusBabysitter *sitter;
    DBusError error;
    DBusString argv0;

    sitter = NULL;

    dbus_error_init (&error);

    /*** Test launching segfault binary */

    argv[0] = get_test_exec ("test-segfault", &argv0);

    if (argv[0] == NULL)

```

```

    {
        /* OOM was simulated, never mind */
        return TRUE;
    }

    if (_dbus_spawn_async_with_babysitter (&sitter, argv, NULL,
                                           NULL, NULL,
                                           &error))
    {
        _dbus_babysitter_block_for_child_exit (sitter);
        _dbus_babysitter_set_child_exit_error (sitter, &error);
    }

    _dbus_string_free (&argv0);

    if (sitter)
        _dbus_babysitter_unref (sitter);

    if (!dbus_error_is_set (&error))
    {
        _dbus_warn ("Did not get an error launching segfaulting
binary\n");
        return FALSE;
    }

    if (!(dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY) ||
         dbus_error_has_name (&error, DBUS_ERROR_SPAWN_CHILD_EXITED)))
    {
        _dbus_warn ("Not expecting error when launching segfaulting
executable: %s: %s\n",
                    error.name, error.message);
        dbus_error_free (&error);
        return FALSE;
    }

    dbus_error_free (&error);

    return TRUE;
}

static dbus_bool_t
check_spawn_exit (void *data)
{
    char *argv[4] = { NULL, NULL, NULL, NULL };
    DBusBabysitter *sitter;
    DBusError error;
    DBusString argv0;

    sitter = NULL;

    dbus_error_init (&error);

```

```

/** Test launching exit failure binary */

argv[0] = get_test_exec ("test-exit", &argv0);

if (argv[0] == NULL)
{
    /* OOM was simulated, never mind */
    return TRUE;
}

if (_dbus_spawn_async_with_babysitter (&sitter, argv, NULL,
                                       NULL, NULL,
                                       &error))
{
    _dbus_babysitter_block_for_child_exit (sitter);
    _dbus_babysitter_set_child_exit_error (sitter, &error);
}

_dbus_string_free (&argv0);

if (sitter)
    _dbus_babysitter_unref (sitter);

if (!dbus_error_is_set (&error))
{
    _dbus_warn ("Did not get an error launching binary that exited
with failure code\n");
    return FALSE;
}

if (!(dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY) ||
      dbus_error_has_name (&error, DBUS_ERROR_SPAWN_CHILD_EXITED)))
{
    _dbus_warn ("Not expecting error when launching exiting
executable: %s: %s\n",
               error.name, error.message);
    dbus_error_free (&error);
    return FALSE;
}

dbus_error_free (&error);

return TRUE;
}

static dbus_bool_t
check_spawn_and_kill (void *data)
{
    char *argv[4] = { NULL, NULL, NULL, NULL };
    DBusBabysitter *sitter;
    DBusError error;
    DBusString argv0;

```

```

sitter = NULL;

dbus_error_init (&error);

/** Test launching sleeping binary then killing it */
argv[0] = get_test_exec ("test-sleep-forever", &argv0);

if (argv[0] == NULL)
{
    /* OOM was simulated, never mind */
    return TRUE;
}

if (_dbus_spawn_async_with_babysitter (&sitter, argv, NULL,
                                       NULL, NULL,
                                       &error))
{
    _dbus_babysitter_kill_child (sitter);

    _dbus_babysitter_block_for_child_exit (sitter);

    _dbus_babysitter_set_child_exit_error (sitter, &error);
}

_dbus_string_free (&argv0);

if (sitter)
    _dbus_babysitter_unref (sitter);

if (!dbus_error_is_set (&error))
{
    _dbus_warn ("Did not get an error after killing spawned
binary\n");
    return FALSE;
}

if (!(dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY) ||
      dbus_error_has_name (&error, DBUS_ERROR_SPAWN_CHILD_EXITED)))
{
    _dbus_warn ("Not expecting error when killing executable: %s:
%s\n",
               error.name, error.message);
    dbus_error_free (&error);
    return FALSE;
}

dbus_error_free (&error);

return TRUE;
}

```

```

dbus_bool_t
_dbus_spawn_test (const char *test_data_dir)
{
    if (!_dbus_test_oom_handling ("spawn_nonexistent",
                                check_spawn_nonexistent,
                                NULL))

        return FALSE;

    /* Don't run the obnoxious segfault test by default,
     * it's a pain to have to click all those error boxes.
     */
    if (getenv ("DO_SEGFAULT_TEST"))
        if (!_dbus_test_oom_handling ("spawn_segfault",
                                    check_spawn_segfault,
                                    NULL))

            return FALSE;

    if (!_dbus_test_oom_handling ("spawn_exit",
                                check_spawn_exit,
                                NULL))

        return FALSE;

    if (!_dbus_test_oom_handling ("spawn_and_kill",
                                check_spawn_and_kill,
                                NULL))

        return FALSE;

    return TRUE;
}
#endif

```

File = dbus-spawn.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-spawn.c Wrapper around fork/exec
 *
 * Copyright (C) 2002, 2003, 2004 Red Hat, Inc.
 * Copyright (C) 2003 CodeFactory AB
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*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*/
```

```
#include <config.h>
```

```
#include "dbus-spawn.h"
#include "dbus-sysdeps-unix.h"
#include "dbus-internals.h"
#include "dbus-test.h"
#include "dbus-protocol.h"
```

```
#include <unistd.h>
#include <fcntl.h>
#include <signal.h>
#include <sys/wait.h>
#include <stdlib.h>
#ifdef HAVE_ERRNO_H
#include <errno.h>
#endif
```

```
extern char **environ;
```

```
/**
 * @addtogroup DBusInternalsUtils
 * @{
 */
```

```
/*
 * I'm pretty sure this whole spawn file could be made simpler,
 * if you thought about it a bit.
 */
```

```
/**
 * Enumeration for status of a read()
 */
```

```
typedef enum
{
    READ_STATUS_OK,          /**< Read succeeded */
    READ_STATUS_ERROR,      /**< Some kind of error */
    READ_STATUS_EOF         /**< EOF returned */
} ReadStatus;
```

```
static ReadStatus
read_ints (int          fd,
```

```

        int          *buf,
        int          n_ints_in_buf,
        int          *n_ints_read,
        DBusError   *error)
{
    size_t bytes = 0;
    ReadStatus retval;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    retval = READ_STATUS_OK;

    while (TRUE)
    {
        ssize_t chunk;
        size_t to_read;

        to_read = sizeof (int) * n_ints_in_buf - bytes;

        if (to_read == 0)
            break;

        again:

        chunk = read (fd,
                     ((char*)buf) + bytes,
                     to_read);

        if (chunk < 0 && errno == EINTR)
            goto again;

        if (chunk < 0)
        {
            dbus_set_error (error,
                            DBUS_ERROR_SPAWN_FAILED,
                            "Failed to read from child pipe (%s)",
                            _dbus_strerror (errno));

            retval = READ_STATUS_ERROR;
            break;
        }
        else if (chunk == 0)
        {
            retval = READ_STATUS_EOF;
            break; /* EOF */
        }
        else /* chunk > 0 */
            bytes += chunk;
    }

    *n_ints_read = (int)(bytes / sizeof(int));

```

```

    return retval;
}

static ReadStatus
read_pid (int      fd,
          pid_t    *buf,
          DBusError *error)
{
    size_t bytes = 0;
    ReadStatus retval;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    retval = READ_STATUS_OK;

    while (TRUE)
    {
        ssize_t chunk;
        size_t to_read;

        to_read = sizeof (pid_t) - bytes;

        if (to_read == 0)
            break;

        again:

        chunk = read (fd,
                     ((char*)buf) + bytes,
                     to_read);
        if (chunk < 0 && errno == EINTR)
            goto again;

        if (chunk < 0)
        {
            dbus_set_error (error,
                           DBUS_ERROR_SPAWN_FAILED,
                           "Failed to read from child pipe (%s)",
                           _dbus_strerror (errno));

            retval = READ_STATUS_ERROR;
            break;
        }
        else if (chunk == 0)
        {
            retval = READ_STATUS_EOF;
            break; /* EOF */
        }
        else /* chunk > 0 */
            bytes += chunk;
    }
}

```



```

    return retval;
}

/* The implementation uses an intermediate child between the main
process
* and the grandchild. The grandchild is our spawned process. The
intermediate
* child is a babysitter process; it keeps track of when the
grandchild
* exits/crashes, and reaps the grandchild.
*/

/* Messages from children to parents */
enum
{
    CHILD_EXITED,          /* This message is followed by the exit
status int */
    CHILD_FORK_FAILED,    /* Followed by errno */
    CHILD_EXEC_FAILED,    /* Followed by errno */
    CHILD_PID             /* Followed by pid_t */
};

/**
 * Babysitter implementation details
 */
struct DBusBabysitter
{
    int refcount; /**< Reference count */

    char *executable; /**< executable name to use in error messages */

    int socket_to_babysitter; /**< Connection to the babysitter process
*/
    int error_pipe_from_child; /**< Connection to the process that does
the exec() */

    pid_t sitter_pid; /**< PID Of the babysitter */
    pid_t grandchild_pid; /**< PID of the grandchild */

    DBusWatchList *watches; /**< Watches */

    DBusWatch *error_watch; /**< Error pipe watch */
    DBusWatch *sitter_watch; /**< Sitter pipe watch */

    DBusBabysitterFinishedFunc finished_cb;
    void *finished_data;

    int errnum; /**< Error number */
    int status; /**< Exit status code */
    unsigned int have_child_status : 1; /**< True if child status has
been reaped */

```

```

    unsigned int have_fork_errnum : 1; /**< True if we have an error
code from fork() */
    unsigned int have_exec_errnum : 1; /**< True if we have an error
code from exec() */
};

static DBusBabysitter*
_dbus_babysitter_new (void)
{
    DBusBabysitter *sitter;

    sitter = dbus_new0 (DBusBabysitter, 1);
    if (sitter == NULL)
        return NULL;

    sitter->refcount = 1;

    sitter->socket_to_babysitter = -1;
    sitter->error_pipe_from_child = -1;

    sitter->sitter_pid = -1;
    sitter->grandchild_pid = -1;

    sitter->watches = _dbus_watch_list_new ();
    if (sitter->watches == NULL)
        goto failed;

    return sitter;

failed:
    _dbus_babysitter_unref (sitter);
    return NULL;
}

/**
 * Increment the reference count on the babysitter object.
 *
 * @param sitter the babysitter
 * @returns the babysitter
 */
DBusBabysitter *
_dbus_babysitter_ref (DBusBabysitter *sitter)
{
    _dbus_assert (sitter != NULL);
    _dbus_assert (sitter->refcount > 0);

    sitter->refcount += 1;

    return sitter;
}

static void close_socket_to_babysitter (DBusBabysitter *sitter);

```

```

static void close_error_pipe_from_child (DBusBabysitter *sitter);

/**
 * Decrement the reference count on the babysitter object.
 * When the reference count of the babysitter object reaches
 * zero, the babysitter is killed and the child that was being
 * babysat gets emancipated.
 *
 * @param sitter the babysitter
 */
void
_dbus_babysitter_unref (DBusBabysitter *sitter)
{
    _dbus_assert (sitter != NULL);
    _dbus_assert (sitter->refcount > 0);

    sitter->refcount -= 1;
    if (sitter->refcount == 0)
    {
        /* If we haven't forked other babysitters
         * since this babysitter and socket were
         * created then this close will cause the
         * babysitter to wake up from poll with
         * a hangup and then the babysitter will
         * quit itself.
         */
        close_socket_to_babysitter (sitter);

        close_error_pipe_from_child (sitter);

        if (sitter->sitter_pid > 0)
        {
            int status;
            int ret;

            /* It's possible the babysitter died on its own above
             * from the close, or was killed randomly
             * by some other process, so first try to reap it
             */
            ret = waitpid (sitter->sitter_pid, &status, WNOHANG);

            /* If we couldn't reap the child then kill it, and
             * try again
             */
            if (ret == 0)
                kill (sitter->sitter_pid, SIGKILL);

        again:
            if (ret == 0)
                ret = waitpid (sitter->sitter_pid, &status, 0);

            if (ret < 0)

```

```

        {
            if (errno == EINTR)
                goto again;
            else if (errno == ECHILD)
                _dbus_warn ("Babysitter process not available to be
reaped; should not happen\n");
            else
                _dbus_warn ("Unexpected error %d in waitpid() for
babysitter: %s\n",
                            errno, _dbus_strerror (errno));
        }
    else
    {
        _dbus_verbose ("Reaped %ld, waiting for babysitter
%ld\n",
                        (long) ret, (long) sitter->sitter_pid);

        if (WIFEXITED (sitter->status))
            _dbus_verbose ("Babysitter exited with status %d\n",
                            WEXITSTATUS (sitter->status));
        else if (WIFSIGNALED (sitter->status))
            _dbus_verbose ("Babysitter received signal %d\n",
                            WTERMSIG (sitter->status));
        else
            _dbus_verbose ("Babysitter exited abnormally\n");
    }

    sitter->sitter_pid = -1;
}

if (sitter->watches)
    _dbus_watch_list_free (sitter->watches);

dbus_free (sitter->executable);

dbus_free (sitter);
}
}

static ReadStatus
read_data (DBusBabysitter *sitter,
           int fd)
{
    int what;
    int got;
    DBusError error = DBUS_ERROR_INIT;
    ReadStatus r;

    r = read_ints (fd, &what, 1, &got, &error);

    switch (r)
    {

```

```

    case READ_STATUS_ERROR:
        _dbus_warn ("Failed to read data from fd %d: %s\n", fd,
error.message);
        dbus_error_free (&error);
        return r;

    case READ_STATUS_EOF:
        return r;

    case READ_STATUS_OK:
        break;
}

if (got == 1)
{
    switch (what)
    {
        case CHILD_EXITED:
        case CHILD_FORK_FAILED:
        case CHILD_EXEC_FAILED:
            {
                int arg;

                r = read_ints (fd, &arg, 1, &got, &error);

                switch (r)
                {
                    case READ_STATUS_ERROR:
                        _dbus_warn ("Failed to read arg from fd %d: %s\n", fd,
error.message);
                        dbus_error_free (&error);
                        return r;
                    case READ_STATUS_EOF:
                        return r;
                    case READ_STATUS_OK:
                        break;
                }

                if (got == 1)
                {
                    if (what == CHILD_EXITED)
                    {
                        sitter->have_child_status = TRUE;
                        sitter->status = arg;
                        sitter->errnum = 0;
                        _dbus_verbose ("recorded child status exited = %d
signaled = %d exitstatus = %d termsig = %d\n",
WIFEXITED (sitter->status),
WIFSIGNALED (sitter->status),
WEXITSTATUS (sitter->status),
WTERMSIG (sitter->status));
                    }
                }
            }
    }
}

```

```

        else if (what == CHILD_FORK_FAILED)
        {
            sitter->have_fork_errnum = TRUE;
            sitter->errnum = arg;
            _dbus_verbose ("recorded fork errnum %d\n",
sitter->errnum);
        }
        else if (what == CHILD_EXEC_FAILED)
        {
            sitter->have_exec_errnum = TRUE;
            sitter->errnum = arg;
            _dbus_verbose ("recorded exec errnum %d\n",
sitter->errnum);
        }
    }
    break;
case CHILD_PID:
    {
        pid_t pid = -1;

        r = read_pid (fd, &pid, &error);

        switch (r)
        {
            case READ_STATUS_ERROR:
                _dbus_warn ("Failed to read PID from fd %d: %s\n", fd,
error.message);
                dbus_error_free (&error);
                return r;
            case READ_STATUS_EOF:
                return r;
            case READ_STATUS_OK:
                break;
        }

        sitter->grandchild_pid = pid;

        _dbus_verbose ("recorded grandchild pid %d\n", sitter-
>grandchild_pid);
    }
    break;
default:
    _dbus_warn ("Unknown message received from babysitter
process\n");
    break;
}
}

return r;
}

```

```

static void
close_socket_to_babysitter (DBusBabysitter *sitter)
{
    _dbus_verbose ("Closing babysitter\n");

    if (sitter->sitter_watch != NULL)
    {
        _dbus_assert (sitter->watches != NULL);
        _dbus_watch_list_remove_watch (sitter->watches, sitter-
>sitter_watch);
        _dbus_watch_invalidate (sitter->sitter_watch);
        _dbus_watch_unref (sitter->sitter_watch);
        sitter->sitter_watch = NULL;
    }

    if (sitter->socket_to_babysitter >= 0)
    {
        _dbus_close_socket (sitter->socket_to_babysitter, NULL);
        sitter->socket_to_babysitter = -1;
    }
}

static void
close_error_pipe_from_child (DBusBabysitter *sitter)
{
    _dbus_verbose ("Closing child error\n");

    if (sitter->error_watch != NULL)
    {
        _dbus_assert (sitter->watches != NULL);
        _dbus_watch_list_remove_watch (sitter->watches, sitter-
>error_watch);
        _dbus_watch_invalidate (sitter->error_watch);
        _dbus_watch_unref (sitter->error_watch);
        sitter->error_watch = NULL;
    }

    if (sitter->error_pipe_from_child >= 0)
    {
        _dbus_close_socket (sitter->error_pipe_from_child, NULL);
        sitter->error_pipe_from_child = -1;
    }
}

static void
handle_babysitter_socket (DBusBabysitter *sitter,
                          int             revents)
{
    /* Even if we have POLLHUP, we want to keep reading
     * data until POLLIN goes away; so this function only
     * looks at HUP/ERR if no IN is set.
     */
}

```

```

    if (revents & _DBUS_POLLIN)
    {
        _dbus_verbose ("Reading data from babysitter\n");
        if (read_data (sitter, sitter->socket_to_babysitter) !=
READ_STATUS_OK)
            close_socket_to_babysitter (sitter);
    }
    else if (revents & (_DBUS_POLLERR | _DBUS_POLLHUP))
    {
        close_socket_to_babysitter (sitter);
    }
}

static void
handle_error_pipe (DBusBabysitter *sitter,
                  int                revents)
{
    if (revents & _DBUS_POLLIN)
    {
        _dbus_verbose ("Reading data from child error\n");
        if (read_data (sitter, sitter->error_pipe_from_child) !=
READ_STATUS_OK)
            close_error_pipe_from_child (sitter);
    }
    else if (revents & (_DBUS_POLLERR | _DBUS_POLLHUP))
    {
        close_error_pipe_from_child (sitter);
    }
}

/* returns whether there were any poll events handled */
static dbus_bool_t
babysitter_iteration (DBusBabysitter *sitter,
                     dbus_bool_t     block)
{
    DBusPollFD fds[2];
    int i;
    dbus_bool_t descriptors_ready;

    descriptors_ready = FALSE;

    i = 0;

    if (sitter->error_pipe_from_child >= 0)
    {
        fds[i].fd = sitter->error_pipe_from_child;
        fds[i].events = _DBUS_POLLIN;
        fds[i].revents = 0;
        ++i;
    }

    if (sitter->socket_to_babysitter >= 0)

```



```

    {
        fds[i].fd = sitter->socket_to_babysitter;
        fds[i].events = _DBUS_POLLIN;
        fds[i].revents = 0;
        ++i;
    }

if (i > 0)
{
    int ret;

    do
    {
        ret = _dbus_poll (fds, i, 0);
    }
    while (ret < 0 && errno == EINTR);

    if (ret == 0 && block)
    {
        do
        {
            ret = _dbus_poll (fds, i, -1);
        }
        while (ret < 0 && errno == EINTR);
    }

    if (ret > 0)
    {
        descriptors_ready = TRUE;

        while (i > 0)
        {
            --i;
            if (fds[i].fd == sitter->error_pipe_from_child)
                handle_error_pipe (sitter, fds[i].revents);
            else if (fds[i].fd == sitter->socket_to_babysitter)
                handle_babysitter_socket (sitter, fds[i].revents);
        }
    }
}

return descriptors_ready;
}

/**
 * Macro returns #TRUE if the babysitter still has live sockets open
to the
 * babysitter child or the grandchild.
 */
#define LIVE_CHILDREN(sitter) ((sitter)->socket_to_babysitter >= 0 ||
(sitter)->error_pipe_from_child >= 0)

```

```

/**
 * Blocks until the babysitter process gives us the PID of the spawned
grandchild,
 * then kills the spawned grandchild.
 *
 * @param sitter the babysitter object
 */
void
_dbus_babysitter_kill_child (DBusBabysitter *sitter)
{
    /* be sure we have the PID of the child */
    while (LIVE_CHILDREN (sitter) &&
           sitter->grandchild_pid == -1)
        babysitter_iteration (sitter, TRUE);

    _dbus_verbose ("Got child PID %ld for killing\n",
                   (long) sitter->grandchild_pid);

    if (sitter->grandchild_pid == -1)
        return; /* child is already dead, or we're so hosed we'll never
recover */

    kill (sitter->grandchild_pid, SIGKILL);
}

/**
 * Checks whether the child has exited, without blocking.
 *
 * @param sitter the babysitter
 */
dbus_bool_t
_dbus_babysitter_get_child_exited (DBusBabysitter *sitter)
{
    /* Be sure we're up-to-date */
    while (LIVE_CHILDREN (sitter) &&
           babysitter_iteration (sitter, FALSE))
        ;

    /* We will have exited the babysitter when the child has exited */
    return sitter->socket_to_babysitter < 0;
}

/**
 * Gets the exit status of the child. We do this so implementation
specific
 * detail is not cluttering up dbus, for example the system launcher
code.
 * This can only be called if the child has exited, i.e. call
 * _dbus_babysitter_get_child_exited(). It returns FALSE if the child
 * did not return a status code, e.g. because the child was signaled
 * or we failed to ever launch the child in the first place.

```

```

*
* @param sitter the babysitter
* @param status the returned status code
* @returns #FALSE on failure
*/
dbus_bool_t
_dbus_babysitter_get_child_exit_status (DBusBabysitter *sitter,
                                         int *status)
{
    if (!_dbus_babysitter_get_child_exited (sitter))
        _dbus_assert_not_reached ("Child has not exited");

    if (!sitter->have_child_status ||
        !(WIFEXITED (sitter->status)))
        return FALSE;

    *status = WEXITSTATUS (sitter->status);
    return TRUE;
}

/**
 * Sets the #DBusError with an explanation of why the spawned
 * child process exited (on a signal, or whatever). If
 * the child process has not exited, does nothing (error
 * will remain unset).
 *
 * @param sitter the babysitter
 * @param error an error to fill in
 */
void
_dbus_babysitter_set_child_exit_error (DBusBabysitter *sitter,
                                       DBusError *error)
{
    if (!_dbus_babysitter_get_child_exited (sitter))
        return;

    /* Note that if exec fails, we will also get a child status
     * from the babysitter saying the child exited,
     * so we need to give priority to the exec error
     */
    if (sitter->have_exec_errnum)
    {
        dbus_set_error (error, DBUS_ERROR_SPAWN_EXEC_FAILED,
                       "Failed to execute program %s: %s",
                       sitter->executable, _dbus_strerror (sitter-
>errnum));
    }
    else if (sitter->have_fork_errnum)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
                       "Failed to fork a new process %s: %s",

```

```

        sitter->executable, _dbus_strerror (sitter-
>errnum));
    }
    else if (sitter->have_child_status)
    {
        if (WIFEXITED (sitter->status))
            dbus_set_error (error, DBUS_ERROR_SPAWN_CHILD_EXITED,
                "Process %s exited with status %d",
                sitter->executable, WEXITSTATUS (sitter-
>status));
        else if (WIFSIGNALED (sitter->status))
            dbus_set_error (error, DBUS_ERROR_SPAWN_CHILD_SIGNALED,
                "Process %s received signal %d",
                sitter->executable, WTERMSIG (sitter-
>status));
        else
            dbus_set_error (error, DBUS_ERROR_FAILED,
                "Process %s exited abnormally",
                sitter->executable);
    }
    else
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
            "Process %s exited, reason unknown",
            sitter->executable);
    }
}

/**
 * Sets watch functions to notify us when the
 * babysitter object needs to read/write file descriptors.
 *
 * @param sitter the babysitter
 * @param add_function function to begin monitoring a new descriptor.
 * @param remove_function function to stop monitoring a descriptor.
 * @param toggled_function function to notify when the watch is
enabled/disabled
 * @param data data to pass to add_function and remove_function.
 * @param free_data_function function to be called to free the data.
 * @returns #FALSE on failure (no memory)
 */
dbus_bool_t
_dbus_babysitter_set_watch_functions (DBusBabysitter
*sitter,
                                     DBusAddWatchFunction
add_function,
                                     DBusRemoveWatchFunction
remove_function,
                                     DBusWatchToggledFunction
toggled_function,
                                     void
                                     *data,

```

```

                                                                    DbusFreeFunction
free_data_function)
{
    return _dbus_watch_list_set_functions (sitter->watches,
                                           add_function,
                                           remove_function,
                                           toggled_function,
                                           data,
                                           free_data_function);
}

static dbus_bool_t
handle_watch (DBusWatch      *watch,
              unsigned int    condition,
              void            *data)
{
    DBusBabysitter *sitter = _dbus_babysitter_ref (data);
    int revents;
    int fd;

    revents = 0;
    if (condition & DBUS_WATCH_READABLE)
        revents |= _DBUS_POLLIN;
    if (condition & DBUS_WATCH_ERROR)
        revents |= _DBUS_POLLERR;
    if (condition & DBUS_WATCH_HANGUP)
        revents |= _DBUS_POLLHUP;

    fd = dbus_watch_get_socket (watch);

    if (fd == sitter->error_pipe_from_child)
        handle_error_pipe (sitter, revents);
    else if (fd == sitter->socket_to_babysitter)
        handle_babysitter_socket (sitter, revents);

    while (LIVE_CHILDREN (sitter) &&
           babysitter_iteration (sitter, FALSE))
        ;

    /* fd.o #32992: if the handle_* methods closed their sockets, they
    previously
    * didn't always remove the watches. Check that we don't regress. */
    _dbus_assert (sitter->socket_to_babysitter != -1 || sitter-
>sitter_watch == NULL);
    _dbus_assert (sitter->error_pipe_from_child != -1 || sitter-
>error_watch == NULL);

    if (_dbus_babysitter_get_child_exited (sitter) &&
        sitter->finished_cb != NULL)
    {
        sitter->finished_cb (sitter, sitter->finished_data);
        sitter->finished_cb = NULL;
    }
}

```

```

    }

    _dbus_babysitter_unref (sitter);
    return TRUE;
}

/** Helps remember which end of the pipe is which */
#define READ_END 0
/** Helps remember which end of the pipe is which */
#define WRITE_END 1

/* Avoids a danger in threaded situations (calling close()
 * on a file descriptor twice, and another thread has
 * re-opened it since the first close)
 */
static int
close_and_invalidate (int *fd)
{
    int ret;

    if (*fd < 0)
        return -1;
    else
        {
            ret = _dbus_close_socket (*fd, NULL);
            *fd = -1;
        }

    return ret;
}

static dbus_bool_t
make_pipe (int          p[2],
           DBusError   *error)
{
    int retval;

#ifdef HAVE_PIPE2
    dbus_bool_t cloexec_done;

    retval = pipe2 (p, O_CLOEXEC);
    cloexec_done = retval >= 0;

    /* Check if kernel seems to be too old to know pipe2(). We assume
     * that if pipe2 is available, O_CLOEXEC is too. */
    if (retval < 0 && errno == ENOSYS)
#endif
    {
        retval = pipe(p);
    }
}

```

```

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (retval < 0)
    {
        dbus_set_error (error,
                        DBUS_ERROR_SPAWN_FAILED,
                        "Failed to create pipe for communicating with child
process (%s)",
                        _dbus_strerror (errno));
        return FALSE;
    }

#ifdef HAVE_PIPE2
    if (!cloexec_done)
#endif
    {
        _dbus_fd_set_close_on_exec (p[0]);
        _dbus_fd_set_close_on_exec (p[1]);
    }

    return TRUE;
}

static void
do_write (int fd, const void *buf, size_t count)
{
    size_t bytes_written;
    int ret;

    bytes_written = 0;

again:

    ret = write (fd, ((const char*)buf) + bytes_written, count -
bytes_written);

    if (ret < 0)
    {
        if (errno == EINTR)
            goto again;
        else
        {
            _dbus_warn ("Failed to write data to pipe!\n");
            exit (1); /* give up, we suck */
        }
    }
    else
        bytes_written += ret;

    if (bytes_written < count)
        goto again;
}

```

```

static void
write_err_and_exit (int fd, int msg)
{
    int en = errno;

    do_write (fd, &msg, sizeof (msg));
    do_write (fd, &en, sizeof (en));

    exit (1);
}

static void
write_pid (int fd, pid_t pid)
{
    int msg = CHILD_PID;

    do_write (fd, &msg, sizeof (msg));
    do_write (fd, &pid, sizeof (pid));
}

static void
write_status_and_exit (int fd, int status)
{
    int msg = CHILD_EXITED;

    do_write (fd, &msg, sizeof (msg));
    do_write (fd, &status, sizeof (status));

    exit (0);
}

static void
do_exec (int                                child_err_report_fd,
         char                                **argv,
         char                                **envp,
         DBusSpawnChildSetupFunc           child_setup,
         void                                *user_data)
{
#ifdef DBUS_BUILD_TESTS
    int i, max_open;
#endif

    _dbus_verbose_reset ();
    _dbus_verbose ("Child process has PID " DBUS_PID_FORMAT "\n",
                  _dbus_getpid ());

    if (child_setup)
        (* child_setup) (user_data);

#ifdef DBUS_BUILD_TESTS
    max_open = sysconf (_SC_OPEN_MAX);
#endif

```



```

for (i = 3; i < max_open; i++)
{
    int retval;

    if (i == child_err_report_fd)
        continue;

    retval = fcntl (i, F_GETFD);

    if (retval != -1 && !(retval & FD_CLOEXEC))
        _dbus_warn ("Fd %d did not have the close-on-exec flag set!\n",
i);
}
#endif

if (envp == NULL)
{
    _dbus_assert (environ != NULL);

    envp = environ;
}

execve (argv[0], argv, envp);

/* Exec failed */
write_err_and_exit (child_err_report_fd,
                    CHILD_EXEC_FAILED);
}

static void
check_babysit_events (pid_t grandchild_pid,
                     int parent_pipe,
                     int revents)
{
    pid_t ret;
    int status;

    do
    {
        ret = waitpid (grandchild_pid, &status, WNOHANG);
        /* The man page says EINTR can't happen with WNOHANG,
         * but there are reports of it (maybe only with valgrind?)
         */
    }
    while (ret < 0 && errno == EINTR);

    if (ret == 0)
    {
        _dbus_verbose ("no child exited\n");

        ; /* no child exited */
    }
}

```

```

    }
    else if (ret < 0)
    {
        /* This isn't supposed to happen. */
        _dbus_warn ("unexpected waitpid() failure in
check_babysit_events(): %s\n",
                    _dbus_strerror (errno));
        exit (1);
    }
    else if (ret == grandchild_pid)
    {
        /* Child exited */
        _dbus_verbose ("reaped child pid %ld\n", (long) ret);

        write_status_and_exit (parent_pipe, status);
    }
    else
    {
        _dbus_warn ("waitpid() reaped pid %d that we've never heard
of\n",
                    (int) ret);
        exit (1);
    }

    if (revents & _DBUS_POLLIN)
    {
        _dbus_verbose ("babysitter got POLLIN from parent pipe\n");
    }

    if (revents & (_DBUS_POLLERR | _DBUS_POLLHUP))
    {
        /* Parent is gone, so we just exit */
        _dbus_verbose ("babysitter got POLLERR or POLLHUP from
parent\n");
        exit (0);
    }
}

static int babysit_sigchld_pipe = -1;

static void
babysit_signal_handler (int signo)
{
    char b = '\0';
again:
    if (write (babysit_sigchld_pipe, &b, 1) <= 0)
        if (errno == EINTR)
            goto again;
}

static void
babysit (pid_t grandchild_pid,

```

```

        int    parent_pipe)
{
    int sigchld_pipe[2];

    /* We don't exec, so we keep parent state, such as the pid that
     * _dbus_verbose() uses. Reset the pid here.
     */
    _dbus_verbose_reset ();

    /* I thought SIGCHLD would just wake up the poll, but
     * that didn't seem to work, so added this pipe.
     * Probably the pipe is more likely to work on busted
     * operating systems anyhow.
     */
    if (pipe (sigchld_pipe) < 0)
    {
        _dbus_warn ("Not enough file descriptors to create pipe in
babysitter process\n");
        exit (1);
    }

    babysit_sigchld_pipe = sigchld_pipe[WRITE_END];

    _dbus_set_signal_handler (SIGCHLD, babysit_signal_handler);

    write_pid (parent_pipe, grandchild_pid);

    check_babysit_events (grandchild_pid, parent_pipe, 0);

    while (TRUE)
    {
        DBusPollFD pfds[2];

        pfds[0].fd = parent_pipe;
        pfds[0].events = _DBUS_POLLIN;
        pfds[0].revents = 0;

        pfds[1].fd = sigchld_pipe[READ_END];
        pfds[1].events = _DBUS_POLLIN;
        pfds[1].revents = 0;

        if (_dbus_poll (pfds, _DBUS_N_ELEMENTS (pfds), -1) < 0 && errno
!= EINTR)
        {
            _dbus_warn ("_dbus_poll() error: %s\n", strerror (errno));
            exit (1);
        }

        if (pfds[0].revents != 0)
        {
            check_babysit_events (grandchild_pid, parent_pipe,
pfds[0].revents);
        }
    }
}

```

```

    }
    else if (pfds[1].revents & _DBUS_POLLIN)
    {
        char b;
        if (read (sigchld_pipe[READ_END], &b, 1) == -1)
        {
            /* ignore */
        }
        /* do waitpid check */
        check_babysit_events (grandchild_pid, parent_pipe, 0);
    }
}

exit (1);
}

/**
 * Spawns a new process. The executable name and argv[0]
 * are the same, both are provided in argv[0]. The child_setup
 * function is passed the given user_data and is run in the child
 * just before calling exec().
 *
 * Also creates a "babysitter" which tracks the status of the
 * child process, advising the parent if the child exits.
 * If the spawn fails, no babysitter is created.
 * If sitter_p is #NULL, no babysitter is kept.
 *
 * @param sitter_p return location for babysitter or #NULL
 * @param argv the executable and arguments
 * @param env the environment (not used on unix yet)
 * @param child_setup function to call in child pre-exec()
 * @param user_data user data for setup function
 * @param error error object to be filled in if function fails
 * @returns #TRUE on success, #FALSE if error is filled in
 */
dbus_bool_t
_dbus_spawn_async_with_babysitter (DBusBabysitter          **sitter_p,
                                   char                    **argv,
                                   char                    **env,
                                   DBusSpawnChildSetupFunc
child_setup,
                                   void
*user_data,
                                   DBusError                *error)
{
    DBusBabysitter *sitter;
    int child_err_report_pipe[2] = { -1, -1 };
    int babysitter_pipe[2] = { -1, -1 };
    pid_t pid;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

```

```

if (sitter_p != NULL)
    *sitter_p = NULL;

sitter = NULL;

sitter = _dbus_babysitter_new ();
if (sitter == NULL)
{
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
    return FALSE;
}

sitter->executable = _dbus_strdup (argv[0]);
if (sitter->executable == NULL)
{
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
    goto cleanup_and_fail;
}

if (!make_pipe (child_err_report_pipe, error))
    goto cleanup_and_fail;

if (!_dbus_full_duplex_pipe (&babysitter_pipe[0],
&babysitter_pipe[1], TRUE, error))
    goto cleanup_and_fail;

/* Setting up the babysitter is only useful in the parent,
 * but we don't want to run out of memory and fail
 * after we've already forked, since then we'd leak
 * child processes everywhere.
 */
sitter->error_watch = _dbus_watch_new
(child_err_report_pipe[READ_END],
                                     DBUS_WATCH_READABLE,
                                     TRUE, handle_watch, sitter,
NULL);
if (sitter->error_watch == NULL)
{
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
    goto cleanup_and_fail;
}

if (!_dbus_watch_list_add_watch (sitter->watches, sitter-
>error_watch))
{
    /* we need to free it early so the destructor won't try to
remove it
    * without it having been added, which DbusLoop doesn't allow */
    _dbus_watch_invalidate (sitter->error_watch);
    _dbus_watch_unref (sitter->error_watch);
    sitter->error_watch = NULL;
}

```

```

        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto cleanup_and_fail;
    }

    sitter->sitter_watch = _dbus_watch_new (babysitter_pipe[0],
                                           DBUS_WATCH_READABLE,
                                           TRUE, handle_watch, sitter,
NULL);
    if (sitter->sitter_watch == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto cleanup_and_fail;
    }

    if (!_dbus_watch_list_add_watch (sitter->watches, sitter-
>sitter_watch))
    {
        /* we need to free it early so the destructor won't try to
remove it
        * without it having been added, which DbusLoop doesn't allow */
        _dbus_watch_invalidate (sitter->sitter_watch);
        _dbus_watch_unref (sitter->sitter_watch);
        sitter->sitter_watch = NULL;

        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto cleanup_and_fail;
    }

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    pid = fork ();

    if (pid < 0)
    {
        dbus_set_error (error,
                        DBUS_ERROR_SPAWN_FORK_FAILED,
                        "Failed to fork (%s)",
                        _dbus_strerror (errno));
        goto cleanup_and_fail;
    }
    else if (pid == 0)
    {
        /* Immediate child, this is the babysitter process. */
        int grandchild_pid;

        /* Be sure we crash if the parent exits
        * and we write to the err_report_pipe
        */
        signal (SIGPIPE, SIG_DFL);

        /* Close the parent's end of the pipes. */
        close_and_invalidate (&child_err_report_pipe[READ_END]);
    }

```

```

close_and_invalidate (&babysitter_pipe[0]);

/* Create the child that will exec () */
grandchild_pid = fork ();

if (grandchild_pid < 0)
{
    write_err_and_exit (babysitter_pipe[1],
                        CHILD_FORK_FAILED);
    _dbus_assert_not_reached ("Got to code after
write_err_and_exit()");
}
else if (grandchild_pid == 0)
{
    do_exec (child_err_report_pipe[WRITE_END],
            argv,
            env,
            child_setup, user_data);
    _dbus_assert_not_reached ("Got to code after exec() - should
have exited on error");
}
else
{
    babysit (grandchild_pid, babysitter_pipe[1]);
    _dbus_assert_not_reached ("Got to code after babysit()");
}
}
else
{
    /* Close the uncared-about ends of the pipes */
    close_and_invalidate (&child_err_report_pipe[WRITE_END]);
    close_and_invalidate (&babysitter_pipe[1]);

    sitter->socket_to_babysitter = babysitter_pipe[0];
    babysitter_pipe[0] = -1;

    sitter->error_pipe_from_child = child_err_report_pipe[READ_END];
    child_err_report_pipe[READ_END] = -1;

    sitter->sitter_pid = pid;

    if (sitter_p != NULL)
        *sitter_p = sitter;
    else
        _dbus_babysitter_unref (sitter);

    dbus_free_string_array (env);

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    return TRUE;
}

```

```

cleanup_and_fail:

    _DBUS_ASSERT_ERROR_IS_SET (error);

    close_and_invalidate (&child_err_report_pipe[READ_END]);
    close_and_invalidate (&child_err_report_pipe[WRITE_END]);
    close_and_invalidate (&babysitter_pipe[0]);
    close_and_invalidate (&babysitter_pipe[1]);

    if (sitter != NULL)
        _dbus_babysitter_unref (sitter);

    return FALSE;
}

void
_dbus_babysitter_set_result_function (DBusBabysitter
*sitter,
                                     DBusBabysitterFinishedFunc
finished,
                                     void
*user_data)
{
    sitter->finished_cb = finished;
    sitter->finished_data = user_data;
}

/** @} */

#ifdef DBUS_BUILD_TESTS

static char *
get_test_exec (const char *exe,
               DBusString *scratch_space)
{
    const char *dbus_test_exec;

    dbus_test_exec = _dbus_getenv ("DBUS_TEST_EXEC");

    if (dbus_test_exec == NULL)
        dbus_test_exec = DBUS_TEST_EXEC;

    if (!_dbus_string_init (scratch_space))
        return NULL;

    if (!_dbus_string_append_printf (scratch_space, "%s/%s%s",
                                     dbus_test_exec, exe, DBUS_EXEEXT))
    {
        _dbus_string_free (scratch_space);
        return NULL;
    }
}

```



```

    return _dbus_string_get_data (scratch_space);
}

static void
_dbus_babysitter_block_for_child_exit (DBusBabysitter *sitter)
{
    while (LIVE_CHILDREN (sitter))
        babysitter_iteration (sitter, TRUE);
}

static dbus_bool_t
check_spawn_nonexistent (void *data)
{
    char *argv[4] = { NULL, NULL, NULL, NULL };
    DBusBabysitter *sitter = NULL;
    DBusError error = DBUS_ERROR_INIT;

    /*** Test launching nonexistent binary **/

    argv[0] = "/this/does/not/exist/32542sdgafgafdg";
    if (_dbus_spawn_async_with_babysitter (&sitter, argv,
                                           NULL, NULL, NULL,
                                           &error))
    {
        _dbus_babysitter_block_for_child_exit (sitter);
        _dbus_babysitter_set_child_exit_error (sitter, &error);
    }

    if (sitter)
        _dbus_babysitter_unref (sitter);

    if (!dbus_error_is_set (&error))
    {
        _dbus_warn ("Did not get an error launching nonexistent
executable\n");
        return FALSE;
    }

    if (!(dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY) ||
        dbus_error_has_name (&error, DBUS_ERROR_SPAWN_EXEC_FAILED)))
    {
        _dbus_warn ("Not expecting error when launching nonexistent
executable: %s: %s\n",
                    error.name, error.message);
        dbus_error_free (&error);
        return FALSE;
    }

    dbus_error_free (&error);

    return TRUE;
}

```

```

}

static dbus_bool_t
check_spawn_segfault (void *data)
{
    char *argv[4] = { NULL, NULL, NULL, NULL };
    DBusBabysitter *sitter = NULL;
    DBusError error = DBUS_ERROR_INIT;
    DBusString argv0;

    /*** Test launching segfault binary */

    argv[0] = get_test_exec ("test-segfault", &argv0);

    if (argv[0] == NULL)
    {
        /* OOM was simulated, never mind */
        return TRUE;
    }

    if (_dbus_spawn_async_with_babysitter (&sitter, argv,
                                           NULL, NULL, NULL,
                                           &error))
    {
        _dbus_babysitter_block_for_child_exit (sitter);
        _dbus_babysitter_set_child_exit_error (sitter, &error);
    }

    _dbus_string_free (&argv0);

    if (sitter)
        _dbus_babysitter_unref (sitter);

    if (!dbus_error_is_set (&error))
    {
        _dbus_warn ("Did not get an error launching segfaulting
binary\n");
        return FALSE;
    }

    if (!(dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY) ||
        dbus_error_has_name (&error,
        DBUS_ERROR_SPAWN_CHILD_SIGNALED)))
    {
        _dbus_warn ("Not expecting error when launching segfaulting
executable: %s: %s\n",
                    error.name, error.message);
        dbus_error_free (&error);
        return FALSE;
    }

    dbus_error_free (&error);
}

```

```

    return TRUE;
}

static dbus_bool_t
check_spawn_exit (void *data)
{
    char *argv[4] = { NULL, NULL, NULL, NULL };
    DBusBabysitter *sitter = NULL;
    DBusError error = DBUS_ERROR_INIT;
    DBusString argv0;

    /*** Test launching exit failure binary **/

    argv[0] = get_test_exec ("test-exit", &argv0);

    if (argv[0] == NULL)
    {
        /* OOM was simulated, never mind */
        return TRUE;
    }

    if (_dbus_spawn_async_with_babysitter (&sitter, argv,
                                           NULL, NULL, NULL,
                                           &error))
    {
        _dbus_babysitter_block_for_child_exit (sitter);
        _dbus_babysitter_set_child_exit_error (sitter, &error);
    }

    _dbus_string_free (&argv0);

    if (sitter)
        _dbus_babysitter_unref (sitter);

    if (!dbus_error_is_set (&error))
    {
        _dbus_warn ("Did not get an error launching binary that exited
with failure code\n");
        return FALSE;
    }

    if (!(dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY) ||
        dbus_error_has_name (&error, DBUS_ERROR_SPAWN_CHILD_EXITED)))
    {
        _dbus_warn ("Not expecting error when launching exiting
executable: %s: %s\n",
                    error.name, error.message);
        dbus_error_free (&error);
        return FALSE;
    }
}

```

```

dbus_error_free (&error);

return TRUE;
}

static dbus_bool_t
check_spawn_and_kill (void *data)
{
    char *argv[4] = { NULL, NULL, NULL, NULL };
    DBusBabysitter *sitter = NULL;
    DBusError error = DBUS_ERROR_INIT;
    DBusString argv0;

    /** Test launching sleeping binary then killing it */

    argv[0] = get_test_exec ("test-sleep-forever", &argv0);

    if (argv[0] == NULL)
    {
        /* OOM was simulated, never mind */
        return TRUE;
    }

    if (_dbus_spawn_async_with_babysitter (&sitter, argv,
                                           NULL, NULL, NULL,
                                           &error))
    {
        _dbus_babysitter_kill_child (sitter);

        _dbus_babysitter_block_for_child_exit (sitter);

        _dbus_babysitter_set_child_exit_error (sitter, &error);
    }

    _dbus_string_free (&argv0);

    if (sitter)
        _dbus_babysitter_unref (sitter);

    if (!dbus_error_is_set (&error))
    {
        _dbus_warn ("Did not get an error after killing spawned
binary\n");
        return FALSE;
    }

    if (!(dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY) ||
        dbus_error_has_name (&error,
        DBUS_ERROR_SPAWN_CHILD_SIGNALED)))
    {
        _dbus_warn ("Not expecting error when killing executable: %s:
%s\n",

```

```

        error.name, error.message);
    dbus_error_free (&error);
    return FALSE;
}

dbus_error_free (&error);

return TRUE;
}

dbus_bool_t
_dbus_spawn_test (const char *test_data_dir)
{
    if (!_dbus_test_oom_handling ("spawn_nonexistent",
                                check_spawn_nonexistent,
                                NULL))
        return FALSE;

    if (!_dbus_test_oom_handling ("spawn_segfault",
                                check_spawn_segfault,
                                NULL))
        return FALSE;

    if (!_dbus_test_oom_handling ("spawn_exit",
                                check_spawn_exit,
                                NULL))
        return FALSE;

    if (!_dbus_test_oom_handling ("spawn_and_kill",
                                check_spawn_and_kill,
                                NULL))
        return FALSE;

    return TRUE;
}
#endif

```

File = dbus-spawn.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-spawn.h Wrapper around fork/exec
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```

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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*/

```

```

#ifndef DBUS_SPAWN_H
#define DBUS_SPAWN_H

#include <dbus/dbus-string.h>
#include <dbus/dbus-errors.h>
#include <dbus/dbus-watch.h>

DBUS_BEGIN_DECLS

typedef void (* DbusSpawnChildSetupFunc) (void *user_data);

typedef struct DbusBabysitter DbusBabysitter;

typedef void (* DbusBabysitterFinishedFunc) (DBusBabysitter *sitter,
void
*user_data);

dbus_bool_t _dbus_spawn_async_with_babysitter (DBusBabysitter
**sitter_p,
char
**argv,
char
**env,
DBusSpawnChildSetupFunc child_setup,
void
*user_data,
DBusError
*error);
void _dbus_babysitter_set_result_function (DBusBabysitter
*sitter,
DBusBabysitterFinishedFunc finished,
void
*user_data);

```

```

DBusBabysitter* _dbus_babysitter_ref          (DBusBabysitter
*sitter);
void          _dbus_babysitter_unref          (DBusBabysitter
*sitter);
void          _dbus_babysitter_kill_child    (DBusBabysitter
*sitter);
dbus_bool_t  _dbus_babysitter_get_child_exited (DBusBabysitter
*sitter);
void          _dbus_babysitter_set_child_exit_error (DBusBabysitter
*sitter,
                                           DBusError
*error);
dbus_bool_t  _dbus_babysitter_get_child_exit_status (DBusBabysitter
*sitter,
                                           int
*status);
dbus_bool_t  _dbus_babysitter_set_watch_functions (DBusBabysitter
*sitter,

DBusAddWatchFunction    add_function,

DBusRemoveWatchFunction remove_function,

DBusWatchToggledFunction toggled_function,
                                           void
*data,
                                           DBusFreeFunction
free_data_function);

DBUS_END_DECLS

#endif /* DBUS_SPAWN_H */

```

File = dbus-specification.html

```

<html><head><meta http-equiv="Content-Type" content="text/html;
charset=ISO-8859-1"><title>D-Bus Specification</title><meta
name="generator" content="DocBook XSL Stylesheets
V1.76.1"></head><body bgcolor="white" text="black" link="#0000FF"
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class="authorgroup"><div class="author"><h3 class="author"><span
class="firstname">Havoc</span> <span
class="surname">Pennington</span></h3><div class="affiliation"><span
class="orgname">Red Hat, Inc.<br></span><div class="address"><p><br>
<code class="email">&lt;<a class="email"
href="mailto:hp@pobox.com">hp@pobox.com</a>&gt;</code><br>
</p></div></div></div><div class="author"><h3
class="author"><span class="firstname">Anders</span> <span

```

```

class="surname">Carlsson</span></h3><div class="affiliation"><span
class="orgname">CodeFactory AB<br></span><div class="address"><p><br>
    <code class="email">&lt;<a class="email"
href="mailto:andersca@codefactory.se">andersca@codefactory.se</a>&gt;</code><br>
    </p></div></div></div><div class="author"><h3
class="author"><span class="firstname">Alexander</span> <span
class="surname">Larsson</span></h3><div class="affiliation"><span
class="orgname">Red Hat, Inc.<br></span><div class="address"><p><br>
    <code class="email">&lt;<a class="email"
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    </p></div></div></div><div class="author"><h3
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class="surname">Herzberg</span></h3><div class="affiliation"><span
class="orgname">Imendio AB<br></span><div class="address"><p><br>
    <code class="email">&lt;<a class="email"
href="mailto:sven@imendio.com">sven@imendio.com</a>&gt;</code><br>
    </p></div></div></div><div class="author"><h3
class="author"><span class="firstname">Simon</span> <span
class="surname">McVittie</span></h3><div class="affiliation"><span
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    <code class="email">&lt;<a class="email"
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co.uk</a>&gt;</code><br>
    </p></div></div></div><div class="author"><h3
class="author"><span class="firstname">David</span> <span
class="surname">Zeuthen</span></h3><div class="affiliation"><span
class="orgname">Red Hat, Inc.<br></span><div class="address"><p><br>
    <code class="email">&lt;<a class="email"
href="mailto:davidz@redhat.com">davidz@redhat.com</a>&gt;</code><br>
    </p></div></div></div></div></div><div><p
class="releaseinfo">Version 0.19</p></div><div><div
class="revhistory"><table border="1" width="100%" summary="Revision
history"><tr><th align="left" valign="top" colspan="3"><b>Revision
History</b></th></tr><tr><td align="left">Revision current</td><td
align="left"><a class="ulink"
href="http://cgit.freedesktop.org/dbus/dbus/log/doc/dbus-
specification.xml" target="_top">commit log</a></td><td
align="left"></td></tr><tr><td align="left"
colspan="3"></td></tr><tr><td align="left">Revision 0.19</td><td
align="left">20 February 2012</td><td
align="left">smcv/lp</td></tr><tr><td align="left"
colspan="3">formally define unique connection names and well-known
    bus names; document best practices for interface, bus, member
and
    error names, and object paths; document the search path for
session
    and system services on Unix; document the systemd
transport</td></tr><tr><td align="left">Revision 0.18</td><td
align="left">29 July 2011</td><td align="left">smcv</td></tr><tr><td
align="left" colspan="3">define eavesdropping, unicast, broadcast; add
eavesdrop

```


match keyword; promote type system to a top-level section

Revision 0.17	1 June 2011	smcv/davidz
define ObjectManager; reserve extra pseudo-type-codes used by GVariant		
Revision 0.16	11 April 2011	
add path_namespace, arg0namespace; argNpath matches object paths		
Revision 0.15	3 November 2010	
Revision 0.14		
Revision 0.14	12 May 2010	
Revision 0.13		
Revision 0.13	23 Dezember 2009	
Revision 0.12		
Revision 0.12	7 November, 2006	
Revision 0.11		
Revision 0.11	6 February 2005	
Revision 0.10		
Revision 0.10	28 January 2005	
Revision 0.9		
Revision 0.9	7 Januar 2005	
Revision 0.8		
Revision 0.8	06 September 2003	
First released document.		

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byte">Special credentials-passing nul byte</dt><dt>AUTH Command</dt><dt>CANCEL Command</dt><dt>DATA Command</dt><dt>BEGIN Command</dt><dt>REJECTED Command</dt><dt>OK Command</dt><dt>ERROR Command</dt><dt>NEGOTIATE_UNIX_FD Command</dt><dt>AGREE_UNIX_FD Command</dt><dt>Future Extensions</dt><dt>Authentication examples</dt><dt>Authentication state diagrams</dt><dt>Authentication mechanisms</dt></dl></dd><dt>Server Addresses</dt><dt>Transports</dt><dd><dl><dt>Unix Domain Sockets</dt><dt>launchd</dt><dt>systemd</dt><dt>TCP Sockets</dt><dt>Nonce-secured TCP Sockets</dt><dt>Executed Subprocesses on Unix</dt></dl></dd><dt>Meta Transports</dt><dd><dl><dt>Autolaunch</dt></dl></dd><dt>UUIDs</dt><dt>Standard Interfaces</dt><dd><dl><dt><code class="literal">org.freedesktop.DBus.Peer</code></dt><dt><code class="literal">org.freedesktop.DBus.Introspectable</code></dt><dt><code class="literal">org.freedesktop.DBus.Properties</code></dt><dt><code class="literal">org.freedesktop.DBus.ObjectManager</code></dt></dl></dd><dt>Introspection Data Format</dt><dt>Message Bus Specification</dt><dd><dl><dt><a

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[Introduction](#)

D-Bus is a system for low-latency, low-overhead, easy to use interprocess communication (IPC). In more detail:

- D-Bus is low-latency because it is designed to avoid round trips and allow asynchronous operation, much like the X protocol.
- D-Bus is low-overhead because it uses a binary protocol, and does not have to convert to and from a text format such as XML. Because D-Bus is intended for potentially high-resolution same-machine IPC, not primarily for Internet IPC, this is an interesting optimization.
- D-Bus is easy to use because it works in terms of messages rather than byte streams, and automatically handles a lot of the hard IPC issues. Also, the D-Bus library is designed to be wrapped in a way that lets developers use their framework's existing object/type system, rather than learning a new one specifically for IPC.

The base D-Bus protocol is a one-to-one (peer-to-peer or client-server) protocol, specified in [the section called “Message Protocol”](#message-protocol "Message Protocol"). That is, it is

a system for one application to talk to a single other application. However, the primary intended application of the protocol is the

D-Bus *message bus*, specified in [the section called "Message Bus Specification"](#). The message bus is a special application that

accepts connections from multiple other applications, and forwards messages among them.

</p><p>

Uses of D-Bus include notification of system changes (notification of when

a camera is plugged in to a computer, or a new version of some software

has been installed), or desktop interoperability, for example a file

monitoring service or a configuration service.

</p><p>

D-Bus is designed for two specific use cases:

</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>

A "system bus" for notifications from the system to user sessions,

and to allow the system to request input from user sessions.

</p><li class="listitem"><p>

A "session bus" used to implement desktop environments such as

GNOME and KDE.

</p></div><p>

D-Bus is not intended to be a generic IPC system for any possible

application, and intentionally omits many features found in other

IPC systems for this reason.

</p><p>

At the same time, the bus daemons offer a number of features not found in

other IPC systems, such as single-owner "bus names" (similar to X

selections), on-demand startup of services, and security policies.

In many ways, these features are the primary motivation for developing

D-Bus; other systems would have sufficed if IPC were the only goal.

</p><p>

D-Bus may turn out to be useful in unanticipated applications, but future

versions of this spec and the reference implementation probably will not

incorporate features that interfere with the core use cases.

</p><p>
The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119. However, the document could use a serious audit to be sure it makes sense to do so. Also, they are not capitalized.

</p><div class="sect2" title="Protocol and Specification Stability"><div class="titlepage"><div><div><h3 class="title">Protocol and Specification Stability</h3></div></div></div><p>
The D-Bus protocol is frozen (only compatible extensions are allowed) as of November 8, 2006. However, this specification could still use a fair bit of work to make interoperable reimplementations possible without reference to the D-Bus reference implementation. Thus, this specification is not marked 1.0. To mark it 1.0, we'd like to see someone invest significant effort in clarifying the specification language, and growing the specification to cover more aspects of the reference implementation's behavior.

</p><p>
Until this work is complete, any attempt to reimplement D-Bus will probably require looking at the reference implementation and/or asking questions on the D-Bus mailing list about intended behavior. Questions on the list are very welcome.

</p><p>
Nonetheless, this document should be a useful starting point and is to our knowledge accurate, though incomplete.

</p></div></div><div class="sect1" title="Type System"><div class="titlepage"><div><div><h2 class="title" style="clear: both">Type System</h2></div></div></div><p>
D-Bus has a type system, in which values of various types can be serialized into a sequence of bytes referred to as the <em class="firstterm">wire format in a standard way. Converting a value from some other representation into the wire format is called <em class="firstterm">marshaling and converting it back from the wire format is <em class="firstterm">unmarshaling.

[Type Signatures](#)

The D-Bus protocol does not include type tags in the marshaled data; a block of marshaled values must have a known `type signature`. The type signature is made up of `type codes`. A type code is an ASCII character representing the type of a value. Because ASCII characters are used, the type signature will always form a valid ASCII string. A simple string compare determines whether two type signatures are equivalent.

As a simple example, the type code for 32-bit integer (`INT32`) is the ASCII character 'i'. So the signature for a block of values containing a single `INT32` would be:

```

i
  
```

A block of values containing two `INT32` would have this signature:

```

ii
  
```

All `basic` types work like `INT32` in this example. To marshal and unmarshal basic types, you simply read one value from the data block corresponding to each type code in the signature. In addition to basic types, there are four `container` types: `STRUCT`, `ARRAY`, `VARIANT`, and `DICT_ENTRY`.

`STRUCT` has a type code, ASCII character 'r', but this type code does not appear in signatures. Instead, ASCII characters '(' and ')' are used to mark the beginning and end of the struct. So for example, a struct containing two integers would have this signature:

```

(ii)
  
```

Structs can be nested, so for example a struct containing an integer and another struct:

```

</pre><pre class="programlisting">
    "(i(ii))"
</pre><p>
    The value block storing that struct would contain three integers; the type signature allows you to distinguish "(i(ii))" from "((ii)i)" or "(iii)" or "iii".
</p><p>
    The <code class="literal">STRUCT</code> type code 'r' is not currently used in the D-Bus protocol, but is useful in code that implements the protocol. This type code is specified to allow such code to interoperate in non-protocol contexts.
</p><p>
    Empty structures are not allowed; there must be at least one type code between the parentheses.
</p><p>
    <code class="literal">ARRAY</code> has ASCII character 'a' as type code. The array type code must be followed by a <em class="firstterm">single complete type</em>. The single complete type following the array is the type of each array element. So the simple example is:
</p><pre class="programlisting">
    "ai"
</pre><p>
    which is an array of 32-bit integers. But an array can be of any type, such as this array-of-struct-with-two-int32-fields:
</p><pre class="programlisting">
    "a(ii)"
</pre><p>
    Or this array of array of integer:
</p><pre class="programlisting">
    "aai"
</pre><p>
    The phrase <em class="firstterm">single complete type</em> deserves some definition. A single complete type is a basic type code, a variant type code, an array with its element type, or a struct with its fields. So the following signatures are not single complete types:
</p><pre class="programlisting">
    "aa"
</pre><p>
</pre><pre class="programlisting">

```

```
"(ii"  
</pre><p>  
</p><pre class="programlisting">  
"ii)"  
</pre><p>
```

And the following signatures contain multiple complete types:

```
</p><pre class="programlisting">  
"ii"  
</pre><p>  
</p><pre class="programlisting">  
"aiai"  
</pre><p>  
</p><pre class="programlisting">  
"(ii)(ii)"  
</pre><p>
```

Note however that a single complete type may contain multiple other single complete types.

</p><p>
<code class="literal">VARIANT</code> has ASCII character 'v' as its type code. A marshaled value of type <code class="literal">VARIANT</code> will have the signature of a single complete type as part of the value. This signature will be followed by a marshaled value of that type.

</p><p>
A <code class="literal">DICT_ENTRY</code> works exactly like a struct, but rather than parentheses it uses curly braces, and it has more restrictions.

The restrictions are: it occurs only as an array element type; it has exactly two single complete types inside the curly braces; the first single complete type (the "key") must be a basic type rather than a container type. Implementations must not accept dict entries outside of arrays, must not accept dict entries with zero, one, or more than two fields, and must not accept dict entries with non-basic-typed keys. A dict entry is always a key-value pair.

</p><p>
The first field in the <code class="literal">DICT_ENTRY</code> is always the key.

A message is considered corrupt if the same key occurs twice in the same array of <code class="literal">DICT_ENTRY</code>. However, for performance reasons

implementations are not required to reject dicts with duplicate keys.

</p><p>

In most languages, an array of dict entry would be represented as a

map, hash table, or dict object.

</p><p>

The following table summarizes the D-Bus types.

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Conventional Name</th><th>Code</th><th>Description</th></tr></thead><tbody><tr><td><code class="literal">INVALID</code></td><td>0 (ASCII NUL)</td><td>Not a valid type code, used to terminate signatures</td></tr><tr><td><code class="literal">BYTE</code></td><td>121 (ASCII 'y')</td><td>8-bit unsigned integer</td></tr><tr><td><code class="literal">BOOLEAN</code></td><td>98 (ASCII 'b')</td><td>Boolean value, 0 is <code class="literal">FALSE</code> and 1 is <code class="literal">TRUE</code>. Everything else is invalid.</td></tr><tr><td><code class="literal">INT16</code></td><td>110 (ASCII 'n')</td><td>16-bit signed integer</td></tr><tr><td><code class="literal">UINT16</code></td><td>113 (ASCII 'q')</td><td>16-bit unsigned integer</td></tr><tr><td><code class="literal">INT32</code></td><td>105 (ASCII 'i')</td><td>32-bit signed integer</td></tr><tr><td><code class="literal">UINT32</code></td><td>117 (ASCII 'u')</td><td>32-bit unsigned integer</td></tr><tr><td><code class="literal">INT64</code></td><td>120 (ASCII 'x')</td><td>64-bit signed integer</td></tr><tr><td><code class="literal">UINT64</code></td><td>116 (ASCII 't')</td><td>64-bit unsigned integer</td></tr><tr><td><code class="literal">DOUBLE</code></td><td>100 (ASCII 'd')</td><td>IEEE 754 double</td></tr><tr><td><code class="literal">STRING</code></td><td>115 (ASCII 's')</td><td>UTF-8 string (must be valid UTF-8). Must be nul terminated and contain no other nul bytes.</td></tr><tr><td><code class="literal">OBJECT_PATH</code></td><td>111 (ASCII 'o')</td><td>Name of an object instance</td></tr><tr><td><code class="literal">SIGNATURE</code></td><td>103 (ASCII 'g')</td><td>A type signature</td></tr><tr><td><code class="literal">ARRAY</code></td><td>97 (ASCII 'a')</td><td>Array</td></tr><tr><td><code class="literal">STRUCT</code></td><td>114 (ASCII 'r'), 40 (ASCII '('), 41 (ASCII ')')</td><td>Struct; type code 114 'r' is reserved for use in

general bindings and implementations to represent the

concept of a struct, and must not appear in signatures

	used on D-Bus.
<code>VARIANT</code>	118 (ASCII 'v')
Variant type (the type of the value is part of the value itself)	
<code>DICTIONARY_ENTRY</code>	101 (ASCII 'e'), 123 (ASCII '{'), 125 (ASCII '}')
Entry in a dict or map (array of key-value pairs).	
	Type code 101 'e' is reserved for use in bindings and implementations to represent the general concept of a dict or dict-entry, and must not appear in signatures
	used on D-Bus.
<code>UNIX_FD</code>	104 (ASCII 'h')
Unix file descriptor	
	(reserved)
	109 (ASCII 'm')
Reserved for a	
	'maybe' type compatible with the one in <code>GVariant</code> ,
	and must not appear in signatures used on D-Bus until specified
	(reserved)
	42 (ASCII '*')
Reserved for use in bindings/implementations to represent any <i>single complete type</i> ,	
	and must not appear in signatures used on D-Bus.
	(reserved)
	63 (ASCII '?')
Reserved for use in bindings/implementations to represent any <i>basic type</i> ,	
	and must not appear in signatures used on D-Bus.
	(reserved)
	64 (ASCII '@'), 38 (ASCII '&'),
	94 (ASCII '^')
Reserved for internal use by bindings/implementations,	
	and must not appear in signatures used on D-Bus.
<code>GVariant</code> uses these type-codes to encode calling conventions.	

[Marshaling \(Wire Format\)](#)

[Marshaling \(Wire Format\)](#)

Given a type signature, a block of bytes can be converted into typed values. This section describes the format of the block of bytes. Byte order and alignment issues are handled uniformly for all D-Bus types.

A block of bytes has an associated byte order. The byte order has to be discovered in some way; for D-Bus messages, the byte order is part of the message header as described in [the section called "Message Format"](# "Message Format"). For now, assume that the byte order is known to be either little endian or big endian.

Each value in a block of bytes is aligned "naturally," for example 4-byte values are aligned to a 4-byte boundary, and 8-byte values to an 8-byte boundary. To properly align a value, alignment padding may be necessary. The alignment padding must always be the minimum required padding to properly align the following value; and it must always be made up of nul bytes. The alignment padding must not be left uninitialized (it can't contain garbage), and more padding than required must not be used.

Given all this, the types are marshaled on the wire as follows:

Conventional Name	Encoding	Alignment
	<code>INVALID</code>	Not applicable; cannot be marshaled.
	<code>BYTE</code>	A single 8-bit byte.
	<code>BOOLEAN</code>	1
	<code>UINT32</code>	As for <code>UINT16</code> , but only 0 and 1 are valid values.
	<code>INT16</code>	4
	<code>UINT16</code>	16-bit signed integer in the message's byte order.
	<code>INT32</code>	2
	<code>UINT32</code>	16-bit unsigned integer in the message's byte order.
	<code>INT64</code>	32-bit signed integer in the message's byte order.
	<code>UINT64</code>	4
	<code>DOUBLE</code>	32-bit unsigned integer in the message's byte order.
		64-bit signed integer in the message's byte order.
		8
		64-bit IEEE 754 double in the message's byte order.
		8

<pre> class="literal">STRING</code></td><td>A <code class="literal">UINT32</code> indicating the string's length in bytes excluding its terminating nul, followed by a terminating nul byte. </pre>	<pre> </td><td> 4 (for the length) </td></tr><tr><td><code class="literal">OBJECT_PATH</code></td><td>Exactly the same as <code class="literal">STRING</code> except the content must be a valid object path (see below). </td><td> 4 (for the length) </td></tr><tr><td><code class="literal">SIGNATURE</code></td><td>The same as <code class="literal">STRING</code> except the length is a single byte (thus signatures have a maximum length of 255) and the content must be a valid signature (see below). </td><td> 1 </td></tr><tr><td><code class="literal">ARRAY</code></td><td> A <code class="literal">UINT32</code> giving the length of the array data in bytes, followed by alignment padding to the alignment boundary of the array element type, followed by each array element. The array length is from the end of the alignment padding to the end of the last element, i.e. it does not include the padding after the length, or any padding after the last element. Arrays have a maximum length defined to be 2 to the 26th power or 67108864. Implementations must not send or accept arrays exceeding this length. </td><td> 4 (for the length) </td></tr><tr><td><code class="literal">STRUCT</code></td><td> A struct must start on an 8-byte boundary regardless of the type of the struct fields. The struct value consists of each field marshaled in sequence starting from that 8- byte alignment boundary. </pre>
--	--

	8
<code>VARIANT</code>	A variant type has a marshaled
	<code>SIGNATURE</code> followed by a
marshaled	value with the type given in the signature. Unlike
	a message signature, the variant signature can
	contain only a single complete type. So "i", "ai"
may not	or "(ii)" is OK, but "ii" is not. Use of variants
	cause a total message depth to be larger than 64,
including	other container types such as structures.

	1 (alignment of the signature)
<code>DICT_ENTRY</code>	Identical to STRUCT.
	8
<code>UNIX_FD</code>	32-bit unsigned integer in the
message's byte	order. The actual file descriptors need to be
	transferred out-of-band via some platform specific
	mechanism. On the wire, values of this type store the
index to the	file descriptor in the array of file descriptors that
	accompany the
message.	4

</p><div class="sect3" title="Valid Object Paths"><div class="titlepage"><div><div><h4 class="title">Valid Object Paths</h4></div></div></div><p>

An object path is a name used to refer to an object instance. Conceptually, each participant in a D-Bus message exchange may have any number of object instances (think of C++ or Java objects) and each such instance will have a path. Like a filesystem, the object instances in an application form a hierarchical tree.

The following rules define a valid object path. Implementations must not send or accept messages with invalid object paths.

- The path may be of any length.

```

    </p></li><li class="listitem"><p>
        The path must begin with an ASCII '/' (integer 47)
character,
        and must consist of elements separated by slash
characters.
    </p></li><li class="listitem"><p>
        Each element must only contain the ASCII characters
        "[A-Z][a-z][0-9]_"
    </p></li><li class="listitem"><p>
        No element may be the empty string.
    </p></li><li class="listitem"><p>
        Multiple '/' characters cannot occur in sequence.
    </p></li><li class="listitem"><p>
        A trailing '/' character is not allowed unless the
        path is the root path (a single '/' character).
    </p></li></ul></div><p>
</p><p>
    Object paths are often namespaced by starting with a
reversed
    domain name and containing an interface version number, in
the
    same way as
    <a class="link" href="#message-protocol-names-interface"
title="Interface names">interface
    names</a> and
    <a class="link" href="#message-protocol-names-bus"
title="Bus names">well-known
    bus names</a>.
    This makes it possible to implement more than one service,
or
    more than one version of a service, in the same process,
    even if the services share a connection but cannot otherwise
    co-operate (for instance, if they are implemented by
different
    plugins).
    </p><p>
    For instance, if the owner of <code
class="literal">example.com</code> is
    developing a D-Bus API for a music player, they might use
the
    hierarchy of object paths that start with
    <code class="literal">/com/example/MusicPlayer1</code> for
its objects.
    </p></div><div class="sect3" title="Valid Signatures"><div
class="titlepage"><div><div><h4 class="title"><a name="message-
protocol-marshaling-signature"></a>Valid
Signatures</h4></div></div></div><p>
    An implementation must not send or accept invalid
signatures.
    Valid signatures will conform to the following rules:
    </p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>

```

```

    The signature ends with a nul byte.
  </p></li><li class="listitem"><p>
    The signature is a list of single complete types.
    Arrays must have element types, and structs must
    have both open and close parentheses.
  </p></li><li class="listitem"><p>
    Only type codes and open and close parentheses are
    allowed in the signature. The <code
class="literal">STRUCT</code> type code
    is not allowed in signatures, because parentheses
    are used instead.
  </p></li><li class="listitem"><p>
    The maximum depth of container type nesting is 32
array type
    codes and 32 open parentheses. This implies that the
maximum
    total depth of recursion is 64, for an "array of array
of array
    of ... struct of struct of struct of ..." where there
are 32
    array and 32 struct.
  </p></li><li class="listitem"><p>
    The maximum length of a signature is 255.
  </p></li><li class="listitem"><p>
    Signatures must be nul-terminated.
  </p></li></ul></div><p>
  </p></div></div></div><div class="sect1" title="Message
Protocol"><div class="titlepage"><div><div><h2 class="title"
style="clear: both"><a name="message-protocol"></a>Message
Protocol</h2></div></div></div><p>
  A <em class="firstterm">message</em> consists of a
  <em class="firstterm">header</em> and a <em
class="firstterm">body</em>. If you
  think of a message as a package, the header is the address, and
the body
  contains the package contents. The message delivery system uses
the header
  information to figure out where to send the message and how to
interpret
  it; the recipient interprets the body of the message.
  </p><p>
  The body of the message is made up of zero or more
  <em class="firstterm">arguments</em>, which are typed values,
such as an
  integer or a byte array.
  </p><p>
  Both header and body use the D-Bus <a class="link" href="#type-
system" title="Type System">type
  system</a> and format for serializing data.
  </p><div class="sect2" title="Message Format"><div
class="titlepage"><div><div><h3 class="title"><a name="message-
protocol-messages"></a>Message Format</h3></div></div></div><p>

```

A message consists of a header and a body. The header is a block of

values with a fixed signature and meaning. The body is a separate block

of values, with a signature specified in the header.

</p><p>

The length of the header must be a multiple of 8, allowing the body to

begin on an 8-byte boundary when storing the entire message in a single

buffer. If the header does not naturally end on an 8-byte boundary

up to 7 bytes of nul-initialized alignment padding must be added.

</p><p>

The message body need not end on an 8-byte boundary.

</p><p>

The maximum length of a message, including header, header alignment padding,

and body is 2 to the 27th power or 134217728. Implementations must not

send or accept messages exceeding this size.

</p><p>

The signature of the header is:

</p><pre class="programlisting">

```
"yyyyyua(yv)"
```

</pre><p>

Written out more readably, this is:

</p><pre class="programlisting">

```
BYTE, BYTE, BYTE, BYTE, UINT32, UINT32, ARRAY of STRUCT of (BYTE,VARIANT)
```

</pre><p>

</p><p>

These values have the following meanings:

</p><div class="informaltable"><table border="1"><colgroup><col><col></colgroup><thead><tr><th>Value</th><th>Description</th></tr></thead><tbody><tr><td>1st <code class="literal">BYTE</code></td><td>Endianness flag; ASCII 'l' for little-endian

or ASCII 'B' for big-endian. Both header and body are

in this endianness.</td></tr><tr><td>2nd <code class="literal">BYTE</code></td><td><em class="firstterm">Message type. Unknown types must be ignored.

Currently-defined types are described below.

</td></tr><tr><td>3rd <code class="literal">BYTE</code></td><td>Bitwise OR of flags. Unknown flags must be ignored. Currently-defined flags are described below.

</td></tr><tr><td>4th <code class="literal">BYTE</code></td><td>Major protocol version of the sending application. If

the major protocol version of the receiving application does not match, the applications will not be able to communicate and the D-Bus connection must be disconnected. The major protocol version for this version of the specification is 1.

1st	<code>UINT32</code>	Length in bytes of the message body, starting from the end of the header. The header ends after its alignment padding to an 8-boundary.
2nd	<code>UINT32</code>	The serial of this message, used as a cookie by the sender to identify the reply corresponding to this request. This must not be zero.
	<code>ARRAY</code>	An array of zero or more <code>STRUCT</code> of (<code>BYTE</code> , <code>VARIANT</code>)

header fields where the byte is the field code, and the variant is the field value. The message type determines which fields are required.

Message types that can appear in the second byte of the header are:

Conventional name	Decimal value	Description
	0	This is an invalid type.
<code>METHOD_CALL</code>	1	Method call.
<code>METHOD_RETURN</code>	2	Method reply with returned data.
<code>ERROR</code>	3	Error reply. If the first argument exists and is a string, it is an error message.
<code>SIGNAL</code>	4	Signal emission.

Flags that can appear in the third byte of the header:

Conventional name	Hex
-------------------	-----

```

value</th><th>Description</th></tr></thead><tbody><tr><td><code
class="literal">NO_REPLY_EXPECTED</code></td><td>0x1</td><td>This
message does not expect method return replies or
        error replies; the reply can be omitted as an
specification        optimization. However, it is compliant with this
harm        to return the reply despite this flag and the only
        from doing so is extra network traffic.
        </td></tr><tr><td><code
class="literal">NO_AUTO_START</code></td><td>0x2</td><td>The bus must
not launch an owner
        for the destination name in response to this
message.
        </td></tr></tbody></table></div><p>
</p><div class="sect3" title="Header Fields"><div
class="titlepage"><div><div><h4 class="title"><a name="message-
protocol-header-fields"></a>Header Fields</h4></div></div></div><p>
        The array at the end of the header contains <em
class="firstterm">header
        fields</em>, where each field is a 1-byte field code
followed
        by a field value. A header must contain the required header
fields for
        its message type, and zero or more of any optional header
add new        fields. Future versions of this protocol specification may
        fields. Implementations must ignore fields they do not
fields;<        understand. Implementations must not invent their own header
        only changes to this specification may introduce new header
fields.
        </p><p>
        Again, if an implementation sees a header field code that it
does not
        expect, it must ignore that field, as it will be part of a
new
        (but compatible) version of this specification. This also
applies
        to known header fields appearing in unexpected messages, for
example: if a signal has a reply serial it must be ignored
spec.        even though it has no meaning as of this version of the
        </p><p>
        However, implementations must not send or accept known
header fields
        with the wrong type stored in the field value. So for
example a
        message with an <code class="literal">INTERFACE</code> field
of type
        <code class="literal">UINT32</code> would be considered
corrupt.

```

</p><p>

Here are the currently-defined header fields:

```
</p><div class="informaltable"><table
border="1"><colgroup><col><col><col><col><col></colgroup><thead><tr><t
h>Conventional Name</th><th>Decimal Code</th><th>Type</th><th>Required
In</th><th>Description</th></tr></thead><tbody><tr><td><code
class="literal">INVALID</code></td><td>0</td><td>N/A</td><td>not
allowed</td><td>Not a valid field name (error if it appears in a
message)</td></tr><tr><td><code
class="literal">PATH</code></td><td>1</td><td><code
class="literal">OBJECT_PATH</code></td><td><code
class="literal">METHOD_CALL</code>, <code
class="literal">SIGNAL</code></td><td>The object to send a call to,
or the object a signal is emitted from.
The special path
<code
class="literal">/org/freedesktop/DBus/Local</code> is reserved;
implementations should not send messages with this
path,
and the reference implementation of the bus daemon
will
disconnect any application that attempts to do so.
</td></tr><tr><td><code
class="literal">INTERFACE</code></td><td>2</td><td><code
class="literal">STRING</code></td><td><code
class="literal">SIGNAL</code></td><td>
The interface to invoke a method call on, or
that a signal is emitted from. Optional for
method calls, required for signals.
The special interface
<code
class="literal">org.freedesktop.DBus.Local</code> is reserved;
implementations should not send messages with this
interface, and the reference implementation of the
bus
daemon will disconnect any application that
attempts to
do so.
</td></tr><tr><td><code
class="literal">MEMBER</code></td><td>3</td><td><code
class="literal">STRING</code></td><td><code
class="literal">METHOD_CALL</code>, <code
class="literal">SIGNAL</code></td><td>The member, either the method
name or signal name.</td></tr><tr><td><code
class="literal">ERROR_NAME</code></td><td>4</td><td><code
class="literal">STRING</code></td><td><code
class="literal">ERROR</code></td><td>The name of the error that
occurred, for errors</td></tr><tr><td><code
class="literal">REPLY_SERIAL</code></td><td>5</td><td><code
class="literal">UINT32</code></td><td><code
class="literal">ERROR</code>, <code
```

<code>METHOD_RETURN</code>				The serial number of the message this message is a reply to. (The serial number is the second <code>UINT32</code> in the header.)
<code>DESTINATION</code>	6			optional The name of the connection this message is intended for.
<code>STRING</code>				Only used in combination with the message bus, see the section called Message Bus Specification .
<code>SENDER</code>	7			optional Unique name of the sending connection.
<code>STRING</code>				The message bus fills in this field so it is reliable; the field is only meaningful in combination with the message bus.
<code>SIGNATURE</code>	8			optional The signature of the message body.
<code>SIGNATURE</code>				If omitted, it is assumed to be the empty signature "" (i.e. the body must be 0-length).
<code>UNIX_FDS</code>	9			optional The number of Unix file descriptors that accompany the message. If omitted, it is assumed that no Unix file descriptors accompany the message. The actual file descriptors need to be transferred via platform specific mechanism out-of-band. They must be sent at the same time as part of the message itself. They may not be sent before the first byte of the message itself is transferred or after the last byte of the message itself.
<code>UNIX_FDS</code>				

Valid Names

The various names in D-Bus messages have some restrictions.

There is a *maximum name length* of 255 which applies to bus names, interfaces, and members.

Interface names

Interfaces have names with type `STRING`, meaning that they must be valid UTF-8. However, there are also some additional restrictions that apply to interface names specifically:

```

    </p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>Interface names are composed of 1
or more elements separated by
    a period ('.') character. All elements must contain at
least
    one character.
    </p></li><li class="listitem"><p>Each element must
only contain the ASCII characters
    "[A-Z][a-z][0-9]_" and must not begin with a digit.
    </p></li><li class="listitem"><p>Interface names must
contain at least one '.' (period)
    character (and thus at least two elements).
    </p></li><li class="listitem"><p>Interface names must
not begin with a '.' (period) character.</p></li><li
class="listitem"><p>Interface names must not exceed the maximum name
length.</p></li></ul></div><p>
    </p><p>
    Interface names should start with the reversed DNS domain
name of
    the author of the interface (in lower-case), like interface
names
    in Java. It is conventional for the rest of the interface
name
    to consist of words run together, with initial capital
letters
    on all words ("CamelCase"). Several levels of hierarchy can
be used.
    It is also a good idea to include the major version of the
interface
    in the name, and increment it if incompatible changes are
made;
    this way, a single object can implement several versions of
an
    interface in parallel, if necessary.
    </p><p>
    For instance, if the owner of <code
class="literal">example.com</code> is
    developing a D-Bus API for a music player, they might define
interfaces called <code
class="literal">com.example.MusicPlayer1</code>,
    <code class="literal">com.example.MusicPlayer1.Track</code>
and
    <code
class="literal">com.example.MusicPlayer1.Seekable</code>.
    </p><p>
    D-Bus does not distinguish between the concepts that would
be
    called classes and interfaces in Java: either can be
identified on
    D-Bus by an interface name.

```

Bus names</h4></div></div></div><p>Connections have one or more bus names associated with them. A connection has exactly one bus name that is a <em class="firstterm">unique connection name. The unique connection name remains with the connection for its entire lifetime. A bus name is of type <code class="literal">STRING</code>, meaning that it must be valid UTF-8. However, there are also some additional restrictions that apply to bus names specifically:</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>Bus names that start with a colon (':') character are unique connection names. Other bus names are called <em class="firstterm">well-known bus names. </p><li class="listitem"><p>Bus names are composed of 1 or more elements separated by a period ('.') character. All elements must contain at least one character. </p><li class="listitem"><p>Each element must only contain the ASCII characters "[A-Z][a-z][0-9]_". Only elements that are part of a unique connection name may begin with a digit, elements in other bus names must not begin with a digit. </p><li class="listitem"><p>Bus names must contain at least one '.' (period) character (and thus at least two elements). </p><li class="listitem"><p>Bus names must not begin with a '.' (period) character.</p><li class="listitem"><p>Bus names must not exceed the maximum name length.</p></div><p></p><p>Note that the hyphen ('-') character is allowed in bus names but not in interface names. </p><p>Like interface names, well-known bus names should start with the reversed DNS domain name of the author of the interface (in lower-case), and it is conventional for the rest of the well-known bus name to consist of words run together, with initial capital letters. As with interface names, including a version number in well-known bus names is a good idea; it's possible to

have the well-known bus name for more than one version simultaneously if backwards compatibility is required.

</p><p>
If a well-known bus name implies the presence of a "main" interface,
that "main" interface is often given the same name as the well-known bus name, and situated at the corresponding object path. For instance, if the owner of <code class="literal">example.com</code> is developing a D-Bus API for a music player, they might define that any application that takes the well-known name <code class="literal">com.example.MusicPlayer1</code> should have an object at the object path <code class="literal">/com/example/MusicPlayer1</code> which implements the interface <code class="literal">com.example.MusicPlayer1</code>.

</p></div><div class="sect3" title="Member names"><div class="titlepage"><div><div><h4 class="title">Member names</h4></div></div></div><p>Member (i.e. method or signal) names:

</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>Must only contain the ASCII characters "[A-Z][a-z][0-9]_" and may not begin with a digit.</p><li class="listitem"><p>Must not contain the '.' (period) character.</p><li class="listitem"><p>Must not exceed the maximum name length.</p><li class="listitem"><p>Must be at least 1 byte in length.</p></div><p></p><p>It is conventional for member names on D-Bus to consist of capitalized words with no punctuation ("camel-case"). Method names should usually be verbs, such as <code class="literal">GetItems</code>, and signal names should usually be a description of an event, such as <code class="literal">ItemsChanged</code>.

</p></div><div class="sect3" title="Error names"><div class="titlepage"><div><div><h4 class="title">Error names</h4></div></div></div><p>Error names have the same restrictions as interface names.

</p><p>Error names have the same naming conventions as interface names, and often contain <code class="literal">.Error.</code>; for instance, the owner of <code class="literal">example.com</code> might define the errors <code class="literal">com.example.MusicPlayer.Error.FileNotFound</code>

and `com.example.MusicPlayer.Error.OutOfMemory`.
The errors defined by D-Bus itself, such as
`org.freedesktop.DBus.Error.Failed`, follow a
similar pattern.

</p></div></div><div class="sect2" title="Message Types"><div
class="titlepage"><div><div><h3 class="title"><a name="message-
protocol-types">Message Types</h3></div></div></div><p>

Each of the message types (`METHOD_CALL`, `METHOD_RETURN`, `ERROR`, and
`SIGNAL`) has its own expected
usage conventions and header fields.

This section describes these conventions.
</p><div class="sect3" title="Method Calls"><div
class="titlepage"><div><div><h4 class="title"><a name="message-
protocol-types-method">Method Calls</h4></div></div></div><p>
Some messages invoke an operation on a remote object. These
are

called method call messages and have the type tag `METHOD_CALL`. Such
messages map naturally to methods on objects in a typical
program.

</p><p>
A method call message is required to have a `MEMBER` header field
indicating the name of the method. Optionally, the message
has an
`INTERFACE` field giving the
interface the method is a part of. In the
absence of an `INTERFACE` field,
if two interfaces on the same object have
a method with the same name, it is undefined which of the
two methods
will be invoked. Implementations may also choose to return
an error in
this ambiguous case. However, if a method name is unique
implementations must not require an interface field.

</p><p>
Method call messages also include a `PATH` field
indicating the object to invoke the method on. If the call
is passing
through a message bus, the message will also have a
`DESTINATION` field giving the
name of the connection
to receive the message.

</p><p>
When an application handles a method call message, it is
required to

return a reply. The reply is identified by a `REPLY_SERIAL` header field

indicating the serial number of the `METHOD_CALL` being replied to. The

reply can have one of two types; either `METHOD_RETURN` or `ERROR`.

If the reply has type `METHOD_RETURN`, the arguments to the reply message

are the return value(s) or "out parameters" of the method call.

If the reply has type `ERROR`, then an "exception" has been thrown,

and the call fails; no return value will be provided. It makes

no sense to send multiple replies to the same method call.

Even if a method call has no return values, a `METHOD_RETURN`

reply is required, so the caller will know the method was successfully processed.

The `METHOD_RETURN` or `ERROR` reply message must have the `REPLY_SERIAL`

header field.

If a `METHOD_CALL` message has the flag `NO_REPLY_EXPECTED`,

then as an optimization the application receiving the method call may choose to omit the reply message (regardless of whether the reply would have been `METHOD_RETURN` or `ERROR`).

However, it is also acceptable to ignore the `NO_REPLY_EXPECTED`

flag and reply anyway.

Unless a message has the flag `NO_AUTO_START`, if the destination name does not exist then a program to own the destination

name will be started before the message is delivered. The message

will be held until the new program is successfully started or has

failed to start; in case of failure, an error will be returned. This

flag is only relevant in the context of a message bus, it is ignored

during one-to-one communication with no intermediate bus.

</p><div class="sect4" title="Mapping method calls to native APIs"><div class="titlepage"><div><div><h5 class="title">Mapping method calls to native APIs</h5></div></div></div><p>

APIs for D-Bus may map method calls to a method call in a specific programming language, such as C++, or may map a method call written in an IDL to a D-Bus message.

</p><p>

In APIs of this nature, arguments to a method are often termed "in" (which implies sent in the <code class="literal">METHOD_CALL</code>), or "out" (which implies returned in the <code class="literal">METHOD_RETURN</code>). Some APIs such as CORBA also have "inout" arguments, which are both sent and received, i.e. the caller passes in a value which is modified. Mapped to D-Bus, an "inout" argument is equivalent to an "in" argument, followed by an "out" argument. You can't pass things "by reference" over the wire, so "inout" is purely an illusion of the in-process API.

</p><p>

Given a method with zero or one return values, followed by zero or more arguments, where each argument may be "in", "out", or "inout", the caller constructs a message by appending each "in" or "inout" argument, in order. "out" arguments are not represented in the caller's message.

</p><p>

The recipient constructs a reply by appending first the return value if any, then each "out" or "inout" argument, in order. "in" arguments are not represented in the reply message.

</p><p>

Error replies are normally mapped to exceptions in languages that have exceptions.

</p><p>

In converting from native APIs to D-Bus, it is perhaps nice to map D-Bus naming conventions ("FooBar") to native conventions such as "fooBar" or "foo_bar" automatically. This is OK as long as you can say that the native API is one that

sense
method,
problem.

was specifically written for D-Bus. It makes the most
when writing object implementations that will be exported
over the bus. Object proxies used to invoke remote D-Bus
objects probably need the ability to call any D-Bus
and thus a magic name mapping like this could be a

bindings;
consistency

</p><p>
This specification doesn't require anything of native API
the preceding is only a suggested convention for
among bindings.

</p></div></div><div class="sect3" title="Signal
Emission"><div class="titlepage"><div><div><h4 class="title">Signal
Emission</h4></div></div></div><p>
Unlike method calls, signal emissions have no replies.
A signal emission is simply a single message of type <code
class="literal">SIGNAL</code>.

It must have three header fields: <code
class="literal">PATH</code> giving the object
the signal was emitted from, plus <code
class="literal">INTERFACE</code> and <code
class="literal">MEMBER</code> giving
the fully-qualified name of the signal. The <code
class="literal">INTERFACE</code> header is required
for signals, though it is optional for method calls.

</p></div><div class="sect3" title="Errors"><div
class="titlepage"><div><div><h4 class="title"><a name="message-
protocol-types-errors">Errors</h4></div></div></div><p>
Messages of type <code class="literal">ERROR</code> are most
commonly replies
to a <code class="literal">METHOD_CALL</code>, but may be
returned in reply
to any kind of message. The message bus for example
will return an <code class="literal">ERROR</code> in reply
to a signal emission if
the bus does not have enough memory to send the signal.

</p><p>
An <code class="literal">ERROR</code> may have any
arguments, but if the first
argument is a <code class="literal">STRING</code>, it must
be an error message.
The error message may be logged or shown to the user
in some way.

</p></div><div class="sect3" title="Notation in this
document"><div class="titlepage"><div><div><h4 class="title">Notation in this
document</h4></div></div></div><p>

This document uses a simple pseudo-IDL to describe particular method calls and signals. Here is an example of a method call:

```
org.freedesktop.DBus.StartServiceByName (in STRING name,
in UINT32 flags,
out UINT32
resultcode)
```

This means `INTERFACE` = `org.freedesktop.DBus`, `MEMBER` = `StartServiceByName`, `METHOD_CALL` arguments are `STRING` and `UINT32`, `METHOD_RETURN` argument is `UINT32`. Remember that the `MEMBER` field can't contain any '.' (period)

characters so it's known that the last part of the name in the "IDL" is the member name.

In C++ that might end up looking like this:

```
unsigned int org::freedesktop::DBus::StartServiceByName
(const char *name,
```

```
unsigned int flags);
or equally valid, the return value could be done as an
argument:
```

```
void org::freedesktop::DBus::StartServiceByName (const
char *name,
unsigned
int flags,
unsigned
int *resultcode);
```

It's really up to the API designer how they want to make this look. You could design an API where the namespace wasn't used in C++, using STL or Qt, using varargs, or whatever you wanted.

Signals are written as follows:

```
org.freedesktop.DBus.NameLost (STRING name)
```

Signals don't specify "in" vs. "out" because only a single direction is possible.

It isn't especially encouraged to use this lame pseudo-IDL in actual API implementations; you might use the native notation for the language you're using, or you might use COM or CORBA IDL, for example.

</p></div></div><div class="sect2" title="Invalid Protocol and Spec Extensions"><div class="titlepage"><div><div><h3 class="title">Invalid Protocol and Spec Extensions</h3></div></div></div><p>

For security reasons, the D-Bus protocol should be strictly parsed and validated, with the exception of defined extension points. Any invalid protocol or spec violations should result in immediately dropping the connection without notice to the other end. Exceptions should be

carefully considered, e.g. an exception may be warranted for a well-understood idiosyncrasy of a widely-deployed implementation. In cases where the other end of a connection is 100% trusted and known to

be friendly, skipping validation for performance reasons could also make sense in certain cases.

</p><p>Generally speaking violations of the "must" requirements in this spec should be considered possible attempts to exploit security, and violations of the "should" suggestions should be considered legitimate (though perhaps they should generate an error in some cases).

</p><p>The following extension points are built in to D-Bus on purpose and must not be treated as invalid protocol. The extension points are intended for use by future versions of this spec, they are not intended for third parties. At the moment, the only way a third party could extend D-Bus without breaking interoperability would be to introduce a way to negotiate new feature support as part of the auth protocol, using EXTENSION_-prefixed commands. There is not yet a standard way to negotiate features.

</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>

In the authentication protocol (see [the section called Authentication Protocol](#auth-protocol "Authentication Protocol")) unknown commands result in an ERROR rather than a disconnect.

This enables

future extensions to the protocol. Commands starting with EXTENSION_ are reserved for third parties.

The authentication protocol supports pluggable auth mechanisms.

The address format (see [the section called Server Addresses](#addresses "Server Addresses")) supports new kinds of transport.

Messages with an unknown type (something other than `METHOD_CALL`, `METHOD_RETURN`, `ERROR`, `SIGNAL`) are ignored.

Unknown-type messages must still be well-formed in the same way

as the known messages, however. They still have the normal header and body.

Header fields with an unknown or unexpected field code must be ignored, though again they must still be well-formed.

New standard interfaces (with new methods and signals) can of course be added.

Authentication Protocol

Authentication Protocol

Before the flow of messages begins, two applications must authenticate. A simple plain-text protocol is used for authentication; this protocol is a SASL profile, and maps fairly directly from the SASL specification. The message encoding is NOT used here, only plain text messages.

In examples, "C:" and "S:" indicate lines sent by the client and server respectively.

Protocol Overview

The protocol is a line-based protocol, where each line ends with

\r\n. Each line begins with an all-caps ASCII command name containing only the character range [A-Z_], a space, then any arguments for the command, then the \r\n ending the line. The protocol is case-sensitive. All bytes must be in the ASCII character set.

Commands from the client to the server are as follows:

```
</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>AUTH [mechanism] [initial-response]</p></li><li class="listitem"><p>CANCEL</p></li><li class="listitem"><p>BEGIN</p></li><li class="listitem"><p>DATA &lt;data in hex encoding&gt;</p></li><li class="listitem"><p>ERROR [human-readable error explanation]</p></li><li class="listitem"><p>NEGOTIATE_UNIX_FD</p></li></ul></div><p>
```

From server to client are as follows:

```
</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>REJECTED &lt;space-separated list of mechanism names&gt;</p></li><li class="listitem"><p>OK &lt;GUID in hex&gt;</p></li><li class="listitem"><p>DATA &lt;data in hex encoding&gt;</p></li><li class="listitem"><p>ERROR</p></li><li class="listitem"><p>AGREE_UNIX_FD</p></li></ul></div><p>
```

Unofficial extensions to the command set must begin with the letters

"EXTENSION_", to avoid conflicts with future official commands.

For example, "EXTENSION_COM_MYDOMAIN_DO_STUFF".

```
</p></div><div class="sect2" title="Special credentials-passing nul byte"><div class="titlepage"><div><div><h3 class="title"><a name="auth-nul-byte"></a>Special credentials-passing nul byte</h3></div></div></div><p>
```

Immediately after connecting to the server, the client must send a single nul byte. This byte may be accompanied by credentials information on some operating systems that use sendmsg() with SCM_CREDS or SCM_CREDENTIALS to pass credentials over UNIX domain sockets. However, the nul byte must be sent even on other kinds of socket, and even on operating systems that do not require a byte to be sent in order to transmit credentials. The text protocol described in this document begins after the single nul byte. If the first byte received from the client is not a nul byte, the server may disconnect that client.

</p><p>
A nul byte in any context other than the initial byte is an
error;
the protocol is ASCII-only.
</p><p>
The credentials sent along with the nul byte may be used with
the
SASL mechanism EXTERNAL.
</p></div><div class="sect2" title="AUTH command"><div
class="titlepage"><div><div><h3 class="title"><a name="auth-command-
auth">AUTH command</h3></div></div></div><p>
If an AUTH command has no arguments, it is a request to list
available mechanisms. The server must respond with a REJECTED
command listing the mechanisms it understands, or with an
error.
</p><p>
If an AUTH command specifies a mechanism, and the server
supports
said mechanism, the server should begin exchanging SASL
challenge-response data with the client using DATA commands.
</p><p>
If the server does not support the mechanism given in the AUTH
command, it must send either a REJECTED command listing the
mechanisms
it does support, or an error.
</p><p>
If the [initial-response] argument is provided, it is intended
for use
with mechanisms that have no initial challenge (or an empty
initial
challenge), as if it were the argument to an initial DATA
command. If
the selected mechanism has an initial challenge and [initial-
response]
was provided, the server should reject authentication by
sending
REJECTED.
</p><p>
If authentication succeeds after exchanging DATA commands,
an OK command must be sent to the client.
</p><p>
The first octet received by the server after the \r\n of the
BEGIN
command from the client must be the first octet of the
authenticated/encrypted stream of D-Bus messages.
</p><p>
If BEGIN is received by the server, the first octet received
by the client after the \r\n of the OK command must be the
first octet of the authenticated/encrypted stream of D-Bus
messages.

</p></div><div class="sect2" title="CANCEL Command"><div class="titlepage"><div><div><h3 class="title">CANCEL Command</h3></div></div></div><p>

At any time up to sending the BEGIN command, the client may send a

CANCEL command. On receiving the CANCEL command, the server must

send a REJECTED command and abort the current authentication exchange.

</p></div><div class="sect2" title="DATA Command"><div class="titlepage"><div><div><h3 class="title">DATA Command</h3></div></div></div><p>

The DATA command may come from either client or server, and simply

contains a hex-encoded block of data to be interpreted according to the SASL mechanism in use.

</p><p>

Some SASL mechanisms support sending an "empty string";

FIXME we need some way to do this.

</p></div><div class="sect2" title="BEGIN Command"><div class="titlepage"><div><div><h3 class="title">BEGIN Command</h3></div></div></div><p>

The BEGIN command acknowledges that the client has received an OK command from the server, and that the stream of messages is about to begin.

</p><p>

The first octet received by the server after the \r\n of the BEGIN

command from the client must be the first octet of the authenticated/encrypted stream of D-Bus messages.

</p></div><div class="sect2" title="REJECTED Command"><div class="titlepage"><div><div><h3 class="title">REJECTED Command</h3></div></div></div><p>

The REJECTED command indicates that the current authentication exchange has failed, and further exchange of DATA is inappropriate.

The client would normally try another mechanism, or try providing

different responses to challenges.

</p><p>

Optionally, the REJECTED command has a space-separated list of available auth mechanisms as arguments. If a server ever provides

a list of supported mechanisms, it must provide the same list each time it sends a REJECTED message. Clients are free to ignore all lists received after the first.

</p></div><div class="sect2" title="OK Command"><div class="titlepage"><div><div><h3 class="title">OK Command</h3></div></div></div><p>

The OK command indicates that the client has been authenticated. The client may now proceed with negotiating Unix file descriptor passing. To do that it shall send

NEGOTIATE_UNIX_FD to the server.

</p><p>

Otherwise, the client must respond to the OK command by sending a BEGIN command, followed by its stream of messages, or by disconnecting. The server must not accept additional commands using this protocol after the BEGIN command has been received. Further communication will be a stream of D-Bus messages (optionally encrypted, as negotiated) rather than this protocol.

</p><p>

If a client sends BEGIN the first octet received by the client after the \r\n of the OK command must be the first octet of the authenticated/encrypted stream of D-Bus messages.

</p><p>

The OK command has one argument, which is the GUID of the server.

See [the section called "Server Addresses" for more on server GUIDs.](#)

</p></div><div class="sect2" title="ERROR Command"><div class="titlepage"><div><div><h3 class="title">ERROR Command</h3></div></div></div><p>

The ERROR command indicates that either server or client did not

know a command, does not accept the given command in the current context, or did not understand the arguments to the command.

This allows the protocol to be extended; a client or server can send a command present or permitted only in new protocol versions, and if an ERROR is received instead of an appropriate response, fall back to using some other technique.

</p><p>

If an ERROR is sent, the server or client that sent the error must continue as if the command causing the ERROR had never been

received. However, the the server or client receiving the error should try something other than whatever caused the error; if only canceling/rejecting the authentication.

</p><p>

If the D-Bus protocol changes incompatibly at some future time, applications implementing the new protocol would probably be able to check for support of the new protocol by sending a new command and receiving an ERROR from applications that don't understand it. Thus the

ERROR feature of the auth protocol is an escape hatch that lets us negotiate extensions or changes to the D-Bus protocol in the future.

</p></div><div class="sect2" title="NEGOTIATE_UNIX_FD Command"><div class="titlepage"><div><div><h3 class="title">NEGOTIATE_UNIX_FD Command</h3></div></div></div><p>

The NEGOTIATE_UNIX_FD command indicates that the client supports Unix file descriptor passing. This command may only be sent after the connection is authenticated, i.e. after OK was received by the client. This command may only be sent on transports that support Unix file descriptor passing.

</p><p>

On receiving NEGOTIATE_UNIX_FD the server must respond with either AGREE_UNIX_FD or ERROR. It shall respond the former if the transport chosen supports Unix file descriptor passing and the server supports this feature. It shall respond the latter if the transport does not support Unix file descriptor passing, the server does not support this feature, or the server decides not to enable file descriptor passing due to security or other reasons.

</p></div><div class="sect2" title="AGREE_UNIX_FD Command"><div class="titlepage"><div><div><h3 class="title">AGREE_UNIX_FD Command</h3></div></div></div><p>

The AGREE_UNIX_FD command indicates that the server supports Unix file descriptor passing. This command may only be sent after the connection is authenticated, and the client sent NEGOTIATE_UNIX_FD to enable Unix file descriptor passing. This command may only be sent on transports that support Unix file descriptor passing.

</p><p>

On receiving AGREE_UNIX_FD the client must respond with BEGIN, followed by its stream of messages, or by disconnecting. The server must not accept additional commands using this protocol after the BEGIN command has been received. Further communication will be a stream of D-Bus messages (optionally encrypted, as negotiated) rather than this protocol.

</p></div><div class="sect2" title="Future Extensions"><div class="titlepage"><div><div><h3 class="title">Future Extensions</h3></div></div></div><p>

Future extensions to the authentication and negotiation protocol are possible. For that new commands may be introduced. If a client or server receives an unknown command it shall respond with ERROR and not consider this fatal. New commands may be introduced both before, and after authentication, i.e. both before and after the OK command.

</p></div><div class="sect2" title="Authentication examples"><div class="titlepage"><div><div><h3 class="title">Authentication examples</h3></div></div></div><p>

</p><div class="figure"><p class="title">Figure 1. Example of successful magic cookie authentication</p><div class="figure-contents"><pre class="programlisting">

```
(MAGIC_COOKIE is a made up mechanism)
```

C: AUTH MAGIC_COOKIE 3138363935333137393635383634
S: OK 1234deadbeef
C: BEGIN

</pre></div></div><p><br class="figure-break"></p><div class="figure"><p class="title">Figure 2. Example of finding out mechanisms then picking one</p><div class="figure-contents"><pre class="programlisting">

```
C: AUTH  
S: REJECTED KERBEROS_V4 SKEY  
C: AUTH SKEY 7ab83f32ee  
S: DATA 8799cabb2ea93e  
C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f  
S: OK 1234deadbeef  
C: BEGIN
```

</pre></div></div><p><br class="figure-break"></p><div class="figure"><p class="title">Figure 3. Example of client sends unknown command then falls back to regular auth</p><div class="figure-contents"><pre class="programlisting">

```
C: FOOBAR  
S: ERROR  
C: AUTH MAGIC_COOKIE 3736343435313230333039  
S: OK 1234deadbeef  
C: BEGIN
```

</pre></div></div><p><br class="figure-break"></p><div class="figure"><p class="title">Figure 4. Example of server doesn't support initial auth mechanism</p><div class="figure-contents"><pre class="programlisting">

```
C: AUTH MAGIC_COOKIE 3736343435313230333039  
S: REJECTED KERBEROS_V4 SKEY  
C: AUTH SKEY 7ab83f32ee  
S: DATA 8799cabb2ea93e  
C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f  
S: OK 1234deadbeef  
C: BEGIN
```

</pre></div></div><p><br class="figure-break"></p><div class="figure"><p class="title">Figure 5. Example of wrong password or the like followed by successful retry</p><div class="figure-contents"><pre class="programlisting">

```
C: AUTH MAGIC_COOKIE 3736343435313230333039  
S: REJECTED KERBEROS_V4 SKEY  
C: AUTH SKEY 7ab83f32ee  
S: DATA 8799cabb2ea93e
```

```
C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f
S: REJECTED
C: AUTH SKEY 7ab83f32ee
S: DATA 8799cabb2ea93e
C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f
S: OK 1234deadbeef
C: BEGIN
```

</pre></div></div><p><br class="figure-break">
</p><div class="figure"><p
class="title">Figure 6. Example of skey cancelled and
restarted</p><div class="figure-contents"><pre
class="programlisting">

```
C: AUTH MAGIC_COOKIE 3736343435313230333039
S: REJECTED KERBEROS_V4 SKEY
C: AUTH SKEY 7ab83f32ee
S: DATA 8799cabb2ea93e
C: CANCEL
S: REJECTED
C: AUTH SKEY 7ab83f32ee
S: DATA 8799cabb2ea93e
C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f
S: OK 1234deadbeef
C: BEGIN
```

</pre></div></div><p><br class="figure-break">
</p><div class="figure"><p
class="title">Figure 7. Example of successful magic cookie
authentication with successful negotiation of Unix FD
passing</p><div class="figure-contents"><pre
class="programlisting">

(MAGIC_COOKIE is a made up mechanism)

```
C: AUTH MAGIC_COOKIE 3138363935333137393635383634
S: OK 1234deadbeef
C: NEGOTIATE_UNIX_FD
S: AGREE_UNIX_FD
C: BEGIN
```

</pre></div></div><p><br class="figure-break">
</p><div class="figure"><p
class="title">Figure 8. Example of successful magic cookie
authentication with unsuccessful negotiation of Unix FD
passing</p><div class="figure-contents"><pre
class="programlisting">

(MAGIC_COOKIE is a made up mechanism)

```
C: AUTH MAGIC_COOKIE 3138363935333137393635383634
S: OK 1234deadbeef
C: NEGOTIATE_UNIX_FD
S: ERROR
C: BEGIN
```

</pre></div></div><p><br class="figure-break">
</p></div><div class="sect2" title="Authentication state
diagrams"><div class="titlepage"><div><div><h3 class="title">Authentication state diagrams</h3></div></div></div><p>

This section documents the auth protocol in terms of a state machine for the client and the server. This is probably the most robust way to implement the protocol.

</p><div class="sect3" title="Client states"><div class="titlepage"><div><div><h4 class="title">Client states</h4></div></div></div><p>

To more precisely describe the interaction between the protocol state machine and the authentication mechanisms the following notation is used: MECH(CHALL) means that the server challenge CHALL was fed to the mechanism MECH, which returns one of

</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>CONTINUE(Resp) means continue the auth conversation and send Resp as the response to the server;</p><li class="listitem"><p>OK(Resp) means that after sending Resp to the server the client side of the auth conversation is finished and the server should return "OK";</p><li class="listitem"><p>ERROR means that CHALL was invalid and could not be processed.</p></div><p>

Both Resp and CHALL may be empty.

</p><p>The Client starts by getting an initial response from the default mechanism and sends AUTH MECH Resp, or AUTH MECH if the mechanism did not provide an initial response. If the mechanism returns CONTINUE, the client starts in state WaitingForData, if the mechanism returns OK the client starts in state WaitingForOK.</p><p>

The client should keep track of available mechanisms and which it mechanisms it has already attempted. This list is used to decide which AUTH command to send. When the list is exhausted, the client should give up and close the connection.

</p><p title="WaitingForData">WaitingForData.</p>

</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>

Receive DATA CHALL

</p><table border="0" summary="Simple list" class="simplelist"><tr><td>

MECH(CHALL) returns CONTINUE(Resp) → send DATA Resp, goto

```

        <span
class="emphasis"><em>WaitingForData</em></span>
        </td></tr><tr><td>
            MECH(CHALL) returns OK(Resp) &#8594; send DATA
            Resp, goto <span
class="emphasis"><em>WaitingForOK</em></span>
        </td></tr><tr><td>
            MECH(CHALL) returns ERROR &#8594; send ERROR
            [msg], goto <span
class="emphasis"><em>WaitingForData</em></span>
        </td></tr></table><p>
</p></li><li class="listitem"><p>
    Receive REJECTED [mechs] &#8594;
    send AUTH [next mech], goto
    WaitingForData or <span
class="emphasis"><em>WaitingForOK</em></span>
</p></li><li class="listitem"><p>
    Receive ERROR &#8594; send
    CANCEL, goto
    <span
class="emphasis"><em>WaitingForReject</em></span>
</p></li><li class="listitem"><p>
    Receive OK &#8594; send
    BEGIN, terminate auth
    conversation, authenticated
</p></li><li class="listitem"><p>
    Receive anything else &#8594; send
    ERROR, goto
    <span
class="emphasis"><em>WaitingForData</em></span>
</p></li></ul></div><p title="WaitingForData">
</p><p title="WaitingForOK"><b><span
class="emphasis"><em>WaitingForOK</em></span>. </b>
</p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
    Receive OK &#8594; send BEGIN, terminate auth
    conversation, <span
class="emphasis"><em>authenticated</em></span>
</p></li><li class="listitem"><p>
    Receive REJECT [mechs] &#8594; send AUTH [next
mech],
        goto <span
class="emphasis"><em>WaitingForData</em></span> or
    <span class="emphasis"><em>WaitingForOK</em></span>
</p></li><li class="listitem"><p>
    Receive DATA &#8594; send CANCEL, goto
    <span
class="emphasis"><em>WaitingForReject</em></span>
</p></li><li class="listitem"><p>
    Receive ERROR &#8594; send CANCEL, goto
    <span
class="emphasis"><em>WaitingForReject</em></span>

```

```

        </p></li><li class="listitem"><p>
            Receive anything else &#8594; send ERROR, goto
            <span class="emphasis"><em>WaitingForOK</em></span>
        </p></li></ul></div><p title="WaitingForOK">
    </p><p title="WaitingForReject"><b><span
class="emphasis"><em>WaitingForReject</em></span>. </b>
    </p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
        Receive REJECT [mechs] &#8594; send AUTH [next
mech],
            goto <span
class="emphasis"><em>WaitingForData</em></span> or
            <span class="emphasis"><em>WaitingForOK</em></span>
        </p></li><li class="listitem"><p>
            Receive anything else &#8594; terminate auth
            conversation, disconnect
        </p></li></ul></div><p title="WaitingForReject">
    </p></div><div class="sect3" title="Server states"><div
class="titlepage"><div><div><h4 class="title"><a name="auth-states-
server"></a>Server states</h4></div></div></div><p>
    For the server MECH(RES)P means that the client response
    RESP was fed to the the mechanism MECH, which returns one of

    </p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
        CONTINUE(CHALL) means continue the auth conversation
and
            send CHALL as the challenge to the client;
        </p></li><li class="listitem"><p>
            OK means that the client has been successfully
            authenticated;
        </p></li><li class="listitem"><p>
            REJECT means that the client failed to authenticate or
            there was an error in RESP.
        </p></li></ul></div><p>

    The server starts out in state
    <span class="emphasis"><em>WaitingForAuth</em></span>. If
the client is
    rejected too many times the server must disconnect the
    client.
    </p><p title="WaitingForAuth"><b><span
class="emphasis"><em>WaitingForAuth</em></span>. </b>
    </p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
        Receive AUTH &#8594; send REJECTED [mechs], goto
        <span
class="emphasis"><em>WaitingForAuth</em></span>
        </p></li><li class="listitem"><p>
            Receive AUTH MECH RESP

```



```

        </p><table border="0" summary="Simple list"
class="simplelist"><tr><td>
        MECH not valid mechanism &#8594; send REJECTED
        [mechs], goto
        <span
class="emphasis"><em>WaitingForAuth</em></span>
        </td></tr><tr><td>
        MECH(RESP) returns CONTINUE(CHALL) &#8594; send
        DATA CHALL, goto
        <span
class="emphasis"><em>WaitingForData</em></span>
        </td></tr><tr><td>
        MECH(RESP) returns OK &#8594; send OK, goto
        <span
class="emphasis"><em>WaitingForBegin</em></span>
        </td></tr><tr><td>
        MECH(RESP) returns REJECT &#8594; send REJECTED
        [mechs], goto
        <span
class="emphasis"><em>WaitingForAuth</em></span>
        </td></tr></table><p>
</p></li><li class="listitem"><p>
        Receive BEGIN &#8594; terminate
        auth conversation, disconnect
</p></li><li class="listitem"><p>
        Receive ERROR &#8594; send REJECTED [mechs], goto
        <span
class="emphasis"><em>WaitingForAuth</em></span>
</p></li><li class="listitem"><p>
        Receive anything else &#8594; send
        ERROR, goto
        <span
class="emphasis"><em>WaitingForAuth</em></span>
</p></li></ul></div><p title="WaitingForAuth">
</p><p title="WaitingForData"><b><span
class="emphasis"><em>WaitingForData</em></span>. </b>
</p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
        Receive DATA RESP
        </p><table border="0" summary="Simple list"
class="simplelist"><tr><td>
        MECH(RESP) returns CONTINUE(CHALL) &#8594; send
        DATA CHALL, goto
        <span
class="emphasis"><em>WaitingForData</em></span>
        </td></tr><tr><td>
        MECH(RESP) returns OK &#8594; send OK, goto
        <span
class="emphasis"><em>WaitingForBegin</em></span>
        </td></tr><tr><td>
        MECH(RESP) returns REJECT &#8594; send REJECTED
        [mechs], goto

```

```

        <span
class="emphasis"><em>WaitingForAuth</em></span>
        </td></tr></table><p>
        </p></li><li class="listitem"><p>
            Receive BEGIN &#8594; terminate auth conversation,
            disconnect
        </p></li><li class="listitem"><p>
            Receive CANCEL &#8594; send REJECTED [mechs], goto
            <span
class="emphasis"><em>WaitingForAuth</em></span>
        </p></li><li class="listitem"><p>
            Receive ERROR &#8594; send REJECTED [mechs], goto
            <span
class="emphasis"><em>WaitingForAuth</em></span>
        </p></li><li class="listitem"><p>
            Receive anything else &#8594; send ERROR, goto
            <span
class="emphasis"><em>WaitingForData</em></span>
        </p></li></ul></div><p title="WaitingForData">
        </p><p title="WaitingForBegin"><b><span
class="emphasis"><em>WaitingForBegin</em></span>. </b>
        </p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
            Receive BEGIN &#8594; terminate auth conversation,
            client authenticated
        </p></li><li class="listitem"><p>
            Receive CANCEL &#8594; send REJECTED [mechs], goto
            <span
class="emphasis"><em>WaitingForAuth</em></span>
        </p></li><li class="listitem"><p>
            Receive ERROR &#8594; send REJECTED [mechs], goto
            <span
class="emphasis"><em>WaitingForAuth</em></span>
        </p></li><li class="listitem"><p>
            Receive anything else &#8594; send ERROR, goto
            <span
class="emphasis"><em>WaitingForBegin</em></span>
        </p></li></ul></div><p title="WaitingForBegin">
        </p></div></div><div class="sect2" title="Authentication
mechanisms"><div class="titlepage"><div><div><h3 class="title"><a
name="auth-mechanisms"></a>Authentication
mechanisms</h3></div></div></div><p>
        This section describes some new authentication mechanisms.
        D-Bus also allows any standard SASL mechanism of course.
        </p><div class="sect3" title="DBUS_COOKIE_SHA1"><div
class="titlepage"><div><div><h4 class="title"><a name="auth-
mechanisms-sha"></a>DBUS_COOKIE_SHA1</h4></div></div></div><p>
        The DBUS_COOKIE_SHA1 mechanism is designed to establish that
        a client
        has the ability to read a private file owned by the user
        being

```

authenticated. If the client can prove that it has access to a secret cookie stored in this file, then the client is authenticated.

Thus the security of DBUS_COOKIE_SHA1 depends on a secure home directory.

Throughout this description, "hex encoding" must output the digits from a to f in lower-case; the digits A to F must not be used in the DBUS_COOKIE_SHA1 mechanism.

Authentication proceeds as follows:

- <p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>

- The client sends the username it would like to authenticate as, hex-encoded.
- The server sends the name of its "cookie context" (see below); a space character; the integer ID of the secret cookie the client must demonstrate knowledge of; a space character; then a randomly-generated challenge string, all of this hex-encoded into one, single string.

- The client locates the cookie and generates its own randomly-generated challenge string. The client then concatenates the server's decoded challenge, a ":" character, its own challenge, another ":" character, and the cookie. It computes the SHA-1 hash of this composite string as a hex digest. It concatenates the client's challenge string, a space character, and the SHA-1 hex digest, hex-encodes the result and sends it back to the server.

- The server generates the same concatenated string used by the client and computes its SHA-1 hash. It compares the hash with the hash received from the client; if the two hashes match, the client is authenticated.

```
</p></li></ul></div><p>
</p><p>
Each server has a "cookie context," which is a name that
identifies a
set of cookies that apply to that server. A sample context
might be
"org_freedesktop_session_bus". Context names must be valid
ASCII,
nonzero length, and may not contain the characters slash
("/"),
backslash ("\\"), space (" "), newline ("\n"), carriage
return ("\r"),
tab ("\t"), or period "."). There is a default context,
"org_freedesktop_general" that's used by servers that do not
specify
otherwise.
</p><p>
Cookies are stored in a user's home directory, in the
directory
<code class="filename">~/.dbus-keyrings/</code>. This
directory must
not be readable or writable by other users. If it is,
clients and servers must ignore it. The directory
contains cookie files named after the cookie context.
</p><p>
A cookie file contains one cookie per line. Each line
has three space-separated fields:
</p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
The cookie ID number, which must be a non-negative
integer and
may not be used twice in the same file.
</p></li><li class="listitem"><p>
The cookie's creation time, in UNIX seconds-since-the-
epoch
format.
</p></li><li class="listitem"><p>
The cookie itself, a hex-encoded random block of
bytes. The cookie
may be of any length, though obviously security
increases
as the length increases.
</p></li></ul></div><p>
</p><p>
Only server processes modify the cookie file.
They must do so with this procedure:
</p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
Create a lockfile name by appending ".lock" to the
name of the
cookie file. The server should attempt to create this
file
```

using `O_CREAT | O_EXCL`.
If file creation fails, the lock fails. Servers should retry for a reasonable period of time, then they may choose to delete an existing lock to keep users from having to manually delete a stale lock. ^{[[1](#ftn.idp5281040)]}

- Once the lockfile has been created, the server loads the cookie file. It should then delete any cookies that are old (the timeout can be fairly short), or more than a reasonable time in the future (so that cookies never accidentally become permanent, if the clock was set far into the future at some point). If no recent keys remain, the server may generate a new key.
- The pruned and possibly added-to cookie file must be resaved atomically (using a temporary file which is `rename()`'d).
- The lock must be dropped by deleting the lockfile.

Clients need not lock the file in order to load it, because servers are required to save the file atomically.

Server Addresses

Server addresses consist of a transport name followed by a colon, and then an optional, comma-separated list of keys and values in the form `key=value`. Each value is escaped.

For example:

```
unix:path=/tmp/dbus-test
```

Which is the address to a unix socket with the path `/tmp/dbus-test`.

Value escaping is similar to URI escaping but simpler.

- The set of optionally-escaped bytes is:

`[0-9A-Za-z_-.]`. To escape, each `byte` (note, not character) which is not in the set of optionally-escaped bytes must be replaced with an ASCII percent (`%`) and the value of the byte in hex. The hex value must always be two digits, even if the first digit is zero. The optionally-escaped bytes may be escaped if desired.

- To unescape, append each byte in the value; if a byte is an ASCII percent (`%`) character then append the following hex value instead. It is an error if a `%` byte does not have two hex digits following. It is an error if a non-optionally-escaped byte is seen unescaped.

The set of optionally-escaped bytes is intended to preserve address readability and convenience.

A server may specify a key-value pair with the key `guid` and the value a hex-encoded 16-byte sequence. [the section called "UUIDs"](#uuids "UUIDs") describes the format of the `guid` field. If present, this UUID may be used to distinguish one server address from another. A server should use a different UUID for each address it listens on. For example, if a message bus daemon offers both UNIX domain socket and TCP connections, but treats clients the same regardless of how they connect, those two connections are equivalent post-connection but should have distinct UUIDs to distinguish the kinds of connection.

The intent of the address UUID feature is to allow a client to avoid opening multiple identical connections to the same server, by allowing the client to check whether an address corresponds to an already-existing

connection. Comparing two addresses is insufficient, because addresses can be recycled by distinct servers, and equivalent addresses may look different if simply compared as strings (for example, the host in a TCP address can be given as an IP address or as a hostname).

Note that the address key is `guid` even though the rest of the API and documentation says "UUID," for historical reasons.

[FIXME clarify if attempting to connect to each is a requirement or just a suggestion]
When connecting to a server, multiple server addresses can be separated by a semi-colon. The library will then try to connect to the first address and if that fails, it'll try to connect to the next one specified, and so forth. For example

```
unix:path=/tmp/dbus-test;unix:path=/tmp/dbus-test2
```

Transports

[FIXME we need to specify in detail each transport and its possible arguments]

Current transports include: unix domain sockets (including abstract namespace on linux), launchd, systemd, TCP/IP, an executed subprocess and a debug/testing transport using in-process pipes. Future possible transports include one that tunnels over X11 protocol.

Unix Domain Sockets

Unix domain sockets can be either paths in the file system or on Linux kernels, they can be abstract which are similar to paths but do not show up in the file system.

When a socket is opened by the D-Bus library it truncates the path name right before the first trailing Nul byte. This is true for both normal paths and abstract paths. Note that this is a departure from previous versions of D-Bus that would create sockets with a fixed length path name. Names which were shorter than the fixed length would be padded by Nul bytes.

Unix domain sockets are not available on Windows.

</p><div class="sect3" title="Server Address Format"><div class="titlepage"><div><div><h4 class="title">Server Address Format</h4></div></div></div><p>

Unix domain socket addresses are identified by the "unix:" prefix

and support the following key/value pairs:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Name</th><th>Values</th><th>Description</th></tr></thead><tbody><tr><td>path</td><td>(path)</td><td>path of the unix domain socket. If set, the "tmpdir" and "abstract" key must not be set.</td></tr><tr><td>tmpdir</td><td>(path)</td><td>temporary directory in which a socket file with a random file name starting with 'dbus-' will be created by the server. This key can only be used in server addresses, not in client addresses. If set, the "path" and "abstract" key must not be set.</td></tr><tr><td>abstract</td><td>(string)</td><td>unique string (path) in the abstract namespace. If set, the "path" or "tmpdir" key must not be set.</td></tr></tbody></table></div></div></div><div class="sect2" title="launchd"><div class="titlepage"><div><div><h3 class="title">launchd</h3></div></div></div><p>

launchd is an open-source server management system that replaces init, inetd

and cron on Apple Mac OS X versions 10.4 and above. It provides a common session

bus address for each user and deprecates the X11-enabled D-Bus launcher on OSX.

</p><p>

launchd allocates a socket and provides it with the unix path through the

DBUS_LAUNCHD_SESSION_BUS_SOCKET variable in launchd's environment. Every process

spawned by launchd (or dbus-daemon, if it was started by launchd) can access

it through its environment.

Other processes can query for the launchd socket by executing:

```
$ launchctl getenv DBUS_LAUNCHD_SESSION_BUS_SOCKET
```

This is normally done by the D-Bus client library so doesn't have to be done

manually.

</p><p>

launchd is not available on Microsoft Windows.

</p><div class="sect3" title="Server Address Format"><div class="titlepage"><div><div><h4 class="title">Server Address Format</h4></div></div></div><p>

launchd addresses are identified by the "launchd:" prefix

and support the following key/value pairs:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Name</th><th>Values</th><th>Description</th></tr></thead><tbody><tr><td>env</td>

d><td>(environment variable)</td><td>path of the unix domain socket for the launchd created dbus-

daemon.</td></tr></tbody></table></div></div></div><div class="sect2" title="systemd"><div class="titlepage"><div><div><h3 class="title">systemd</h3></div></div></div><p>

systemd is an open-source server management system that replaces init and inetd on newer Linux systems. It supports socket activation. The D-Bus systemd transport is used to acquire

socket activation file descriptors from systemd and use them as D-Bus transport when the current process is spawned by socket activation from it.

</p><p>

The systemd transport accepts only one or more Unix domain or TCP streams sockets passed in via socket activation.

</p><p>

The systemd transport is not available on non-Linux operating systems.

</p><p>

The systemd transport defines no parameter keys.

</p></div><div class="sect2" title="TCP Sockets"><div class="titlepage"><div><div><h3 class="title">TCP Sockets</h3></div></div></div><p>

The tcp transport provides TCP/IP based connections between clients

located on the same or different hosts.

</p><p>

Using tcp transport without any additional secure authentication mechanismus

over a network is unsecure.

</p><p>

Windows notes: Because of the tcp stack on Windows does not provide sending

credentials over a tcp connection, the EXTERNAL authentication

mechanismus does not work.

</p><div class="sect3" title="Server Address Format"><div class="titlepage"><div><div><h4 class="title">Server Address Format</h4></div></div></div><p>

TCP/IP socket addresses are identified by the "tcp:" prefix and support the following key/value pairs:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Name</th><th>Values</th><th>Description</th></tr></thead><tbody><tr><td>host</td><td>(string)</td><td>dns name or ip address</td></tr><tr><td>port</td><td>(number)</td><td>The tcp port the server will open. A zero value let the server

choose a free port provided from the underlying operating system.

libdbus is able to retrieve the real used port from the server.

</td></tr><tr><td>family</td><td>(string)</td><td>If set, provide the type of socket family either "ipv4" or "ipv6". If unset, the family is

unspecified.</td></tr></tbody></table></div></div></div><div

class="sect2" title="Nonce-secured TCP Sockets"><div

class="titlepage"><div><div><h3 class="title">Nonce-secured TCP Sockets</h3></div></div></div><p>

The nonce-tcp transport provides a secured TCP transport, using a

simple authentication mechanism to ensure that only clients with read

access to a certain location in the filesystem can connect to the server.

The server writes a secret, the nonce, to a file and an incoming client

connection is only accepted if the client sends the nonce right after

the connect. The nonce mechanism requires no setup and is orthogonal to

the higher-level authentication mechanisms described in the Authentication section.

</p><p>

On start, the server generates a random 16 byte nonce and writes it

to a file in the user's temporary directory. The nonce file location

is published as part of the server's D-Bus address using the "noncefile" key-value pair.

After an accept, the server reads 16 bytes from the socket. If the

read bytes do not match the nonce stored in the nonce file, the

server MUST immediately drop the connection.

If the nonce match the received byte sequence, the client is accepted

and the transport behaves like an unsecured tcp transport.

</p><p>

After a successful connect to the server socket, the client MUST read

the nonce from the file published by the server via the noncefile=

key-value pair and send it over the socket. After that, the transport behaves like an unsecured tcp transport.

</p><div class="sect3" title="Server Address Format"><div class="titlepage"><div><div><h4 class="title">Server Address Format</h4></div></div></div><p>

Nonce TCP/IP socket addresses uses the "nonce-tcp:" prefix and support the following key/value pairs:

Name	Values	Description
host	(string)	dns name or ip address
port	(number)	The tcp port the server will open. A zero value let the server choose a free port provided from the underlying operating system.

libdbus is able to retrieve the real used port from the server.

family	(string)	If set, provide the type of socket family either "ipv4" or "ipv6". If unset, the family is unspecified.
noncefile	(path)	file location containing the secret

Executed Subprocesses on Unix

Executed Subprocesses on Unix

This transport forks off a process and connects its standard input and standard output with an anonymous Unix domain socket. This socket is then used for communication by the transport. This transport may be used to use out-of-process forwarder programs as basis for the D-Bus protocol.

The forked process will inherit the standard error output and process group from the parent process.

Executed subprocesses are not available on Windows.

Server Address Format

Server Address Format

Executed subprocess addresses are identified by the "unixexec:" prefix and support the following key/value pairs:

Name	Values	Description
path	(path)	Path of the binary to execute, either an absolute

path or a binary name that is searched for in the default search path of the OS. This corresponds to the first argument of `execlp()`. This key is mandatory.

argv0	(string)	The program name to use when executing the binary. If omitted the same value as specified for path= will be used. This corresponds to the second argument of <code>execlp()</code> .
argv1, argv2, ...	(string)	Arguments to pass to the binary. This corresponds

to the third and later arguments of `execlp()`. If a

specific argvX is not specified no further argvY for Y
> X

are taken into
account.</td></tr></tbody></table></div></div></div></div><div
class="sect1" title="Meta Transports"><div
class="titlepage"><div><div><h2 class="title" style="clear: both">Meta Transports</h2></div></div></div><p>

Meta transports are a kind of transport with special
enhancements or
behavior. Currently available meta transports include:
autolaunch

</p><div class="sect2" title="Autolaunch"><div
class="titlepage"><div><div><h3 class="title"><a name="meta-
transports-autolaunch">Autolaunch</h3></div></div></div><p>The
autolaunch transport provides a way for dbus clients to autodetect
a running dbus session bus and to autolaunch a session bus if
not present.

</p><div class="sect3" title="Server Address Format"><div
class="titlepage"><div><div><h4 class="title"><a name="meta-
transports-autolaunch-addresses">Server Address
Format</h4></div></div></div><p>

Autolaunch addresses uses the "autolaunch:" prefix and
support the

following key/value pairs:
</p><div class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Name</th>
><th>Values</th><th>Description</th></tr></thead><tbody><tr><td>scope<
</td><td>(string)</td><td>scope of autolaunch (Windows only)

<div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>

"*install-path" - limit session bus to dbus
installation path.

The dbus installation path is determined from the
location of
the shared dbus library. If the library is located in a
'bin'
subdirectory the installation root is the directory
above,
otherwise the directory where the library lives is
taken as

installation root.
</p><pre class="programlisting">
 <lt;install-root>/bin/[lib]dbus-1.dll
 <lt;install-root>/[lib]dbus-1.dll
</pre><p>
</p><li class="listitem"><p>
 "*user" - limit session bus to the recent user.
</p><li class="listitem"><p>
 other values - specify dedicated session bus like

"release",
 "debug" or other
</p></div>

On start, the server opens a platform specific transport, creates a mutex and a shared memory section containing the related session bus address.

This mutex will be inspected by the dbus client library to detect a

running dbus session bus. The access to the mutex and the shared memory section are protected by global locks.

In the recent implementation the autolaunch transport uses a tcp transport

on localhost with a port choosen from the operating system. This detail may

change in the future.

Disclaimer: The recent implementation is in an early state and may not

work in all cirumstances and/or may have security issues.

Because of this

the implementation is not documentated yet.

UUIDs

A working D-Bus implementation uses universally-unique IDs in two places.

First, each server address has a UUID identifying the address, as described in [the section called "Server Addresses"](#).

Second, each operating

system kernel instance running a D-Bus client or server has a UUID

identifying that kernel, retrieved by invoking the method `org.freedesktop.DBus.Peer.GetMachineId()` (see [the section called "org.freedesktop.DBus.Peer"](#) the `org.freedesktop.DBus.Peer`).

The term "UUID" in this document is intended literally, i.e. an identifier that is universally unique. It is not intended to refer to

RFC4122, and in fact the D-Bus UUID is not compatible with that RFC.

The UUID must contain 128 bits of data and be hex-encoded. The hex-encoded string may not contain hyphens or other non-hex-digit

characters, and it must be exactly 32 characters long. To generate a UUID, the current reference implementation concatenates 96 bits of random data followed by the 32-bit time in seconds since the UNIX epoch (in big endian byte order).

It would also be acceptable and probably better to simply generate 128 bits of random data, as long as the random number generator is of high quality. The timestamp could conceivably help if the random bits are not very random. With a quality random number generator, collisions are extremely unlikely even with only 96 bits, so it's somewhat academic.

Implementations should, however, stick to random data for the first 96 bits of the UUID.

</p></div><div class="sect1" title="Standard Interfaces"><div class="titlepage"><div><div><h2 class="title" style="clear: both">Standard Interfaces</h2></div></div></div><p>

See the section called “Notation in this document” for details on

the notation used in this section. There are some standard interfaces that may be useful across various D-Bus applications.

</p><div class="sect2" title="org.freedesktop.DBus.Peer"><div class="titlepage"><div><div><h3 class="title"><code class="literal">org.freedesktop.DBus.Peer</code></h3></div></div></div><p>

The <code class="literal">org.freedesktop.DBus.Peer</code> interface

has two methods:

```
org.freedesktop.DBus.Peer.Ping ()
org.freedesktop.DBus.Peer.GetMachineId (out STRING
machine_uuid)
```

On receipt of the <code class="literal">METHOD_CALL</code> message

<code class="literal">org.freedesktop.DBus.Peer.Ping</code>, an application should do nothing other than reply with a <code class="literal">METHOD_RETURN</code> as

usual. It does not matter which object path a ping is sent to. The

reference implementation handles this method automatically.

On receipt of the `METHOD_CALL` message

`org.freedesktop.DBus.Peer.GetMachineId`, an application should

reply with a `METHOD_RETURN` containing a hex-encoded

UUID representing the identity of the machine the process is running on.

This UUID must be the same for all processes on a single system at least

until that system next reboots. It should be the same across reboots

if possible, but this is not always possible to implement and is not

guaranteed.

It does not matter which object path a `GetMachineId` is sent to. The

reference implementation handles this method automatically.

The UUID is intended to be per-instance-of-the-operating-system, so may represent

a virtual machine running on a hypervisor, rather than a physical machine.

Basically if two processes see the same UUID, they should also see the same

shared memory, UNIX domain sockets, process IDs, and other features that require

a running OS kernel in common between the processes.

The UUID is often used where other programs might use a hostname. Hostnames

can change without rebooting, however, or just be "localhost" - so the UUID

is more robust.

[the section called "UUIDs" explains the format of the UUID.](#)

`org.freedesktop.DBus.Introspectable`

This interface has one method:

```
org.freedesktop.DBus.Introspectable.Introspect (out STRING
```

```
xml_data)
```

```

    </pre><p>
  </p><p>
    Objects instances may implement
    <code class="literal">Introspect</code> which returns an XML
description of
    the object, including its interfaces (with signals and
methods), objects
    below it in the object path tree, and its properties.
  </p><p>
    <a class="xref" href="#introspection-format"
title="Introspection Data Format">the section called
&#8220;Introspection Data Format&#8221;</a> describes the format of
this XML string.
    </p></div><div class="sect2"
title="org.freedesktop.DBus.Properties"><div
class="titlepage"><div><div><h3 class="title"><a name="standard-
interfaces-properties"></a><code
class="literal">org.freedesktop.DBus.Properties</code></h3></div></div
></div><p>
    Many native APIs will have a concept of object <em
class="firstterm">properties</em>
    or <em class="firstterm">attributes</em>. These can be exposed
via the
    <code class="literal">org.freedesktop.DBus.Properties</code>
interface.
  </p><p>
    </p><pre class="programlisting">
      org.freedesktop.DBus.Properties.Get (in STRING
interface_name,
                                      in STRING
property_name,
                                      out VARIANT value);
      org.freedesktop.DBus.Properties.Set (in STRING
interface_name,
                                      in STRING
property_name,
                                      in VARIANT value);
      org.freedesktop.DBus.Properties.GetAll (in STRING
interface_name,
                                      out
DICT<lt;STRING,VARIANT> props);
    </pre><p>
  </p><p>
    It is conventional to give D-Bus properties names consisting
of
    capitalized words without punctuation ("CamelCase"), like
    <a class="link" href="#message-protocol-names-member"
title="Member names">member names</a>.
    For instance, the GObject property
    <code class="literal">connection-status</code> or the Qt
property

```


`connectionStatus` could be represented on D-Bus as `ConnectionStatus`.

Strictly speaking, D-Bus property names are not required to follow the same naming restrictions as member names, but D-Bus property names that would not be valid member names (in particular, GObject-style dash-separated property names) can cause interoperability problems and should be avoided.

The available properties and whether they are writable can be determined by calling `org.freedesktop.DBus.Introspectable.Introspect`, see [the section called `org.freedesktop.DBus.Introspectable`](#).

An empty string may be provided for the interface name; in this case, if there are multiple properties on an object with the same name, the results are undefined (picking one by according to an arbitrary deterministic rule, or returning an error, are the reasonable possibilities).

If one or more properties change on an object, the `org.freedesktop.DBus.Properties.PropertiesChanged` signal may be emitted (this signal was added in 0.14):

```
org.freedesktop.DBus.Properties.PropertiesChanged
(String interface_name,
 DICT<String,Variant> changed_properties,
 ARRAY<String> invalidated_properties);
```

where `changed_properties` is a dictionary containing the changed properties with the new values and `invalidated_properties` is an array of properties that changed but the value is not conveyed.

Whether the `PropertiesChanged` signal is supported can be determined by calling `org.freedesktop.DBus.Introspectable.Introspect`. Note that the signal may be supported for an object but it may differ how whether and how it is used on a per-property basis (for e.g. performance or security reasons). Each property (or the parent interface) must be annotated with the `org.freedesktop.DBus.Property.EmitsChangedSignal` annotation to convey this (usually the default value `true` is sufficient meaning that the annotation does not need to be used). See [the section called "Introspection Data Format"](#introspection-format "Introspection Data Format") for details on this annotation.

`org.freedesktop.DBus.ObjectManager`

`org.freedesktop.DBus.ObjectManager`

An API can optionally make use of this interface for one or more sub-trees of objects. The root of each sub-tree implements this interface so other applications can get all objects, interfaces and properties in a single method call. It is appropriate to use this interface if users of the tree of objects are expected to be interested in all interfaces of all objects in the tree; a more granular API should be used if users of the objects are expected to be interested in a small subset of the objects, a small subset of their interfaces, or both.

The method that applications can use to get all objects and properties is `GetManagedObjects`:

```
org.freedesktop.DBus.ObjectManager.GetManagedObjects (out
DICT<OBJPATH, DICT<STRING, DICT<STRING, VARIANT>>>>
objpath_interfaces_and_properties);
```

The return value of this method is a dict whose keys are object paths. All returned object paths are children of the object path implementing this interface, i.e. their object

paths start with the ObjectManager's object path plus '/'.
 </p><p>
 Each value is a dict whose keys are interfaces names. Each value in this inner dict is the same dict that would be returned by the org.freedesktop.DBus.Properties.GetAll() method for that combination of object path and interface. If an interface has no properties, the empty dict is returned.

</p><p>
 Changes are emitted using the following two signals:

</p><p>
 </p><pre class="programlisting">
 org.freedesktop.DBus.ObjectManager.InterfacesAdded (OBJPATH
 object_path,
 DICT<STRING,DICT<STRING,VARIANT>>
 interfaces_and_properties);
 org.freedesktop.DBus.ObjectManager.InterfacesRemoved
 (OBJPATH object_path,
 ARRAY<STRING> interfaces);
 </pre><p>
 </p><p>
 The <code class="literal">InterfacesAdded</code> signal is emitted when either a new object is added or when an existing object gains one or more interfaces. The <code class="literal">InterfacesRemoved</code> signal is emitted whenever an object is removed or it loses one or more interfaces. The second parameter of the <code class="literal">InterfacesAdded</code> signal contains a dict with the interfaces and properties (if any) that have been added to the given object path. Similarly, the second parameter of the <code class="literal">InterfacesRemoved</code> signal contains an array of the interfaces that were removed. Note that changes on properties on existing interfaces are not reported using this interface - an application should also monitor the existing PropertiesChanged signal on each object.

</p><p>
 Applications SHOULD NOT export objects that are children of an object (directly or otherwise) implementing this interface but which are not returned in the reply from the <code class="literal">GetManagedObjects()</code> method of this interface on the given object.

```

</p><p>
    The intent of the class="literal">ObjectManager</code>
interface
    is to make it easy to write a robust client
    implementation. The trivial client implementation only needs
    to make two method calls:
</p><p>
    </pre><pre class="programlisting">
        org.freedesktop.DBus.AddMatch (bus_proxy,
"type='signal',name='org.example.App',path_namespace='/org/example/App
'");
        objects =
org.freedesktop.DBus.ObjectManager.GetManagedObjects (app_proxy);
    </pre><p>
</p><p>
    on the message bus and the remote application's
    class="literal">ObjectManager</code>, respectively.
Whenever a new
    remote object is created (or an existing object gains a new
    interface), the class="literal">InterfacesAdded</code>
signal is
    emitted, and since this signal contains all properties for the
    interfaces, no calls to the
    class="literal">org.freedesktop.Properties</code>
interface on the
    remote object are needed. Additionally, since the initial
    class="literal">AddMatch()</code> rule already includes
signal
    messages from the newly created child object, no new
    class="literal">AddMatch()</code> call is needed.
</p><p>
    <span class="emphasis"><em>
        The 
class="literal">org.freedesktop.DBus.ObjectManager</code>
        interface was added in version 0.17 of the D-Bus
        specification.
    </em></span>
</p></div></div><div class="sect1" title="Introspection Data
Format"><div class="titlepage"><div><div><h2 class="title"
style="clear: both"><a name="introspection-format"></a>Introspection
Data Format</h2></div></div></div><p>
    As described in <a class="xref" href="#standard-interfaces-
introspectable" title="org.freedesktop.DBus.Introspectable">the
section called &#8220;<code
class="literal">org.freedesktop.DBus.Introspectable</code>&#8221;</a>,
    objects may be introspected at runtime, returning an XML string
    that describes the object. The same XML format may be used in
    other contexts as well, for example as an "IDL" for generating
    static language bindings.
</p><p>
    Here is an example of introspection data:

```

```

</p><pre class="programlisting">
  <!--DOCTYPE node PUBLIC "-//freedesktop//DTD D-BUS Object
  Introspection 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/introspect.dtd">
  <!--node name="/org/freedesktop/sample_object">
  <!--interface name="org.freedesktop.SampleInterface">
  <!--method name="Frobate">
    <!--arg name="foo" type="i" direction="in"/>
    <!--arg name="bar" type="s" direction="out"/>
    <!--arg name="baz" type="a{us}" direction="out"/>
    <!--annotation name="org.freedesktop.DBus.Deprecated"
value="true"/>
  <!--/method>
  <!--method name="Bazify">
    <!--arg name="bar" type="(iiu)" direction="in"/>
    <!--arg name="bar" type="v" direction="out"/>
  <!--/method>
  <!--method name="Mogrify">
    <!--arg name="bar" type="(iiav)" direction="in"/>
  <!--/method>
  <!--signal name="Changed">
    <!--arg name="new_value" type="b"/>
  <!--/signal>
  <!--property name="Bar" type="y" access="readwrite"/>
  <!--/interface>
  <!--node name="child_of_sample_object"/>
  <!--node name="another_child_of_sample_object"/>
  <!--/node>
</pre><p>
</p><p>

```

A more formal DTD and spec needs writing, but here are some quick notes.

```

</p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
  Only the root <!--node> element can omit the node name,
as it's
  known to be the object that was introspected. If the root
  <!--node> does have a name attribute, it must be an
absolute
  object path. If child <!--node> have object paths, they
must be
  relative.
</p></li><li class="listitem"><p>
  If a child <!--node> has any sub-elements, then they
  must represent a complete introspection of the child.
  If a child <!--node> is empty, then it may or may
  not have sub-elements; the child must be introspected
  in order to find out. The intent is that if an object
  knows that its children are "fast" to introspect
  it can go ahead and return their information, but
  otherwise it can omit it.

```

```

</p></li><li class="listitem"><p>
    The direction element on <code>arg</code> may be omitted,
    in which case it defaults to "in" for method calls
    and "out" for signals. Signals only allow "out"
    so while direction may be specified, it's pointless.
</p></li><li class="listitem"><p>
    The possible directions are "in" and "out",
    unlike CORBA there is no "inout"
</p></li><li class="listitem"><p>
    The possible property access flags are
    "readwrite", "read", and "write"
</p></li><li class="listitem"><p>
    Multiple interfaces can of course be listed for
    one <code>node</code>.
</p></li><li class="listitem"><p>
    The "name" attribute on arguments is optional.
</p></li></ul></div><p>

```

```

</p><p>

```

Method, interface, property, and signal elements may have "annotations", which are generic key/value pairs of metadata. They are similar conceptually to Java's annotations and C# attributes.

Well-known annotations:

```

</p><div class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Name</th>
<th>Values (separated by
,)</th><th>Description</th></tr></thead><tbody><tr><td>org.freedesktop
.DBus.Deprecated</td><td>true,false</td><td>Whether or not the entity
is deprecated; defaults to
false</td></tr><tr><td>org.freedesktop.DBus.GLib.CSymbol</td><td>(stri
ng)</td><td>The C symbol; may be used for methods and
interfaces</td></tr><tr><td>org.freedesktop.DBus.Method.NoReply</td><t
d>true,false</td><td>If set, don't expect a reply to the method call;
defaults to
false.</td></tr><tr><td>org.freedesktop.DBus.Property.EmitsChangedSign
al</td><td>true,invalidates,false</td><td>

```

```

<p>

```

```

    If set to <code class="literal">false</code>, the
<code
class="literal">org.freedesktop.DBus.Properties.PropertiesChanged</cod
e>

```

```

    signal, see <a class="xref" href="#standard-
interfaces-properties" title="org.freedesktop.DBus.Properties">the
section called &#8220;<code
class="literal">org.freedesktop.DBus.Properties</code>&#8221;</a> is
not

```

```

    guaranteed to be emitted if the property changes.
</p>

```

```

<p>

```

```

    If set to <code class="literal">invalidates</code>
the signal
    is emitted but the value is not included in the

```

```

        signal.
    </p>
    <p>
        If set to true the
signal is
        emitted with the value included.
    </p>
    <p>
        The value for the annotation defaults to
        true if the enclosing
interface
        element does not specify the annotation. Otherwise it
        defaults to the value specified in the enclosing
        interface element.
    </p>
</td></tr></tbody></table></div></div><div class="sect1"
title="Message Bus Specification"><div class="titlepage"><div><div><h2
class="title" style="clear: both"><a name="message-bus"></a>Message
Bus Specification</h2></div></div></div><div class="sect2"
title="Message Bus Overview"><div class="titlepage"><div><div><h3
class="title"><a name="message-bus-overview"></a>Message Bus
Overview</h3></div></div></div><p>
    The message bus accepts connections from one or more
applications.
    Once connected, applications can exchange messages with other
    applications that are also connected to the bus.
</p><p>
    In order to route messages among connections, the message bus
keeps a
    mapping from names to connections. Each connection has one
    unique-for-the-lifetime-of-the-bus name automatically
assigned.
    Applications may request additional names for a connection.
Additional
    names are usually "well-known names" such as
    "org.freedesktop.TextEditor". When a name is bound to a
connection,
    that connection is said to own the
name.
</p><p>
    The bus itself owns a special name, org.freedesktop.DBus.
    This name routes messages to the bus, allowing applications to
make
    administrative requests. For example, applications can ask the
bus
    to assign a name to a connection.
</p><p>
    Each name may have queued owners.
When an
    application requests a name for a connection and the name is
already in

```

use, the bus will optionally add the connection to a queue waiting for the name. If the current owner of the name disconnects or releases the name, the next connection in the queue will become the new owner.

</p><p>

This feature causes the right thing to happen if you start two text

editors for example; the first one may request "org.freedesktop.TextEditor",

and the second will be queued as a possible owner of that name. When

the first exits, the second will take over.

</p><p>

Applications may send <em class="firstterm">unicast messages to

a specific recipient or to the message bus itself, or <em class="firstterm">broadcast messages to all interested recipients.

See the section called “Message Bus Message Routing” for details.

</p></div><div class="sect2" title="Message Bus Names"><div class="titlepage"><div><div><h3 class="title">Message Bus Names</h3></div></div></div><p>

Each connection has at least one name, assigned at connection time and

returned in response to the <code class="literal">org.freedesktop.DBus.Hello</code> method call. This

automatically-assigned name is called the connection's <em class="firstterm">unique

name. Unique names are never reused for two different connections to the same bus.

</p><p>

Ownership of a unique name is a prerequisite for interaction with

the message bus. It logically follows that the unique name is always

the first name that an application comes to own, and the last one that it loses ownership of.

</p><p>

Unique connection names must begin with the character ':' (ASCII colon

character); bus names that are not unique names must not begin with this character. (The bus must reject any attempt by an application

to manually request a name beginning with ':'.) This restriction

categorically prevents "spoofing"; messages sent to a unique name

will always go to the expected connection.

When a connection is closed, all the names that it owns are deleted (or transferred to the next connection in the queue if any).

A connection can request additional names to be associated with it using the `org.freedesktop.DBus.RequestName` message. [the section called “Bus names”](#) describes the format of a valid name. These names can be released again using the `org.freedesktop.DBus.ReleaseName` message.

[org.freedesktop.DBus.RequestName](#)

As a method:

```

UINT32 RequestName (in STRING name, in UINT32 flags)

```

Message arguments:

Argument	Type	Description
0	STRING	Name to request
1	UINT32	Flags

Reply arguments:

Argument	Type	Description
0	UINT32	Return value

This method call should be sent to `org.freedesktop.DBus` and asks the message bus to assign the given name to the method caller. Each name maintains a queue of possible owners, where the head of the queue is the primary or current owner of the name. Each potential owner in the queue maintains the `DBUS_NAME_FLAG_ALLOW_REPLACEMENT` and `DBUS_NAME_FLAG_DO_NOT_QUEUE` settings from its latest `RequestName` call. When `RequestName` is invoked the following occurs:

```
</p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
    If the method caller is currently the primary owner of
the name,
    the DBUS_NAME_FLAG_ALLOW_REPLACEMENT and
DBUS_NAME_FLAG_DO_NOT_QUEUE
    values are updated with the values from the new
RequestName call,
    and nothing further happens.
</p></li><li class="listitem"><p>
    If the current primary owner (head of the queue) has
DBUS_NAME_FLAG_ALLOW_REPLACEMENT set, and the
RequestName
    invocation has the DBUS_NAME_FLAG_REPLACE_EXISTING
flag, then
    the caller of RequestName replaces the current primary
owner at
    the head of the queue and the current primary owner
moves to the
    second position in the queue. If the caller of
RequestName was
    in the queue previously its flags are updated with the
values from
    the new RequestName in addition to moving it to the
head of the queue.
</p></li><li class="listitem"><p>
    If replacement is not possible, and the method caller
is
    currently in the queue but not the primary owner, its
flags are
    updated with the values from the new RequestName call.
</p></li><li class="listitem"><p>
    If replacement is not possible, and the method caller
is
    currently not in the queue, the method caller is
appended to the
    queue.
</p></li><li class="listitem"><p>
    If any connection in the queue has
DBUS_NAME_FLAG_DO_NOT_QUEUE
    set and is not the primary owner, it is removed from
the
    queue. This can apply to the previous primary owner
(if it
    was replaced) or the method caller (if it updated the
DBUS_NAME_FLAG_DO_NOT_QUEUE flag while still stuck in
the
    queue, or if it was just added to the queue with that
flag set).
</p></li></ul></div><p>
</p><p>
```

Note that `DBUS_NAME_FLAG_REPLACE_EXISTING` results in "jumping the queue," even if another application already in the queue had specified `DBUS_NAME_FLAG_REPLACE_EXISTING`. This comes up if a primary owner that does not allow replacement goes away, and the next primary owner does allow replacement. In this case, queued items that specified `DBUS_NAME_FLAG_REPLACE_EXISTING` *do not* automatically replace the new primary owner. In other words, `DBUS_NAME_FLAG_REPLACE_EXISTING` is not saved, it is only used at the time `RequestName` is called. This is deliberate to avoid an infinite loop anytime two applications are both `DBUS_NAME_FLAG_ALLOW_REPLACEMENT` and `DBUS_NAME_FLAG_REPLACE_EXISTING`.

The flags argument contains any of the following values logically ORed together:

Conventional Name	Value	Description
<code>DBUS_NAME_FLAG_ALLOW_REPLACEMENT</code>	0x1	

If an application A specifies this flag and succeeds in becoming the owner of the name, and another application B later calls `RequestName` with the `DBUS_NAME_FLAG_REPLACE_EXISTING` flag, then application A will lose ownership and receive a `org.freedesktop.DBus.NameLost` signal, and application B will become the new owner. If `DBUS_NAME_FLAG_ALLOW_REPLACEMENT` is not specified by application A, or `DBUS_NAME_FLAG_REPLACE_EXISTING` is not specified by application B, then application B will not replace application A as the owner.

<code>DBUS_NAME_FLAG_REPLACE_EXISTING</code>	0x2	
--	-----	--

If this flag is not set the application will only become the owner of the name if there is no current owner. If this flag is set, the application will replace the current owner if the current owner specified

DBUS_NAME_FLAG_ALLOW_REPLACEMENT.

</td></tr><tr><td>DBUS_NAME_FLAG_DO_NOT_QUEUE</td><td>0x4</td><td>

Without this flag, if an application requests a name that is already owned, the application will be placed in a queue to own the name when the current owner gives it up. If this flag is given, the application will not be placed in the queue, the request for the name will simply fail. This flag also affects behavior when an application is replaced as name owner; by default the application moves back into the waiting queue, unless this flag was provided when the application became the name owner.

</td></tr></tbody></table></div><p>

The return code can be one of the following values:

Conventional Name	Value	Description
DBUS_REQUEST_NAME_REPLY_PRIMARY_OWNER	1	The caller is now the primary owner of the name, replacing any previous owner. Either the name had no owner before, or the caller specified DBUS_NAME_FLAG_REPLACE_EXISTING and the current owner specified
DBUS_NAME_FLAG_ALLOW_REPLACEMENT.		
DBUS_REQUEST_NAME_REPLY_IN_QUEUE	2	The name already had an owner, DBUS_NAME_FLAG_DO_NOT_QUEUE was not specified, and either the current owner did not specify

DBUS_NAME_FLAG_ALLOW_REPLACEMENT or the requesting application did not specify DBUS_NAME_FLAG_REPLACE_EXISTING.

</td></tr><tr><td>DBUS_REQUEST_NAME_REPLY_EXISTS</td><td>3</td><td>The name already has an owner,

DBUS_NAME_FLAG_DO_NOT_QUEUE was specified, and either DBUS_NAME_FLAG_ALLOW_REPLACEMENT was not specified by the current owner, or DBUS_NAME_FLAG_REPLACE_EXISTING was not specified by the requesting

application.</td></tr><tr><td>DBUS_REQUEST_NAME_REPLY_ALREADY_OWNER</td><td>4</td><td>The application trying to request ownership of a name is already the owner of it.</td></tr></tbody></table></div><p>

</p></div><div class="sect3" title="org.freedesktop.DBus.ReleaseName"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.ReleaseName</code></h4></div></div></div><p>

As a method:
</p><pre class="programlisting">UINT32 ReleaseName (in STRING name)
</pre><p>

Message arguments:
</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Name to release</td></tr></tbody></table></div><p>

Reply arguments:
</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>UINT32</td><td>Return value</td></tr></tbody></table></div><p>

</p><p>This method call should be sent to <code class="literal">org.freedesktop.DBus</code> and asks the message bus to release the method caller's claim to the given name. If the caller is the primary owner, a new primary owner will be selected from the queue if any other owners are waiting. If the caller is waiting in the queue for the name, the caller will removed from the queue and will not be made an owner of the name if it later becomes available. If there are no other owners in the queue for the name, it will be removed from the bus entirely.

The return code can be one of the following values:

```
</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Conventional Name</th><th>Value</th><th>Description</th></tr></thead><tbody><tr><td>DBUS_RELEASE_NAME_REPLY_RELEASED</td><td>1</td><td>The caller has released his claim on the given name. Either the caller was the primary owner of the name, and the name is now unused or taken by somebody waiting in the queue for the name, or the caller was in the queue for the name and has now been removed from the
```

```
queue.</td></tr><tr><td>DBUS_RELEASE_NAME_REPLY_NON_EXISTENT</td><td>2</td><td>The given name does not exist on this bus.</td></tr><tr><td>DBUS_RELEASE_NAME_REPLY_NOT_OWNER</td><td>3</td><td>The caller was not the primary owner of this name, and was also not waiting in the queue to own this name.</td></tr></tbody></table></div><p>
```

```
</p></div><div class="sect3" title="org.freedesktop.DBus.ListQueuedOwners"><div class="titlepage"><div><div><h4 class="title"><a name="bus-messages-list-queued-owners"></a><code class="literal">org.freedesktop.DBus.ListQueuedOwners</code></h4></div></div></div><p>
```

As a method:

```
</p><pre class="programlisting">
```

```
    ARRAY of STRING ListQueuedOwners (in STRING name)
```

```
</pre><p>
```

Message arguments:

```
</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>The well-known bus name to query, such as <code class="literal">com.example.cappuccino</code></td></tr></tbody></table></div><p>
```

Reply arguments:

```
</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>ARRAY of STRING</td><td>The unique bus names of connections currently queued for the name</td></tr></tbody></table></div><p>
```

```
</p><p>
```

This method call should be sent to

```
<code class="literal">org.freedesktop.DBus</code> and lists the connections
```

currently queued for a bus name (see [#term-queued-owner](#) `title="Queued Name Owner">Queued Name Owner).`

`</p></div></div><div class="sect2" title="Message Bus Message Routing"><div class="titlepage"><div><div><h3 class="title">#message-bus-routingMessage Bus Message Routing</h3></div></div></div><p>`

Messages may have a `DESTINATION` field (see [#message-protocol-header-fields](#) `title="Header Fields">the section called Header Fields, resulting in a`

`<em class="firstterm">unicast message. If the DESTINATION field is present, it specifies a message recipient by name. Method calls and replies normally specify this field.`

The message bus must send messages (of any type) with the `DESTINATION` field set to the specified recipient,

regardless of whether the recipient has set up a match rule matching the message.

`</p><p>`

When the message bus receives a signal, if the `DESTINATION` field is absent, it is considered to

be a `broadcast signal`, and is sent to all

applications with `message matching rules` that

match the message. Most signal messages are broadcasts.

`</p><p>`

Unicast signal messages (those with a `DESTINATION`

field) are not commonly used, but they are treated like any unicast

message: they are delivered to the specified recipient, regardless of its match rules. One use for unicast signals is to

avoid a race condition in which a signal is emitted before the intended

recipient can call [#bus-messages-add-match](#) `title="org.freedesktop.DBus.AddMatch">the section called org.freedesktop.DBus.AddMatch`

to receive that signal: if the signal is sent directly to that recipient

using a unicast message, it does not need to add a match rule at all,

and there is no race condition. Another use for unicast signals,

on message buses whose security policy prevents eavesdropping,
is to

send sensitive information which should only be visible to one
recipient.

</p><p>

When the message bus receives a method call, if the
<code class="literal">DESTINATION</code> field is absent, the
call is taken to be

a standard one-to-one message and interpreted by the message
bus

itself. For example, sending an
<code class="literal">org.freedesktop.DBus.Peer.Ping</code>
message with no

<code class="literal">DESTINATION</code> will cause the
message bus itself to

reply to the ping immediately; the message bus will not make
this

message visible to other applications.

</p><p>

Continuing the <code
class="literal">org.freedesktop.DBus.Peer.Ping</code> example, if
the ping message were sent with a <code

class="literal">DESTINATION</code> name of

<code class="literal">com.yoyodyne.Screensaver</code>, then
the ping would be

forwarded, and the Yoyodyne Corporation screensaver
application would be

expected to reply to the ping.

</p><p>

Message bus implementations may impose a security policy which
prevents certain messages from being sent or received.

When a message cannot be sent or received due to a security
policy, the message bus should send an error reply, unless the
original message had the <code class="literal">NO_REPLY</code>

flag.

</p><div class="sect3" title="Eavesdropping"><div

class="titlepage"><div><div><h4 class="title"><a name="message-bus-
routing-eavesdropping">Eavesdropping</h4></div></div></div><p>

Receiving a unicast message whose <code
class="literal">DESTINATION</code>

indicates a different recipient is called

<em class="firstterm">eavesdropping. On a message bus
which acts as

a security boundary (like the standard system bus), the
security

policy should usually prevent eavesdropping, since unicast
messages

are normally kept private and may contain security-sensitive
information.

</p><p>

Eavesdropping is mainly useful for debugging tools, such as

the `dbus-monitor` tool in the reference

implementation of D-Bus. Tools which eavesdrop on the message bus

should be careful to avoid sending a reply or error in response to

messages intended for a different client.

</p><p>

Clients may attempt to eavesdrop by adding match rules (see [the section called "Match Rules"](#)) containing

the `eavesdrop='true'` match. If the message bus'

security policy does not allow eavesdropping, the match rule can

still be added, but will not have any practical effect. For compatibility with older message bus implementations, if

adding such

a match rule results in an error reply, the client may fall back to

adding the same rule with the `eavesdrop` match omitted.

</p></div><div class="sect3" title="Match Rules"><div class="titlepage"><div><div><h4 class="title">Match Rules</h4></div></div></div><p>

An important part of the message bus routing protocol is match rules. Match rules describe the messages that should be sent to a

client, based on the contents of the message. Broadcast signals

are only sent to clients which have a suitable match rule: this

avoids waking up client processes to deal with signals that are

not relevant to that client.

</p><p>

Messages that list a client as their `DESTINATION`

do not need to match the client's match rules, and are sent to that

client regardless. As a result, match rules are mainly used to

receive a subset of broadcast signals.

</p><p>

Match rules can also be used for eavesdropping (see [the section called "Eavesdropping"](#)),

if the security policy of the message bus allows it.

</p><p>

Match rules are added using the `AddMatch` bus method (see [org.freedesktop.DBus.AddMatch](#) the section called `org.freedesktop.DBus.AddMatch`).

Rules are

specified as a string of comma separated key/value pairs. Excluding a key from the rule indicates a wildcard match. For instance excluding the the member from a match rule but adding a sender would let all messages from that sender

through.

An example of a complete rule would be

```
"type='signal',sender='org.freedesktop.DBus',interface='org.freedesktop.DBus',member='Foo',path='/bar/foo',destination=':452345.34',arg2='bar'"
```

The following table describes the keys that can be used to create

a match rule:

The following table summarizes the D-Bus types.

Key	Possible Values	Description
<code>type</code>	'signal', 'method_call', 'method_return', 'error'	Match on the message type. An example of a type match is <code>type='signal'</code>
<code>sender</code>	A bus or unique name (see Bus Name and Unique Connection Name respectively)	Match messages sent by a particular sender.

An example of a sender match

is

```
sender='org.freedesktop.Hal'</td></tr><tr><td><code class="literal">interface</code></td><td>An interface name (see <a class="xref" href="#message-protocol-names-interface" title="Interface names">the section called &#8220;Interface names&#8221;</a></td><td>Match messages sent over or to a particular interface. An example of an
```

interface match is

```
interface='org.freedesktop.Hal.Manager'.
```

If a message omits the interface header, it must not match any rule

that specifies this key.</td></tr><tr><td><code class="literal">member</code></td><td>Any valid method or signal name</td><td>Matches messages which have the give method or signal name. An example of

a member match is

```
member='NameOwnerChanged'</td></tr><tr><td><code class="literal">path</code></td><td>An object path (see <a
```

[Valid Object Paths](# "Valid Object Paths")

Matches messages which are sent from or to the given object. An example of a path match is

```

path='/org/freedesktop/Hal/Manager'

```

An object path

```

class="literal">path_namespace</code>

```

Matches messages which are sent from or to an object for which the object path is either the given value, or that value followed by one or more path components.

```

</p>

<p>
  For example,
  <code>
class="literal">path_namespace='/com/example/foo'</code>
  would match signals sent by
  <code class="literal">/com/example/foo</code>
  or by
  <code
class="literal">/com/example/foo/bar</code>,
  but not by
  <code
class="literal">/com/example/foobar</code>.
</p>

<p>
  Using both <code class="literal">path</code> and
  <code class="literal">path_namespace</code> in
the same match
  rule is not allowed.
</p>

<p>
  <span class="emphasis"><em>
    This match key was added in version 0.16 of
the
    D-Bus specification and implemented by the bus
    daemon in dbus 1.5.0 and later.
  </em></span>
</p>
</td></tr><tr><td><code
class="literal">destination</code></td><td>A unique name (see <a
class="xref" href="#" title="Unique Connection Name">Unique Connection Name</a></td><td>Matches messages which are
being sent to the given unique name. An
  example of a destination match is
  <code class="literal">arg[0, 1, 2,
3, ...]</code></td><td>Any string</td><td>Arg matches are special and
are used for further restricting the

```

match based on the arguments in the body of a message. Only arguments of type `STRING` can be matched in this way. An example of an argument match would be `arg3='Foo'`. Only argument indexes from 0 to 63 should be accepted.

Argument path matches provide a specialised form of wildcard matching for path-like namespaces. They can match arguments whose type is either `STRING` or `OBJECT_PATH`. As with normal argument matches, if the argument is exactly equal to the string given in the match rule then the rule is satisfied. Additionally, there is also a match when either the string given in the match rule or the appropriate message argument ends with `'/'` and is a prefix of the other. An example argument path match is `arg0path='/aa/bb/'`. This would match messages with first arguments of `'/'`, `'/aa/'`, `'/aa/bb/'`, `'/aa/bb/cc/'` and `'/aa/bb/cc'`. It would not match messages with first arguments of `'/aa/b'`, `'/aa'` or even `'/aa/bb'`.

This is intended for monitoring directories in file system-like hierarchies, as used in the `dconf` configuration system. An application interested in all nodes in a particular hierarchy would monitor `arg0path='/ca/example/foo/'`. Then the service could emit a signal with zeroth argument `"/ca/example/foo/bar"` to represent a modification to the `bar` property, or a signal with zeroth argument `"/ca/example/"` to represent atomic modification of many properties within that directory, and the interested application would be notified in both cases.

``

the

later,

dbus 1.5.0

This match key was added in version 0.12 of D-Bus specification, implemented for STRING arguments by the bus daemon in dbus 1.2.0 and implemented for OBJECT_PATH arguments in and later.

Like a bus name, except that the string is not required to contain a '.' (period)

Match messages whose first argument is of type STRING, and is a bus name or interface name within the specified namespace. This is primarily intended for watching name owner changes for a group of related bus names, rather than for a single name or all name changes.

Because every valid interface name is also a bus name, this can also be used for messages whose first argument is an interface name.

For example, the match rule

```
member='NameOwnerChanged',arg0namespace='com.example.backend'
```

matches name owner changes for bus names such as

```
com.example.backend.foo,
```

```
com.example.backend.foo.bar,
```

and

```
com.example.backend
```

itself.

See also [the section called org.freedesktop.DBus.NameOwnerChanged](#)

This match key was added in version 0.16 of the D-Bus specification and implemented by the bus daemon in dbus 1.5.0 and later.

`</p>`
`</td></tr><tr><td><code`
`class="literal">eavesdrop</code></td><td><code`
`class="literal">'true'</code>, <code`
`class="literal">'false'</code></td><td>Since D-Bus 1.5.6, match rules`
do not
`class="literal">DESTINATION</code>`
match messages which have a `<code`
`class="literal">DESTINATION</code>`
field unless the match rule specifically
requests this
(see [the section called](#message-bus-routing-eavesdropping)
[Eavesdropping](#message-bus-routing-eavesdropping)
by specifying `<code`
`class="literal">eavesdrop='true'</code>`
in the match rule. `<code`
`class="literal">eavesdrop='false'</code>`
restores the default behaviour. Messages are
delivered to their `<code`
`class="literal">DESTINATION</code>`
regardless of match rules, so this match does not
affect normal delivery of unicast messages.
If the message bus has a security policy which
forbids
eavesdropping, this match may still be used
without error,
but will not have any practical effect.
In older versions of D-Bus, this match was not
allowed
in match rules, and all match rules behaved as if
`<code class="literal">eavesdrop='true'</code>` had
been used.

`</td></tr></tbody></table></div><p>`
`</p></div></div><div class="sect2" title="Message Bus Starting`
`Services"><div class="titlepage"><div><div><h3 class="title"><a`
`name="message-bus-starting-services">Message Bus Starting`
`Services</h3></div></div></div><p>`

The message bus can start applications on behalf of other applications.

In CORBA terms, this would be called `<em`
`class="firstterm">activation`.

An application that can be started in this way is called a
`<em class="firstterm">service`.

`</p><p>`

With D-Bus, starting a service is normally done by name. That
is,

applications ask the message bus to start some program that
will own a

well-known name, such as `<code`
`class="literal">org.freedesktop.TextEditor</code>`.

This implies a contract documented along with the name

`org.freedesktop.TextEditor` for which objects the owner of that name will provide, and what interfaces those objects will have.

To find an executable corresponding to a particular name, the bus daemon

looks for `service description files`. Service description files define a mapping from names to executables. Different

kinds of message bus will look for these files in different places, see

[Well-known Message Bus Instances](#) the section called `Well-known Message Bus Instances`.

Service description files have the `.service` file extension. The message bus will only load service description files

ending with `.service`; all other files will be ignored. The file format

is similar to that of [desktop entries](#). All service description files must be in UTF-8 encoding. To ensure that there will be no name collisions, service files

must be namespaced using the same mechanism as messages and service names.

[FIXME the file format should be much better specified than "similar to `.desktop entries`" esp. since desktop entries are already badly-specified. ;-)]

These sections from the specification apply to service files as well:

```
</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>General syntax</p></li><li class="listitem"><p>Comment format</p></li></ul></div><p>
```

```
</p><div class="figure"><a name="idp5671872"></a><p class="title"><b>Figure 9. Example service description file</b></p><div class="figure-contents"><pre class="programlisting"># Sample service description file
[D-BUS Service]
```

```
Names=org.freedesktop.ConfigurationDatabase;org.gnome.GConf;
Exec=/usr/libexec/gconfd-2
```

```
</pre></div></div><p><br class="figure-break">
```

When an application asks to start a service by name, the bus daemon tries to find a service that will own that name. It then tries to spawn the executable associated with it. If this fails, it will report an error. [FIXME what happens if two .service files offer the same service; what kind of error is reported, should we have a way for the client to choose one?]

The executable launched will have the environment variable `DBUS_STARTER_ADDRESS` set to the address of the message bus so it can connect and request the appropriate names.

The executable being launched may want to know whether the message bus starting it is one of the well-known message buses (see [the section called "Well-known Message Bus Instances"](#)). To facilitate this, the bus must also set the `DBUS_STARTER_BUS_TYPE` environment variable if it is one of the well-known buses. The currently-defined values for this variable are `system` for the systemwide message bus, and `session` for the per-login-session message bus. The new executable must still connect to the address given in `DBUS_STARTER_ADDRESS`, but may assume that the resulting connection is to the well-known bus.

[FIXME there should be a timeout somewhere, either specified in the .service file, by the client, or just a global value and if the client being activated fails to connect within that timeout, an error should be sent back.]

[Message Bus Service Scope](#)

The "scope" of a service is its "per-", such as per-session, per-machine, per-home-directory, or per-display. The reference implementation doesn't yet support starting services in a different

scope from the message bus itself. So e.g. if you start a service on the session bus its scope is per-session.

We could add an optional scope to a bus name. For example, for per-(display,session pair), we could have a unique ID for each display generated automatically at login and set on screen 0 by executing a special "set display ID" binary. The ID would be stored in a `_DBUS_DISPLAY_ID` property and would be a string of random bytes. This ID would then be used to scope names. Starting/locating a service could be done by ID-name pair rather than only by name.

Contrast this with a per-display scope. To achieve that, we would want a single bus spanning all sessions using a given display. So we might set a `_DBUS_DISPLAY_BUS_ADDRESS` property on screen 0 of the display, pointing to this bus.

Well-known Message Bus Instances

Well-known Message Bus Instances

Two standard message bus instances are defined here, along with how to locate them and where their service files live.

Login session message bus

Each time a user logs in, a `login session message bus` may be started. All applications in the user's login session may interact with one another using this message bus.

The address of the login session message bus is given in the `DBUS_SESSION_BUS_ADDRESS` environment variable. If that variable is not set, applications may also try to read the address from the X Window System root window property `_DBUS_SESSION_BUS_ADDRESS`. The root window property must have type `STRING`. The environment variable should have precedence over the

root window property.

The address of the login session message bus is given in the environment variable. If `DBUS_SESSION_BUS_ADDRESS` is not set, or if it's set to the string "autolaunch:", the system should use platform-specific methods of locating a running D-Bus session server, or starting one if a running instance cannot be found. Note that this mechanism is not recommended for attempting to determine if a daemon is running. It is inherently racy to attempt to make this determination, since the bus daemon may be started just before or just after the determination is made.

Therefore, it is recommended that applications do not try to make this determination for their functionality purposes, and instead they should attempt to start the server.

`<div class="sect4" title="X Windowing System"><div class="titlepage"><div><div><h5 class="title">X Windowing System</h5></div></div></div><p>`

For the X Windowing System, the application must locate the window owner of the selection represented by the atom formed by concatenating:

`</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>the literal string "_DBUS_SESSION_BUS_SELECTION_"</p><li class="listitem"><p>the current user's username</p><li class="listitem"><p>the literal character '_' (underscore)</p><li class="listitem"><p>the machine's ID</p></div><p>`

The following properties are defined for the window that owns this X selection:

`</p><div class="informaltable"><table border="1"><colgroup><col><col></colgroup><tbody><tr><td><p>Atom</p></td><td><p>meaning</p></td></tr><tr><td><p>_DBUS_SESSION_BUS_ADDRESS</p></td><td><p>the actual address of the server socket</p></td></tr><tr><td>`

```

        <p>_DBUS_SESSION_BUS_PID</p>
    </td><td>
        <p>the PID of the server process</p>
    </td></tr></tbody></table></div><p>
</p><p>
    At least the _DBUS_SESSION_BUS_ADDRESS property MUST be
    present in this window.
</p><p>
    If the X selection cannot be located or if reading the
    properties from the window fails, the implementation MUST
conclude
    that there is no D-Bus server running and proceed to start
a new
    server. (See below on concurrency issues)
</p><p>
    Failure to connect to the D-Bus server address thus
obtained
    MUST be treated as a fatal connection error and should be
reported
    to the application.
</p><p>
    As an alternative, an implementation MAY find the
information
    in the following file located in the current user's home
directory,
    in subdirectory .dbus/session-bus/:
    <p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>the machine's ID</p></li><li
class="listitem"><p>the literal character '-' (dash)</p></li><li
class="listitem"><p>the X display without the screen number, with the
    following prefixes removed, if present: ":",
"localhost:"
    ."localhost.localdomain:". That is, a display of
"localhost:10.0" produces just the number
"10"</p></li></ul></div><p>
</p><p>
    The contents of this file NAME=value assignment pairs and
allowed
    lines starting with # are comments (no comments are
    otherwise). The following variable names are defined:
    <p><div class="informaltable"><table
border="1"><colgroup><col><col></colgroup><tbody><tr><td>
        <p>Variable</p>
    </td><td>
        <p>meaning</p>
    </td></tr><tr><td>
        <p>DBUS_SESSION_BUS_ADDRESS</p>
    </td><td>
        <p>the actual address of the server socket</p>
    </td></tr><tr><td>
        <p>DBUS_SESSION_BUS_PID</p>
    </td><td>

```

```
        <p>the PID of the server process</p>
    </td></tr><tr><td>
        <p>DBUS_SESSION_BUS_WINDOWID</p>
    </td><td>
        <p>the window ID</p>
    </td></tr></tbody></table></div><p>
```

```
</p><p>
    At least the DBUS_SESSION_BUS_ADDRESS variable MUST be
present
    in this file.
</p><p>
    Failure to open this file MUST be interpreted as absence
of a
    running server. Therefore, the implementation MUST proceed
to
    attempting to launch a new bus server if the file cannot
be
    opened.
</p><p>
    However, success in opening this file MUST NOT lead to the
connect to
    conclusion that the server is running. Thus, a failure to
NOT be
    the bus address obtained by the alternative method MUST
established,
    considered a fatal error. If the connection cannot be
settings or
    the implementation MUST proceed to check the X selection
to start the server on its own.
</p><p>
    If the implementation concludes that the D-Bus server is
not
    running it MUST attempt to start a new server and it MUST
also
    ensure that the daemon started as an effect of the
"autolaunch"
    mechanism provides the lookup mechanisms described above,
so
    subsequent calls can locate the newly started server. The
concurrent
    implementation MUST also ensure that if two or more
all other
    initiations happen, only one server remains running and
and
    initiations are able to obtain the address of this server
ensure that
    connect to it. In other words, the implementation MUST
without
    the X selection is not present when it attempts to set it,
    allowing another process to set the selection between the
    verification and the setting (e.g., by using XGrabServer /
    XungrabServer).
```

</h5></div></div></div><p> On Unix systems, the session bus should search for .service files in `<code class="literal">$XDG_DATA_DIRS/dbus-1/services</code>` as defined by the [>XDG Base Directory Specification. Implementations may also search additional locations, which should be searched with lower priority than anything in XDG_DATA_HOME, XDG_DATA_DIRS or their respective defaults; for example, the reference implementation also looks in `<code class="literal">\${datadir}/dbus-1/services</code>` as set at compile time.](http://standards.freedesktop.org/basedir-spec/basedir-spec-latest.html)

</p><p>As described in the XDG Base Directory Specification, software packages should install their session .service files to their configured `<code class="literal">${datadir}/dbus-1/services</code>`, where `<code class="literal">${datadir}</code>` is as defined by the GNU coding standards. System administrators or users can arrange for these service files to be read by setting XDG_DATA_DIRS or by symlinking them into the default locations.

System message bus</h4></div></div></div><p>A computer may have a *system message bus*, accessible to all applications on the system. This message bus may be used to broadcast system events, such as adding new hardware devices, changes in the printer queue, and so forth. The address of the system message bus is given in the `<code class="literal">DBUS_SYSTEM_BUS_ADDRESS</code>` environment variable. If that variable is not set, applications should try to connect to the well-known address

```

        <code
class="literal">unix:path=/var/run/dbus/system_bus_socket</code>.
        <sup>[<a name="idp5733888" href="#ftn.idp5733888"
class="footnote">2</a>]</sup>
        </p><p>
            On Unix systems, the system bus should default to searching
            for .service files in
            <code class="literal">/usr/local/share/dbus-1/system-
services</code>,
            <code class="literal">/usr/share/dbus-1/system-
services</code> and
            <code class="literal">/lib/dbus-1/system-services</code>,
with that order
            of precedence. It may also search other implementation-
specific
            locations, but should not vary these locations based on
environment
            variables.
            <sup>[<a name="idp5738096" href="#ftn.idp5738096"
class="footnote">3</a>]</sup>
        </p><p>
            Software packages should install their system .service
            files to their configured
            <code class="literal">${datadir}/dbus-1/system-
services</code>,
            where <code class="literal">${datadir}</code> is as defined
by the GNU
            coding standards. System administrators can arrange
            for these service files to be read by editing the system
bus'
            configuration file or by symlinking them into the default
            locations.
        </p></div></div><div class="sect2" title="Message Bus
Messages"><div class="titlepage"><div><div><h3 class="title"><a
name="message-bus-messages"></a>Message Bus
Messages</h3></div></div></div><p>
            The special message bus name <code
class="literal">org.freedesktop.DBus</code>
            responds to a number of additional messages.
        </p><div class="sect3" title="org.freedesktop.DBus.Hello"><div
class="titlepage"><div><div><h4 class="title"><a name="bus-messages-
hello"></a><code
class="literal">org.freedesktop.DBus.Hello</code></h4></div></div></di
v><p>
            As a method:
        </p><pre class="programlisting">
            STRING Hello ()
        </pre><p>
            Reply arguments:
        </p><div class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument
</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</t

```

d><td>STRING</td><td>Unique name assigned to the connection</td></tr></tbody></table></div><p>

</p><p>

Before an application is able to send messages to other applications

it must send the `org.freedesktop.DBus.Hello` message to the message bus to obtain a unique name. If an application without

a unique name tries to send a message to another application, or a message to the message bus itself that isn't the `org.freedesktop.DBus.Hello` message, it will be disconnected from the bus.

</p><p>

There is no corresponding "disconnect" request; if a client wishes to

disconnect from the bus, it simply closes the socket (or other

communication channel).

</p></div><div class="sect3" title="org.freedesktop.DBus.ListNames"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.ListNames</code></h4></div></div></div><p>

As a method:

</p><pre class="programlisting">

```
ARRAY of STRING ListNames ()
```

</pre><p>

Reply arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>ARRAY of STRING</td><td>Array of strings where each string is a bus name</td></tr></tbody></table></div><p>

</p><p>

Returns a list of all currently-owned names on the bus.

</p></div><div class="sect3" title="org.freedesktop.DBus.ListActivatableNames"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.ListActivatableNames</code></h4></div></div></div><p>

As a method:

</p><pre class="programlisting">

```
ARRAY of STRING ListActivatableNames ()
```

</pre><p>

Reply arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument

</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>ARRAY of STRING</td><td>Array of strings where each string is a bus name</td></tr></tbody></table></div><p>

</p><p>

Returns a list of all names that can be activated on the bus.

</p></div><div class="sect3" title="org.freedesktop.DBus.NameHasOwner"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.NameHasOwner</code></h4></div></div></div></div><p>

As a method:

</p><pre class="programlisting">

 BOOLEAN NameHasOwner (in STRING name)

</pre><p>

Message arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Name to check</td></tr></tbody></table></div><p>

Reply arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>BOOLEAN</td><td>Return value, true if the name exists</td></tr></tbody></table></div><p>

</p><p>

Checks if the specified name exists (currently has an owner).

</p></div><div class="sect3" title="org.freedesktop.DBus.NameOwnerChanged"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.NameOwnerChanged</code></h4></div></div></div></div><p>

This is a signal:

</p><pre class="programlisting">

 NameOwnerChanged (STRING name, STRING old_owner, STRING new_owner)

</pre><p>

Message arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Name with a new owner</td></tr><tr><td>1</td><td>STRING</td><td>Old owner or empty string if none</td></tr><tr><td>2</td><td>STRING</td><td>New owner or empty string if none</td></tr></tbody></table></div><p>

</p><p>

This signal indicates that the owner of a name has changed. It's also the signal to use to detect the appearance of


```

        new names on the bus.
    </p></div><div class="sect3"
title="org.freedesktop.DBus.NameLost"><div
class="titlepage"><div><div><h4 class="title"><a name="bus-messages-
name-lost"></a><code
class="literal">org.freedesktop.DBus.NameLost</code></h4></div></div><
/div><p>
    This is a signal:
    </p><pre class="programlisting">
        NameLost (STRING name)
    </pre><p>
    Message arguments:
    </p><div class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument
</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</t
d><td>STRING</td><td>Name which was
lost</td></tr></tbody></table></div><p>
    </p><p>
        This signal is sent to a specific application when it loses
        ownership of a name.
    </p></div><div class="sect3"
title="org.freedesktop.DBus.NameAcquired"><div
class="titlepage"><div><div><h4 class="title"><a name="bus-messages-
name-acquired"></a><code
class="literal">org.freedesktop.DBus.NameAcquired</code></h4></div></d
iv></div><p>
    This is a signal:
    </p><pre class="programlisting">
        NameAcquired (STRING name)
    </pre><p>
    Message arguments:
    </p><div class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument
</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</t
d><td>STRING</td><td>Name which was
acquired</td></tr></tbody></table></div><p>
    </p><p>
        This signal is sent to a specific application when it gains
        ownership of a name.
    </p></div><div class="sect3"
title="org.freedesktop.DBus.StartServiceByName"><div
class="titlepage"><div><div><h4 class="title"><a name="bus-messages-
start-service-by-name"></a><code
class="literal">org.freedesktop.DBus.StartServiceByName</code></h4></d
iv></div></div><p>
    As a method:
    </p><pre class="programlisting">
        UINT32 StartServiceByName (in STRING name, in UINT32
flags)
    </pre><p>
    Message arguments:

```

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Name of the service to start</td></tr><tr><td>1</td><td>UINT32</td><td>Flags (currently not used)</td></tr></tbody></table></div><p>

Reply arguments:

<div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>UINT32</td><td>Return value</td></tr></tbody></table></div><p>

Tries to launch the executable associated with a name. For more information, see the section called “Message Bus Starting Services”.

</p><p>

The return value can be one of the following values:

<div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Identifier</th><th>Value</th><th>Description</th></tr></thead><tbody><tr><td>DBUS_START_REPLY_SUCCESS</td><td>1</td><td>The service was successfully started.</td></tr><tr><td>DBUS_START_REPLY_ALREADY_RUNNING</td><td>2</td><td>A connection already owns the given name.</td></tr></tbody></table></div><p>

</p><div class="sect3" title="org.freedesktop.DBus.UpdateActivationEnvironment"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.UpdateActivationEnvironment</code></h4></div></div></div><p>

As a method:

</p><pre class="programlisting">UpdateActivationEnvironment (in ARRAY of DICT<lt;STRING,STRING>; environment)</pre><p>

Message arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>ARRAY of DICT<lt;STRING,STRING>;</td><td>Environment to add or update</td></tr></tbody></table></div><p>

Normally, session bus activated services inherit the environment of the bus daemon. This method adds to or modifies that environment when activating services.

</p><p>

Some bus instances, such as the standard system bus, may disable access to this method for some or all callers.

</p><p>

Note, both the environment variable names and values must be valid UTF-8. There's no way to update the activation environment with data that is invalid UTF-8.

</code></h4></div></div></div></div></div><p>

As a method:

```
class="programlisting">
    STRING GetNameOwner (in STRING name)
</pre><p>
```

Message arguments:

```
class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument
</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Name to get the owner
of</td></tr></tbody></table></div><p>
```

Reply arguments:

```
class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument
</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Return value, a unique connection
name</td></tr></tbody></table></div><p>
```

Returns the unique connection name of the primary owner of the name

given. If the requested name doesn't have an owner, returns a

```
class="literal">org.freedesktop.DBus.Error.NameHasNoOwner</code>
error.
```

</code></h4></div></div></div></div></div><p>

As a method:

```
class="programlisting">
    UINT32 GetConnectionUnixUser (in STRING bus_name)
</pre><p>
```

Message arguments:

```
class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument
</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Unique or well-known bus name of the connection
to
```

```
query, such as <code class="literal">:12.34</code>
```

or

```
<code
```

```
class="literal">com.example.tea</code></td></tr></tbody></table></div>
<p>
```

Reply arguments:

```
class="informaltable"><table
border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument
```

</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>UINT32</td><td>Unix user ID</td></tr></tbody></table></div><p>

Returns the Unix user ID of the process connected to the server. If unable to determine it (for instance, because the process is not on the

same machine as the bus daemon), an error is returned.

</p></div><div class="sect3" title="org.freedesktop.DBus.GetConnectionUnixProcessID"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.GetConnectionUnixProcessID</code></h4></div></div></div></div><p>

As a method:

</p><pre class="programlisting">

```
UINT32 GetConnectionUnixProcessID (in STRING bus_name)
```

</pre><p>

Message arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Unique or well-known bus name of the connection to

query, such as <code class="literal">:12.34</code>

or

<code

class="literal">com.example.tea</code></td></tr></tbody></table></div><p>

Reply arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>UINT32</td><td>Unix process id</td></tr></tbody></table></div><p>

Returns the Unix process ID of the process connected to the server. If

unable to determine it (for instance, because the process is not on the

same machine as the bus daemon), an error is returned.

</p></div><div class="sect3" title="org.freedesktop.DBus.AddMatch"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.AddMatch</code></h4></div></div></div></div><p>

As a method:

</p><pre class="programlisting">

```
AddMatch (in STRING rule)
```

</pre><p>

Message arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument

</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Match rule to add to the connection</td></tr></tbody></table></div><p>

Adds a match rule to match messages going through the message bus (see the section called “Match Rules”).

If the bus does not have enough resources the <code class="literal">org.freedesktop.DBus.Error.OOM</code> error is returned.

</p></div><div class="sect3" title="org.freedesktop.DBus.RemoveMatch"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.RemoveMatch</code></h4></div></div></div><p>

As a method:

</p><pre class="programlisting">

RemoveMatch (in STRING rule)

</pre><p>

Message arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Match rule to remove from the connection</td></tr></tbody></table></div><p>

Removes the first rule that matches (see the section called “Match Rules”).

If the rule is not found the <code class="literal">org.freedesktop.DBus.Error.MatchRuleNotFound</code> error is returned.

</p></div><div class="sect3" title="org.freedesktop.DBus.GetId"><div class="titlepage"><div><div><h4 class="title"><code class="literal">org.freedesktop.DBus.GetId</code></h4></div></div></div><p>

As a method:

</p><pre class="programlisting">

GetId (out STRING id)

</pre><p>

Reply arguments:

</p><div class="informaltable"><table border="1"><colgroup><col><col><col></colgroup><thead><tr><th>Argument</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>0</td><td>STRING</td><td>Unique ID identifying the bus daemon</td></tr></tbody></table></div><p>

Gets the unique ID of the bus. The unique ID here is shared among all addresses the

bus daemon is listening on (TCP, UNIX domain socket, etc.) and its format is described in

[the section called “UUIDs”](#uuids "UUIDs"). Each address the bus is listening on also has its own unique

ID, as described in [the section called “Server Addresses”](#addresses "Server Addresses"). The per-bus and per-address IDs are not related.

There is also a per-machine ID, described in [the section called “`org.freedesktop.DBus.Peer`”](#standard-interfaces-peer "org.freedesktop.DBus.Peer") and returned

by `org.freedesktop.DBus.Peer.GetMachineId()`.

For a desktop session bus, the bus ID can be used as a way to uniquely identify a user's session.

[Glossary](#)

[Glossary](#)

This glossary defines some of the terms used in this specification.

Bus Name

The message bus maintains an association between names and connections. (Normally, there's one connection per application.) A

bus name is simply an identifier used to locate connections.

For

example, the hypothetical `com.yoyodyne.Screensaver` name might be used to send a message to a screensaver from Yoyodyne

Corporation. An application is said to *own* a

name if the message bus has associated the application's connection

with the name. Names may also have *queued*

owners (see [Queued Name Owner](#term-queued-owner "Queued Name Owner")).

The bus assigns a unique name to each connection, see [Unique Connection Name](#term-unique-name "Unique Connection Name"). Other names can be thought of as "well-known names" and are used to find applications that offer specific functionality.

See [the section called “Bus names”](#message-protocol-names-bus "Bus names") for details of

the syntax and naming conventions for bus names.

Message

A message is the atomic unit of communication via the D-Bus protocol. It consists of a *header*

and a

`<em class="firstterm">body`; the body is made up of `<em class="firstterm">arguments`.

`</p></dd><dt>Message Bus</dt><dd><p>`

The message bus is a special application that forwards or routes messages between a group of applications connected to the message bus. It also manages `<em class="firstterm">names` used for routing messages.

`</p></dd><dt>Name</dt><dd><p>`

See `Bus Name`. "Name" may also be used to refer to some of the other names in D-Bus, such as interface names.

`</p></dd><dt>Namespace</dt><dd><p>`

Used to prevent collisions when defining new interfaces, bus names etc. The convention used is the same one Java uses for defining classes: a reversed domain name. See `the section called “Bus names”`, `the section called “Interface names”`, `the section called “Error names”`, `the section called “Valid Object Paths”`.

`</p></dd><dt>Object</dt><dd><p>`

Each application contains `<em class="firstterm">objects`, which have `<em class="firstterm">interfaces` and `<em class="firstterm">methods`. Objects are referred to by a name, called a `<em class="firstterm">path`.

`</p></dd><dt>One-to-One</dt><dd><p>`

An application talking directly to another application, without going through a message bus. One-to-one connections may be "peer to peer" or "client vs. server." The D-Bus protocol has no concept of messages is symmetrical (full duplex).

`</p></dd><dt>Path</dt><dd><p>`

Object references (object names) in D-Bus are organized into a filesystem-style hierarchy, so each object is named by a path. As in

LDAP, there's no difference between "files" and "directories"; a path can refer to an object, while still having child objects below it.

[Queued Name Owner](#)

Each bus name has a primary owner; messages sent to the name go to the primary owner. However, certain names also maintain a queue of

secondary owners "waiting in the wings." If the primary owner releases the name, then the first secondary owner in the queue automatically becomes the new owner of the name.

[Service](#)

A service is an executable that can be launched by the bus daemon.

Services normally guarantee some particular features, for example they

may guarantee that they will request a specific name such as "org.freedesktop.Screensaver", have a singleton object "/org/freedesktop/Application", and that object will implement the

interface "org.freedesktop.ScreensaverControl".

[Service Description Files](#)

".service files" tell the bus about service applications that can be

launched (see [Service](#)). Most importantly they

provide a mapping from bus names to services that will request those

names when they start up.

[Unique Connection Name](#)

The special name automatically assigned to each connection by the

message bus. This name will never change owner, and will be unique

(never reused during the lifetime of the message bus).

It will begin with a ':' character.

¹ Lockfiles are used instead of real file

locking `fcntl()` because

implementations are still flaky on network filesystems.

² `fcntl()`

The D-Bus reference implementation actually honors the `$(localstatedir)` configure option for this address, on both client and server side.

^{[[3](#)]} The system bus is security-sensitive and is typically executed by an init system with a clean environment. Its launch helper process is particularly security-sensitive, and specifically clears its own environment.

File = dbus-specification.xml

```
<?xml version="1.0" standalone="no" ?>
<!DOCTYPE article PUBLIC "-//OASIS//DTD DocBook XML V4.1.2//EN"
"http://www.oasis-open.org/docbook/xml/4.1.2/docbookx.dtd"
[
]>
<article id="index">
  <articleinfo>
    <title>D-Bus Specification</title>
    <releaseinfo>Version 0.19</releaseinfo>
    <date>2012-02-21</date>
    <authorgroup>
      <author>
        <firstname>Havoc</firstname>
        <surname>Pennington</surname>
        <affiliation>
          <orgname>Red Hat, Inc.</orgname>
          <address>
            <email>hp@pobox.com</email>
          </address>
        </affiliation>
      </author>
      <author>
        <firstname>Anders</firstname>
        <surname>Carlsson</surname>
        <affiliation>
          <orgname>CodeFactory AB</orgname>
          <address>
            <email>andersca@codefactory.se</email>
          </address>
        </affiliation>
      </author>
      <author>
        <firstname>Alexander</firstname>
```

```
<surname>Larsson</surname>
<affiliation>
  <orgname>Red Hat, Inc.</orgname>
  <address>
    <email>alexl@redhat.com</email>
  </address>
</affiliation>
</author>
<author>
<firstname>Sven</firstname>
<surname>Herzberg</surname>
<affiliation>
  <orgname>Imendio AB</orgname>
  <address>
    <email>sven@imendio.com</email>
  </address>
</affiliation>
</author>
<author>
  <firstname>Simon</firstname>
  <surname>McVittie</surname>
  <affiliation>
    <orgname>Collabora Ltd.</orgname>
    <address>
      <email>simon.mcvittie@collabora.co.uk</email>
    </address>
  </affiliation>
</author>
<author>
  <firstname>David</firstname>
  <surname>Zeuthen</surname>
  <affiliation>
    <orgname>Red Hat, Inc.</orgname>
    <address>
      <email>davidz@redhat.com</email>
    </address>
  </affiliation>
</author>
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  <revision>
    <revnumber>current</revnumber>
    <date><ulink
url='http://cgit.freedesktop.org/dbus/dbus/log/doc/dbus-
specification.xml'>commit log</ulink></date>
    <authorinitials></authorinitials>
    <revremark></revremark>
  </revision>
  <revision>
    <revnumber>0.19</revnumber>
    <date>20 February 2012</date>
    <authorinitials>smcv/lp</authorinitials>
```

known
and
session
transport</revremark>
</revision>
<revision>
 <revnumber>0.18</revnumber>
 <date>29 July 2011</date>
 <authorinitials>smcv</authorinitials>
 <revremark>define eavesdropping, unicast, broadcast; add
eavesdrop
 match keyword; promote type system to a top-level
section</revremark>
</revision>
<revision>
 <revnumber>0.17</revnumber>
 <date>1 June 2011</date>
 <authorinitials>smcv/davidz</authorinitials>
 <revremark>define ObjectManager; reserve extra pseudo-type-
codes used
 by GVariant</revremark>
</revision>
<revision>
 <revnumber>0.16</revnumber>
 <date>11 April 2011</date>
 <authorinitials></authorinitials>
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object
 paths</revremark>
</revision>
<revision>
 <revnumber>0.15</revnumber>
 <date>3 November 2010</date>
 <authorinitials></authorinitials>
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</revision>
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```

<revision>
  <revnumber>0.12</revnumber>
  <date>7 November, 2006</date>
  <authorinitials></authorinitials>
  <revremark></revremark>
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  <revnumber>0.11</revnumber>
  <date>6 February 2005</date>
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  <date>28 January 2005</date>
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  <date>7 Januar 2005</date>
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  <date>06 September 2003</date>
  <authorinitials></authorinitials>
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</revision>
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<sect1 id="introduction">
  <title>Introduction</title>
  <para>
    D-Bus is a system for low-latency, low-overhead, easy to use
    interprocess communication (IPC). In more detail:
    <itemizedlist>
      <listitem>
        <para>
          D-Bus is <emphasis>low-latency</emphasis> because it is
          designed
          to avoid round trips and allow asynchronous operation,
          much like
          the X protocol.
        </para>
      </listitem>
      <listitem>
        <para>
          D-Bus is <emphasis>low-overhead</emphasis> because it uses

```

binary protocol, and does not have to convert to and from a text format such as XML. Because D-Bus is intended for potentially high-resolution same-machine IPC, not primarily for Internet IPC, this is an interesting optimization.

</para>
</listitem>
<listitem>
<para>
D-Bus is <emphasis>easy to use</emphasis> because it works in terms of <firstterm>messages</firstterm> rather than byte streams, and automatically handles a lot of the hard IPC issues. Also, the D-Bus library is designed to be wrapped in a way that lets developers use their framework's existing object/type system, rather than learning a new one specifically for IPC.

</para>
</listitem>
</itemizedlist>
</para>

<para>
The base D-Bus protocol is a one-to-one (peer-to-peer or client-server) protocol, specified in <xref linkend="message-protocol"/>. That is, it is a system for one application to talk to a single other application. However, the primary intended application of the protocol is the D-Bus <firstterm>message bus</firstterm>, specified in <xref linkend="message-bus"/>. The message bus is a special application that accepts connections from multiple other applications, and forwards messages among them.

</para>

<para>
Uses of D-Bus include notification of system changes (notification of when a camera is plugged in to a computer, or a new version of some software has been installed), or desktop interoperability, for example a file monitoring service or a configuration service.

</para>

```
<para>
  D-Bus is designed for two specific use cases:
  <itemizedlist>
    <listitem>
      <para>
        A "system bus" for notifications from the system to user
sessions,
        and to allow the system to request input from user
sessions.
      </para>
    </listitem>
    <listitem>
      <para>
        A "session bus" used to implement desktop environments
such as
        GNOME and KDE.
      </para>
    </listitem>
  </itemizedlist>
  D-Bus is not intended to be a generic IPC system for any
possible
  application, and intentionally omits many features found in
other
  IPC systems for this reason.
</para>

<para>
  At the same time, the bus daemons offer a number of features not
found in
  other IPC systems, such as single-owner "bus names" (similar to
X
  selections), on-demand startup of services, and security
policies.
  In many ways, these features are the primary motivation for
developing
  D-Bus; other systems would have sufficed if IPC were the only
goal.
</para>

<para>
  D-Bus may turn out to be useful in unanticipated applications,
but future
  versions of this spec and the reference implementation probably
will not
  incorporate features that interfere with the core use cases.
</para>

<para>
  The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL
NOT",
```

"SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119. However, the document could use a serious audit to be sure it makes sense to do so. Also, they are not capitalized.

```
<sect2 id="stability">
  <title>Protocol and Specification Stability</title>
  <para>
    The D-Bus protocol is frozen (only compatible extensions are
    allowed) as of November 8, 2006. However, this specification could still
    use a fair bit of work to make interoperable reimplementations possible
    without reference to the D-Bus reference implementation. Thus, this
    specification is not marked 1.0. To mark it 1.0, we'd like to see
    someone invest significant effort in clarifying the specification
    language, and growing the specification to cover more aspects
    of the reference implementation's behavior.
  </para>
  <para>
    Until this work is complete, any attempt to reimplement D-Bus
    will probably require looking at the reference implementation
    and/or asking questions on the D-Bus mailing list about intended behavior.
    Questions on the list are very welcome.
  </para>
  <para>
    Nonetheless, this document should be a useful starting point
    and is to our knowledge accurate, though incomplete.
  </para>
</sect2>
```

```
</sect1>
```

```
<sect1 id="type-system">
  <title>Type System</title>
```

```
<para>
  D-Bus has a type system, in which values of various types can be
  serialized into a sequence of bytes referred to as the
  <firstterm>wire format</firstterm> in a standard way.
  Converting a value from some other representation into the wire
```

format is called `<firstterm>marshaling</firstterm>` and converting it back from the wire format is `<firstterm>unmarshaling</firstterm>`.

`<sect2 id="message-protocol-signatures">`
`<title>Type Signatures</title>`

`<para>`
The D-Bus protocol does not include type tags in the marshaled data; a block of marshaled values must have a known `<firstterm>type signature</firstterm>`. The type signature is made up of `<firstterm>type codes</firstterm>`. A type code is an ASCII character representing the type of a value. Because ASCII characters are used, the type signature will always form a valid ASCII string. A simple string compare determines whether two type signatures are equivalent.

`<para>`
As a simple example, the type code for 32-bit integer (`<literal>INT32</literal>`) is the ASCII character 'i'. So the signature for a block of values containing a single `<literal>INT32</literal>` would be:
`<programlisting>`
"i"
`</programlisting>`
A block of values containing two `<literal>INT32</literal>` would have this signature:
`<programlisting>`
"ii"
`</programlisting>`

`<para>`
All `<firstterm>basic</firstterm>` types work like `<literal>INT32</literal>` in this example. To marshal and unmarshal basic types, you simply read one value from the data block corresponding to each type code in the signature. In addition to basic types, there are four `<firstterm>container</firstterm>` types: `<literal>STRUCT</literal>`, `<literal>ARRAY</literal>`, `<literal>VARIANT</literal>`, and `<literal>DICT_ENTRY</literal>`.

<para>
<literal>STRUCT</literal> has a type code, ASCII character 'r', but this type code does not appear in signatures. Instead, ASCII characters '(' and ')' are used to mark the beginning and end of the struct.

So for example, a struct containing two integers would have this

signature:

```
<programlisting>
```

```
"(ii)"
```

```
</programlisting>
```

Structs can be nested, so for example a struct containing an integer and another struct:

```
<programlisting>
```

```
"(i(ii))"
```

```
</programlisting>
```

The value block storing that struct would contain three integers; the

type signature allows you to distinguish "(i(ii))" from "((ii)i)" or

"(iii)" or "iii".

</para>

<para>

The <literal>STRUCT</literal> type code 'r' is not currently used in the D-Bus protocol,

but is useful in code that implements the protocol. This type code

is specified to allow such code to interoperate in non-protocol contexts.

</para>

<para>

Empty structures are not allowed; there must be at least one type code between the parentheses.

</para>

<para>

<literal>ARRAY</literal> has ASCII character 'a' as type code. The array type code must be

followed by a <firstterm>single complete type</firstterm>. The single

complete type following the array is the type of each array element. So

the simple example is:

```
<programlisting>
```

```
"ai"
```

```
</programlisting>
```

which is an array of 32-bit integers. But an array can be of any type,

such as this array-of-struct-with-two-int32-fields:

```
<programlisting>
    "a(ii)"
</programlisting>
Or this array of array of integer:
<programlisting>
    "aai"
</programlisting>
</para>
```

<para>
The phrase <firstterm>single complete type</firstterm>
deserves some
definition. A single complete type is a basic type code, a
variant type code,
an array with its element type, or a struct with its fields.
So the following signatures are not single complete types:

```
<programlisting>
    "aa"
</programlisting>
<programlisting>
    "(ii)"
</programlisting>
<programlisting>
    "ii)"
</programlisting>
```

And the following signatures contain multiple complete types:

```
<programlisting>
    "ii"
</programlisting>
<programlisting>
    "aiai"
</programlisting>
<programlisting>
    "(ii)(ii)"
</programlisting>
```

Note however that a single complete type may
<emphasis>contain</emphasis>
multiple other single complete types.

</para>

<para>
<literal>VARIANT</literal> has ASCII character 'v' as its type
code. A marshaled value of
type <literal>VARIANT</literal> will have the signature of a
single complete type as part
of the <emphasis>value</emphasis>. This signature will be
followed by a
marshaled value of that type.

</para>

<para>

A `<literal>DICT_ENTRY</literal>` works exactly like a struct, but rather than parentheses it uses curly braces, and it has more restrictions.

The restrictions are: it occurs only as an array element type; it has exactly two single complete types inside the curly braces; the first single complete type (the "key") must be a basic type rather than a container type. Implementations must not accept dict entries outside of arrays, must not accept dict entries with zero, one, or more than two fields, and must not accept dict entries with non-basic-typed keys. A dict entry is always a key-value pair.

</para>

<para>
The first field in the `<literal>DICT_ENTRY</literal>` is always the key.

A message is considered corrupt if the same key occurs twice in the same array of `<literal>DICT_ENTRY</literal>`. However, for performance reasons implementations are not required to reject dicts with duplicate keys.

</para>

<para>
In most languages, an array of dict entry would be represented as a map, hash table, or dict object.

</para>

<para>
The following table summarizes the D-Bus types.

Conventional Name	Code	Description
<code><literal>INVALID</literal></code>		
0	(ASCII NUL)	

```

        <entry>Not a valid type code, used to terminate
signatures</entry>
    </row><row>
    <entry><literal>BYTE</literal></entry>
    <entry>121 (ASCII 'y')</entry>
    <entry>8-bit unsigned integer</entry>
    </row><row>
    <entry><literal>BOOLEAN</literal></entry>
    <entry>98 (ASCII 'b')</entry>
    <entry>Boolean value, 0 is <literal>FALSE</literal> and 1
is <literal>TRUE</literal>. Everything else is invalid.</entry>
    </row><row>
        <entry><literal>INT16</literal></entry>
        <entry>110 (ASCII 'n')</entry>
        <entry>16-bit signed integer</entry>
    </row><row>
        <entry><literal>UINT16</literal></entry>
        <entry>113 (ASCII 'q')</entry>
        <entry>16-bit unsigned integer</entry>
    </row><row>
        <entry><literal>INT32</literal></entry>
        <entry>105 (ASCII 'i')</entry>
        <entry>32-bit signed integer</entry>
    </row><row>
        <entry><literal>UINT32</literal></entry>
        <entry>117 (ASCII 'u')</entry>
        <entry>32-bit unsigned integer</entry>
    </row><row>
        <entry><literal>INT64</literal></entry>
        <entry>120 (ASCII 'x')</entry>
        <entry>64-bit signed integer</entry>
    </row><row>
        <entry><literal>UINT64</literal></entry>
        <entry>116 (ASCII 't')</entry>
        <entry>64-bit unsigned integer</entry>
    </row><row>
        <entry><literal>DOUBLE</literal></entry>
        <entry>100 (ASCII 'd')</entry>
        <entry>IEEE 754 double</entry>
    </row><row>
        <entry><literal>STRING</literal></entry>
        <entry>115 (ASCII 's')</entry>
        <entry>UTF-8 string (<emphasis>must</emphasis> be
valid UTF-8). Must be nul terminated and contain no other nul
bytes.</entry>
    </row><row>
        <entry><literal>OBJECT_PATH</literal></entry>
        <entry>111 (ASCII 'o')</entry>
        <entry>Name of an object instance</entry>
    </row><row>
        <entry><literal>SIGNATURE</literal></entry>
        <entry>103 (ASCII 'g')</entry>

```

```

    <entry>A type signature</entry>
</row><row>
    <entry><literal>ARRAY</literal></entry>
    <entry>97 (ASCII 'a')</entry>
    <entry>Array</entry>
</row><row>
    <entry><literal>STRUCT</literal></entry>
    <entry>114 (ASCII 'r'), 40 (ASCII '('), 41 (ASCII
')')</entry>
    <entry>Struct; type code 114 'r' is reserved for use
in
    bindings and implementations to represent the
general
    concept of a struct, and must not appear in
signatures
    used on D-Bus.</entry>
</row><row>
    <entry><literal>VARIANT</literal></entry>
    <entry>118 (ASCII 'v') </entry>
    <entry>Variant type (the type of the value is part of
the value itself)</entry>
</row><row>
    <entry><literal>DICT_ENTRY</literal></entry>
    <entry>101 (ASCII 'e'), 123 (ASCII '{'), 125 (ASCII
}')') </entry>
    <entry>Entry in a dict or map (array of key-value
pairs).
    Type code 101 'e' is reserved for use in bindings
and
    implementations to represent the general concept of
a
    dict or dict-entry, and must not appear in
signatures
    used on D-Bus.</entry>
</row><row>
    <entry><literal>UNIX_FD</literal></entry>
    <entry>104 (ASCII 'h')</entry>
    <entry>Unix file descriptor</entry>
</row>
<row>
    <entry>(reserved)</entry>
    <entry>109 (ASCII 'm')</entry>
    <entry>Reserved for <ulink
url="https://bugs.freedesktop.org/show_bug.cgi?id=27857">a
    'maybe' type compatible with the one in
GVariant</ulink>,
    and must not appear in signatures used on D-Bus
until
    specified here</entry>
</row>
<row>

```

<entry>(reserved)</entry>
<entry>42 (ASCII '*')</entry>
<entry>Reserved for use in bindings/implementations to represent any <firstterm>single complete type</firstterm>, and must not appear in signatures used on D-Bus.</entry>
</row>
<row>
<entry>(reserved)</entry>
<entry>63 (ASCII '?')</entry>
<entry>Reserved for use in bindings/implementations to represent any <firstterm>basic type</firstterm>, and must not appear in signatures used on D-Bus.</entry>
</row>
<row>
<entry>(reserved)</entry>
<entry>64 (ASCII '@'), 38 (ASCII '&'), 94 (ASCII '^')</entry>
<entry>Reserved for internal use by bindings/implementations, and must not appear in signatures used on D-Bus. GVariant uses these type-codes to encode calling conventions.</entry>
</row>

</tbody>

</tgroup>

</informaltable>

</para>

</sect2>

<sect2 id="message-protocol-marshaling">
 <title>Marshaling (Wire Format)</title>

<para>
 Given a type signature, a block of bytes can be converted into typed bytes. Byte order and alignment issues are handled uniformly for all D-Bus types.</para>

<para>
 A block of bytes has an associated byte order. The byte order has to be discovered in some way; for D-Bus messages, the byte order is part of the message header as described in <xref linkend="message-protocol-messages"/>. For now, assume that the byte order is known to be either little endian or big endian.</para>

</para>

<para>

Each value in a block of bytes is aligned "naturally," for example

4-byte values are aligned to a 4-byte boundary, and 8-byte values to an

8-byte boundary. To properly align a value, <firstterm>alignment

padding</firstterm> may be necessary. The alignment padding must always

be the minimum required padding to properly align the following value;

padding must and it must always be made up of nul bytes. The alignment

padding must not be left uninitialized (it can't contain garbage), and more

padding than required must not be used.

</para>

<para>

Given all this, the types are marshaled on the wire as follows:

<informaltable>

<tgroup cols="3">

<thead>

<row>

<entry>Conventional Name</entry>

<entry>Encoding</entry>

<entry>Alignment</entry>

</row>

</thead>

<tbody>

<row>

<entry><literal>INVALID</literal></entry>

<entry>Not applicable; cannot be marshaled.</entry>

<entry>N/A</entry>

</row><row>

<entry><literal>BYTE</literal></entry>

<entry>A single 8-bit byte.</entry>

<entry>1</entry>

</row><row>

<entry><literal>BOOLEAN</literal></entry>

and 1 are valid values.</entry>

<entry>4</entry>

</row><row>

<entry><literal>INT16</literal></entry>

order.</entry>

<entry>2</entry>

</row><row>

```

        <entry><literal>UINT16</literal></entry>
        <entry>16-bit unsigned integer in the message's byte
order.</entry>
        <entry>2</entry>
</row><row>
        <entry><literal>INT32</literal></entry>
        <entry>32-bit signed integer in the message's byte
order.</entry>
        <entry>4</entry>
</row><row>
        <entry><literal>UINT32</literal></entry>
        <entry>32-bit unsigned integer in the message's byte
order.</entry>
        <entry>4</entry>
</row><row>
        <entry><literal>INT64</literal></entry>
        <entry>64-bit signed integer in the message's byte
order.</entry>
        <entry>8</entry>
</row><row>
        <entry><literal>UINT64</literal></entry>
        <entry>64-bit unsigned integer in the message's byte
order.</entry>
        <entry>8</entry>
</row><row>
        <entry><literal>DOUBLE</literal></entry>
        <entry>64-bit IEEE 754 double in the message's byte
order.</entry>
        <entry>8</entry>
</row><row>
        <entry><literal>STRING</literal></entry>
        <entry>A <literal>UINT32</literal> indicating the
string's
        length in bytes excluding its terminating nul,
followed by
        non-nul string data of the given length, followed by
a terminating nul
        byte.
        </entry>
        <entry>
            4 (for the length)
        </entry>
</row><row>
        <entry><literal>OBJECT_PATH</literal></entry>
        <entry>Exactly the same as <literal>STRING</literal>
except the
        content must be a valid object path (see below).
        </entry>
        <entry>
            4 (for the length)
        </entry>
</row><row>

```



```

    <entry><literal>SIGNATURE</literal></entry>
    <entry>The same as <literal>STRING</literal> except
the length is a single
    byte (thus signatures have a maximum length of 255)
    and the content must be a valid signature (see
below).
    </entry>
    <entry>
    1
    </entry>
</row><row>
    <entry><literal>ARRAY</literal></entry>
    <entry>
    A <literal>UINT32</literal> giving the length of the
array data in bytes, followed by
    alignment padding to the alignment boundary of the
array element type,
    followed by each array element. The array length is
from the
    end of the alignment padding to the end of the last
element,
    i.e. it does not include the padding after the
length,
    or any padding after the last element.
    Arrays have a maximum length defined to be 2 to the
26th power or
    67108864. Implementations must not send or accept
arrays exceeding this
    length.
    </entry>
    <entry>
    4 (for the length)
    </entry>
</row><row>
    <entry><literal>STRUCT</literal></entry>
    <entry>
    A struct must start on an 8-byte boundary regardless
of the
    type of the struct fields. The struct value consists
of each
    field marshaled in sequence starting from that 8-
byte
    alignment boundary.
    </entry>
    <entry>
    8
    </entry>
</row><row>
    <entry><literal>VARIANT</literal></entry>
    <entry>
    A variant type has a marshaled
    <literal>SIGNATURE</literal> followed by a marshaled

```

value with the type given in the signature. Unlike a message signature, the variant signature can contain only a single complete type. So "i", "ai" or "(ii)" is OK, but "ii" is not. Use of variants may not cause a total message depth to be larger than 64, including other container types such as structures.

```
</entry>
<entry>
  1 (alignment of the signature)
</entry>
</row><row>
<entry><literal>DICT_ENTRY</literal></entry>
<entry>
  Identical to STRUCT.
</entry>
<entry>
  8
</entry>
</row><row>
<entry><literal>UNIX_FD</literal></entry>
<entry>32-bit unsigned integer in the message's byte
order. The actual file descriptors need to be
transferred out-of-band via some platform specific
mechanism. On the wire, values of this type store the
index to the
file descriptor in the array of file descriptors that
accompany the message.</entry>
<entry>4</entry>
```

```
</row>
</tbody>
</tgroup>
</informaltable>
</para>
```

```
<sect3 id="message-protocol-marshaling-object-path">
<title>Valid Object Paths</title>
```

```
<para>
  An object path is a name used to refer to an object
instance.
  Conceptually, each participant in a D-Bus message exchange
may have
  any number of object instances (think of C++ or Java
objects) and each
  such instance will have a path. Like a filesystem, the
object
  instances in an application form a hierarchical tree.
</para>
```

```
<para>
```

The following rules define a valid object path.
Implementations must not send or accept messages with invalid object paths.

- <itemizedlist>
 - <listitem>
 - <para>

The path may be of any length.
- </listitem>
 - <listitem>
 - <para>

The path must begin with an ASCII '/' (integer 47) character, and must consist of elements separated by slash characters.
- </listitem>
 - <listitem>
 - <para>

Each element must only contain the ASCII characters "[A-Z][a-z][0-9]_"
- </listitem>
 - <listitem>
 - <para>

No element may be the empty string.
- </listitem>
 - <listitem>
 - <para>

Multiple '/' characters cannot occur in sequence.
- </listitem>
 - <listitem>
 - <para>

A trailing '/' character is not allowed unless the path is the root path (a single '/' character).

</itemizedlist>
</para>

<para>
reversed Object paths are often namespaced by starting with a domain name and containing an interface version number, in the same way as
<link linkend="message-protocol-names-interface">interface names</link> and
<link linkend="message-protocol-names-bus">well-known bus names</link>.

or This makes it possible to implement more than one service,
more than one version of a service, in the same process,
even if the services share a connection but cannot otherwise
co-operate (for instance, if they are implemented by
different plugins).
</para>

<para>
is For instance, if the owner of <literal>example.com</literal>
the developing a D-Bus API for a music player, they might use
the hierarchy of object paths that start with
objects. <literal>/com/example/MusicPlayer1</literal> for its
</para>
</sect3>

<sect3 id="message-protocol-marshaling-signature">
<title>Valid Signatures</title>
<para>
signatures. An implementation must not send or accept invalid
Valid signatures will conform to the following rules:
<itemizedlist>
<listitem>
<para>
The signature ends with a nul byte.
</para>
</listitem>
<listitem>
<para>
The signature is a list of single complete types.
Arrays must have element types, and structs must
have both open and close parentheses.
</para>
</listitem>
<listitem>
<para>
<literal>STRUCT</literal> type code
is not allowed in signatures, because parentheses
are used instead.
</para>
</listitem>
<listitem>
<para>
The maximum depth of container type nesting is 32
array type

maximum
of array
are 32

codes and 32 open parentheses. This implies that the total depth of recursion is 64, for an "array of array of ... struct of struct of struct of ..." where there

array and 32 struct.

</para>

</listitem>

<listitem>

<para>

The maximum length of a signature is 255.

</para>

</listitem>

<listitem>

<para>

Signatures must be nul-terminated.

</para>

</listitem>

</itemizedlist>

</para>

</sect3>

</sect2>

</sect1>

<sect1 id="message-protocol">

<title>Message Protocol</title>

<para>

A <firstterm>message</firstterm> consists of a

<firstterm>header</firstterm> and a <firstterm>body</firstterm>.

If you

think of a message as a package, the header is the address, and the body

contains the package contents. The message delivery system uses the header

information to figure out where to send the message and how to interpret

it; the recipient interprets the body of the message.

</para>

<para>

The body of the message is made up of zero or more

<firstterm>arguments</firstterm>, which are typed values, such as an

integer or a byte array.

</para>

<para>

Both header and body use the D-Bus [type-system](#) and format for serializing data.

Message Format

A message consists of a header and a body. The header is a block of values with a fixed signature and meaning. The body is a separate block of values, with a signature specified in the header.

The length of the header must be a multiple of 8, allowing the body to begin on an 8-byte boundary when storing the entire message in a single buffer. If the header does not naturally end on an 8-byte boundary up to 7 bytes of nul-initialized alignment padding must be added.

The message body need not end on an 8-byte boundary.

The maximum length of a message, including header, header alignment padding, and body is 2 to the 27th power or 134217728. Implementations must not send or accept messages exceeding this size.

The signature of the header is:

```
"yyyyuua(yv)"
```

Written out more readably, this is:

```
BYTE, BYTE, BYTE, BYTE, UINT32, UINT32, ARRAY of STRUCT of (BYTE,VARIANT)
```

These values have the following meanings:

<informaltable>

<tgroup cols="2">

<thead>

<row>

<entry>Value</entry>

<entry>Description</entry>

</row>

</thead>

<tbody>

<row>

<entry>1st <literal>BYTE</literal></entry>

<entry>Endianness flag; ASCII 'l' for little-endian or ASCII 'B' for big-endian. Both header and body

are

in this endianness.</entry>

</row>

<row>

<entry>2nd <literal>BYTE</literal></entry>

<entry><firstterm>Message type</firstterm>. Unknown

types must be ignored.

Currently-defined types are described below.

</entry>

</row>

<row>

<entry>3rd <literal>BYTE</literal></entry>

<entry>Bitwise OR of flags. Unknown flags

must be ignored. Currently-defined flags are

described below.

</entry>

</row>

<row>

<entry>4th <literal>BYTE</literal></entry>

<entry>Major protocol version of the sending

application. If

the major protocol version of the receiving

application does not

match, the applications will not be able to

communicate and the

D-Bus connection must be disconnected. The major

protocol

version for this version of the specification is 1.

</entry>

</row>

<row>

<entry>1st <literal>UINT32</literal></entry>

<entry>Length in bytes of the message body, starting

from the end of the header. The header ends after

its alignment padding to an 8-boundary.

</entry>

</row>

<row>

```

        <entry>2nd <literal>UINT32</literal></entry>
        <entry>The serial of this message, used as a cookie
            by the sender to identify the reply corresponding
            to this request. This must not be zero.
        </entry>
    </row>
    <row>
        <entry><literal>ARRAY</literal> of
<literal>STRUCT</literal> of
(<literal>BYTE</literal>,<literal>VARIANT</literal>)</entry>
        <entry>An array of zero or more <firstterm>header
            fields</firstterm> where the byte is the field code,
and the
            variant is the field value. The message type
determines
            which fields are required.
        </entry>
    </row>
</tbody>
</tgroup>
</informaltable>
</para>
<para>
    <firstterm>Message types</firstterm> that can appear in the
second byte
of the header are:
<informaltable>
    <tgroup cols="3">
        <thead>
            <row>
                <entry>Conventional name</entry>
                <entry>Decimal value</entry>
                <entry>Description</entry>
            </row>
        </thead>
        <tbody>
            <row>
                <entry><literal>INVALID</literal></entry>
                <entry>0</entry>
                <entry>This is an invalid type.</entry>
            </row>
            <row>
                <entry><literal>METHOD_CALL</literal></entry>
                <entry>1</entry>
                <entry>Method call.</entry>
            </row>
            <row>
                <entry><literal>METHOD_RETURN</literal></entry>
                <entry>2</entry>
                <entry>Method reply with returned data.</entry>
            </row>
        </tbody>
    </tgroup>
</informaltable>

```


is a

```
<entry><literal>ERROR</literal></entry>
<entry>3</entry>
<entry>Error reply. If the first argument exists and
string, it is an error message.</entry>
</row>
<row>
<entry><literal>SIGNAL</literal></entry>
<entry>4</entry>
<entry>Signal emission.</entry>
</row>
</tbody>
</tgroup>
</informaltable>
</para>
<para>
Flags that can appear in the third byte of the header:
<informaltable>
<tgroup cols="3">
<thead>
<row>
<entry>Conventional name</entry>
<entry>Hex value</entry>
<entry>Description</entry>
</row>
</thead>
<tbody>
<row>
<entry><literal>NO_REPLY_EXPECTED</literal></entry>
<entry>0x1</entry>
<entry>This message does not expect method return
error replies; the reply can be omitted as an
optimization. However, it is compliant with this
specification
to return the reply despite this flag and the only
harm
from doing so is extra network traffic.
</entry>
</row>
<row>
<entry><literal>NO_AUTO_START</literal></entry>
<entry>0x2</entry>
<entry>The bus must not launch an owner
message.
for the destination name in response to this
</entry>
</row>
</tbody>
</tgroup>
</informaltable>
</para>
```

<sect3 id="message-protocol-header-fields">
<title>Header Fields</title>

<para>
The array at the end of the header contains
<firstterm>header
fields</firstterm>, where each field is a 1-byte field code
followed
by a field value. A header must contain the required header
fields for
its message type, and zero or more of any optional header
fields. Future versions of this protocol specification may
add new
fields. Implementations must ignore fields they do not
understand. Implementations must not invent their own header
fields;
only changes to this specification may introduce new header
fields.
</para>

<para>
Again, if an implementation sees a header field code that it
does not
expect, it must ignore that field, as it will be part of a
new
(but compatible) version of this specification. This also
applies
to known header fields appearing in unexpected messages, for
example: if a signal has a reply serial it must be ignored
even though it has no meaning as of this version of the
spec.
</para>

<para>
However, implementations must not send or accept known
header fields
with the wrong type stored in the field value. So for
example a
message with an <literal>INTERFACE</literal> field of type
<literal>UINT32</literal> would be considered corrupt.
</para>

<para>
Here are the currently-defined header fields:
<informaltable>
<tgroup cols="5">
<thead>
<row>
<entry>Conventional Name</entry>
<entry>Decimal Code</entry>
<entry>Type</entry>

	<entry>Required In</entry>	<entry>Description</entry>
in a message)	<entry><literal>INVALID</literal></entry>	<entry>0</entry> <entry>N/A</entry> <entry>not allowed</entry> <entry>Not a valid field name (error if it appears
reserved; path, will	<entry><literal>PATH</literal></entry>	<entry>1</entry> <entry><literal>OBJECT_PATH</literal></entry> <entry><literal>METHOD_CALL</literal>, <literal>SIGNAL</literal></entry> <entry>The object to send a call to, or the object a signal is emitted from. The special path <literal>/org/freedesktop/DBus/Local</literal> is implementations should not send messages with this and the reference implementation of the bus daemon will disconnect any application that attempts to do so.
reserved; bus attempts to	<entry><literal>INTERFACE</literal></entry>	<entry>2</entry> <entry><literal>STRING</literal></entry> <entry><literal>SIGNAL</literal></entry> <entry> The interface to invoke a method call on, or that a signal is emitted from. Optional for method calls, required for signals. The special interface <literal>org.freedesktop.DBus.Local</literal> is implementations should not send messages with this interface, and the reference implementation of the daemon will disconnect any application that do so.

```

        <entry><literal>MEMBER</literal></entry>
        <entry>3</entry>
        <entry><literal>STRING</literal></entry>
        <entry><literal>METHOD_CALL</literal>,
<literal>SIGNAL</literal></entry>
        <entry>The member, either the method name or signal
name.</entry>
    </row>
    <row>
        <entry><literal>ERROR_NAME</literal></entry>
        <entry>4</entry>
        <entry><literal>STRING</literal></entry>
        <entry><literal>ERROR</literal></entry>
        <entry>The name of the error that occurred, for
errors</entry>
    </row>
    <row>
        <entry><literal>REPLY_SERIAL</literal></entry>
        <entry>5</entry>
        <entry><literal>UINT32</literal></entry>
        <entry><literal>ERROR</literal>,
<literal>METHOD_RETURN</literal></entry>
        <entry>The serial number of the message this message
is a reply
            to. (The serial number is the second
<literal>UINT32</literal> in the header.)</entry>
    </row>
    <row>
        <entry><literal>DESTINATION</literal></entry>
        <entry>6</entry>
        <entry><literal>STRING</literal></entry>
        <entry>optional</entry>
        <entry>The name of the connection this message is
intended for.
            Only used in combination with the message bus, see
            <xref linkend="message-bus"/>.</entry>
    </row>
    <row>
        <entry><literal>SENDER</literal></entry>
        <entry>7</entry>
        <entry><literal>STRING</literal></entry>
        <entry>optional</entry>
        <entry>Unique name of the sending connection.
            The message bus fills in this field so it is
reliable; the field is
            only meaningful in combination with the message
bus.</entry>
    </row>
    <row>
        <entry><literal>SIGNATURE</literal></entry>
        <entry>8</entry>
        <entry><literal>SIGNATURE</literal></entry>

```

```

        <entry>optional</entry>
        <entry>The signature of the message body.
        If omitted, it is assumed to be the
        empty signature "" (i.e. the body must be 0-
length).</entry>
    </row>
    <row>
        <entry><literal>UNIX_FDS</literal></entry>
        <entry>9</entry>
        <entry><literal>UINT32</literal></entry>
        <entry>optional</entry>
        <entry>The number of Unix file descriptors that
        accompany the message. If omitted, it is assumed
        that no Unix file descriptors accompany the
        message. The actual file descriptors need to be
        transferred via platform specific mechanism
        out-of-band. They must be sent at the same time as
        part of the message itself. They may not be sent
        before the first byte of the message itself is
        transferred or after the last byte of the message
        itself.</entry>
    </row>
</tbody>
</tgroup>
</informaltable>
</para>
</sect3>
</sect2>

```

```

<sect2 id="message-protocol-names">
  <title>Valid Names</title>
  <para>
    The various names in D-Bus messages have some restrictions.
  </para>
  <para>
    There is a <firstterm>maximum name length</firstterm>
    of 255 which applies to bus names, interfaces, and members.
  </para>
  <sect3 id="message-protocol-names-interface">
    <title>Interface names</title>
    <para>
      Interfaces have names with type <literal>STRING</literal>,
meaning that
      they must be valid UTF-8. However, there are also some
      additional restrictions that apply to interface names
      specifically:
      <itemizedlist>
        <listitem><para>Interface names are composed of 1 or more
elements separated by
          a period ('.') character. All elements must contain at
least
          one character.

```

```

        </para>
    </listitem>
    <listitem><para>Each element must only contain the ASCII
characters
        "[A-Z][a-z][0-9]_" and must not begin with a digit.
        </para>
    </listitem>

    <listitem><para>Interface names must contain at least one '.'
(period)
        character (and thus at least two elements).
        </para></listitem>

    <listitem><para>Interface names must not begin with a '.'
(period) character.</para></listitem>
    <listitem><para>Interface names must not exceed the maximum
name length.</para></listitem>
</itemizedlist>
</para>

<para>
    Interface names should start with the reversed DNS domain
name of
    the author of the interface (in lower-case), like interface
names
    in Java. It is conventional for the rest of the interface
name
    to consist of words run together, with initial capital
letters
    on all words ("CamelCase"). Several levels of hierarchy can
be used.
    It is also a good idea to include the major version of the
interface
    in the name, and increment it if incompatible changes are
made;
    this way, a single object can implement several versions of
an
    interface in parallel, if necessary.
</para>

<para>
    For instance, if the owner of <literal>example.com</literal>
is
    developing a D-Bus API for a music player, they might define
    interfaces called
<literal>com.example.MusicPlayer1</literal>,
    <literal>com.example.MusicPlayer1.Track</literal> and
    <literal>com.example.MusicPlayer1.Seekable</literal>.
</para>

<para>

```

D-Bus does not distinguish between the concepts that would be

called classes and interfaces in Java: either can be identified on

D-Bus by an interface name.

</para>

</sect3>

<sect3 id="message-protocol-names-bus">

<title>Bus names</title>

<para>

Connections have one or more bus names associated with them.

A connection has exactly one bus name that is a

<firstterm>unique

connection name</firstterm>. The unique connection name

remains

with the connection for its entire lifetime.

A bus name is of type <literal>STRING</literal>,

meaning that it must be valid UTF-8. However, there are also some additional restrictions that apply to bus names

specifically:

<itemizedlist>

<listitem><para>Bus names that start with a colon (':')

character are unique connection names. Other bus names are called <firstterm>well-known bus

names</firstterm>.

</para>

</listitem>

<listitem><para>Bus names are composed of 1 or more

elements separated by

a period ('.') character. All elements must contain at

least

one character.

</para>

</listitem>

<listitem><para>Each element must only contain the ASCII

characters

"[A-Z][a-z][0-9]_". Only elements that are part of a

unique

connection name may begin with a digit, elements in other bus names must not begin with a digit.

</para>

</listitem>

<listitem><para>Bus names must contain at least one '.'

(period)

character (and thus at least two elements).

</para></listitem>

<listitem><para>Bus names must not begin with a '.' (period) character.</para></listitem>

<listitem><para>Bus names must not exceed the maximum name length.</para></listitem>

```
    </itemizedlist>
</para>
<para>
    Note that the hyphen ('-') character is allowed in bus names
but
    not in interface names.
</para>

<para>
    Like <link linkend="message-protocol-names-
interface">interface
    names</link>, well-known bus names should start with the
    reversed DNS domain name of the author of the interface (in
    lower-case), and it is conventional for the rest of the
well-known
    bus name to consist of words run together, with initial
    capital letters. As with interface names, including a
version
    number in well-known bus names is a good idea; it's possible
to
    have the well-known bus name for more than one version
    simultaneously if backwards compatibility is required.
</para>

<para>
    If a well-known bus name implies the presence of a "main"
interface,
    that "main" interface is often given the same name as
    the well-known bus name, and situated at the corresponding
object
    path. For instance, if the owner of
<literal>example.com</literal>
    is developing a D-Bus API for a music player, they might
define
    that any application that takes the well-known name
    <literal>com.example.MusicPlayer1</literal> should have an
object
    at the object path
<literal>/com/example/MusicPlayer1</literal>
    which implements the interface
    <literal>com.example.MusicPlayer1</literal>.
</para>
</sect3>
<sect3 id="message-protocol-names-member">
    <title>Member names</title>
    <para>
        Member (i.e. method or signal) names:
        <itemizedlist>
        <listitem><para>Must only contain the ASCII characters
            "[A-Z][a-z][0-9]_" and may not begin with a
            digit.</para></listitem>
    </itemizedlist>

```


`<listitem><para>Must not contain the '.' (period) character.</para></listitem>`

`<listitem><para>Must not exceed the maximum name length.</para></listitem>`

`<listitem><para>Must be at least 1 byte in length.</para></listitem>`

`</itemizedlist>`

`</para>`

`<para>`

It is conventional for member names on D-Bus to consist of capitalized words with no punctuation ("camel-case").

Method names should usually be verbs, such as

`<literal>GetItems</literal>`, and signal names should usually

be

a description of an event, such as

`<literal>ItemsChanged</literal>`.

`</para>`

`</sect3>`

`<sect3 id="message-protocol-names-error">`

`<title>Error names</title>`

`<para>`

Error names have the same restrictions as interface names.

`</para>`

`<para>`

Error names have the same naming conventions as interface names, and often contain `<literal>.Error.</literal>`; for

instance,

the owner of `<literal>example.com</literal>` might define the errors

`<literal>com.example.MusicPlayer.Error.FileNotFound</literal>`

and

`<literal>com.example.MusicPlayer.Error.OutOfMemory</literal>`.

The errors defined by D-Bus itself, such as

`<literal>org.freedesktop.DBus.Error.Failed</literal>`, follow

a

similar pattern.

`</para>`

`</sect3>`

`</sect2>`

`<sect2 id="message-protocol-types">`

`<title>Message Types</title>`

`<para>`

Each of the message types (`<literal>METHOD_CALL</literal>`, `<literal>METHOD_RETURN</literal>`, `<literal>ERROR</literal>`, and

`<literal>SIGNAL</literal>`) has its own expected usage conventions and header fields.

This section describes these conventions.

`</para>`

`<sect3 id="message-protocol-types-method">`

<title>Method Calls</title>
<para>
Some messages invoke an operation on a remote object. These
are
called method call messages and have the type tag
<literal>METHOD_CALL</literal>. Such
messages map naturally to methods on objects in a typical
program.
</para>
<para>
A method call message is required to have a
<literal>MEMBER</literal> header field
indicating the name of the method. Optionally, the message
has an
<literal>INTERFACE</literal> field giving the interface the
method is a part of. In the
absence of an <literal>INTERFACE</literal> field, if two
interfaces on the same object have
a method with the same name, it is undefined which of the
two methods
will be invoked. Implementations may also choose to return
an error in
this ambiguous case. However, if a method name is unique
implementations must not require an interface field.
</para>
<para>
Method call messages also include a <literal>PATH</literal>
field
indicating the object to invoke the method on. If the call
is passing
through a message bus, the message will also have a
<literal>DESTINATION</literal> field giving the name of the
connection
to receive the message.
</para>
<para>
When an application handles a method call message, it is
required to
return a reply. The reply is identified by a
<literal>REPLY_SERIAL</literal> header field
indicating the serial number of the
<literal>METHOD_CALL</literal> being replied to. The
reply can have one of two types; either
<literal>METHOD_RETURN</literal> or <literal>ERROR</literal>.
</para>
<para>
If the reply has type <literal>METHOD_RETURN</literal>, the
arguments to the reply message
are the return value(s) or "out parameters" of the method
call.
If the reply has type <literal>ERROR</literal>, then an
"exception" has been thrown,

and the call fails; no return value will be provided. It makes

no sense to send multiple replies to the same method call.
</para>

<para>
Even if a method call has no return values, a
<literal>METHOD_RETURN</literal>
reply is required, so the caller will know the method
was successfully processed.
</para>

<para>
The <literal>METHOD_RETURN</literal> or
<literal>ERROR</literal> reply message must have the
<literal>REPLY_SERIAL</literal>
header field.
</para>

<para>
If a <literal>METHOD_CALL</literal> message has the flag
<literal>NO_REPLY_EXPECTED</literal>,
then as an optimization the application receiving the method
call may choose to omit the reply message (regardless of
whether the reply would have been
<literal>METHOD_RETURN</literal> or <literal>ERROR</literal>).
However, it is also acceptable to ignore the

<literal>NO_REPLY_EXPECTED</literal>
flag and reply anyway.
</para>

<para>
Unless a message has the flag
<literal>NO_AUTO_START</literal>, if the
destination name does not exist then a program to own the
destination
name will be started before the message is delivered. The
message
will be held until the new program is successfully started
or has
failed to start; in case of failure, an error will be
returned. This
flag is only relevant in the context of a message bus, it is
ignored
during one-to-one communication with no intermediate bus.
</para>

<sect4 id="message-protocol-types-method-apis">
<title>Mapping method calls to native APIs</title>
<para>
APIs for D-Bus may map method calls to a method call in a
specific
programming language, such as C++, or may map a method
call written
in an IDL to a D-Bus message.
</para>

<para>

In APIs of this nature, arguments to a method are often termed "in" (which implies sent in the `<literal>METHOD_CALL</literal>`), or "out" (which implies returned in the `<literal>METHOD_RETURN</literal>`). Some APIs such as CORBA also have "inout" arguments, which are both sent and received, i.e. the caller passes in a value which is modified. Mapped to D-Bus, an "inout" argument is equivalent to an "in" argument, followed by an "out" argument. You can't pass things "by reference" over the wire, so "inout" is purely an illusion of the in-process API.

Given a method with zero or one return values, followed by zero or more arguments, where each argument may be "in", "out", or "inout", the caller constructs a message by appending each "in" or "inout" argument, in order. "out" arguments are not represented in the caller's message.

The recipient constructs a reply by appending first the return value if any, then each "out" or "inout" argument, in order. "in" arguments are not represented in the reply message.

Error replies are normally mapped to exceptions in languages that have exceptions.

In converting from native APIs to D-Bus, it is perhaps nice to map D-Bus naming conventions ("FooBar") to native conventions such as "fooBar" or "foo_bar" automatically. This is OK as long as you can say that the native API is one that was specifically written for D-Bus. It makes the most sense when writing object implementations that will be exported over the bus. Object proxies used to invoke remote D-Bus objects probably need the ability to call any D-Bus method, and thus a magic name mapping like this could be a problem.

</para>
<para>
This specification doesn't require anything of native API
bindings;
the preceding is only a suggested convention for
consistency
among bindings.
</para>
</sect4>
</sect3>

<sect3 id="message-protocol-types-signal">
<title>Signal Emission</title>
<para>
Unlike method calls, signal emissions have no replies.
A signal emission is simply a single message of type
<literal>SIGNAL</literal>.
It must have three header fields: <literal>PATH</literal>
giving the object
the signal was emitted from, plus
<literal>INTERFACE</literal> and <literal>MEMBER</literal> giving
the fully-qualified name of the signal. The
<literal>INTERFACE</literal> header is required
for signals, though it is optional for method calls.
</para>
</sect3>

<sect3 id="message-protocol-types-errors">
<title>Errors</title>
<para>
Messages of type <literal>ERROR</literal> are most commonly
replies
to a <literal>METHOD_CALL</literal>, but may be returned in
reply
to any kind of message. The message bus for example
will return an <literal>ERROR</literal> in reply to a signal
emission if
the bus does not have enough memory to send the signal.
</para>
<para>
An <literal>ERROR</literal> may have any arguments, but if
the first
argument is a <literal>STRING</literal>, it must be an error
message.
The error message may be logged or shown to the user
in some way.
</para>
</sect3>

<sect3 id="message-protocol-types-notation">
<title>Notation in this document</title>
<para>

This document uses a simple pseudo-IDL to describe particular method calls and signals. Here is an example of a method call:

```
<programlisting>
    org.freedesktop.DBus.StartServiceByName (in STRING name,
in UINT32 flags,
                                           out UINT32
resultcode)
```

```
</programlisting>
This means <literal>INTERFACE</literal> =
org.freedesktop.DBus, <literal>MEMBER</literal> = StartServiceByName,
<literal>METHOD_CALL</literal> arguments are
<literal>STRING</literal> and <literal>UINT32</literal>,
<literal>METHOD_RETURN</literal> argument
is <literal>UINT32</literal>. Remember that the
<literal>MEMBER</literal> field can't contain any '.' (period)
characters so it's known that the last part of the name in
the "IDL" is the member name.
```

```
</para>
<para>
    In C++ that might end up looking like this:
    <programlisting>
        unsigned int org::freedesktop::DBus::StartServiceByName
(const char *name,
```

```
unsigned int flags);
    </programlisting>
    or equally valid, the return value could be done as an
argument:
    <programlisting>
        void org::freedesktop::DBus::StartServiceByName (const
char *name,
                                                         unsigned
int flags,
                                                         unsigned
int *resultcode);
    </programlisting>
```

It's really up to the API designer how they want to make this look. You could design an API where the namespace wasn't used in C++, using STL or Qt, using varargs, or whatever you wanted.

```
</para>
<para>
    Signals are written as follows:
    <programlisting>
        org.freedesktop.DBus.NameLost (STRING name)
    </programlisting>
    Signals don't specify "in" vs. "out" because only
    a single direction is possible.
</para>
<para>
```

It isn't especially encouraged to use this lame pseudo-IDL in actual API implementations; you might use the native notation for the language you're using, or you might use COM or CORBA IDL, for example.

```
</para>  
</sect3>  
</sect2>
```

```
<sect2 id="message-protocol-handling-invalid">  
  <title>Invalid Protocol and Spec Extensions</title>
```

```
  <para>  
    For security reasons, the D-Bus protocol should be strictly  
parsed and validated, with the exception of defined extension points. Any  
invalid protocol or spec violations should result in immediately  
dropping the connection without notice to the other end. Exceptions should  
be carefully considered, e.g. an exception may be warranted for a  
well-understood idiosyncrasy of a widely-deployed  
implementation. In cases where the other end of a connection is 100% trusted and  
known to be friendly, skipping validation for performance reasons could  
also make sense in certain cases.  
  </para>
```

```
  <para>  
    Generally speaking violations of the "must" requirements in  
this spec should be considered possible attempts to exploit security,  
and violations of the "should" suggestions should be considered legitimate  
(though perhaps they should generate an error in some cases).  
  </para>
```

```
  <para>  
    The following extension points are built in to D-Bus on  
purpose and must not be treated as invalid protocol. The extension points are  
intended for use by future versions of this spec, they are not intended  
for third parties. At the moment, the only way a third party could  
extend D-Bus
```

without breaking interoperability would be to introduce a way to negotiate new feature support as part of the auth protocol, using EXTENSION_-prefixed commands. There is not yet a standard way to negotiate features.

<itemizedlist>
<listitem>
<para>
In the authentication protocol (see <xref linkend="auth-protocol"/>) unknown commands result in an ERROR rather than a disconnect. This enables future extensions to the protocol. Commands starting with EXTENSION_ are reserved for third parties.

</para>
</listitem>
<listitem>
<para>
The authentication protocol supports pluggable auth mechanisms.

</para>
</listitem>
<listitem>
<para>
The address format (see <xref linkend="addresses"/>) supports new kinds of transport.

</para>
</listitem>
<listitem>
<para>
Messages with an unknown type (something other than <literal>METHOD_CALL</literal>, <literal>METHOD_RETURN</literal>, <literal>ERROR</literal>, <literal>SIGNAL</literal>) are ignored.

Unknown-type messages must still be well-formed in the same way as the known messages, however. They still have the normal header and body.

</para>
</listitem>
<listitem>
<para>
Header fields with an unknown or unexpected field code must be ignored, though again they must still be well-formed.

</para>
</listitem>


```
        <listitem>
        <para>
            New standard interfaces (with new methods and signals)
can of course be added.
        </para>
        </listitem>
    </itemizedlist>
</para>
```

```
</sect2>
```

```
</sect1>
```

```
<sect1 id="auth-protocol">
```

```
  <title>Authentication Protocol</title>
```

```
  <para>
```

```
    Before the flow of messages begins, two applications must
    authenticate. A simple plain-text protocol is used for
    authentication; this protocol is a SASL profile, and maps fairly
    directly from the SASL specification. The message encoding is
    NOT used here, only plain text messages.
```

```
  </para>
```

```
  <para>
```

```
    In examples, "C:" and "S:" indicate lines sent by the client and
    server respectively.
```

```
  </para>
```

```
  <sect2 id="auth-protocol-overview">
```

```
    <title>Protocol Overview</title>
```

```
    <para>
```

```
      The protocol is a line-based protocol, where each line ends
with
```

```
      \r\n. Each line begins with an all-caps ASCII command name
containing
```

```
      only the character range [A-Z_], a space, then any arguments
for the
```

```
      command, then the \r\n ending the line. The protocol is
      case-sensitive. All bytes must be in the ASCII character set.
```

```
      Commands from the client to the server are as follows:
```

```
      <itemizedlist>
```

```
      <listitem><para>AUTH [mechanism] [initial-
response]</para></listitem>
```

```
      <listitem><para>CANCEL</para></listitem>
```

```
      <listitem><para>BEGIN</para></listitem>
```

```
      <listitem><para>DATA &lt;data in hex
encoding&gt;</para></listitem>
```

```
      <listitem><para>ERROR [human-readable error
explanation]</para></listitem>
```

```
      <listitem><para>NEGOTIATE_UNIX_FD</para></listitem>
```

```
    </itemizedlist>
```

From server to client are as follows:

```
<itemizedlist>
  <listitem><para>REJECTED &lt;space-separated list of mechanism
names&gt;</para></listitem>
  <listitem><para>OK &lt;GUID in hex&gt;</para></listitem>
  <listitem><para>DATA &lt;data in hex
encoding&gt;</para></listitem>
  <listitem><para>ERROR</para></listitem>
  <listitem><para>AGREE_UNIX_FD</para></listitem>
</itemizedlist>
```

```
</para>
<para>
  Unofficial extensions to the command set must begin with the
letters
```

```
  "EXTENSION_", to avoid conflicts with future official
commands.
```

```
  For example, "EXTENSION_COM_MYDOMAIN_DO_STUFF".
```

```
</para>
```

```
</sect2>
```

```
<sect2 id="auth-nul-byte">
```

```
<title>Special credentials-passing nul byte</title>
```

```
<para>
```

```
  Immediately after connecting to the server, the client must
send a
```

```
  single nul byte. This byte may be accompanied by credentials
information on some operating systems that use sendmsg() with
SCM_CREDS or SCM_CREDENTIALS to pass credentials over UNIX
```

```
domain
```

```
  sockets. However, the nul byte must be sent even on other
kinds of
```

```
  socket, and even on operating systems that do not require a
byte to be
```

```
  sent in order to transmit credentials. The text protocol
described in
```

```
  this document begins after the single nul byte. If the first
byte
```

```
  received from the client is not a nul byte, the server may
disconnect
```

```
  that client.
```

```
</para>
```

```
<para>
```

```
  A nul byte in any context other than the initial byte is an
error;
```

```
  the protocol is ASCII-only.
```

```
</para>
```

```
<para>
```

```
  The credentials sent along with the nul byte may be used with
the
```

```
  SASL mechanism EXTERNAL.
```

```
</para>
```

```
</sect2>
```

```
<sect2 id="auth-command-auth">
  <title>AUTH command</title>
  <para>
    If an AUTH command has no arguments, it is a request to list
    available mechanisms. The server must respond with a REJECTED
    command listing the mechanisms it understands, or with an
error.
  </para>
  <para>
    If an AUTH command specifies a mechanism, and the server
supports
    said mechanism, the server should begin exchanging SASL
    challenge-response data with the client using DATA commands.
  </para>
  <para>
    If the server does not support the mechanism given in the AUTH
mechanisms
    command, it must send either a REJECTED command listing the
    mechanisms it does support, or an error.
  </para>
  <para>
    If the [initial-response] argument is provided, it is intended
for use
    with mechanisms that have no initial challenge (or an empty
initial
    challenge), as if it were the argument to an initial DATA
command. If
    the selected mechanism has an initial challenge and [initial-
response]
    was provided, the server should reject authentication by
sending
    REJECTED.
  </para>
  <para>
    If authentication succeeds after exchanging DATA commands,
    an OK command must be sent to the client.
  </para>
  <para>
    The first octet received by the server after the \r\n of the
BEGIN
    command from the client must be the first octet of the
    authenticated/encrypted stream of D-Bus messages.
  </para>
  <para>
    If BEGIN is received by the server, the first octet received
    by the client after the \r\n of the OK command must be the
    first octet of the authenticated/encrypted stream of D-Bus
    messages.
  </para>
</sect2>
<sect2 id="auth-command-cancel">
  <title>CANCEL Command</title>
```

<para>
At any time up to sending the BEGIN command, the client may
send a CANCEL command. On receiving the CANCEL command, the server
must send a REJECTED command and abort the current authentication
exchange.

</para>

</sect2>

<sect2 id="auth-command-data">

<title>DATA Command</title>

<para>

The DATA command may come from either client or server, and
contains a hex-encoded block of data to be interpreted
according to the SASL mechanism in use.

</para>

<para>

Some SASL mechanisms support sending an "empty string";
FIXME we need some way to do this.

</para>

</sect2>

<sect2 id="auth-command-begin">

<title>BEGIN Command</title>

<para>

The BEGIN command acknowledges that the client has received an
OK command from the server, and that the stream of messages
is about to begin.

</para>

<para>

The first octet received by the server after the \r\n of the
BEGIN command from the client must be the first octet of the
authenticated/encrypted stream of D-Bus messages.

</para>

</sect2>

<sect2 id="auth-command-rejected">

<title>REJECTED Command</title>

<para>

The REJECTED command indicates that the current authentication
exchange has failed, and further exchange of DATA is
inappropriate.

The client would normally try another mechanism, or try
providing different responses to challenges.

</para><para>

Optionally, the REJECTED command has a space-separated list of
available auth mechanisms as arguments. If a server ever

provides

a list of supported mechanisms, it must provide the same list
each time it sends a REJECTED message. Clients are free to
ignore all lists received after the first.

</para>

</sect2>

<sect2 id="auth-command-ok">

<title>OK Command</title>

<para>

The OK command indicates that the client has been authenticated. The client may now proceed with negotiating Unix file descriptor passing. To do that it shall send NEGOTIATE_UNIX_FD to the server.

</para>

<para>

Otherwise, the client must respond to the OK command by sending a BEGIN command, followed by its stream of messages, or by disconnecting. The server must not accept additional commands using this protocol after the BEGIN command has been received. Further communication will be a stream of D-Bus messages (optionally encrypted, as negotiated) rather than this protocol.

</para>

<para>

If a client sends BEGIN the first octet received by the client after the `\r\n` of the OK command must be the first octet of the authenticated/encrypted stream of D-Bus messages.

</para>

<para>

The OK command has one argument, which is the GUID of the server.

See [addresses](#) for more on server GUIDs.

</para>

</sect2>

<sect2 id="auth-command-error">

<title>ERROR Command</title>

<para>

The ERROR command indicates that either server or client did not know a command, does not accept the given command in the current context, or did not understand the arguments to the command.

This allows the protocol to be extended; a client or server can send a command present or permitted only in new protocol versions, and if an ERROR is received instead of an appropriate response, fall back to using some other technique.

</para>

<para>

If an ERROR is sent, the server or client that sent the error must continue as if the command causing the ERROR had never been

received. However, the the server or client receiving the error should try something other than whatever caused the error; if only canceling/rejecting the authentication.

If the D-Bus protocol changes incompatibly at some future time, applications implementing the new protocol would probably be able to check for support of the new protocol by sending a new command and receiving an ERROR from applications that don't understand it. Thus the ERROR feature of the auth protocol is an escape hatch that lets us negotiate extensions or changes to the D-Bus protocol in the future.

NEGOTIATE_UNIX_FD Command

The NEGOTIATE_UNIX_FD command indicates that the client supports Unix file descriptor passing. This command may only be sent after the connection is authenticated, i.e. after OK was received by the client. This command may only be sent on transports that support Unix file descriptor passing.

On receiving NEGOTIATE_UNIX_FD the server must respond with either AGREE_UNIX_FD or ERROR. It shall respond the former if the transport chosen supports Unix file descriptor passing and the server supports this feature. It shall respond the latter if the transport does not support Unix file descriptor passing, the server does not support this feature, or the server decides not to enable file descriptor passing due to security or other reasons.

AGREE_UNIX_FD Command

The AGREE_UNIX_FD command indicates that the server supports Unix file descriptor passing. This command may only be sent after the connection is authenticated, and the client sent NEGOTIATE_UNIX_FD to enable Unix file descriptor passing. This command may only be sent on transports that support Unix file descriptor passing.

On receiving AGREE_UNIX_FD the client must respond with BEGIN,

followed by its stream of messages, or by disconnecting. The server must not accept additional commands using this protocol after the BEGIN command has been received. Further communication will be a stream of D-Bus messages (optionally encrypted, as negotiated) rather than this protocol.

</para>

</sect2>

<sect2 id="auth-command-future">

<title>Future Extensions</title>

<para>

Future extensions to the authentication and negotiation protocol are possible. For that new commands may be introduced. If a client or server receives an unknown command it shall respond with ERROR and not consider this fatal. New commands may be introduced both before, and after authentication, i.e. both before and after the OK command.

</para>

</sect2>

<sect2 id="auth-examples">

<title>Authentication examples</title>

<para>

<figure>

<title>Example of successful magic cookie authentication</title>

<programlisting>

(MAGIC_COOKIE is a made up mechanism)

C: AUTH MAGIC_COOKIE 3138363935333137393635383634

S: OK 1234deadbeef

C: BEGIN

</programlisting>

</figure>

<figure>

<title>Example of finding out mechanisms then picking one</title>

<programlisting>

C: AUTH

S: REJECTED KERBEROS_V4 SKEY

C: AUTH SKEY 7ab83f32ee

S: DATA 8799cabb2ea93e

C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f

S: OK 1234deadbeef

C: BEGIN

</programlisting>

</figure>

<figure>

<title>Example of client sends unknown command then falls back to regular auth</title>

<programlisting>

C: FOOBAR

S: ERROR

```
        C: AUTH MAGIC_COOKIE 3736343435313230333039
        S: OK 1234deadbeef
        C: BEGIN
    </programlisting>
</figure>
<figure>
  <title>Example of server doesn't support initial auth
mechanism</title>
  <programlisting>
    C: AUTH MAGIC_COOKIE 3736343435313230333039
    S: REJECTED KERBEROS_V4 SKEY
    C: AUTH SKEY 7ab83f32ee
    S: DATA 8799cabb2ea93e
    C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f
    S: OK 1234deadbeef
    C: BEGIN
  </programlisting>
</figure>
<figure>
  <title>Example of wrong password or the like followed by
successful retry</title>
  <programlisting>
    C: AUTH MAGIC_COOKIE 3736343435313230333039
    S: REJECTED KERBEROS_V4 SKEY
    C: AUTH SKEY 7ab83f32ee
    S: DATA 8799cabb2ea93e
    C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f
    S: REJECTED
    C: AUTH SKEY 7ab83f32ee
    S: DATA 8799cabb2ea93e
    C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f
    S: OK 1234deadbeef
    C: BEGIN
  </programlisting>
</figure>
<figure>
  <title>Example of skey cancelled and restarted</title>
  <programlisting>
    C: AUTH MAGIC_COOKIE 3736343435313230333039
    S: REJECTED KERBEROS_V4 SKEY
    C: AUTH SKEY 7ab83f32ee
    S: DATA 8799cabb2ea93e
    C: CANCEL
    S: REJECTED
    C: AUTH SKEY 7ab83f32ee
    S: DATA 8799cabb2ea93e
    C: DATA 8ac876e8f68ee9809bfa876e6f9876g8fa8e76e98f
    S: OK 1234deadbeef
    C: BEGIN
  </programlisting>
</figure>
<figure>
```


<title>Example of successful magic cookie authentication with successful negotiation of Unix FD passing</title>

<programlisting>

(MAGIC_COOKIE is a made up mechanism)

C: AUTH MAGIC_COOKIE 3138363935333137393635383634

S: OK 1234deadbeef

C: NEGOTIATE_UNIX_FD

S: AGREE_UNIX_FD

C: BEGIN

</programlisting>

</figure>

<figure>

<title>Example of successful magic cookie authentication with unsuccessful negotiation of Unix FD passing</title>

<programlisting>

(MAGIC_COOKIE is a made up mechanism)

C: AUTH MAGIC_COOKIE 3138363935333137393635383634

S: OK 1234deadbeef

C: NEGOTIATE_UNIX_FD

S: ERROR

C: BEGIN

</programlisting>

</figure>

</para>

</sect2>

<sect2 id="auth-states">

<title>Authentication state diagrams</title>

<para>

This section documents the auth protocol in terms of a state machine for the client and the server. This is probably the most robust way to implement the protocol.

</para>

<sect3 id="auth-states-client">

<title>Client states</title>

<para>

To more precisely describe the interaction between the protocol state machine and the authentication mechanisms the following notation is used: MECH(CHALL) means that the server challenge CHALL was fed to the mechanism MECH, which returns one of

<itemizedlist>

<listitem>

<para>

CONTINUE(RESP) means continue the auth conversation and send RESP as the response to the server;

</para>

</listitem>

<listitem>

<para>

OK(Resp) means that after sending Resp to the server the client side of the auth conversation is finished and the server should return "OK";

</para>

</listitem>

<listitem>

<para>

ERROR means that CHALL was invalid and could not be processed.

</para>

</listitem>

</itemizedlist>

Both Resp and CHALL may be empty.

</para>

<para>

The Client starts by getting an initial response from the default mechanism and sends AUTH MECH Resp, or AUTH MECH if the mechanism did not provide an initial response. If the mechanism returns CONTINUE, the client starts in state *WaitingForData*, if the mechanism returns OK the client starts in state *WaitingForOK*.

</para>

<para>

The client should keep track of available mechanisms and which it mechanisms it has already attempted. This list is used to decide which AUTH command to send. When the list is exhausted, the client should give up and close the connection.

</para>

<formalpara>

<title>*WaitingForData*</title>

<para>

<itemizedlist>

<listitem>

<para>

Receive DATA CHALL

<simplelist>

<member>

MECH(CHALL) returns CONTINUE (Resp) → send DATA Resp, goto

WaitingForData

</member>

```

    <member>
        MECH(CHALL) returns OK(ESP) &rarr; send DATA
        RESP, goto <emphasis>WaitingForOK</emphasis>
    </member>

    <member>
        MECH(CHALL) returns ERROR &rarr; send ERROR
        [msg], goto <emphasis>WaitingForData</emphasis>
    </member>
</simplelist>
</para>
</listitem>

<listitem>
    <para>
        Receive REJECTED [mechs] &rarr;
        send AUTH [next mech], goto
        WaitingForData or <emphasis>WaitingForOK</emphasis>
    </para>
</listitem>
<listitem>
    <para>
        Receive ERROR &rarr; send
        CANCEL, goto
        <emphasis>WaitingForReject</emphasis>
    </para>
</listitem>
<listitem>
    <para>
        Receive OK &rarr; send
        BEGIN, terminate auth
        conversation, authenticated
    </para>
</listitem>
<listitem>
    <para>
        Receive anything else &rarr; send
        ERROR, goto
        <emphasis>WaitingForData</emphasis>
    </para>
</listitem>
</itemizedlist>
</para>
</formalpara>

<formalpara>
    <title><emphasis>WaitingForOK</emphasis></title>
    <para>
        <itemizedlist>
            <listitem>
                <para>

```

```

        Receive OK &rarr; send BEGIN, terminate auth
        conversation, <emphasis>authenticated</emphasis>
    </para>
</listitem>
<listitem>
    <para>
        Receive REJECT [mechs] &rarr; send AUTH [next mech],
        goto <emphasis>WaitingForData</emphasis> or
        <emphasis>WaitingForOK</emphasis>
    </para>
</listitem>

<listitem>
    <para>
        Receive DATA &rarr; send CANCEL, goto
        <emphasis>WaitingForReject</emphasis>
    </para>
</listitem>

<listitem>
    <para>
        Receive ERROR &rarr; send CANCEL, goto
        <emphasis>WaitingForReject</emphasis>
    </para>
</listitem>

<listitem>
    <para>
        Receive anything else &rarr; send ERROR, goto
        <emphasis>WaitingForOK</emphasis>
    </para>
</listitem>
</itemizedlist>
</para>
</formalpara>

<formalpara>
    <title><emphasis>WaitingForReject</emphasis></title>
    <para>
        <itemizedlist>
            <listitem>
                <para>
                    Receive REJECT [mechs] &rarr; send AUTH [next mech],
                    goto <emphasis>WaitingForData</emphasis> or
                    <emphasis>WaitingForOK</emphasis>
                </para>
            </listitem>

            <listitem>
                <para>
                    Receive anything else &rarr; terminate auth
                    conversation, disconnect
                </para>
            </listitem>
        </itemizedlist>
    </para>
</formalpara>

```

```
        </para>
      </listitem>
    </itemizedlist>
  </para>
</formalpara>
```

```
</sect3>
```

```
<sect3 id="auth-states-server">
  <title>Server states</title>
```

```
<para>
  For the server MECH(Resp) means that the client response
  Resp was fed to the the mechanism MECH, which returns one of
```

```
<itemizedlist>
  <listitem>
    <para>
      CONTINUE(CHALL) means continue the auth conversation
```

and

```
      send CHALL as the challenge to the client;
    </para>
  </listitem>
```

```
<listitem>
  <para>
    OK means that the client has been successfully
    authenticated;
  </para>
</listitem>
```

```
<listitem>
  <para>
    REJECT means that the client failed to authenticate or
    there was an error in Resp.
  </para>
</listitem>
</itemizedlist>
```

```
The server starts out in state
<emph>WaitingForAuth</emph>. If the client is
rejected too many times the server must disconnect the
client.
```

```
</para>
```

```
<formalpara>
  <title><emph>WaitingForAuth</emph></title>
```

```
<para>
  <itemizedlist>
```

```
    <listitem>
      <para>
```

```
    Receive AUTH &rarr; send REJECTED [mechs], goto
    <emphasis>WaitingForAuth</emphasis>
</para>
</listitem>

<listitem>
  <para>
    Receive AUTH MECH RESP

    <simplelist>
      <member>
        MECH not valid mechanism &rarr; send REJECTED
        [mechs], goto
        <emphasis>WaitingForAuth</emphasis>
      </member>

      <member>
        MECH(RESP) returns CONTINUE(CHALL) &rarr; send
        DATA CHALL, goto
        <emphasis>WaitingForData</emphasis>
      </member>

      <member>
        MECH(RESP) returns OK &rarr; send OK, goto
        <emphasis>WaitingForBegin</emphasis>
      </member>

      <member>
        MECH(RESP) returns REJECT &rarr; send REJECTED
        [mechs], goto
        <emphasis>WaitingForAuth</emphasis>
      </member>
    </simplelist>
  </para>
</listitem>

<listitem>
  <para>
    Receive BEGIN &rarr; terminate
    auth conversation, disconnect
  </para>
</listitem>

<listitem>
  <para>
    Receive ERROR &rarr; send REJECTED [mechs], goto
    <emphasis>WaitingForAuth</emphasis>
  </para>
</listitem>

<listitem>
  <para>
```

```

        Receive anything else &rarr; send
        ERROR, goto
        <emphasis>WaitingForAuth</emphasis>
    </para>
</listitem>
</itemizedlist>
</para>
</formalpara>

<formalpara>
    <title><emphasis>WaitingForData</emphasis></title>
    <para>
        <itemizedlist>
            <listitem>
                <para>
                    Receive DATA RESP
                    <simplelist>
                        <member>
                            MECH(RESP) returns CONTINUE(CHALL) &rarr; send
                            DATA CHALL, goto
                            <emphasis>WaitingForData</emphasis>
                        </member>

                        <member>
                            MECH(RESP) returns OK &rarr; send OK, goto
                            <emphasis>WaitingForBegin</emphasis>
                        </member>

                        <member>
                            MECH(RESP) returns REJECT &rarr; send REJECTED
                            [mechs], goto
                            <emphasis>WaitingForAuth</emphasis>
                        </member>
                    </simplelist>
                </para>
            </listitem>

            <listitem>
                <para>
                    Receive BEGIN &rarr; terminate auth conversation,
                    disconnect
                </para>
            </listitem>

            <listitem>
                <para>
                    Receive CANCEL &rarr; send REJECTED [mechs], goto
                    <emphasis>WaitingForAuth</emphasis>
                </para>
            </listitem>
        </itemizedlist>
    </para>
</formalpara>

```

```
<listitem>
  <para>
    Receive ERROR &rarr; send REJECTED [mechs], goto
    <emphasis>WaitingForAuth</emphasis>
  </para>
</listitem>

<listitem>
  <para>
    Receive anything else &rarr; send ERROR, goto
    <emphasis>WaitingForData</emphasis>
  </para>
</listitem>
</itemizedlist>
</para>
</formalpara>

<formalpara>
  <title><emphasis>WaitingForBegin</emphasis></title>
  <para>
    <itemizedlist>
      <listitem>
        <para>
          Receive BEGIN &rarr; terminate auth conversation,
          client authenticated
        </para>
      </listitem>

      <listitem>
        <para>
          Receive CANCEL &rarr; send REJECTED [mechs], goto
          <emphasis>WaitingForAuth</emphasis>
        </para>
      </listitem>

      <listitem>
        <para>
          Receive ERROR &rarr; send REJECTED [mechs], goto
          <emphasis>WaitingForAuth</emphasis>
        </para>
      </listitem>

      <listitem>
        <para>
          Receive anything else &rarr; send ERROR, goto
          <emphasis>WaitingForBegin</emphasis>
        </para>
      </listitem>
    </itemizedlist>
  </para>
</formalpara>
```



```
</sect3>

</sect2>
<sect2 id="auth-mechanisms">
  <title>Authentication mechanisms</title>
  <para>
    This section describes some new authentication mechanisms.
    D-Bus also allows any standard SASL mechanism of course.
  </para>
  <sect3 id="auth-mechanisms-sha">
    <title>DBUS_COOKIE_SHA1</title>
    <para>
      The DBUS_COOKIE_SHA1 mechanism is designed to establish that
      a client
      being
      a secret
      authenticated.
      home
      directory.
    </para>
    <para>
      Throughout this description, "hex encoding" must output the
      digits
      used
      in the DBUS_COOKIE_SHA1 mechanism.
    </para>
    <para>
      Authentication proceeds as follows:
      <itemizedlist>
        <listitem>
          <para>
            authenticate
            as, hex-encoded.
          </para>
        </listitem>
        <listitem>
          <para>
            below); a
            the client
            a
            encoded into
            one, single string.
          </para>
        </listitem>
      </itemizedlist>
    </para>
  </sect3>
</sect2>
```

```
</para>
</listitem>
<listitem>
  <para>
    The client locates the cookie and generates its own
    randomly-generated challenge string. The client then
concatenates
    the server's decoded challenge, a ":" character, its
own challenge,
    another ":" character, and the cookie. It computes the
SHA-1 hash
    of this composite string as a hex digest. It
concatenates the
    client's challenge string, a space character, and the
SHA-1 hex
    digest, hex-encodes the result and sends it back to
the server.
  </para>
</listitem>
<listitem>
  <para>
    The server generates the same concatenated string used
by the
    client and computes its SHA-1 hash. It compares the
hash with
    the hash received from the client; if the two hashes
match, the
    client is authenticated.
  </para>
</listitem>
</itemizedlist>
</para>
<para>
  Each server has a "cookie context," which is a name that
identifies a
  set of cookies that apply to that server. A sample context
might be
  "org_freedesktop_session_bus". Context names must be valid
ASCII,
  nonzero length, and may not contain the characters slash
  ("/"),
  backslash ("\\"), space (" "), newline ("\n"), carriage
return ("\r"),
  tab ("\t"), or period ("."). There is a default context,
  "org_freedesktop_general" that's used by servers that do not
specify
  otherwise.
</para>
<para>
  Cookies are stored in a user's home directory, in the
directory
  <filename>~/.dbus-keyrings/</filename>. This directory must
```

not be readable or writable by other users. If it is, clients and servers must ignore it. The directory contains cookie files named after the cookie context.

</para>

<para>

A cookie file contains one cookie per line. Each line has three space-separated fields:

<itemizedlist>

<listitem>

<para>

integer and The cookie ID number, which must be a non-negative integer and may not be used twice in the same file.

</para>

</listitem>

<listitem>

<para>

epoch The cookie's creation time, in UNIX seconds-since-the-epoch format.

</para>

</listitem>

<listitem>

<para>

bytes. The cookie increases The cookie itself, a hex-encoded random block of bytes. The cookie may be of any length, though obviously security increases as the length increases.

</para>

</listitem>

</itemizedlist>

</para>

<para>

Only server processes modify the cookie file.

They must do so with this procedure:

<itemizedlist>

<listitem>

<para>

name of the file creation reasonable existing lock real file Create a lockfile name by appending ".lock" to the cookie file. The server should attempt to create this using <literal>O_CREAT | O_EXCL</literal>. If file fails, the lock fails. Servers should retry for a period of time, then they may choose to delete an existing lock to keep users from having to manually delete a stale lock. <footnote><para>Lockfiles are used instead of

```

locking      locking <literal>fcntl()</literal> because real
locking      implementations are still flaky on network
              filesystems.</para></footnote>
              </para>
              </listitem>
              <listitem>
                <para>
the cookie    Once the lockfile has been created, the server loads
              file. It should then delete any cookies that are old
              (the
              timeout can be fairly short), or more than a
reasonable   time in the future (so that cookies never accidentally
              become permanent, if the clock was set far into the
future       at some point). If no recent keys remain, the
              server may generate a new key.
              </para>
              </listitem>
              <listitem>
                <para>
              The pruned and possibly added-to cookie file
              must be resaved atomically (using a temporary
              file which is rename()'d).
              </para>
              </listitem>
              <listitem>
                <para>
              The lock must be dropped by deleting the lockfile.
              </para>
              </listitem>
              </itemizedlist>
            </para>
            <para>
              Clients need not lock the file in order to load it,
              because servers are required to save the file atomically.
            </para>
          </sect3>
        </sect2>
      </sect1>
    <sect1 id="addresses">
      <title>Server Addresses</title>
      <para>
        Server addresses consist of a transport name followed by a
colon, and
        then an optional, comma-separated list of keys and values in the
form key=value.
        Each value is escaped.
      </para>
      <para>

```

For example:
<programlisting>unix:path=/tmp/dbus-test</programlisting>
Which is the address to a unix socket with the path /tmp/dbus-test.

</para>
<para>
Value escaping is similar to URI escaping but simpler.

<itemizedlist>
<listitem>
<para>
The set of optionally-escaped bytes is:
<literal>[0-9A-Za-z_-.\\]</literal>. To escape, each
<emphasis>byte</emphasis> (note, not character) which is
not in the
ASCII
in hex.
The hex value must always be two digits, even if the first
digit is
desired.
zero. The optionally-escaped bytes may be escaped if
desired.

</para>
</listitem>
<listitem>
<para>
To unescape, append each byte in the value; if a byte is
an ASCII
following
percent (<literal>%</literal>) character then append the
hex value instead. It is an error if a
<literal>%</literal> byte
does not have two hex digits following. It is an error if
a
non-optionally-escaped byte is seen unescaped.

</para>
</listitem>
</itemizedlist>
The set of optionally-escaped bytes is intended to preserve
address
readability and convenience.

</para>
<para>
A server may specify a key-value pair with the key
<literal>guid</literal>
and the value a hex-encoded 16-byte sequence. <xref
linkend="uuids"/>
describes the format of the <literal>guid</literal> field. If
present,
this UUID may be used to distinguish one server address from
another. A

server should use a different UUID for each address it listens on. For example, if a message bus daemon offers both UNIX domain socket and TCP connections, but treats clients the same regardless of how they connect, those two connections are equivalent post-connection but should have distinct UUIDs to distinguish the kinds of connection.

The intent of the address UUID feature is to allow a client to avoid opening multiple identical connections to the same server, by allowing the client to check whether an address corresponds to an already-existing connection. Comparing two addresses is insufficient, because addresses can be recycled by distinct servers, and equivalent addresses may look different if simply compared as strings (for example, the host in a TCP address can be given as an IP address or as a hostname).

Note that the address key is `guid` even though the rest of the API and documentation says "UUID," for historical reasons.

[FIXME clarify if attempting to connect to each is a requirement or just a suggestion]
When connecting to a server, multiple server addresses can be separated by a semi-colon. The library will then try to connect to the first address and if that fails, it'll try to connect to the next one specified, and so forth. For example

```
<programlisting>unix:path=/tmp/dbus-test;unix:path=/tmp/dbus-test2</programlisting>
```

</sect1>

<sect1 id="transports">
<title>Transports</title>
<para>
[FIXME we need to specify in detail each transport and its possible arguments]

Current transports include: unix domain sockets (including abstract namespace on linux), launchd, systemd, TCP/IP, an executed subprocess and a debug/testing transport using in-process pipes. Future possible transports include one that tunnels over X11 protocol.

<sect2 id="transports-unix-domain-sockets">

<title>Unix Domain Sockets</title>

<para>

Unix domain sockets can be either paths in the file system or on Linux kernels, they can be abstract which are similar to paths but do not show up in the file system.

</para>

<para>

When a socket is opened by the D-Bus library it truncates the path name right before the first trailing Nul byte. This is true for both normal paths and abstract paths. Note that this is a departure from previous versions of D-Bus that would create sockets with a fixed length path name. Names which were shorter than the fixed length would be padded by Nul bytes.

</para>

<para>

Unix domain sockets are not available on Windows.

</para>

<sect3 id="transports-unix-domain-sockets-addresses">

<title>Server Address Format</title>

<para>

Unix domain socket addresses are identified by the "unix:" prefix

and support the following key/value pairs:

</para>

<informaltable>

<tgroup cols="3">

<thead>

<row>

<entry>Name</entry>

<entry>Values</entry>

<entry>Description</entry>

</row>

</thead>

<tbody>

<row>

<entry>path</entry>

<entry>(path)</entry>

```

        <entry>path of the unix domain socket. If set, the
"tmpdir" and "abstract" key must not be set.</entry>
    </row>
    <row>
        <entry>tmpdir</entry>
        <entry>(path)</entry>
        <entry>temporary directory in which a socket file with a
random file name starting with 'dbus-' will be created by the server.
This key can only be used in server addresses, not in client
addresses. If set, the "path" and "abstract" key must not be
set.</entry>
    </row>
    <row>
        <entry>abstract</entry>
        <entry>(string)</entry>
        <entry>unique string (path) in the abstract namespace. If
set, the "path" or "tmpdir" key must not be set.</entry>
    </row>
</tbody>
</tgroup>
</informaltable>
</sect3>
</sect2>
<sect2 id="transports-launchd">
    <title>launchd</title>
    <para>
        launchd is an open-source server management system that
replaces init, inetd
        and cron on Apple Mac OS X versions 10.4 and above. It
provides a common session
        bus address for each user and deprecates the X11-enabled D-Bus
launcher on OSX.
    </para>

    <para>
        launchd allocates a socket and provides it with the unix path
through the
        DBUS_LAUNCHD_SESSION_BUS_SOCKET variable in launchd's
environment. Every process
        spawned by launchd (or dbus-daemon, if it was started by
launchd) can access
        it through its environment.
        Other processes can query for the launchd socket by executing:
        $ launchctl getenv DBUS_LAUNCHD_SESSION_BUS_SOCKET
        This is normally done by the D-Bus client library so doesn't
have to be done
        manually.
    </para>
    <para>
        launchd is not available on Microsoft Windows.
    </para>
</sect2 id="transports-launchd">
</sect3 id="transports-launchd-addresses">

```



```

<title>Server Address Format</title>
<para>
    launchd addresses are identified by the "launchd:" prefix
    and support the following key/value pairs:
</para>
<informaltable>
    <tgroup cols="3">
        <thead>
            <row>
                <entry>Name</entry>
                <entry>Values</entry>
                <entry>Description</entry>
            </row>
        </thead>
        <tbody>
            <row>
                <entry>env</entry>
                <entry>(environment variable)</entry>
                <entry>path of the unix domain socket for the launchd
created dbus-daemon.</entry>
            </row>
        </tbody>
    </tgroup>
</informaltable>
</sect3>
</sect2>
<sect2 id="transports-systemd">
    <title>systemd</title>
    <para>
        systemd is an open-source server management system that
        replaces init and inetd on newer Linux systems. It supports
        socket activation. The D-Bus systemd transport is used to
acquire
        socket activation file descriptors from systemd and use them
        as D-Bus transport when the current process is spawned by
        socket activation from it.
    </para>
    <para>
        The systemd transport accepts only one or more Unix domain or
        TCP streams sockets passed in via socket activation.
    </para>
    <para>
        The systemd transport is not available on non-Linux operating
systems.
    </para>
    <para>
        The systemd transport defines no parameter keys.
    </para>
</sect2>
<sect2 id="transports-tcp-sockets">
    <title>TCP Sockets</title>
    <para>

```

The tcp transport provides TCP/IP based connections between clients

located on the same or different hosts.

</para>

<para>

Using tcp transport without any additional secure authentication mechanismus

over a network is unsecure.

</para>

<para>

Windows notes: Because of the tcp stack on Windows does not provide sending

credentials over a tcp connection, the EXTERNAL

authentication

mechanismus does not work.

</para>

<sect3 id="transports-tcp-sockets-addresses">

<title>Server Address Format</title>

<para>

TCP/IP socket addresses are identified by the "tcp:" prefix and support the following key/value pairs:

</para>

<informaltable>

<tgroup cols="3">

<thead>

<row>

<entry>Name</entry>

<entry>Values</entry>

<entry>Description</entry>

</row>

</thead>

<tbody>

<row>

<entry>host</entry>

<entry>(string)</entry>

<entry>dns name or ip address</entry>

</row>

<row>

<entry>port</entry>

<entry>(number)</entry>

<entry>The tcp port the server will open. A zero value let

the server

choose a free port provided from the underlying operating

system.

libdbus is able to retrieve the real used port from the

server.

</entry>

</row>

<row>

<entry>family</entry>

<entry>(string)</entry>

```
    <entry>If set, provide the type of socket family either
"ipv4" or "ipv6". If unset, the family is unspecified.</entry>
```

```
  </row>
```

```
</tbody>
```

```
</tgroup>
```

```
</informaltable>
```

```
</sect3>
```

```
</sect2>
```

```
<sect2 id="transports-nonce-tcp-sockets">
```

```
<title>Nonce-secured TCP Sockets</title>
```

```
<para>
```

The nonce-tcp transport provides a secured TCP transport, using a simple authentication mechanism to ensure that only clients with read access to a certain location in the filesystem can connect to the server.

The server writes a secret, the nonce, to a file and an incoming client connection is only accepted if the client sends the nonce right after the connect. The nonce mechanism requires no setup and is orthogonal to the higher-level authentication mechanisms described in the Authentication section.

```
</para>
```

```
<para>
```

On start, the server generates a random 16 byte nonce and writes it to a file in the user's temporary directory. The nonce file location is published as part of the server's D-Bus address using the "noncefile" key-value pair.

After an accept, the server reads 16 bytes from the socket. If the read bytes do not match the nonce stored in the nonce file, the server MUST immediately drop the connection.

If the nonce match the received byte sequence, the client is accepted and the transport behaves like an unsecured tcp transport.

```
</para>
```

```
<para>
```

After a successful connect to the server socket, the client MUST read the nonce from the file published by the server via the noncefile= key-value pair and send it over the socket. After that, the transport behaves like an unsecured tcp transport.

```
</para>
```

```

<sect3 id="transports-nonce-tcp-sockets-addresses">
  <title>Server Address Format</title>
  <para>
    Nonce TCP/IP socket addresses uses the "nonce-tcp:" prefix
    and support the following key/value pairs:
  </para>
  <informaltable>
    <tgroup cols="3">
      <thead>
        <row>
          <entry>Name</entry>
          <entry>Values</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
          <entry>host</entry>
          <entry>(string)</entry>
          <entry>dns name or ip address</entry>
        </row>
        <row>
          <entry>port</entry>
          <entry>(number)</entry>
          <entry>The tcp port the server will open. A zero value let
the server
system.
          <entry>libdbus is able to retrieve the real used port from the
server.
          </entry>
        </row>
        <row>
          <entry>family</entry>
          <entry>(string)</entry>
          <entry>If set, provide the type of socket family either
"ipv4" or "ipv6". If unset, the family is unspecified.</entry>
        </row>
        <row>
          <entry>noncefile</entry>
          <entry>(path)</entry>
          <entry>file location containing the secret</entry>
        </row>
      </tbody>
    </tgroup>
  </informaltable>
</sect3>
</sect2>
<sect2 id="transports-exec">
  <title>Executed Subprocesses on Unix</title>
  <para>
    This transport forks off a process and connects its standard

```

input and standard output with an anonymous Unix domain socket. This socket is then used for communication by the transport. This transport may be used to use out-of-process forwarder programs as basis for the D-Bus protocol.

The forked process will inherit the standard error output and process group from the parent process.

Executed subprocesses are not available on Windows.

Server Address Format

Executed subprocess addresses are identified by the "unixexec:" prefix and support the following key/value pairs:

Name	Values	Description
path	(path)	Path of the binary to execute, either an absolute path or a binary name that is searched for in the default search path of the OS. This corresponds to the first argument of <code>execlp()</code> . This key is mandatory.
argv0	(string)	The program name to use when executing the binary. If omitted the same value as specified for <code>path=</code> will be used. This corresponds to the second argument of <code>execlp()</code> .
argv1, argv2, ...	(string)	Arguments to pass to the binary. This corresponds to the third and later arguments of <code>execlp()</code> . If a specific <code>argvX</code> is not specified no further <code>argvY</code> for <code>Y > X</code> are taken into account.

'bin' the shared dbus library. If the library is located in a subdirectory the installation root is the directory above, otherwise the directory where the library lives is taken as

installation root.

```
<programlisting>
    &lt;install-root&gt;/bin/[lib]dbus-1.dll
    &lt;install-root&gt;/[lib]dbus-1.dll
</programlisting>
```

```
</para>
```

```
</listitem>
```

```
<listitem>
```

```
<para>
```

"*user" - limit session bus to the recent user.

```
</para>
```

```
</listitem>
```

```
<listitem>
```

```
<para>
```

other values - specify dedicated session bus like

"release",

"debug" or other

```
</para>
```

```
</listitem>
```

```
</itemizedlist>
```

```
</entry>
```

```
</row>
```

```
</tbody>
```

```
</tgroup>
```

```
</informaltable>
```

```
</sect3>
```

```
<sect3 id="meta-transports-autolaunch-windows-implementation">
```

```
<title>Windows implementation</title>
```

```
<para>
```

On start, the server opens a platform specific transport, creates a mutex and a shared memory section containing the related session bus address.

This mutex will be inspected by the dbus client library to detect a

running dbus session bus. The access to the mutex and the shared memory

section are protected by global locks.

```
</para>
```

```
<para>
```

In the recent implementation the autolaunch transport uses a tcp transport

on localhost with a port choosen from the operating system.

This detail may

change in the future.

</para>
<para>
Disclaimer: The recent implementation is in an early state and
may not
work in all circumstances and/or may have security issues.
Because of this
the implementation is not documented yet.
</para>
</sect3>
</sect2>
</sect1>

<sect1 id="uuids">
<title>UUIDs</title>
<para>
A working D-Bus implementation uses universally-unique IDs in
two places.
First, each server address has a UUID identifying the address,
as described in <xref linkend="addresses"/>. Second, each
operating
system kernel instance running a D-Bus client or server has a
UUID
identifying that kernel, retrieved by invoking the method
org.freedesktop.DBus.Peer.GetMachineId() (see <xref
linkend="standard-interfaces-peer"/>).
</para>
<para>
The term "UUID" in this document is intended literally, i.e. an
identifier that is universally unique. It is not intended to
refer to
RFC4122, and in fact the D-Bus UUID is not compatible with that
RFC.
</para>
<para>
The UUID must contain 128 bits of data and be hex-encoded. The
hex-encoded string may not contain hyphens or other non-hex-
digit
characters, and it must be exactly 32 characters long. To
generate a
UUID, the current reference implementation concatenates 96 bits
of random
data followed by the 32-bit time in seconds since the UNIX epoch
(in big
endian byte order).
</para>
<para>
It would also be acceptable and probably better to simply
generate 128
bits of random data, as long as the random number generator is
of high
quality. The timestamp could conceivably help if the random bits
are not

very random. With a quality random number generator, collisions are extremely unlikely even with only 96 bits, so it's somewhat academic.

</para>

<para>

Implementations should, however, stick to random data for the first 96 bits of the UUID.

</para>

</sect1>

<sect1 id="standard-interfaces">

<title>Standard Interfaces</title>

<para>

See <xref linkend="message-protocol-types-notation"/> for details on

the notation used in this section. There are some standard interfaces

that may be useful across various D-Bus applications.

</para>

<sect2 id="standard-interfaces-peer">

<title><literal>org.freedesktop.DBus.Peer</literal></title>

<para>

The <literal>org.freedesktop.DBus.Peer</literal> interface has two methods:

<programlisting>

org.freedesktop.DBus.Peer.Ping ()

org.freedesktop.DBus.Peer.GetMachineId (out STRING machine_uuid)

</programlisting>

</para>

<para>

On receipt of the <literal>METHOD_CALL</literal> message <literal>org.freedesktop.DBus.Peer.Ping</literal>, an application should do

nothing other than reply with a

<literal>METHOD_RETURN</literal> as

usual. It does not matter which object path a ping is sent to. The

reference implementation handles this method automatically.

</para>

<para>

On receipt of the <literal>METHOD_CALL</literal> message <literal>org.freedesktop.DBus.Peer.GetMachineId</literal>, an application should

reply with a <literal>METHOD_RETURN</literal> containing a hex-encoded

UUID representing the identity of the machine the process is running on.

This UUID must be the same for all processes on a single system at least

until that system next reboots. It should be the same across reboots if possible, but this is not always possible to implement and is not

guaranteed.

It does not matter which object path a GetMachineId is sent to. The

reference implementation handles this method automatically.

</para>

<para>

The UUID is intended to be per-instance-of-the-operating-system, so may represent

a virtual machine running on a hypervisor, rather than a physical machine.

Basically if two processes see the same UUID, they should also see the same

shared memory, UNIX domain sockets, process IDs, and other features that require

a running OS kernel in common between the processes.

</para>

<para>

The UUID is often used where other programs might use a hostname. Hostnames

can change without rebooting, however, or just be "localhost" - so the UUID

is more robust.

</para>

<para>

<xref linkend="uuids"/> explains the format of the UUID.

</para>

</sect2>

<sect2 id="standard-interfaces-introspectable">

<title><literal>org.freedesktop.DBus.Introspectable</literal></title>

<para>

This interface has one method:

<programlisting>

org.freedesktop.DBus.Introspectable.Introspect (out STRING xml_data)

</programlisting>

</para>

<para>

Objects instances may implement

<literal>Introspect</literal> which returns an XML description of

the object, including its interfaces (with signals and methods), objects

below it in the object path tree, and its properties.

</para>

<para>

`<xref linkend="introspection-format"/>` describes the format of this XML string.

`</para>`

`</sect2>`

`<sect2 id="standard-interfaces-properties">`

`<title><literal>org.freedesktop.DBus.Properties</literal></title>`

`<para>`

Many native APIs will have a concept of object `<firstterm>properties</firstterm>` or `<firstterm>attributes</firstterm>`. These can be exposed via the

`<literal>org.freedesktop.DBus.Properties</literal>` interface.

`</para>`

`<para>`

`<programlisting>`

```
org.freedesktop.DBus.Properties.Get (in STRING
interface_name,
                                     in STRING
property_name,
                                     out VARIANT value);
org.freedesktop.DBus.Properties.Set (in STRING
interface_name,
                                     in STRING
property_name,
                                     in VARIANT value);
org.freedesktop.DBus.Properties.GetAll (in STRING
interface_name,
                                     out
DICT<STRING,VARIANT> props);
```

`</programlisting>`

`</para>`

`<para>`

It is conventional to give D-Bus property names consisting of capitalized words without punctuation ("CamelCase"), like `<link linkend="message-protocol-names-member">member names</link>`.

For instance, the GObject property `<literal>connection-status</literal>` or the Qt property `<literal>connectionStatus</literal>` could be represented on D-

Bus

as `<literal>ConnectionStatus</literal>`.

`</para>`

`<para>`

Strictly speaking, D-Bus property names are not required to follow

the same naming restrictions as member names, but D-Bus property

names that would not be valid member names (in particular, GObject-style dash-separated property names) can cause interoperability

problems and should be avoided.

</para>

<para>

The available properties and whether they are writable can be determined

by calling

<literal>org.freedesktop.DBus.Introspectable.Introspect</literal>, see <xref linkend="standard-interfaces-introspectable"/>.

</para>

<para>

An empty string may be provided for the interface name; in this case,

if there are multiple properties on an object with the same name,

the results are undefined (picking one by according to an arbitrary

deterministic rule, or returning an error, are the reasonable possibilities).

</para>

<para>

If one or more properties change on an object, the

<literal>org.freedesktop.DBus.Properties.PropertiesChanged</literal> signal may be emitted (this signal was added in 0.14):

</para>

<para>

<programlisting>

```
org.freedesktop.DBus.Properties.PropertiesChanged
```

```
(STRING interface_name,
```

```
DICTIONARY<STRING,VARIANT> changed_properties,
```

```
ARRAY<STRING> invalidated_properties);
```

</programlisting>

</para>

<para>

where <literal>changed_properties</literal> is a dictionary containing the changed properties with the new values and <literal>invalidated_properties</literal> is an array of properties that changed but the value is not conveyed.

</para>

<para>

Whether the <literal>PropertiesChanged</literal> signal is supported can be determined by calling

<literal>org.freedesktop.DBus.Introspectable.Introspect</literal>.

Note

that the signal may be supported for an object but it may differ how whether and how it is used on a per-property basis (for e.g. performance or security reasons). Each property (or the parent interface) must be annotated with the

`org.freedesktop.DBus.Property.EmitsChangedSignal` annotation to convey this (usually the default value `true` is sufficient meaning that the annotation does not need to be used). See [introspection-format](#) for details on this annotation.

`standard-interfaces-objectmanager`

`org.freedesktop.DBus.ObjectManager`

An API can optionally make use of this interface for one or more sub-trees of objects. The root of each sub-tree implements this interface so other applications can get all objects, interfaces and properties in a single method call. It is appropriate to use this interface if users of the tree of objects are expected to be interested in all interfaces of all objects in the tree; a more granular API should be used if users of the objects are expected to be interested in a small subset of the objects, a small subset of their interfaces, or both.

The method that applications can use to get all objects and properties is `GetManagedObjects`:

```
<programlisting>
```

```
org.freedesktop.DBus.ObjectManager.GetManagedObjects (out
DICT<OBJPATH, DICT<STRING, DICT<STRING, VARIANT>>>>
objpath_interfaces_and_properties);
```

```
</programlisting>
```

The return value of this method is a dict whose keys are object paths. All returned object paths are children of the object path implementing this interface, i.e. their object paths start with the ObjectManager's object path plus `'/'`.

Each value is a dict whose keys are interfaces names. Each value in this inner dict is the same dict that would be returned by the [standard-interfaces-properties](#)

`org.freedesktop.DBus.Properties.GetAll()` method for that combination of object path and interface. If an interface has no properties, the empty dict is returned.

<para>

Changes are emitted using the following two signals:

</para>

<para>

<programlisting>

```
org.freedesktop.DBus.ObjectManager.InterfacesAdded (OBJPATH
object_path,
```

```
    DICT&lt;STRING, DICT&lt;STRING, VARIANT&gt;&gt;
    interfaces_and_properties);
```

```
    org.freedesktop.DBus.ObjectManager.InterfacesRemoved
    (OBJPATH object_path,
```

```
    ARRAY&lt;STRING&gt; interfaces);
```

</programlisting>

</para>

<para>

The <literal>InterfacesAdded</literal> signal is emitted when either a new object is added or when an existing object gains one or more interfaces. The <literal>InterfacesRemoved</literal> signal is emitted whenever an object is removed or it loses one or more interfaces. The second parameter of the <literal>InterfacesAdded</literal> signal contains a dict with the interfaces and properties (if any) that have been added to the given object path. Similarly, the second parameter of the <literal>InterfacesRemoved</literal> signal contains an array of the interfaces that were removed. Note that changes on properties on existing interfaces are not reported using this interface - an application should also monitor the existing

<link

linkend="standard-interfaces-properties">PropertiesChanged</link>
signal on each object.

</para>

<para>

Applications SHOULD NOT export objects that are children of an object (directly or otherwise) implementing this interface but which are not returned in the reply from the <literal>GetManagedObjects()</literal> method of this interface on the given object.

</para>

<para>

The intent of the <literal>ObjectManager</literal> interface is to make it easy to write a robust client implementation. The trivial client implementation only needs to make two method calls:

</para>

<para>

<programlisting>

```
org.freedesktop.DBus.AddMatch (bus_proxy,
```

```

"type='signal',name='org.example.App',path_namespace='/org/example/App
');
    objects =
org.freedesktop.DBus.ObjectManager.GetManagedObjects (app_proxy);
    </programlisting>
</para>
<para>
    on the message bus and the remote application's
    <literal>ObjectManager</literal>, respectively. Whenever a new
    remote object is created (or an existing object gains a new
    interface), the <literal>InterfacesAdded</literal> signal is
    emitted, and since this signal contains all properties for the
    interfaces, no calls to the
    <literal>org.freedesktop.Properties</literal> interface on the
    remote object are needed. Additionally, since the initial
    <literal>AddMatch()</literal> rule already includes signal
    messages from the newly created child object, no new
    <literal>AddMatch()</literal> call is needed.
</para>

<para>
    <emphasis>
        The <literal>org.freedesktop.DBus.ObjectManager</literal>
        interface was added in version 0.17 of the D-Bus
        specification.
    </emphasis>
</para>
</sect2>
</sect1>

<sect1 id="introspection-format">
    <title>Introspection Data Format</title>
    <para>
        As described in <xref linkend="standard-interfaces-
        introspectable"/>,
        objects may be introspected at runtime, returning an XML string
        that describes the object. The same XML format may be used in
        other contexts as well, for example as an "IDL" for generating
        static language bindings.
    </para>
    <para>
        Here is an example of introspection data:
        <programlisting>
            &lt;!DOCTYPE node PUBLIC "-//freedesktop//DTD D-BUS Object
            Introspection 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/introspect.dtd">
            &lt;node name="/org/freedesktop/sample_object">
                &lt;interface name="org.freedesktop.SampleInterface">
                    &lt;method name="Frobate">
                        &lt;arg name="foo" type="i" direction="in"/>

```

```

        <arg name="bar" type="s" direction="out"/>
        <arg name="baz" type="a{us}" direction="out"/>
        <annotation name="org.freedesktop.DBus.Deprecated"
value="true"/>
    </method>
    <method name="Bazify">
        <arg name="bar" type="(iiu)" direction="in"/>
        <arg name="bar" type="v" direction="out"/>
    </method>
    <method name="Mogrify">
        <arg name="bar" type="(iiav)" direction="in"/>
    </method>
    <signal name="Changed">
        <arg name="new_value" type="b"/>
    </signal>
    <property name="Bar" type="y" access="readwrite"/>
</interface>
<node name="child_of_sample_object"/>
<node name="another_child_of_sample_object"/>
</node>
</programlisting>

```

</para>

<para>

A more formal DTD and spec needs writing, but here are some quick notes.

<itemizedlist>

<listitem>

<para>

Only the root <node> element can omit the node name, as it's known to be the object that was introspected. If the root <node> does have a name attribute, it must be an absolute object path. If child <node> have object paths, they must be relative.

</para>

</listitem>

<listitem>

<para>

If a child <node> has any sub-elements, then they must represent a complete introspection of the child. If a child <node> is empty, then it may or may not have sub-elements; the child must be introspected in order to find out. The intent is that if an object knows that its children are "fast" to introspect it can go ahead and return their information, but otherwise it can omit it.

</para>

</listitem>

<listitem>

<para>

The direction element on `<arg>` may be omitted, in which case it defaults to "in" for method calls and "out" for signals. Signals only allow "out" so while direction may be specified, it's pointless.

`</para>`

`</listitem>`

`<listitem>`

`<para>`

The possible directions are "in" and "out", unlike CORBA there is no "inout"

`</para>`

`</listitem>`

`<listitem>`

`<para>`

The possible property access flags are "readwrite", "read", and "write"

`</para>`

`</listitem>`

`<listitem>`

`<para>`

Multiple interfaces can of course be listed for one `<node>`.

`</para>`

`</listitem>`

`<listitem>`

`<para>`

The "name" attribute on arguments is optional.

`</para>`

`</listitem>`

`</itemizedlist>`

`</para>`

`<para>`

Method, interface, property, and signal elements may have "annotations", which are generic key/value pairs of metadata. They are similar conceptually to Java's annotations and C# attributes.

Well-known annotations:

`</para>`

`<informaltable>`

`<tgroup cols="3">`

`<thead>`

`<row>`

`<entry>Name</entry>`

`<entry>Values (separated by ,)</entry>`

`<entry>Description</entry>`

`</row>`

`</thead>`

`<tbody>`

`<row>`

`<entry>org.freedesktop.DBus.Deprecated</entry>`

`<entry>>true,false</entry>`

```

        <entry>Whether or not the entity is deprecated; defaults to
false</entry>
    </row>
    <row>
        <entry>org.freedesktop.DBus.GLib.CSymbol</entry>
        <entry>(string)</entry>
        <entry>The C symbol; may be used for methods and
interfaces</entry>
    </row>
    <row>
        <entry>org.freedesktop.DBus.Method.NoReply</entry>
        <entry>>true,false</entry>
        <entry>If set, don't expect a reply to the method call;
defaults to false.</entry>
    </row>
    <row>
<entry>org.freedesktop.DBus.Property.EmitsChangedSignal</entry>
        <entry>true,invalidates,false</entry>
        <entry>
            <para>
                If set to <literal>>false</literal>, the
<literal>org.freedesktop.DBus.Properties.PropertiesChanged</literal>
                signal, see <xref
                linkend="standard-interfaces-properties"/> is not
                guaranteed to be emitted if the property changes.
            </para>
            <para>
                If set to <literal>invalidates</literal> the signal
                is emitted but the value is not included in the
                signal.
            </para>
            <para>
                If set to <literal>>true</literal> the signal is
                emitted with the value included.
            </para>
            <para>
                The value for the annotation defaults to
                <literal>>true</literal> if the enclosing interface
                element does not specify the annotation. Otherwise it
                defaults to the value specified in the enclosing
                interface element.
            </para>
        </entry>
    </row>
</tbody>
</tgroup>
</informaltable>
</sect1>
<sect1 id="message-bus">
    <title>Message Bus Specification</title>

```

```
<sect2 id="message-bus-overview">
  <title>Message Bus Overview</title>
  <para>
    The message bus accepts connections from one or more
applications.
    Once connected, applications can exchange messages with other
    applications that are also connected to the bus.
  </para>
  <para>
    In order to route messages among connections, the message bus
keeps a
    mapping from names to connections. Each connection has one
    unique-for-the-lifetime-of-the-bus name automatically
assigned.
    Applications may request additional names for a connection.
Additional
    names are usually "well-known names" such as
    "org.freedesktop.TextEditor". When a name is bound to a
connection,
    that connection is said to <firstterm>own</firstterm> the
name.
  </para>
  <para>
    The bus itself owns a special name,
<literal>org.freedesktop.DBus</literal>.
    This name routes messages to the bus, allowing applications to
make
    administrative requests. For example, applications can ask the
bus
    to assign a name to a connection.
  </para>
  <para>
    Each name may have <firstterm>queued owners</firstterm>. When
an
    application requests a name for a connection and the name is
already in
    use, the bus will optionally add the connection to a queue
waiting for
    the name. If the current owner of the name disconnects or
releases
    the name, the next connection in the queue will become the new
owner.
  </para>
  <para>
    This feature causes the right thing to happen if you start two
text
    editors for example; the first one may request
"org.freedesktop.TextEditor",
    and the second will be queued as a possible owner of that
name. When
    the first exits, the second will take over.
  </para>
</sect2>
```

</para>

<para>

Applications may send <firstterm>unicast messages</firstterm> to a specific recipient or to the message bus itself, or <firstterm>broadcast messages</firstterm> to all interested recipients.

See <xref linkend="message-bus-routing"/> for details.

</para>

</sect2>

<sect2 id="message-bus-names">

<title>Message Bus Names</title>

<para>

Each connection has at least one name, assigned at connection time and

returned in response to the

<literal>org.freedesktop.DBus.Hello</literal> method call.

This

automatically-assigned name is called the connection's

<firstterm>unique

name</firstterm>. Unique names are never reused for two

different

connections to the same bus.

</para>

<para>

Ownership of a unique name is a prerequisite for interaction

with

the message bus. It logically follows that the unique name is

always

the first name that an application comes to own, and the last one that it loses ownership of.

</para>

<para>

Unique connection names must begin with the character ':' (ASCII colon

character); bus names that are not unique names must not begin

with this character. (The bus must reject any attempt by an

application

to manually request a name beginning with ':'.) This

restriction

categorically prevents "spoofing"; messages sent to a unique

name

will always go to the expected connection.

</para>

<para>

When a connection is closed, all the names that it owns are deleted (or

transferred to the next connection in the queue if any).

</para>

<para>

A connection can request additional names to be associated with it using the `<literal>org.freedesktop.DBus.RequestName</literal>` message. [linkend="message-protocol-names-bus"/>](#) describes the format of a valid name. These names can be released again using the `<literal>org.freedesktop.DBus.ReleaseName</literal>` message.

`<sect3 id="bus-messages-request-name">`

`<title><literal>org.freedesktop.DBus.RequestName</literal></title>`

`<para>`

`As a method:`

`<programlisting>`

`UINT32 RequestName (in STRING name, in UINT32 flags)`

`</programlisting>`

`Message arguments:`

`<informaltable>`

`<tgroup cols="3">`

`<thead>`

`<row>`

`<entry>Argument</entry>`

`<entry>Type</entry>`

`<entry>Description</entry>`

`</row>`

`</thead>`

`<tbody>`

`<row>`

`<entry>0</entry>`

`<entry>STRING</entry>`

`<entry>Name to request</entry>`

`</row>`

`<row>`

`<entry>1</entry>`

`<entry>UINT32</entry>`

`<entry>Flags</entry>`

`</row>`

`</tbody>`

`</tgroup>`

`</informaltable>`

`Reply arguments:`

`<informaltable>`

`<tgroup cols="3">`

`<thead>`

`<row>`

`<entry>Argument</entry>`

`<entry>Type</entry>`

`<entry>Description</entry>`

`</row>`

`</thead>`

```

        <tbody>
        <row>
            <entry>0</entry>
            <entry>UINT32</entry>
            <entry>Return value</entry>
        </row>
        </tbody>
    </tgroup>
</informaltable>
</para>
<para>

```

This method call should be sent to `org.freedesktop.DBus` and asks the message bus to assign the given name to the method caller. Each name maintains a queue of possible owners, where the head of the queue is the primary or current owner of the name. Each potential owner in the queue maintains the `DBUS_NAME_FLAG_ALLOW_REPLACEMENT` and `DBUS_NAME_FLAG_DO_NOT_QUEUE` settings from its latest `RequestName` call. When `RequestName` is invoked the following occurs:

- If the method caller is currently the primary owner of the name, the `DBUS_NAME_FLAG_ALLOW_REPLACEMENT` and `DBUS_NAME_FLAG_DO_NOT_QUEUE` values are updated with the values from the new `RequestName` call, and nothing further happens.
- If the current primary owner (head of the queue) has `DBUS_NAME_FLAG_ALLOW_REPLACEMENT` set, and the invocation has the `DBUS_NAME_FLAG_REPLACE_EXISTING` flag, then the caller of `RequestName` replaces the current primary owner at the head of the queue and the current primary owner moves to the second position in the queue. If the caller of `RequestName` was in the queue previously its flags are updated with the values from

the new RequestName in addition to moving it to the head of the queue.

</para>
</listitem>

<listitem>
<para>
If replacement is not possible, and the method caller is currently in the queue but not the primary owner, its flags are updated with the values from the new RequestName call.

</para>
</listitem>

<listitem>
<para>
If replacement is not possible, and the method caller is currently not in the queue, the method caller is appended to the queue.

</para>
</listitem>

<listitem>
<para>
If any connection in the queue has DBUS_NAME_FLAG_DO_NOT_QUEUE set and is not the primary owner, it is removed from the queue. This can apply to the previous primary owner (if it was replaced) or the method caller (if it updated the DBUS_NAME_FLAG_DO_NOT_QUEUE flag while still stuck in the queue, or if it was just added to the queue with that flag set).

</para>
</listitem>

</itemizedlist>

</para>
<para>
Note that DBUS_NAME_FLAG_REPLACE_EXISTING results in "jumping the queue," even if another application already in the queue had specified DBUS_NAME_FLAG_REPLACE_EXISTING. This comes up if a primary owner that does not allow replacement goes away, and the next primary owner

does allow replacement. In this case, queued items that specified `DBUS_NAME_FLAG_REPLACE_EXISTING` *do not* automatically replace the new primary owner. In other words, `DBUS_NAME_FLAG_REPLACE_EXISTING` is not saved, it is only used at the time `RequestName` is called. This is deliberate to avoid an infinite loop anytime two applications are both `DBUS_NAME_FLAG_ALLOW_REPLACEMENT` and `DBUS_NAME_FLAG_REPLACE_EXISTING`.

The flags argument contains any of the following values logically ORed together:

Conventional Name	Value	Description
<code>DBUS_NAME_FLAG_ALLOW_REPLACEMENT</code>	0x1	

If an application A specifies this flag and succeeds in becoming the owner of the name, and another application B later calls `RequestName` with the `DBUS_NAME_FLAG_REPLACE_EXISTING` flag, then application A will lose ownership and receive a `org.freedesktop.DBus.NameLost` signal, and application B will become the new owner. If `DBUS_NAME_FLAG_ALLOW_REPLACEMENT` is not specified by application A, or `DBUS_NAME_FLAG_REPLACE_EXISTING` is not specified by application B, then application B will not replace application A as the owner.


```
<row>
<entry>DBUS_NAME_FLAG_REPLACE_EXISTING</entry>
<entry>0x2</entry>
<entry>
```

If this flag is not set the application will only become the owner of the name if there is no current owner. If this flag is set, the application will replace the current owner if the current owner specified DBUS_NAME_FLAG_ALLOW_REPLACEMENT.

```
</entry>
</row>
<row>
<entry>DBUS_NAME_FLAG_DO_NOT_QUEUE</entry>
<entry>0x4</entry>
<entry>
```

Without this flag, if an application requests a name that is already owned, the application will be placed in a queue to own the name when the current owner gives it up. If this flag is given, the application will not be placed in the queue, the request for the name will simply fail. This flag also affects behavior when an application is replaced as name owner; by default the application moves back into the waiting queue, unless this flag was provided when the application became the name owner.

```
</entry>
</row>
</tbody>
</tgroup>
</informaltable>
```

The return code can be one of the following values:

```
<informaltable>
<tgroup cols="3">
<thead>
<row>
```

```

        <entry>Conventional Name</entry>
        <entry>Value</entry>
        <entry>Description</entry>
    </row>
</thead>
<tbody>
<row>
    <entry>DBUS_REQUEST_NAME_REPLY_PRIMARY_OWNER</entry>
<entry>1</entry> <entry>The caller is now the primary
owner of
the name, replacing any previous owner. Either the name
had no
owner before, or the caller specified
DBUS_NAME_FLAG_REPLACE_EXISTING and the current owner
specified
    DBUS_NAME_FLAG_ALLOW_REPLACEMENT.</entry>
</row>
<row>
<entry>DBUS_REQUEST_NAME_REPLY_IN_QUEUE</entry>
<entry>2</entry>

<entry>The name already had an owner,
    DBUS_NAME_FLAG_DO_NOT_QUEUE was not specified, and
either
    the current owner did not specify
    DBUS_NAME_FLAG_ALLOW_REPLACEMENT or the requesting
application did not specify
DBUS_NAME_FLAG_REPLACE_EXISTING.
</entry>
</row>
<row>
<entry>DBUS_REQUEST_NAME_REPLY_EXISTS</entry>
<entry>3</entry>
<entry>The name already has an owner,
DBUS_NAME_FLAG_DO_NOT_QUEUE was specified, and either
DBUS_NAME_FLAG_ALLOW_REPLACEMENT was not specified by the
current owner, or DBUS_NAME_FLAG_REPLACE_EXISTING was not
specified by the requesting application.</entry>
</row>
<row>
<entry>DBUS_REQUEST_NAME_REPLY_ALREADY_OWNER</entry>
<entry>4</entry>
<entry>The application trying to request ownership of a
name is already the owner of it.</entry>
</row>
</tbody>
</tgroup>
</informaltable>
</para>
</sect3>

<sect3 id="bus-messages-release-name">

```

<title><literal>org.freedesktop.DBus.ReleaseName</literal></title>

<para>

As a method:

<programlisting>

```
UINT32 ReleaseName (in STRING name)
```

</programlisting>

Message arguments:

<informaltable>

<tgroup cols="3">

<thead>

<row>

<entry>Argument</entry>

<entry>Type</entry>

<entry>Description</entry>

</row>

</thead>

<tbody>

<row>

<entry>0</entry>

<entry>STRING</entry>

<entry>Name to release</entry>

</row>

</tbody>

</tgroup>

</informaltable>

Reply arguments:

<informaltable>

<tgroup cols="3">

<thead>

<row>

<entry>Argument</entry>

<entry>Type</entry>

<entry>Description</entry>

</row>

</thead>

<tbody>

<row>

<entry>0</entry>

<entry>UINT32</entry>

<entry>Return value</entry>

</row>

</tbody>

</tgroup>

</informaltable>

</para>

<para>

This method call should be sent to

<literal>org.freedesktop.DBus</literal> and asks the message

bus to

release the method caller's claim to the given name. If the

caller is

the primary owner, a new primary owner will be selected from the queue if any other owners are waiting. If the caller is waiting in the queue for the name, the caller will be removed from the queue and will not be made an owner of the name if it later becomes available. If there are no other owners in the queue for the name, it will be removed from the bus entirely.

The return code can be one of the following values:

Conventional Name	Value	Description
DBUS_RELEASE_NAME_REPLY_RELEASED	1	The caller has released his claim on the given name. Either the caller was the primary owner of the name, and the name is now unused or taken by somebody waiting in the queue for the name, or the caller was waiting in the queue for the name and has now been removed from the queue.
DBUS_RELEASE_NAME_REPLY_NON_EXISTENT	2	The given name does not exist on this bus.
DBUS_RELEASE_NAME_REPLY_NOT_OWNER	3	The caller was not the primary owner of this name, and was also not waiting in the queue to own this name.

```

</informaltable>
</para>
</sect3>

<sect3 id="bus-messages-list-queued-owners">

<title><literal>org.freedesktop.DBus.ListQueuedOwners</literal></title>
>
<para>
  As a method:
  <programlisting>
    ARRAY of STRING ListQueuedOwners (in STRING name)
  </programlisting>
  Message arguments:
  <informaltable>
    <tgroup cols="3">
      <thead>
        <row>
          <entry>Argument</entry>
          <entry>Type</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
          <entry>0</entry>
          <entry>STRING</entry>
          <entry>The well-known bus name to query, such as
            <literal>com.example.cappuccino</literal></entry>
        </row>
      </tbody>
    </tgroup>
  </informaltable>
  Reply arguments:
  <informaltable>
    <tgroup cols="3">
      <thead>
        <row>
          <entry>Argument</entry>
          <entry>Type</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
          <entry>0</entry>
          <entry>ARRAY of STRING</entry>
          <entry>The unique bus names of connections currently
            queued
              for the name</entry>
        </row>
      </tbody>
    </tgroup>
  </informaltable>

```

```

        </tgroup>
    </informaltable>
</para>
<para>
    This method call should be sent to
    <literal>org.freedesktop.DBus</literal> and lists the
connections
    currently queued for a bus name (see
    <xref linkend="term-queued-owner"/>).
</para>
</sect3>
</sect2>

<sect2 id="message-bus-routing">
    <title>Message Bus Message Routing</title>

    <para>
        Messages may have a <literal>DESTINATION</literal> field (see
<xref
        linkend="message-protocol-header-fields"/>), resulting in a
    <firstterm>unicast message</firstterm>. If the
    <literal>DESTINATION</literal> field is present, it specifies
a message
    recipient by name. Method calls and replies normally specify
this field.
    The message bus must send messages (of any type) with the
    <literal>DESTINATION</literal> field set to the specified
recipient,
    regardless of whether the recipient has set up a match rule
matching
    the message.
</para>

    <para>
        When the message bus receives a signal, if the
    <literal>DESTINATION</literal> field is absent, it is
considered to
    be a <firstterm>broadcast signal</firstterm>, and is sent to
all
    applications with <firstterm>message matching
rules</firstterm> that
    match the message. Most signal messages are broadcasts.
</para>

    <para>
        Unicast signal messages (those with a
<literal>DESTINATION</literal>
    field) are not commonly used, but they are treated like any
unicast
    message: they are delivered to the specified recipient,
    regardless of its match rules. One use for unicast signals is
to

```

avoid a race condition in which a signal is emitted before the intended recipient can call `<xref linkend="bus-messages-add-match"/>` to receive that signal: if the signal is sent directly to that recipient using a unicast message, it does not need to add a match rule at all, and there is no race condition. Another use for unicast signals, on message buses whose security policy prevents eavesdropping, is to send sensitive information which should only be visible to one recipient.

</para>

<para>
When the message bus receives a method call, if the `<literal>DESTINATION</literal>` field is absent, the call is taken to be a standard one-to-one message and interpreted by the message bus itself. For example, sending an `<literal>org.freedesktop.DBus.Peer.Ping</literal>` message with no `<literal>DESTINATION</literal>` will cause the message bus itself to reply to the ping immediately; the message bus will not make this message visible to other applications.

</para>

<para>
Continuing the `<literal>org.freedesktop.DBus.Peer.Ping</literal>` example, if the ping message were sent with a `<literal>DESTINATION</literal>` name of `<literal>com.yoyodyne.Screensaver</literal>`, then the ping would be forwarded, and the Yoyodyne Corporation screensaver application would be expected to reply to the ping.

</para>

<para>
Message bus implementations may impose a security policy which prevents certain messages from being sent or received. When a message cannot be sent or received due to a security policy, the message bus should send an error reply, unless the original message had the `<literal>NO_REPLY</literal>` flag.

</para>

<sect3 id="message-bus-routing-eavesdropping">

`<title>Eavesdropping</title>`
`<para>`
Receiving a unicast message whose
`<literal>DESTINATION</literal>`
indicates a different recipient is called
`<firstterm>eavesdropping</firstterm>`. On a message bus which
acts as
a security boundary (like the standard system bus), the
security
policy should usually prevent eavesdropping, since unicast
messages
are normally kept private and may contain security-sensitive
information.
`</para>`

`<para>`
Eavesdropping is mainly useful for debugging tools, such as
the `<literal>dbus-monitor</literal>` tool in the reference
implementation of D-Bus. Tools which eavesdrop on the
message bus
should be careful to avoid sending a reply or error in
response to
messages intended for a different client.
`</para>`

`<para>`
Clients may attempt to eavesdrop by adding match rules
(see `<xref linkend="message-bus-routing-match-rules"/>`)
containing
the `<literal>eavesdrop='true'</literal>` match. If the
message bus'
security policy does not allow eavesdropping, the match rule
can
still be added, but will not have any practical effect. For
compatibility with older message bus implementations, if
adding such
a match rule results in an error reply, the client may fall
back to
adding the same rule with the `<literal>eavesdrop</literal>`
match
omitted.
`</para>`
`</sect3>`

`<sect3 id="message-bus-routing-match-rules">`
`<title>Match Rules</title>`
`<para>`
An important part of the message bus routing protocol is match
rules. Match rules describe the messages that should be sent
to a
client, based on the contents of the message. Broadcast
signals

are only sent to clients which have a suitable match rule:
this
avoids waking up client processes to deal with signals that
are
not relevant to that client.

</para>
<para>
Messages that list a client as their
<literal>DESTINATION</literal>
do not need to match the client's match rules, and are sent
to that
client regardless. As a result, match rules are mainly used
to
receive a subset of broadcast signals.

</para>
<para>
Match rules can also be used for eavesdropping
(see <xref linkend="message-bus-routing-eavesdropping"/>),
if the security policy of the message bus allows it.

</para>
<para>
Match rules are added using the AddMatch bus method
(see <xref linkend="bus-messages-add-match"/>). Rules are
specified as a string of comma separated key/value pairs.
Excluding a key from the rule indicates a wildcard match.
For instance excluding the the member from a match rule but
adding a sender would let all messages from that sender

through.
An example of a complete rule would be

```
"type='signal',sender='org.freedesktop.DBus',interface='org.freedesktop.DBus',member='Foo',path='/bar/foo',destination=':452345.34',arg2='bar'"
```

</para>
<para>
The following table describes the keys that can be used to
create
a match rule:

The following table summarizes the D-Bus types.

```
<informaltable>  
<tgroup cols="3">  
<thead>  
<row>  
<entry>Key</entry>  
<entry>Possible Values</entry>  
<entry>Description</entry>  
</row>  
</thead>  
<tbody>  
<row>  
<entry><literal>type</literal></entry>
```

```

    <entry>'signal', 'method_call', 'method_return',
'error'</entry>
    <entry>Match on the message type. An example of a
type match is type='signal'</entry>
  </row>
  <row>
    <entry><literal>sender</literal></entry>
    <entry>A bus or unique name (see <xref
linkend="term-bus-name"/>
and <xref linkend="term-unique-name"/> respectively)
    </entry>
    <entry>Match messages sent by a particular sender.
An example of a sender match
    is sender='org.freedesktop.Hal'</entry>
  </row>
  <row>
    <entry><literal>interface</literal></entry>
    <entry>An interface name (see <xref
linkend="message-protocol-names-interface"/>)</entry>
    <entry>Match messages sent over or to a particular
interface. An example of an
interface match is
interface='org.freedesktop.Hal.Manager'.
    If a message omits the interface header, it must not
match any rule
    that specifies this key.</entry>
  </row>
  <row>
    <entry><literal>member</literal></entry>
    <entry>Any valid method or signal name</entry>
    <entry>Matches messages which have the give method
or signal name. An example of
    a member match is member='NameOwnerChanged'</entry>
  </row>
  <row>
    <entry><literal>path</literal></entry>
    <entry>An object path (see <xref linkend="message-
protocol-marshaling-object-path"/>)</entry>
    <entry>Matches messages which are sent from or to
the given object. An example of a
    path match is
path='/org/freedesktop/Hal/Manager'</entry>
  </row>
  <row>
    <entry><literal>path_namespace</literal></entry>
    <entry>An object path</entry>
    <entry>
    <para>
      Matches messages which are sent from or to an
      object for which the object path is either the
      given value, or that value followed by one or
      more path components.
    </para>
  </entry>

```

</para>

<para>
For example,

<literal>path_namespace='/com/example/foo'</literal>
would match signals sent by
<literal>/com/example/foo</literal>
or by
<literal>/com/example/foo/bar</literal>,
but not by
<literal>/com/example/foobar</literal>.
</para>

<para>
Using both <literal>path</literal> and
<literal>path_namespace</literal> in the same
match
rule is not allowed.
</para>

<para>
<emphasis>
This match key was added in version 0.16 of
the
D-Bus specification and implemented by the bus
daemon in dbus 1.5.0 and later.
</emphasis>
</para>

</entry>
</row>
<row>
<entry><literal>destination</literal></entry>
<entry>A unique name (see <xref linkend="term-
unique-name"/></entry>
<entry>Matches messages which are being sent to the
given unique name. An
example of a destination match is
destination=':1.0'</entry>
</row>
<row>
<entry><literal>arg[0, 1, 2, 3,
...]</literal></entry>
<entry>Any string</entry>
<entry>Arg matches are special and are used for
further restricting the
match based on the arguments in the body of a
message. Only arguments of type
STRING can be matched in this way. An example of an
argument match
would be arg3='Foo'. Only argument indexes from 0 to
63 should be

```

        accepted.</entry>
</row>
<row>
    <entry><literal>arg[0, 1, 2, 3,
...>path</literal></entry>
    <entry>Any string</entry>
    <entry>
        <para>Argument path matches provide a specialised
form of wildcard matching for
        path-like namespaces. They can match arguments
whose type is either STRING or
        OBJECT_PATH. As with normal argument matches,
if the argument is exactly equal to the string
given in the match
        rule then the rule is satisfied. Additionally,
there is also a
        match when either the string given in the match
rule or the
        appropriate message argument ends with '/' and
is a prefix of the
        other. An example argument path match is
arg0path='/aa/bb/'. This
        would match messages with first arguments of
'/', '/aa/',
        '/aa/bb/', '/aa/bb/cc/' and '/aa/bb/cc/'. It
would not match
        messages with first arguments of '/aa/b', '/aa'
or even '/aa/bb'.</para>
        <para>This is intended for monitoring
&œdirectories&• in file system-like
        hierarchies, as used in the
<citetitle>dconf</citetitle> configuration
        system. An application interested in all nodes
in a particular hierarchy would
        monitor
<literal>arg0path='/ca/example/foo/'</literal>. Then the service could
        emit a signal with zeroth argument
<literal>"/ca/example/foo/bar"</literal> to
        represent a modification to the &œbar&•
property, or a signal with zeroth
        argument <literal>"/ca/example/"</literal> to
represent atomic modification of
        many properties within that directory, and the
interested application would be
        notified in both cases.</para>
        <para>
        <emphasis>
            This match key was added in version 0.12 of
the
            D-Bus specification, implemented for STRING

```

arguments by the bus daemon in dbus 1.2.0 and later, and implemented for OBJECT_PATH arguments in dbus 1.5.0 and later.

</emphasis>

</para>

</entry>

</row>

<row>

<entry><literal>arg0namespace</literal></entry>

<entry>Like a bus name, except that the string is not required to contain a '.' (period)</entry>

<entry>

<para>Match messages whose first argument is of type STRING, and is a bus name or interface name within the specified namespace. This is primarily intended for watching name owner changes for a group of related bus names, rather than for a single name or all name changes.</para>

<para>Because every valid interface name is also a valid bus name, this can also be used for messages whose first argument is an interface name.</para>

<para>For example, the match rule

<literal>member='NameOwnerChanged',arg0namespace='com.example.backend'</literal>

matches name owner changes for bus names such as

<literal>com.example.backend.foo</literal>,
<literal>com.example.backend.foo.bar</literal>,
and

<literal>com.example.backend</literal> itself.</para>

<para>See also <xref linkend='bus-messages-name-owner-changed'/>.</para>

<para>

<emphasis>

This match key was added in version 0.16 of the D-Bus specification and implemented by the bus daemon in dbus 1.5.0 and later.

</emphasis>

</para>

</entry>

</row>

<p>forbids</p> <p>without error,</p> <p>allowed</p>	<p><entry><literal>eavesdrop</literal></entry> <entry><literal>'true'</literal>,
 <literal>'false'</literal></entry> Since D-Bus 1.5.6, match rules do not match messages which have a <literal>DESTINATION</literal> field unless the match rule specifically requests this (see <xref linkend="message-bus-routing- eavesdropping"/>) by specifying <literal>eavesdrop='true'</literal> in the match rule. <literal>eavesdrop='false'</literal> restores the default behaviour. Messages are delivered to their <literal>DESTINATION</literal> regardless of match rules, so this match does not affect normal delivery of unicast messages. If the message bus has a security policy which eavesdropping, this match may still be used but will not have any practical effect. In older versions of D-Bus, this match was not in match rules, and all match rules behaved as if <literal>eavesdrop='true'</literal> had been used.</p>
---	---

</entry>
</row>
</tbody>
</tgroup>
</informaltable>
</para>
</sect3>
</sect2>
<sect2 id="message-bus-starting-services">
<title>Message Bus Starting Services</title>
<para>
The message bus can start applications on behalf of other
applications.
In CORBA terms, this would be called
<firstterm>activation</firstterm>.
An application that can be started in this way is called a
<firstterm>service</firstterm>.
</para>
<para>
With D-Bus, starting a service is normally done by name. That
is,
applications ask the message bus to start some program that
will own a
well-known name, such as
<literal>org.freedesktop.TextEditor</literal>.

This implies a contract documented along with the name
<literal>org.freedesktop.TextEditor</literal> for which
objects

the owner of that name will provide, and what interfaces those
objects will have.

</para>

<para>

To find an executable corresponding to a particular name, the
bus daemon

looks for <firstterm>service description files</firstterm>.

Service

description files define a mapping from names to executables.

Different

kinds of message bus will look for these files in different
places, see

<xref linkend="message-bus-types"/>.

</para>

<para>

Service description files have the ".service" file
extension. The message bus will only load service description

files

ending with .service; all other files will be ignored. The

file format

is similar to that of <ulink

url="http://standards.freedesktop.org/desktop-entry-
spec/desktop-entry-spec-latest.html">desktop

entries</ulink>. All service description files must be in UTF-

8

encoding. To ensure that there will be no name collisions,
service files

must be namespaced using the same mechanism as messages and
service

names.

</para>

<para>

[FIXME the file format should be much better specified than
"similar to

.desktop entries" esp. since desktop entries are already
badly-specified. ;-)]

These sections from the specification apply to service files
as well:

<itemizedlist>

<listitem><para>General syntax</para></listitem>

<listitem><para>Comment format</para></listitem>

</itemizedlist>

<figure>

<title>Example service description file</title>

<programlisting>

Sample service description file

[D-BUS Service]

```
Names=org.freedesktop.ConfigurationDatabase;org.gnome.GConf;  
Exec=/usr/libexec/gconfd-2
```

```
</programlisting>
```

```
</figure>
```

```
</para>
```

```
<para>
```

When an application asks to start a service by name, the bus daemon tries to find a service that will own that name. It then tries to spawn the executable associated with it. If this fails, it will report an error. [FIXME what happens if two .service files offer the same service;

what kind of error is reported, should we have a way for the client to choose one?]

```
</para>
```

```
<para>
```

The executable launched will have the environment variable `<literal>DBUS_STARTER_ADDRESS</literal>` set to the address of the message bus so it can connect and request the appropriate names.

```
</para>
```

```
<para>
```

The executable being launched may want to know whether the message bus starting it is one of the well-known message buses (see [<xref linkend="message-bus-types"/>](#)). To facilitate this, the bus must also set the `<literal>DBUS_STARTER_BUS_TYPE</literal>` environment variable if it is one of the well-known buses. The currently-defined values for this variable

are `<literal>system</literal>` for the systemwide message bus, and `<literal>session</literal>` for the per-login-session

message bus. The new executable must still connect to the address given

in `<literal>DBUS_STARTER_ADDRESS</literal>`, but may assume that the resulting connection is to the well-known bus.

```
</para>
```

```
<para>
```

[FIXME there should be a timeout somewhere, either specified in the .service file, by the client, or just a global value and if the client being activated fails to connect within that timeout, an error should be sent back.]

```
</para>
```



```
<sect3 id="message-bus-starting-services-scope">
  <title>Message Bus Service Scope</title>
  <para>
    The "scope" of a service is its "per-", such as per-session,
    per-machine, per-home-directory, or per-display. The
reference
    implementation doesn't yet support starting services in a
different
    scope from the message bus itself. So e.g. if you start a
service
    on the session bus its scope is per-session.
  </para>
  <para>
    We could add an optional scope to a bus name. For example,
for
    per-(display,session pair), we could have a unique ID for
each display
    generated automatically at login and set on screen 0 by
executing a
    special "set display ID" binary. The ID would be stored in a
string of
    <literal>_DBUS_DISPLAY_ID</literal> property and would be a
    random bytes. This ID would then be used to scope names.
    Starting/locating a service could be done by ID-name pair
rather than
    only by name.
  </para>
  <para>
    Contrast this with a per-display scope. To achieve that, we
would
    want a single bus spanning all sessions using a given
display.
    So we might set a
<literal>_DBUS_DISPLAY_BUS_ADDRESS</literal>
    property on screen 0 of the display, pointing to this bus.
  </para>
</sect3>
</sect2>
```

```
<sect2 id="message-bus-types">
  <title>Well-known Message Bus Instances</title>
  <para>
    Two standard message bus instances are defined here, along
with how
    to locate them and where their service files live.
  </para>
  <sect3 id="message-bus-types-login">
    <title>Login session message bus</title>
    <para>
      Each time a user logs in, a <firstterm>login session message
```

bus

user's login session may interact with one another using this message bus.

</para>

<para>

The address of the login session message bus is given in the `DBUS_SESSION_BUS_ADDRESS` environment variable. If that variable is not set, applications may also try to read the address from the X Window System root window property

`_DBUS_SESSION_BUS_ADDRESS`.

The root window property must have type `STRING`.

The environment variable should have precedence over the root window property.

</para>

The address of the login session message bus is given in the

`DBUS_SESSION_BUS_ADDRESS` environment variable. If

`DBUS_SESSION_BUS_ADDRESS` is not set, or if it's set to the string

"autolaunch:", the system should use platform-specific methods of

locating a running D-Bus session server, or starting one if a running instance cannot be found. Note that this mechanism is not recommended

for attempting to determine if a daemon is running. It is inherently

racy to attempt to make this determination, since the bus daemon may

be started just before or just after the determination is made.

Therefore, it is recommended that applications do not try to make this

determination for their functionality purposes, and instead they

should attempt to start the server.</para>

<sect4 id="message-bus-types-login-x-windows">

<title>X Windowing System</title>

<para>

For the X Windowing System, the application must locate the

window owner of the selection represented by the atom formed by

concatenating:

<itemizedlist>

<listitem>

```

        <para>the literal string
"_DBUS_SESSION_BUS_SELECTION_"</para>
    </listitem>

    <listitem>
        <para>the current user's username</para>
    </listitem>

    <listitem>
        <para>the literal character '_' (underscore)</para>
    </listitem>

    <listitem>
        <para>the machine's ID</para>
    </listitem>
</itemizedlist>
</para>

<para>
    The following properties are defined for the window that
owns
    this X selection:
    <informaltable frame="all">
        <tgroup cols="2">
            <tbody>
                <row>
                    <entry>
                        <para>Atom</para>
                    </entry>

                    <entry>
                        <para>meaning</para>
                    </entry>
                </row>

                <row>
                    <entry>
                        <para>_DBUS_SESSION_BUS_ADDRESS</para>
                    </entry>

                    <entry>
                        <para>the actual address of the server
socket</para>
                    </entry>
                </row>

                <row>
                    <entry>
                        <para>_DBUS_SESSION_BUS_PID</para>
                    </entry>

                    <entry>

```

```
        <para>the PID of the server process</para>
    </entry>
</row>
</tbody>
</tgroup>
</informaltable>
</para>
```

```
<para>
    At least the _DBUS_SESSION_BUS_ADDRESS property MUST be
    present in this window.
</para>
```

```
<para>
    If the X selection cannot be located or if reading the
    properties from the window fails, the implementation MUST
conclude
a new
    that there is no D-Bus server running and proceed to start
    server. (See below on concurrency issues)
</para>
```

```
<para>
    Failure to connect to the D-Bus server address thus
obtained
reported
    MUST be treated as a fatal connection error and should be
    to the application.
</para>
```

```
<para>
    As an alternative, an implementation MAY find the
information
directory,
    in the following file located in the current user's home
    in subdirectory .dbus/session-bus/:
<itemizedlist>
    <listitem>
        <para>the machine's ID</para>
    </listitem>

    <listitem>
        <para>the literal character '-' (dash)</para>
    </listitem>

    <listitem>
        <para>the X display without the screen number, with
the
"localhost:"
        following prefixes removed, if present: ":",
        ."localhost.localdomain:". That is, a display of
        "localhost:10.0" produces just the number "10"</para>
```

```
</listitem>
</itemizedlist>
</para>
```

allowed

```
<para>
The contents of this file NAME=value assignment pairs and
lines starting with # are comments (no comments are
```

```
otherwise). The following variable names are defined:
```

```
<informaltable
```

```
frame="all">
```

```
<tgroup cols="2">
```

```
<tbody>
```

```
<row>
```

```
<entry>
```

```
<para>Variable</para>
```

```
</entry>
```

```
<entry>
```

```
<para>meaning</para>
```

```
</entry>
```

```
</row>
```

```
<row>
```

```
<entry>
```

```
<para>DBUS_SESSION_BUS_ADDRESS</para>
```

```
</entry>
```

```
<entry>
```

```
<para>the actual address of the server
```

socket</para>

```
</entry>
```

```
</row>
```

```
<row>
```

```
<entry>
```

```
<para>DBUS_SESSION_BUS_PID</para>
```

```
</entry>
```

```
<entry>
```

```
<para>the PID of the server process</para>
```

```
</entry>
```

```
</row>
```

```
<row>
```

```
<entry>
```

```
<para>DBUS_SESSION_BUS_WINDOWID</para>
```

```
</entry>
```

```
<entry>
```

```
<para>the window ID</para>
```

```
</entry>
```

```
        </row>
      </tbody>
    </tgroup>
  </informaltable>
</para>
```

<para>
At least the DBUS_SESSION_BUS_ADDRESS variable MUST be present
in this file.
</para>

<para>
Failure to open this file MUST be interpreted as absence of a running server. Therefore, the implementation MUST proceed to attempting to launch a new bus server if the file cannot be opened.
</para>

<para>
However, success in opening this file MUST NOT lead to the conclusion that the server is running. Thus, a failure to connect to the bus address obtained by the alternative method MUST NOT be considered a fatal error. If the connection cannot be established, the implementation MUST proceed to check the X selection settings or to start the server on its own.
</para>

<para>
If the implementation concludes that the D-Bus server is not running it MUST attempt to start a new server and it MUST also ensure that the daemon started as an effect of the "autolaunch" mechanism provides the lookup mechanisms described above, so subsequent calls can locate the newly started server. The concurrent implementation MUST also ensure that if two or more all other initiations happen, only one server remains running and and initiations are able to obtain the address of this server

connect to it. In other words, the implementation MUST ensure that the X selection is not present when it attempts to set it, without allowing another process to set the selection between the verification and the setting (e.g., by using XGrabServer / XungrabServer).

</para>
</sect4>
<sect4>
<title></title>
<para>
On Unix systems, the session bus should search for .service files in <literal>\$XDG_DATA_DIRS/dbus-1/services</literal> as defined by the <ulink url="http://standards.freedesktop.org/basedir-spec/basedir-spec-latest.html">XDG Base Directory Specification</ulink>.

Implementations may also search additional locations, which should be searched with lower priority than anything in XDG_DATA_HOME, XDG_DATA_DIRS or their respective defaults; for example, the reference implementation also looks in <literal>\${datadir}/dbus-1/services</literal> as set at compile time.

</para>
<para>
As described in the XDG Base Directory Specification, software packages should install their session .service files to their configured <literal>\${datadir}/dbus-1/services</literal>, where <literal>\${datadir}</literal> is as defined by the GNU coding standards. System administrators or users can arrange for these service files to be read by setting XDG_DATA_DIRS or by symlinking them into the default locations.

</para>
</sect4>
</sect3>
<sect3 id="message-bus-types-system">
<title>System message bus</title>
<para>
A computer may have a <firstterm>system message bus</firstterm>, accessible to all applications on the system. This message bus may be

used to broadcast system events, such as adding new hardware devices,

changes in the printer queue, and so forth.

</para>

<para>

The address of the system message bus is given in the <literal>DBUS_SYSTEM_BUS_ADDRESS</literal> environment variable. If that variable is not set, applications should try to connect to the well-known address

<literal>unix:path=/var/run/dbus/system_bus_socket</literal>.

<footnote>

<para>

The D-Bus reference implementation actually honors the <literal>\$(localstatedir)</literal> configure option for this address, on both client and server side.

</para>

</footnote>

</para>

<para>

On Unix systems, the system bus should default to searching for .service files in <literal>/usr/local/share/dbus-1/system-services</literal>, <literal>/usr/share/dbus-1/system-services</literal> and <literal>/lib/dbus-1/system-services</literal>, with that

order

of precedence. It may also search other implementation-specific

locations, but should not vary these locations based on environment variables.

<footnote>

<para>

The system bus is security-sensitive and is typically executed by an init system with a clean environment. Its launch helper process is particularly security-sensitive, and specifically clears its own environment.

</para>

</footnote>

</para>

<para>

Software packages should install their system .service files to their configured <literal>\${datadir}/dbus-1/system-services</literal>, where <literal>\${datadir}</literal> is as defined by the GNU coding standards. System administrators can arrange


```

        for these service files to be read by editing the system
bus'
        configuration file or by symlinking them into the default
        locations.
    </para>
</sect3>
</sect2>

<sect2 id="message-bus-messages">
    <title>Message Bus Messages</title>
    <para>
        The special message bus name
    <literal>org.freedesktop.DBus</literal>
        responds to a number of additional messages.
    </para>

    <sect3 id="bus-messages-hello">
        <title><literal>org.freedesktop.DBus.Hello</literal></title>
        <para>
            As a method:
            <programlisting>
                STRING Hello ()
            </programlisting>
            Reply arguments:
            <informaltable>
                <tgroup cols="3">
                    <thead>
                        <row>
                            <entry>Argument</entry>
                            <entry>Type</entry>
                            <entry>Description</entry>
                        </row>
                    </thead>
                    <tbody>
                        <row>
                            <entry>0</entry>
                            <entry>STRING</entry>
                            <entry>Unique name assigned to the
connection</entry>
                        </row>
                    </tbody>
                </tgroup>
            </informaltable>
        </para>
        <para>
            Before an application is able to send messages to other
            applications
            it must send the
    <literal>org.freedesktop.DBus.Hello</literal> message
            to the message bus to obtain a unique name. If an
            application without

```

a unique name tries to send a message to another application, or a message to the message bus itself that isn't the `<literal>org.freedesktop.DBus.Hello</literal>` message, it will be disconnected from the bus.

There is no corresponding "disconnect" request; if a client wishes to disconnect from the bus, it simply closes the socket (or other communication channel).

`<title><literal>org.freedesktop.DBus.ListNames</literal></title>`

As a method:
`<programlisting>`
ARRAY of STRING ListNames ()
`</programlisting>`
Reply arguments:
`<informaltable>`
`<tgroup cols="3">`
`<thead>`
`<row>`
`<entry>Argument</entry>`
`<entry>Type</entry>`
`<entry>Description</entry>`
`</row>`
`</thead>`
`<tbody>`
`<row>`
`<entry>0</entry>`
`<entry>ARRAY of STRING</entry>`
`<entry>Array of strings where each string is a bus name</entry>`
`</row>`
`</tbody>`
`</tgroup>`
`</informaltable>`
Returns a list of all currently-owned names on the bus.

`<title><literal>org.freedesktop.DBus.ListActivatableNames</literal></title>`

```

<para>
  As a method:
  <programlisting>
    ARRAY of STRING ListActivatableNames ()
  </programlisting>
  Reply arguments:
  <informaltable>
    <tgroup cols="3">
      <thead>
        <row>
          <entry>Argument</entry>
          <entry>Type</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
          <entry>0</entry>
          <entry>ARRAY of STRING</entry>
          <entry>Array of strings where each string is a bus
name</entry>
        </row>
      </tbody>
    </tgroup>
  </informaltable>
</para>
<para>
  Returns a list of all names that can be activated on the
bus.
</para>
</sect3>
<sect3 id="bus-messages-name-exists">

```

```

<title><literal>org.freedesktop.DBus.NameHasOwner</literal></title>
<para>
  As a method:
  <programlisting>
    BOOLEAN NameHasOwner (in STRING name)
  </programlisting>
  Message arguments:
  <informaltable>
    <tgroup cols="3">
      <thead>
        <row>
          <entry>Argument</entry>
          <entry>Type</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
          <entry>0</entry>

```

```

        <entry>STRING</entry>
        <entry>Name to check</entry>
    </row>
</tbody>
</tgroup>
</informaltable>
Reply arguments:
<informaltable>
  <tgroup cols="3">
    <thead>
      <row>
        <entry>Argument</entry>
        <entry>Type</entry>
        <entry>Description</entry>
      </row>
    </thead>
    <tbody>
      <row>
        <entry>0</entry>
        <entry>BOOLEAN</entry>
        <entry>Return value, true if the name exists</entry>
      </row>
    </tbody>
  </tgroup>
</informaltable>
</para>
<para>
  Checks if the specified name exists (currently has an
owner).
</para>
</sect3>

<sect3 id="bus-messages-name-owner-changed">

<title><literal>org.freedesktop.DBus.NameOwnerChanged</literal></title>
>
  <para>
    This is a signal:
    <programlisting>
      NameOwnerChanged (STRING name, STRING old_owner, STRING
new_owner)
    </programlisting>
    Message arguments:
    <informaltable>
      <tgroup cols="3">
        <thead>
          <row>
            <entry>Argument</entry>
            <entry>Type</entry>
            <entry>Description</entry>
          </row>
        </thead>

```

```

        <tbody>
          <row>
            <entry>0</entry>
            <entry>STRING</entry>
            <entry>Name with a new owner</entry>
          </row>
          <row>
            <entry>1</entry>
            <entry>STRING</entry>
            <entry>Old owner or empty string if none</entry>
          </row>
          <row>
            <entry>2</entry>
            <entry>STRING</entry>
            <entry>New owner or empty string if none</entry>
          </row>
        </tbody>
      </tgroup>
    </informaltable>
  </para>
  <para>
    This signal indicates that the owner of a name has changed.
    It's also the signal to use to detect the appearance of
    new names on the bus.
  </para>
</sect3>
<sect3 id="bus-messages-name-lost">

```

```

<title><literal>org.freedesktop.DBus.NameLost</literal></title>

```

```

  <para>
    This is a signal:
    <programlisting>
      NameLost (STRING name)
    </programlisting>
    Message arguments:
    <informaltable>
      <tgroup cols="3">
        <thead>
          <row>
            <entry>Argument</entry>
            <entry>Type</entry>
            <entry>Description</entry>
          </row>
        </thead>
        <tbody>
          <row>
            <entry>0</entry>
            <entry>STRING</entry>
            <entry>Name which was lost</entry>
          </row>
        </tbody>
      </tgroup>

```

```
</informaltable>
</para>
<para>
  This signal is sent to a specific application when it loses
  ownership of a name.
</para>
</sect3>
```

```
<sect3 id="bus-messages-name-acquired">
```

```
<title><literal>org.freedesktop.DBus.NameAcquired</literal></title>
```

```
<para>
  This is a signal:
  <programlisting>
    NameAcquired (STRING name)
  </programlisting>
  Message arguments:
  <informaltable>
    <tgroup cols="3">
      <thead>
        <row>
          <entry>Argument</entry>
          <entry>Type</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
          <entry>0</entry>
          <entry>STRING</entry>
          <entry>Name which was acquired</entry>
        </row>
      </tbody>
    </tgroup>
  </informaltable>
</para>
<para>
  This signal is sent to a specific application when it gains
  ownership of a name.
</para>
</sect3>
```

```
<sect3 id="bus-messages-start-service-by-name">
```

```
<title><literal>org.freedesktop.DBus.StartServiceByName</literal></title>
```

```
<para>
  As a method:
  <programlisting>
    UINT32 StartServiceByName (in STRING name, in UINT32
flags)
  </programlisting>
```

Message arguments:

```
<informaltable>
  <tgroup cols="3">
    <thead>
      <row>
        <entry>Argument</entry>
        <entry>Type</entry>
        <entry>Description</entry>
      </row>
    </thead>
    <tbody>
      <row>
        <entry>0</entry>
        <entry>STRING</entry>
        <entry>Name of the service to start</entry>
      </row>
      <row>
        <entry>1</entry>
        <entry>UINT32</entry>
        <entry>Flags (currently not used)</entry>
      </row>
    </tbody>
  </tgroup>
</informaltable>
```

Reply arguments:

```
<informaltable>
  <tgroup cols="3">
    <thead>
      <row>
        <entry>Argument</entry>
        <entry>Type</entry>
        <entry>Description</entry>
      </row>
    </thead>
    <tbody>
      <row>
        <entry>0</entry>
        <entry>UINT32</entry>
        <entry>Return value</entry>
      </row>
    </tbody>
  </tgroup>
</informaltable>
```

Tries to launch the executable associated with a name. For more information, see [<xref linkend="message-bus-starting-services"/>](#).

</para>

<para>

The return value can be one of the following values:

```
<informaltable>
  <tgroup cols="3">
    <thead>
```

Identifier	Value	Description
DBUS_START_REPLY_SUCCESS	1	The service was successfully started.
DBUS_START_REPLY_ALREADY_RUNNING	2	A connection already owns the given name.

</sect3>

<sect3 id="bus-messages-update-activation-environment">

<title><literal>org.freedesktop.DBus.UpdateActivationEnvironment</literal></title>

<para>
 As a method:
 <programlisting>
 UpdateActivationEnvironment (in ARRAY of
 DICT<STRING,STRING> environment)
 </programlisting>
 Message arguments:
 <informaltable>
 <tgroup cols="3">
 <thead>
 <row>
 <entry>Argument</entry>
 <entry>Type</entry>
 <entry>Description</entry>
 </row>
 </thead>
 <tbody>
 <row>
 <entry>0</entry>
 <entry>ARRAY of DICT<STRING,STRING></entry>
 <entry>Environment to add or update</entry>
 </row>
 </tbody>
 </informaltable>

</tgroup>
</informaltable>

Normally, session bus activated services inherit the environment of the bus daemon. This method adds to or modifies that environment when activating services.

</para>

<para>

Some bus instances, such as the standard system bus, may disable access to this method for some or all callers.

</para>

<para>

Note, both the environment variable names and values must be valid UTF-8. There's no way to update the activation environment with data that is invalid UTF-8.

</para>

</sect3>

<sect3 id="bus-messages-get-name-owner">

<title><literal>org.freedesktop.DBus.GetNameOwner</literal></title>

<para>

As a method:

<programlisting>

STRING GetNameOwner (in STRING name)

</programlisting>

Message arguments:

<informaltable>

<tgroup cols="3">

<thead>

<row>

<entry>Argument</entry>

<entry>Type</entry>

<entry>Description</entry>

</row>

</thead>

<tbody>

<row>

<entry>0</entry>

<entry>STRING</entry>

<entry>Name to get the owner of</entry>

</row>

</tbody>

</tgroup>

</informaltable>

Reply arguments:

<informaltable>

<tgroup cols="3">

<thead>

<row>

<entry>Argument</entry>

<entry>Type</entry>

```

        <entry>Description</entry>
    </row>
</thead>
<tbody>
    <row>
        <entry>0</entry>
        <entry>STRING</entry>
        <entry>Return value, a unique connection name</entry>
    </row>
</tbody>
</tgroup>
</informaltable>
Returns the unique connection name of the primary owner of the
name
given. If the requested name doesn't have an owner, returns a
<literal>org.freedesktop.DBus.Error.NameHasNoOwner</literal>
error.
</para>
</sect3>

```

```

<sect3 id="bus-messages-get-connection-unix-user">

```

```

<title><literal>org.freedesktop.DBus.GetConnectionUnixUser</literal></
title>

```

```

<para>
    As a method:
    <programlisting>
        UINT32 GetConnectionUnixUser (in STRING bus_name)
    </programlisting>
    Message arguments:
    <informaltable>
        <tgroup cols="3">
            <thead>
                <row>
                    <entry>Argument</entry>
                    <entry>Type</entry>
                    <entry>Description</entry>
                </row>
            </thead>
            <tbody>
                <row>
                    <entry>0</entry>
                    <entry>STRING</entry>
                    <entry>Unique or well-known bus name of the
connection to
                    query, such as <literal>:12.34</literal> or
                    <literal>com.example.tea</literal></entry>
                </row>
            </tbody>
        </tgroup>
    </informaltable>
    Reply arguments:

```

```

<informaltable>
  <tgroup cols="3">
    <thead>
      <row>
        <entry>Argument</entry>
        <entry>Type</entry>
        <entry>Description</entry>
      </row>
    </thead>
    <tbody>
      <row>
        <entry>0</entry>
        <entry>UINT32</entry>
        <entry>Unix user ID</entry>
      </row>
    </tbody>
  </tgroup>
</informaltable>

```

Returns the Unix user ID of the process connected to the server. If unable to determine it (for instance, because the process is not on the same machine as the bus daemon), an error is returned.

```
</sect3>
```

```
<sect3 id="bus-messages-get-connection-unix-process-id">
```

```
<title><literal>org.freedesktop.DBus.GetConnectionUnixProcessID</literal></title>
```

```

<para>
  As a method:
  <programlisting>
    UINT32 GetConnectionUnixProcessID (in STRING bus_name)
  </programlisting>
  Message arguments:
  <informaltable>

```

```

    <tgroup cols="3">
      <thead>
        <row>
          <entry>Argument</entry>
          <entry>Type</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
          <entry>0</entry>
          <entry>STRING</entry>
          <entry>Unique or well-known bus name of the

```

connection to

```

          query, such as <literal>:12.34</literal> or

```

```
        <literal>com.example.tea</literal></entry>
    </row>
</tbody>
</tgroup>
</informaltable>
```

Reply arguments:

```
<informaltable>
  <tgroup cols="3">
    <thead>
      <row>
        <entry>Argument</entry>
        <entry>Type</entry>
        <entry>Description</entry>
      </row>
    </thead>
    <tbody>
      <row>
        <entry>0</entry>
        <entry>UINT32</entry>
        <entry>Unix process id</entry>
      </row>
    </tbody>
  </tgroup>
</informaltable>
```

Returns the Unix process ID of the process connected to the server. If unable to determine it (for instance, because the process is not on the same machine as the bus daemon), an error is returned.

```
</para>
</sect3>
```

```
<sect3 id="bus-messages-add-match">
```

```
<title><literal>org.freedesktop.DBus.AddMatch</literal></title>
```

```
<para>
  As a method:
  <programlisting>
    AddMatch (in STRING rule)
  </programlisting>
  Message arguments:
  <informaltable>
    <tgroup cols="3">
      <thead>
        <row>
          <entry>Argument</entry>
          <entry>Type</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
```

<entry>0</entry>	<entry>STRING</entry>	<entry>Match rule to add to the connection</entry>
------------------	-----------------------	--

Adds a match rule to match messages going through the message bus (see [message-bus-routing-match-rules](#)).

If the bus does not have enough resources the `org.freedesktop.DBus.Error.OOM` error is returned.

org.freedesktop.DBus.RemoveMatch

As a method:

```
RemoveMatch (in STRING rule)
```

Message arguments:

Argument	Type	Description
0	STRING	Match rule to remove from the connection

Removes the first rule that matches (see [message-bus-routing-match-rules](#)).

If the rule is not found the `org.freedesktop.DBus.Error.MatchRuleNotFound` error is returned.

org.freedesktop.DBus.GetId

```

<para>
  As a method:
  <programlisting>
    GetId (out STRING id)
  </programlisting>
  Reply arguments:
  <informaltable>
    <tgroup cols="3">
      <thead>
        <row>
          <entry>Argument</entry>
          <entry>Type</entry>
          <entry>Description</entry>
        </row>
      </thead>
      <tbody>
        <row>
          <entry>0</entry>
          <entry>STRING</entry>
          <entry>Unique ID identifying the bus daemon</entry>
        </row>
      </tbody>
    </tgroup>
  </informaltable>
  Gets the unique ID of the bus. The unique ID here is shared
  among all addresses the
  bus daemon is listening on (TCP, UNIX domain socket, etc.) and
  its format is described in
  <xref linkend="uuids"/>. Each address the bus is listening on
  also has its own unique
  ID, as described in <xref linkend="addresses"/>. The per-bus
  and per-address IDs are not related.
  There is also a per-machine ID, described in <xref
  linkend="standard-interfaces-peer"/> and returned
  by org.freedesktop.DBus.Peer.GetMachineId().
  For a desktop session bus, the bus ID can be used as a way to
  uniquely identify a user's session.
</para>
</sect3>

</sect2>

</sect1>
<!--
<appendix id="implementation-notes">
  <title>Implementation notes</title>
  <sect1 id="implementation-notes-subsection">
    <title></title>
    <para>
    </para>
  </sect1>
</appendix>

```

-->

```
<glossary><title>Glossary</title>
  <para>
    This glossary defines some of the terms used in this
specification.
  </para>

  <glossentry id="term-bus-name"><glossterm>Bus Name</glossterm>
    <glossdef>
      <para>
        The message bus maintains an association between names and
connections. (Normally, there's one connection per
application.) A
        bus name is simply an identifier used to locate connections.
For
        example, the hypothetical
<literal>com.yoyodyne.Screensaver</literal>
        name might be used to send a message to a screensaver from
Yoyodyne
        Corporation. An application is said to
<firstterm>own</firstterm> a
        name if the message bus has associated the application's
connection
        with the name. Names may also have <firstterm>queued
owners</firstterm> (see <xref linkend="term-queued-
owner"/>).
        The bus assigns a unique name to each connection,
        see <xref linkend="term-unique-name"/>. Other names
        can be thought of as "well-known names" and are
        used to find applications that offer specific
functionality.
      </para>

      <para>
        See <xref linkend="message-protocol-names-bus"/> for details
of
        the syntax and naming conventions for bus names.
      </para>
    </glossdef>
  </glossentry>

  <glossentry id="term-message"><glossterm>Message</glossterm>
    <glossdef>
      <para>
        A message is the atomic unit of communication via the D-Bus
protocol. It consists of a <firstterm>header</firstterm> and
a
        <firstterm>body</firstterm>; the body is made up of
        <firstterm>arguments</firstterm>.
      </para>
    </glossdef>
```

```

</glossentry>

<glossentry id="term-message-bus"><glossterm>Message
Bus</glossterm>
  <glossdef>
    <para>
      The message bus is a special application that forwards
      or routes messages between a group of applications
      connected to the message bus. It also manages
      <firstterm>names</firstterm> used for routing
      messages.
    </para>
  </glossdef>
</glossentry>

<glossentry id="term-name"><glossterm>Name</glossterm>
  <glossdef>
    <para>
      See <xref linkend="term-bus-name"/>. "Name" may
      also be used to refer to some of the other names
      in D-Bus, such as interface names.
    </para>
  </glossdef>
</glossentry>

<glossentry id="namespace"><glossterm>Namespace</glossterm>
  <glossdef>
    <para>
      Used to prevent collisions when defining new interfaces, bus
names
      etc. The convention used is the same one Java uses for
defining
      classes: a reversed domain name.
      See <xref linkend="message-protocol-names-bus"/>,
      <xref linkend="message-protocol-names-interface"/>,
      <xref linkend="message-protocol-names-error"/>,
      <xref linkend="message-protocol-marshaling-object-path"/>.
    </para>
  </glossdef>
</glossentry>

<glossentry id="term-object"><glossterm>Object</glossterm>
  <glossdef>
    <para>
      Each application contains <firstterm>objects</firstterm>,
which have
      <firstterm>interfaces</firstterm> and
      <firstterm>methods</firstterm>. Objects are referred to by a
name,
      called a <firstterm>path</firstterm>.
    </para>
  </glossdef>

```


</glossentry>

<glossentry id="one-to-one"><glossterm>One-to-One</glossterm>

<glossdef>

<para>

An application talking directly to another application, without going through a message bus. One-to-one connections may be "peer to peer" or "client to server." The D-Bus protocol has no concept of client vs. server after a connection has authenticated; the flow of messages is symmetrical (full duplex).

</para>

</glossdef>

</glossentry>

<glossentry id="term-path"><glossterm>Path</glossterm>

<glossdef>

<para>

Object references (object names) in D-Bus are organized into a filesystem-style hierarchy, so each object is named by a path. As in LDAP, there's no difference between "files" and "directories"; a path can refer to an object, while still having child objects below it.

</para>

</glossdef>

</glossentry>

<glossentry id="term-queued-owner"><glossterm>Queued Name Owner</glossterm>

<glossdef>

<para>

Each bus name has a primary owner; messages sent to the name go to the primary owner. However, certain names also maintain a queue of secondary owners "waiting in the wings." If the primary owner releases the name, then the first secondary owner in the queue automatically becomes the new owner of the name.

</para>

</glossdef>

</glossentry>

<glossentry id="term-service"><glossterm>Service</glossterm>

<glossdef>

```
<para>
  A service is an executable that can be launched by the bus
daemon.
  Services normally guarantee some particular features, for
example they
  may guarantee that they will request a specific name such as
  "org.freedesktop.Screensaver", have a singleton object
  "/org/freedesktop/Application", and that object will
implement the
  interface "org.freedesktop.ScreensaverControl".
</para>
</glossdef>
</glossentry>
```

```
<glossentry id="term-service-description-files"><glossterm>Service
Description Files</glossterm>
<glossdef>
<para>
  ".service files" tell the bus about service applications
that can be
  launched (see <xref linkend="term-service"/>). Most
importantly they
  provide a mapping from bus names to services that will
request those
  names when they start up.
</para>
</glossdef>
</glossentry>
```

```
<glossentry id="term-unique-name"><glossterm>Unique Connection
Name</glossterm>
<glossdef>
<para>
  The special name automatically assigned to each connection
by the
  message bus. This name will never change owner, and will be
unique
  (never reused during the lifetime of the message bus).
  It will begin with a ':' character.
</para>
</glossdef>
</glossentry>
```

```
</glossary>
</article>
```

```
File = dbus-string-private.h
```

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
```

```

/* dbus-string-private.h String utility class (internal to D-Bus
implementation)
*
* Copyright (C) 2002, 2003 Red Hat, Inc.
*
* Licensed under the Academic Free License version 2.1
*
* This program is free software; you can redistribute it and/or
modify
* it under the terms of the GNU General Public License as published
by
* the Free Software Foundation; either version 2 of the License, or
* (at your option) any later version.
*
* This program is distributed in the hope that it will be useful,
* but WITHOUT ANY WARRANTY; without even the implied warranty of
* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
* GNU General Public License for more details.
*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

```

```

#ifndef DBUS_STRING_PRIVATE_H
#define DBUS_STRING_PRIVATE_H

```

```

#include <dbus/dbus-internals.h>
#include <dbus/dbus-memory.h>
#include <dbus/dbus-types.h>

```

```

#ifndef DBUS_CAN_USE_DBUS_STRING_PRIVATE
#error "Don't go including dbus-string-private.h for no good reason"
#endif

```

```

DBUS_BEGIN_DECLS

```

```

/**
 * @brief Internals of DBusString.
 *
 * DBusString internals. DBusString is an opaque objects, it must be
 * used via accessor functions.
 */

```

```

typedef struct

```

```

{
    unsigned char *str;          /**< String data, plus nul
termination */
    int len;                    /**< Length without nul */
    int allocated;              /**< Allocated size of data */

```

```

    unsigned int    constant : 1;    /**< String data is not owned by
DBusString */
    unsigned int    locked : 1;      /**< DBusString has been locked and
can't be changed */
    unsigned int    invalid : 1;     /**< DBusString is invalid (e.g.
already freed) */
    unsigned int    align_offset : 3; /**< str - align_offset is the
actual malloc block */
} DBusRealString;

_DBUS_STATIC_ASSERT (sizeof (DBusRealString) == sizeof (DBusString));

/**
 * @defgroup DBusStringInternals DBusString implementation details
 * @ingroup DBusInternals
 * @brief DBusString implementation details
 *
 * The guts of DBusString.
 *
 * @{
 */

/**
 * The maximum length of a DBusString
 */
#define _DBUS_STRING_MAX_LENGTH (_DBUS_INT32_MAX -
_DBUS_STRING_ALLOCATION_PADDING)

/**
 * Checks a bunch of assertions about a string object
 *
 * @param real the DBusRealString
 */
#define DBUS_GENERIC_STRING_PREAMBLE(real) \
do { \
    (void) real; /* might be unused unless asserting */ \
    _dbus_assert ((real) != NULL); \
    _dbus_assert (!(real)->invalid); \
    _dbus_assert ((real)->len >= 0); \
    _dbus_assert ((real)->allocated >= 0); \
    _dbus_assert ((real)->len <= ((real)->allocated -
_DBUS_STRING_ALLOCATION_PADDING)); \
    _dbus_assert ((real)->len <= _DBUS_STRING_MAX_LENGTH); \
} while (0)

/**
 * Checks assertions about a string object that needs to be
 * modifiable - may not be locked or const. Also declares
 * the "real" variable pointing to DBusRealString.
 * @param str the string
 */

```

```

#define DBUS_STRING_PREAMBLE(str) DBusRealString *real =
(DBusRealString*) str; \
    DBUS_GENERIC_STRING_PREAMBLE (real);
\
    _dbus_assert (!(real)->constant);
\
    _dbus_assert (!(real)->locked)

/**
 * Checks assertions about a string object that may be locked but
 * can't be const. i.e. a string object that we can free. Also
 * declares the "real" variable pointing to DBusRealString.
 *
 * @param str the string
 */
#define DBUS_LOCKED_STRING_PREAMBLE(str) DBusRealString *real =
(DBusRealString*) str; \
    DBUS_GENERIC_STRING_PREAMBLE (real);
\
    _dbus_assert (!(real)->constant)

/**
 * Checks assertions about a string that may be const or locked. Also
 * declares the "real" variable pointing to DBusRealString.
 * @param str the string.
 */
#define DBUS_CONST_STRING_PREAMBLE(str) const DBusRealString *real =
(DBusRealString*) str; \
    DBUS_GENERIC_STRING_PREAMBLE (real)

/**
 * Checks for ASCII blank byte
 * @param c the byte
 */
#define DBUS_IS_ASCII_BLANK(c) ((c) == ' ' || (c) == '\t')

/**
 * Checks for ASCII whitespace byte
 * @param c the byte
 */
#define DBUS_IS_ASCII_WHITE(c) ((c) == ' ' || (c) == '\t' || (c) ==
'\n' || (c) == '\r')

/** @} */

DBUS_END_DECLS

#endif /* DBUS_STRING_PRIVATE_H */

```

File = dbus-string-util.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-string-util.c Would be in dbus-string.c, but not used in
libdbus
*
* Copyright (C) 2002, 2003, 2004, 2005 Red Hat, Inc.
* Copyright (C) 2006 Ralf Habacker <ralf.habacker@freenet.de>
*
* Licensed under the Academic Free License version 2.1
*
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* it under the terms of the GNU General Public License as published
by
* the Free Software Foundation; either version 2 of the License, or
* (at your option) any later version.
*
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* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
* GNU General Public License for more details.
*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>
#include "dbus-internals.h"
#include "dbus-string.h"
#define DBUS_CAN_USE_DBUS_STRING_PRIVATE 1
#include "dbus-string-private.h"

/**
 * @addtogroup DBusString
 * @{
 */

/**
 * Returns whether a string ends with the given suffix
 *
 * @todo memcmp might make this faster.
 *
 * @param a the string
 * @param c_str the C-style string
 * @returns #TRUE if the string ends with the suffix
 */
dbus_bool_t
_dbus_string_ends_with_c_str (const DBusString *a,
                             const char      *c_str)

```

```

{
    const unsigned char *ap;
    const unsigned char *bp;
    const unsigned char *a_end;
    unsigned long c_str_len;
    const DBusRealString *real_a = (const DBusRealString*) a;
    DBUS_GENERIC_STRING_PREAMBLE (real_a);
    _dbus_assert (c_str != NULL);

    c_str_len = strlen (c_str);
    if (((unsigned long)real_a->len) < c_str_len)
        return FALSE;

    ap = real_a->str + (real_a->len - c_str_len);
    bp = (const unsigned char*) c_str;
    a_end = real_a->str + real_a->len;
    while (ap != a_end)
        {
            if (*ap != *bp)
                return FALSE;

            ++ap;
            ++bp;
        }

    _dbus_assert (*ap == '\\0');
    _dbus_assert (*bp == '\\0');

    return TRUE;
}

/**
 * Find the given byte scanning backward from the given start.
 * Sets *found to -1 if the byte is not found.
 *
 * @param str the string
 * @param start the place to start scanning (will not find the byte at
this point)
 * @param byte the byte to find
 * @param found return location for where it was found
 * @returns #TRUE if found
 */
dbus_bool_t
_dbus_string_find_byte_backward (const DBusString *str,
                                int start,
                                unsigned char byte,
                                int *found)
{
    int i;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start <= real->len);
    _dbus_assert (start >= 0);

```

```

_dbus_assert (found != NULL);

i = start - 1;
while (i >= 0)
{
    if (real->str[i] == byte)
        break;

    --i;
}

if (found)
    *found = i;

return i >= 0;
}

/** @} */

#ifdef DBUS_BUILD_TESTS
#include "dbus-test.h"
#include <stdio.h>

static void
test_hex_roundtrip (const unsigned char *data,
                    int len)
{
    DBusString orig;
    DBusString encoded;
    DBusString decoded;
    int end;

    if (len < 0)
        len = strlen (data);

    if (!_dbus_string_init (&orig))
        _dbus_assert_not_reached ("could not init string");

    if (!_dbus_string_init (&encoded))
        _dbus_assert_not_reached ("could not init string");

    if (!_dbus_string_init (&decoded))
        _dbus_assert_not_reached ("could not init string");

    if (!_dbus_string_append_len (&orig, data, len))
        _dbus_assert_not_reached ("couldn't append orig data");

    if (!_dbus_string_hex_encode (&orig, 0, &encoded, 0))
        _dbus_assert_not_reached ("could not encode");

    if (!_dbus_string_hex_decode (&encoded, 0, &end, &decoded, 0))
        _dbus_assert_not_reached ("could not decode");
}

```



```

_dbus_assert (_dbus_string_get_length (&encoded) == end);

if (!_dbus_string_equal (&orig, &decoded))
{
    const char *s;

    printf ("Original string %d bytes encoded %d bytes decoded %d
bytes\n",
           _dbus_string_get_length (&orig),
           _dbus_string_get_length (&encoded),
           _dbus_string_get_length (&decoded));
    printf ("Original: %s\n", data);
    s = _dbus_string_get_const_data (&decoded);
    printf ("Decoded: %s\n", s);
    _dbus_assert_not_reached ("original string not the same as
string decoded from hex");
}

_dbus_string_free (&orig);
_dbus_string_free (&encoded);
_dbus_string_free (&decoded);
}

```

```

typedef void (* TestRoundtripFunc) (const unsigned char *data,
                                     int len);

static void
test_roundtrips (TestRoundtripFunc func)
{
    (* func) ("Hello this is a string\n", -1);
    (* func) ("Hello this is a string\n1", -1);
    (* func) ("Hello this is a string\n12", -1);
    (* func) ("Hello this is a string\n123", -1);
    (* func) ("Hello this is a string\n1234", -1);
    (* func) ("Hello this is a string\n12345", -1);
    (* func) ("", 0);
    (* func) ("1", 1);
    (* func) ("12", 2);
    (* func) ("123", 3);
    (* func) ("1234", 4);
    (* func) ("12345", 5);
    (* func) ("", 1);
    (* func) ("1", 2);
    (* func) ("12", 3);
    (* func) ("123", 4);
    (* func) ("1234", 5);
    (* func) ("12345", 6);
    {
        unsigned char buf[512];
        int i;

        i = 0;
    }
}

```

```

while (i < _DBUS_N_ELEMENTS (buf))
    {
        buf[i] = i;
        ++i;
    }
i = 0;
while (i < _DBUS_N_ELEMENTS (buf))
    {
        (* func) (buf, i);
        ++i;
    }
}
}

/**
 * @ingroup DBusStringInternals
 * Unit test for DBusString.
 *
 * @todo Need to write tests for _dbus_string_copy() and
 * _dbus_string_move() moving to/from each of start/middle/end of a
 * string. Also need tests for _dbus_string_move_len ()
 *
 * @returns #TRUE on success.
 */
dbus_bool_t
_dbus_string_test (void)
{
    DBusString str;
    DBusString other;
    int i, a, end;
    long v;
    int lens[] = { 0, 1, 2, 3, 4, 5, 10, 16, 17, 18, 25, 31, 32, 33, 34,
35, 63, 64, 65, 66, 67, 68, 69, 70, 71, 127, 128, 129, 130, 131, 132,
133, 134, 135, 136 };
    char *s;

    /* Test shortening and setting length */
    i = 0;
    while (i < _DBUS_N_ELEMENTS (lens))
        {
            int j;

            if (!_dbus_string_init (&str))
                _dbus_assert_not_reached ("failed to init string");

            if (!_dbus_string_set_length (&str, lens[i]))
                _dbus_assert_not_reached ("failed to set string length");

            j = lens[i];
            while (j > 0)
                {
                    _dbus_assert (_dbus_string_get_length (&str) == j);

```

```

        if (j > 0)
        {
            _dbus_string_shorten (&str, 1);
            _dbus_assert (_dbus_string_get_length (&str) == (j -
1));
        }
        --j;
    }

    _dbus_string_free (&str);

    ++i;
}

/* Test equality */
if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("oom");

if (!_dbus_string_append (&str, "Hello World"))
    _dbus_assert_not_reached ("oom");

_dbus_string_init_const (&other, "H");
_dbus_assert (_dbus_string_equal_substring (&str, 0, 1, &other, 0));
_dbus_assert (_dbus_string_equal_substring (&str, 1, 0, &other, 1));
_dbus_string_init_const (&other, "Hello");
_dbus_assert (_dbus_string_equal_substring (&str, 0, 5, &other, 0));
_dbus_assert (_dbus_string_equal_substring (&str, 1, 4, &other, 1));
_dbus_assert (_dbus_string_equal_substring (&str, 2, 3, &other, 2));
_dbus_assert (_dbus_string_equal_substring (&str, 3, 2, &other, 3));
_dbus_assert (_dbus_string_equal_substring (&str, 4, 1, &other, 4));
_dbus_assert (_dbus_string_equal_substring (&str, 5, 0, &other, 5));

_dbus_assert (_dbus_string_equal_substring (&other, 0, 5, &str, 0));
_dbus_assert (_dbus_string_equal_substring (&other, 1, 4, &str, 1));
_dbus_assert (_dbus_string_equal_substring (&other, 2, 3, &str, 2));
_dbus_assert (_dbus_string_equal_substring (&other, 3, 2, &str, 3));
_dbus_assert (_dbus_string_equal_substring (&other, 4, 1, &str, 4));
_dbus_assert (_dbus_string_equal_substring (&other, 5, 0, &str, 5));

_dbus_string_init_const (&other, "World");
_dbus_assert (_dbus_string_equal_substring (&str, 6, 5, &other,
0));
_dbus_assert (_dbus_string_equal_substring (&str, 7, 4, &other,
1));
_dbus_assert (_dbus_string_equal_substring (&str, 8, 3, &other,
2));
_dbus_assert (_dbus_string_equal_substring (&str, 9, 2, &other,
3));
_dbus_assert (_dbus_string_equal_substring (&str, 10, 1, &other,
4));

```

```

_dbus_assert (_dbus_string_equal_substring (&str, 11, 0, &other,
5));

_dbus_assert (_dbus_string_equal_substring (&other, 0, 5, &str, 6));
_dbus_assert (_dbus_string_equal_substring (&other, 1, 4, &str, 7));
_dbus_assert (_dbus_string_equal_substring (&other, 2, 3, &str, 8));
_dbus_assert (_dbus_string_equal_substring (&other, 3, 2, &str, 9));
_dbus_assert (_dbus_string_equal_substring (&other, 4, 1, &str,
10));
_dbus_assert (_dbus_string_equal_substring (&other, 5, 0, &str,
11));

_dbus_string_free (&str);

/* Test appending data */
if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("failed to init string");

i = 0;
while (i < 10)
{
    if (!_dbus_string_append (&str, "a"))
        _dbus_assert_not_reached ("failed to append string to
string\n");

    _dbus_assert (_dbus_string_get_length (&str) == i * 2 + 1);

    if (!_dbus_string_append_byte (&str, 'b'))
        _dbus_assert_not_reached ("failed to append byte to
string\n");

    _dbus_assert (_dbus_string_get_length (&str) == i * 2 + 2);

    ++i;
}

_dbus_string_free (&str);

/* Check steal_data */

if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("failed to init string");

if (!_dbus_string_append (&str, "Hello World"))
    _dbus_assert_not_reached ("could not append to string");

i = _dbus_string_get_length (&str);

if (!_dbus_string_steal_data (&str, &s))
    _dbus_assert_not_reached ("failed to steal data");

_dbus_assert (_dbus_string_get_length (&str) == 0);

```

```

_dbus_assert (((int)strlen (s)) == i);

dbus_free (s);

/* Check move */

if (!_dbus_string_append (&str, "Hello World"))
    _dbus_assert_not_reached ("could not append to string");

i = _dbus_string_get_length (&str);

if (!_dbus_string_init (&other))
    _dbus_assert_not_reached ("could not init string");

if (!_dbus_string_move (&str, 0, &other, 0))
    _dbus_assert_not_reached ("could not move");

_dbus_assert (_dbus_string_get_length (&str) == 0);
_dbus_assert (_dbus_string_get_length (&other) == i);

if (!_dbus_string_append (&str, "Hello World"))
    _dbus_assert_not_reached ("could not append to string");

if (!_dbus_string_move (&str, 0, &other, _dbus_string_get_length
(&other)))
    _dbus_assert_not_reached ("could not move");

_dbus_assert (_dbus_string_get_length (&str) == 0);
_dbus_assert (_dbus_string_get_length (&other) == i * 2);

    if (!_dbus_string_append (&str, "Hello World"))
        _dbus_assert_not_reached ("could not append to string");

if (!_dbus_string_move (&str, 0, &other, _dbus_string_get_length
(&other) / 2))
    _dbus_assert_not_reached ("could not move");

_dbus_assert (_dbus_string_get_length (&str) == 0);
_dbus_assert (_dbus_string_get_length (&other) == i * 3);

_dbus_string_free (&other);

/* Check copy */

if (!_dbus_string_append (&str, "Hello World"))
    _dbus_assert_not_reached ("could not append to string");

i = _dbus_string_get_length (&str);

if (!_dbus_string_init (&other))
    _dbus_assert_not_reached ("could not init string");

```

```

if (!_dbus_string_copy (&str, 0, &other, 0))
    _dbus_assert_not_reached ("could not copy");

_dbus_assert (_dbus_string_get_length (&str) == i);
_dbus_assert (_dbus_string_get_length (&other) == i);

if (!_dbus_string_copy (&str, 0, &other, _dbus_string_get_length
(&other)))
    _dbus_assert_not_reached ("could not copy");

_dbus_assert (_dbus_string_get_length (&str) == i);
_dbus_assert (_dbus_string_get_length (&other) == i * 2);
_dbus_assert (_dbus_string_equal_c_str (&other,
                                        "Hello WorldHello World"));

if (!_dbus_string_copy (&str, 0, &other, _dbus_string_get_length
(&other) / 2))
    _dbus_assert_not_reached ("could not copy");

_dbus_assert (_dbus_string_get_length (&str) == i);
_dbus_assert (_dbus_string_get_length (&other) == i * 3);
_dbus_assert (_dbus_string_equal_c_str (&other,
                                        "Hello WorldHello WorldHello
World"));

_dbus_string_free (&str);
_dbus_string_free (&other);

/* Check replace */

if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("failed to init string");

if (!_dbus_string_append (&str, "Hello World"))
    _dbus_assert_not_reached ("could not append to string");

i = _dbus_string_get_length (&str);

if (!_dbus_string_init (&other))
    _dbus_assert_not_reached ("could not init string");

if (!_dbus_string_replace_len (&str, 0, _dbus_string_get_length
(&str),
                                &other, 0, _dbus_string_get_length
(&other)))
    _dbus_assert_not_reached ("could not replace");

_dbus_assert (_dbus_string_get_length (&str) == i);
_dbus_assert (_dbus_string_get_length (&other) == i);
_dbus_assert (_dbus_string_equal_c_str (&other, "Hello World"));

```

```

    if (!_dbus_string_replace_len (&str, 0, _dbus_string_get_length
(&str),
                                &other, 5, 1))
        _dbus_assert_not_reached ("could not replace center space");

    _dbus_assert (_dbus_string_get_length (&str) == i);
    _dbus_assert (_dbus_string_get_length (&other) == i * 2 - 1);
    _dbus_assert (_dbus_string_equal_c_str (&other,
                                           "HelloHello WorldWorld"));

    if (!_dbus_string_replace_len (&str, 1, 1,
                                &other,
                                _dbus_string_get_length (&other) - 1,
                                1))
        _dbus_assert_not_reached ("could not replace end character");

    _dbus_assert (_dbus_string_get_length (&str) == i);
    _dbus_assert (_dbus_string_get_length (&other) == i * 2 - 1);
    _dbus_assert (_dbus_string_equal_c_str (&other,
                                           "HelloHello WorldWorle"));

    _dbus_string_free (&str);
    _dbus_string_free (&other);

    /* Different tests are provided because different behaviours are
     * implemented in _dbus_string_replace_len() in function of
replacing and
     * replaced lengths
     */

    if (!_dbus_string_init (&str))
        _dbus_assert_not_reached ("failed to init string");

    if (!_dbus_string_append (&str, "Hello World"))
        _dbus_assert_not_reached ("could not append to string");

    i = _dbus_string_get_length (&str);

    if (!_dbus_string_init (&other))
        _dbus_assert_not_reached ("could not init string");

    if (!_dbus_string_append (&other, "Foo String"))
        _dbus_assert_not_reached ("could not append to string");

    a = _dbus_string_get_length (&other);

    if (!_dbus_string_replace_len (&str, 0, 6,
                                &other, 4, 0))
        _dbus_assert_not_reached ("could not replace 0 length");

    _dbus_assert (_dbus_string_get_length (&str) == i);

```

```

_dbus_assert (_dbus_string_get_length (&other) == a + 6);
_dbus_assert (_dbus_string_equal_c_str (&other,
                                       "Foo Hello String"));

if (!_dbus_string_replace_len (&str, 5, 6,
                              &other,
                              _dbus_string_get_length (&other),
                              0))
    _dbus_assert_not_reached ("could not replace at the end");

_dbus_assert (_dbus_string_get_length (&str) == i);
_dbus_assert (_dbus_string_get_length (&other) == a + 6 + 6);
_dbus_assert (_dbus_string_equal_c_str (&other,
                                       "Foo Hello String World"));

if (!_dbus_string_replace_len (&str, 0, 5,
                              &other,
                              _dbus_string_get_length (&other) - 5,
                              5))
    _dbus_assert_not_reached ("could not replace same length");

_dbus_assert (_dbus_string_get_length (&str) == i);
_dbus_assert (_dbus_string_get_length (&other) == a + 6 + 6);
_dbus_assert (_dbus_string_equal_c_str (&other,
                                       "Foo Hello String Hello"));

if (!_dbus_string_replace_len (&str, 6, 5,
                              &other, 4, 12))
    _dbus_assert_not_reached ("could not replace with shorter
string");

_dbus_assert (_dbus_string_get_length (&str) == i);
_dbus_assert (_dbus_string_get_length (&other) == a + 5);
_dbus_assert (_dbus_string_equal_c_str (&other,
                                       "Foo World Hello"));

if (!_dbus_string_replace_len (&str, 0, 1,
                              &other, 0, 3))
    _dbus_assert_not_reached ("could not replace at the beginning");

_dbus_assert (_dbus_string_get_length (&str) == i);
_dbus_assert (_dbus_string_get_length (&other) == a + 3);
_dbus_assert (_dbus_string_equal_c_str (&other,
                                       "H World Hello"));

if (!_dbus_string_replace_len (&str, 6, 5,
                              &other,
                              _dbus_string_get_length (&other) - 5,
                              5))
    _dbus_assert_not_reached ("could not replace same length");

_dbus_assert (_dbus_string_get_length (&str) == i);

```



```

_dbus_assert (_dbus_string_get_length (&other) == a + 3);
_dbus_assert (_dbus_string_equal_c_str (&other,
                                       "H World World"));

_dbus_string_free (&str);
_dbus_string_free (&other);

/* Check insert/set/get byte */

if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("failed to init string");

if (!_dbus_string_append (&str, "Hello"))
    _dbus_assert_not_reached ("failed to append Hello");

_dbus_assert (_dbus_string_get_byte (&str, 0) == 'H');
_dbus_assert (_dbus_string_get_byte (&str, 1) == 'e');
_dbus_assert (_dbus_string_get_byte (&str, 2) == 'l');
_dbus_assert (_dbus_string_get_byte (&str, 3) == 'l');
_dbus_assert (_dbus_string_get_byte (&str, 4) == 'o');

_dbus_string_set_byte (&str, 1, 'q');
_dbus_assert (_dbus_string_get_byte (&str, 1) == 'q');

if (!_dbus_string_insert_bytes (&str, 0, 1, 255))
    _dbus_assert_not_reached ("can't insert byte");

if (!_dbus_string_insert_bytes (&str, 2, 4, 'Z'))
    _dbus_assert_not_reached ("can't insert byte");

if (!_dbus_string_insert_bytes (&str, _dbus_string_get_length
(&str), 1, 'W'))
    _dbus_assert_not_reached ("can't insert byte");

_dbus_assert (_dbus_string_get_byte (&str, 0) == 255);
_dbus_assert (_dbus_string_get_byte (&str, 1) == 'H');
_dbus_assert (_dbus_string_get_byte (&str, 2) == 'Z');
_dbus_assert (_dbus_string_get_byte (&str, 3) == 'Z');
_dbus_assert (_dbus_string_get_byte (&str, 4) == 'Z');
_dbus_assert (_dbus_string_get_byte (&str, 5) == 'Z');
_dbus_assert (_dbus_string_get_byte (&str, 6) == 'q');
_dbus_assert (_dbus_string_get_byte (&str, 7) == 'l');
_dbus_assert (_dbus_string_get_byte (&str, 8) == 'l');
_dbus_assert (_dbus_string_get_byte (&str, 9) == 'o');
_dbus_assert (_dbus_string_get_byte (&str, 10) == 'W');

_dbus_string_free (&str);

/* Check append/parse int/double */

if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("failed to init string");

```

```

if (!_dbus_string_append_int (&str, 27))
    _dbus_assert_not_reached ("failed to append int");

i = _dbus_string_get_length (&str);

if (!_dbus_string_parse_int (&str, 0, &v, &end))
    _dbus_assert_not_reached ("failed to parse int");

_dbus_assert (v == 27);
_dbus_assert (end == i);

_dbus_string_free (&str);

/* Test find */
if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("failed to init string");

if (!_dbus_string_append (&str, "Hello"))
    _dbus_assert_not_reached ("couldn't append to string");

if (!_dbus_string_find (&str, 0, "He", &i))
    _dbus_assert_not_reached ("didn't find 'He'");
_dbus_assert (i == 0);

if (!_dbus_string_find (&str, 0, "Hello", &i))
    _dbus_assert_not_reached ("didn't find 'Hello'");
_dbus_assert (i == 0);

if (!_dbus_string_find (&str, 0, "ello", &i))
    _dbus_assert_not_reached ("didn't find 'ello'");
_dbus_assert (i == 1);

if (!_dbus_string_find (&str, 0, "lo", &i))
    _dbus_assert_not_reached ("didn't find 'lo'");
_dbus_assert (i == 3);

if (!_dbus_string_find (&str, 2, "lo", &i))
    _dbus_assert_not_reached ("didn't find 'lo'");
_dbus_assert (i == 3);

if (_dbus_string_find (&str, 4, "lo", &i))
    _dbus_assert_not_reached ("did find 'lo'");

if (!_dbus_string_find (&str, 0, "l", &i))
    _dbus_assert_not_reached ("didn't find 'l'");
_dbus_assert (i == 2);

if (!_dbus_string_find (&str, 0, "H", &i))
    _dbus_assert_not_reached ("didn't find 'H'");
_dbus_assert (i == 0);

```

```

if (!_dbus_string_find (&str, 0, "", &i))
    _dbus_assert_not_reached ("didn't find '');
_dbus_assert (i == 0);

if (_dbus_string_find (&str, 0, "Hello!", NULL))
    _dbus_assert_not_reached ("Did find 'Hello!');

if (_dbus_string_find (&str, 0, "Oh, Hello", NULL))
    _dbus_assert_not_reached ("Did find 'Oh, Hello');

if (_dbus_string_find (&str, 0, "ill", NULL))
    _dbus_assert_not_reached ("Did find 'ill');

if (_dbus_string_find (&str, 0, "q", NULL))
    _dbus_assert_not_reached ("Did find 'q');

if (!_dbus_string_find_to (&str, 0, 2, "He", NULL))
    _dbus_assert_not_reached ("Didn't find 'He');

if (_dbus_string_find_to (&str, 0, 2, "Hello", NULL))
    _dbus_assert_not_reached ("Did find 'Hello');

if (!_dbus_string_find_byte_backward (&str, _dbus_string_get_length
(&str), 'H', &i))
    _dbus_assert_not_reached ("Did not find 'H');
_dbus_assert (i == 0);

if (!_dbus_string_find_byte_backward (&str, _dbus_string_get_length
(&str), 'o', &i))
    _dbus_assert_not_reached ("Did not find 'o');
_dbus_assert (i == _dbus_string_get_length (&str) - 1);

if (_dbus_string_find_byte_backward (&str, _dbus_string_get_length
(&str) - 1, 'o', &i))
    _dbus_assert_not_reached ("Did find 'o');
_dbus_assert (i == -1);

if (_dbus_string_find_byte_backward (&str, 1, 'e', &i))
    _dbus_assert_not_reached ("Did find 'e');
_dbus_assert (i == -1);

if (!_dbus_string_find_byte_backward (&str, 2, 'e', &i))
    _dbus_assert_not_reached ("Didn't find 'e');
_dbus_assert (i == 1);

_dbus_string_free (&str);

/* Hex encoding */
_dbus_string_init_const (&str, "cafebabé, this is a bogus hex
string");
if (!_dbus_string_init (&other))
    _dbus_assert_not_reached ("could not init string");

```

```

if (!_dbus_string_hex_decode (&str, 0, &end, &other, 0))
    _dbus_assert_not_reached ("deccoded bogus hex string with no
error");

_dbus_assert (end == 8);

_dbus_string_free (&other);

test_roundtrips (test_hex_roundtrip);

_dbus_string_free (&str);

{
    int found, found_len;

    _dbus_string_init_const (&str, "012\r\n567\n90");

    if (!_dbus_string_find_eol (&str, 0, &found, &found_len) || found
!= 3 || found_len != 2)
        _dbus_assert_not_reached ("Did not find '\\r\\n'");
    if (found != 3 || found_len != 2)
        _dbus_assert_not_reached ("invalid return values");

    if (!_dbus_string_find_eol (&str, 5, &found, &found_len))
        _dbus_assert_not_reached ("Did not find '\\n'");
    if (found != 8 || found_len != 1)
        _dbus_assert_not_reached ("invalid return values");

    if (_dbus_string_find_eol (&str, 9, &found, &found_len))
        _dbus_assert_not_reached ("Found not expected '\\n'");
    else if (found != 11 || found_len != 0)
        _dbus_assert_not_reached ("invalid return values '\\n'");

    found = -1;
    found_len = -1;
    _dbus_string_init_const (&str, "");
    if (_dbus_string_find_eol (&str, 0, &found, &found_len))
        _dbus_assert_not_reached ("found an eol in an empty string");
    _dbus_assert (found == 0);
    _dbus_assert (found_len == 0);

    found = -1;
    found_len = -1;
    _dbus_string_init_const (&str, "foobar");
    if (_dbus_string_find_eol (&str, 0, &found, &found_len))
        _dbus_assert_not_reached ("found eol in string that lacks one");
    _dbus_assert (found == 6);
    _dbus_assert (found_len == 0);

    found = -1;
    found_len = -1;

```

```

    _dbus_string_init_const (&str, "foobar\n");
    if (!_dbus_string_find_eol (&str, 0, &found, &found_len))
        _dbus_assert_not_reached ("did not find eol in string that has
one at end");
    _dbus_assert (found == 6);
    _dbus_assert (found_len == 1);
}

{
    DBusString line;

#define FIRST_LINE "this is a line"
#define SECOND_LINE "this is a second line"
    /* third line is empty */
#define THIRD_LINE ""
#define FOURTH_LINE "this is a fourth line"

    if (!_dbus_string_init (&str))
        _dbus_assert_not_reached ("no memory");

    if (!_dbus_string_append (&str, FIRST_LINE "\n" SECOND_LINE "\r\n"
THIRD_LINE "\n" FOURTH_LINE))
        _dbus_assert_not_reached ("no memory");

    if (!_dbus_string_init (&line))
        _dbus_assert_not_reached ("no memory");

    if (!_dbus_string_pop_line (&str, &line))
        _dbus_assert_not_reached ("failed to pop first line");

    _dbus_assert (_dbus_string_equal_c_str (&line, FIRST_LINE));

    if (!_dbus_string_pop_line (&str, &line))
        _dbus_assert_not_reached ("failed to pop second line");

    _dbus_assert (_dbus_string_equal_c_str (&line, SECOND_LINE));

    if (!_dbus_string_pop_line (&str, &line))
        _dbus_assert_not_reached ("failed to pop third line");

    _dbus_assert (_dbus_string_equal_c_str (&line, THIRD_LINE));

    if (!_dbus_string_pop_line (&str, &line))
        _dbus_assert_not_reached ("failed to pop fourth line");

    _dbus_assert (_dbus_string_equal_c_str (&line, FOURTH_LINE));

    _dbus_string_free (&str);
    _dbus_string_free (&line);
}

{

```

```

if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("no memory");

for (i = 0; i < 10000; i++)
    if (!_dbus_string_append (&str, "abcdefghijklmnopqrstuvwxy"))
        _dbus_assert_not_reached ("no memory");

if (!_dbus_string_set_length (&str, 10))
    _dbus_assert_not_reached ("failed to set length");

/* actually compact */
if (!_dbus_string_compact (&str, 2048))
    _dbus_assert_not_reached ("failed to compact after set_length");

/* peek inside to make sure it worked */
if ((DBusRealString *)&str->allocated > 30)
    _dbus_assert_not_reached ("compacting string didn't do
anything");

if (!_dbus_string_equal_c_str (&str, "abcdefghij"))
    _dbus_assert_not_reached ("unexpected content after compact");

/* compact nothing */
if (!_dbus_string_compact (&str, 2048))
    _dbus_assert_not_reached ("failed to compact 2nd time");

if (!_dbus_string_equal_c_str (&str, "abcdefghij"))
    _dbus_assert_not_reached ("unexpected content after 2nd
compact");

/* and make sure it still works...*/
if (!_dbus_string_append (&str, "123456"))
    _dbus_assert_not_reached ("failed to append after compact");

if (!_dbus_string_equal_c_str (&str, "abcdefghij123456"))
    _dbus_assert_not_reached ("unexpected content after append");

/* after growing automatically, this should do nothing */
if (!_dbus_string_compact (&str, 20000))
    _dbus_assert_not_reached ("failed to compact after grow");

/* but this one will do something */
if (!_dbus_string_compact (&str, 0))
    _dbus_assert_not_reached ("failed to compact after grow");

if (!_dbus_string_equal_c_str (&str, "abcdefghij123456"))
    _dbus_assert_not_reached ("unexpected content");

if (!_dbus_string_append (&str, "!@#$$%"))
    _dbus_assert_not_reached ("failed to append after compact");

if (!_dbus_string_equal_c_str (&str, "abcdefghij123456!@#$$%"))

```

```

    _dbus_assert_not_reached ("unexpected content");
}
_dbus_string_free (&str);
}
{
const char two_strings[] = "one\ttwo";

if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("no memory");

if (!_dbus_string_init (&other))
    _dbus_assert_not_reached ("no memory");

if (!_dbus_string_append (&str, two_strings))
    _dbus_assert_not_reached ("no memory");

if (!_dbus_string_split_on_byte (&str, '\t', &other))
    _dbus_assert_not_reached ("no memory or delimiter not found");

if (strcmp (_dbus_string_get_data (&str), "one") != 0)
    _dbus_assert_not_reached ("left side after split on tab is
wrong");

if (strcmp (_dbus_string_get_data (&other), "two") != 0)
    _dbus_assert_not_reached ("right side after split on tab is
wrong");

_dbus_string_free (&str);
_dbus_string_free (&other);
}
{
const char upper_string[] = "TOUPPERSTRING";
const char lower_string[] = "toupperstring";
const char lower2_string[] = "toupperSTRING";

if (!_dbus_string_init (&str))
    _dbus_assert_not_reached ("no memory");

if (!_dbus_string_append (&str, upper_string))
    _dbus_assert_not_reached ("no memory");

_dbus_string_tolower_ascii (&str, 0,
_dbus_string_get_length(&str));

if (!_dbus_string_equal_c_str (&str, lower_string))
    _dbus_assert_not_reached ("_dbus_string_tolower_ascii failed");

_dbus_string_free (&str);

if (!_dbus_string_init (&str))

```

```

    _dbus_assert_not_reached ("no memory");

    if (!_dbus_string_append (&str, upper_string))
        _dbus_assert_not_reached ("no memory");

    _dbus_string_tolower_ascii (&str, 0, 7);

    if (!_dbus_string_equal_c_str (&str, lower2_string))
        _dbus_assert_not_reached ("_dbus_string_tolower_ascii failed in
partial conversion");

    _dbus_string_free (&str);
}

{
    const char lower_string[] = "toupperstring";
    const char upper_string[] = "TOUPPERSTRING";
    const char upper2_string[] = "TOUPPERstring";

    if (!_dbus_string_init (&str))
        _dbus_assert_not_reached ("no memory");

    if (!_dbus_string_append (&str, lower_string))
        _dbus_assert_not_reached ("no memory");

    _dbus_string_toupper_ascii (&str, 0,
_dbus_string_get_length(&str));

    if (!_dbus_string_equal_c_str (&str, upper_string))
        _dbus_assert_not_reached ("_dbus_string_toupper_ascii failed");

    _dbus_string_free (&str);

    if (!_dbus_string_init (&str))
        _dbus_assert_not_reached ("no memory");

    if (!_dbus_string_append (&str, lower_string))
        _dbus_assert_not_reached ("no memory");

    _dbus_string_toupper_ascii (&str, 0, 7);

    if (!_dbus_string_equal_c_str (&str, upper2_string))
        _dbus_assert_not_reached ("_dbus_string_toupper_ascii failed in
partial conversion");

    _dbus_string_free (&str);
}

return TRUE;
}

#endif /* DBUS_BUILD_TESTS */

```



```

File = dbus-string.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-string.c String utility class (internal to D-Bus
implementation)
*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>
#include "dbus-internals.h"
#include "dbus-string.h"
/* we allow a system header here, for speed/convenience */
#include <string.h>
/* for vsnprintf */
#include <stdio.h>
#define DBUS_CAN_USE_DBUS_STRING_PRIVATE 1
#include "dbus-string-private.h"
#include "dbus-marshal-basic.h" /* probably should be removed by
                                * into the marshaling-related files
                                */

/* for DBUS_VA_COPY */
#include "dbus-sysdeps.h"

/**
* @defgroup DBusString DBusString class
* @ingroup DBusInternals

```

```

* @brief DBusString data structure for safer string handling
*
* Types and functions related to DBusString. DBusString is intended
* to be a string class that makes it hard to mess up security issues
* (and just in general harder to write buggy code). It should be
* used (or extended and then used) rather than the libc stuff in
* string.h. The string class is a bit inconvenient at spots because
* it handles out-of-memory failures and tries to be extra-robust.
*
* A DBusString has a maximum length set at initialization time; this
* can be used to ensure that a buffer doesn't get too big. The
* _dbus_string_lengthen() method checks for overflow, and for max
* length being exceeded.
*
* Try to avoid conversion to a plain C string, i.e. add methods on
* the string object instead, only convert to C string when passing
* things out to the public API. In particular, no sprintf, strcpy,
* strcat, any of that should be used. The GString feature of
* accepting negative numbers for "length of string" is also absent,
* because it could keep us from detecting bogus huge lengths. i.e. if
* we passed in some bogus huge length it would be taken to mean
* "current length of string" instead of "broken crack"
*
* @todo #DBusString needs a lot of cleaning up; some of the
* API is no longer used, and the API is pretty inconsistent.
* In particular all the "append" APIs, especially those involving
* alignment but probably lots of them, are no longer used by the
* marshaling code which always does "inserts" now.
*/

/**
 * @addtogroup DBusString
 * @{
 */

static void
fixup_alignment (DBusRealString *real)
{
    unsigned char *aligned;
    unsigned char *real_block;
    unsigned int old_align_offset;

    /* we have to have extra space in real->allocated for the align
    offset and nul byte */
    _dbus_assert (real->len <= real->allocated -
        _DBUS_STRING_ALLOCATION_PADDING);

    old_align_offset = real->align_offset;
    real_block = real->str - old_align_offset;

    aligned = _DBUS_ALIGN_ADDRESS (real_block, 8);

```

```

real->align_offset = aligned - real_block;
real->str = aligned;

if (old_align_offset != real->align_offset)
{
    /* Here comes the suck */
    memmove (real_block + real->align_offset,
            real_block + old_align_offset,
            real->len + 1);
}

_dbus_assert (real->align_offset < 8);
_dbus_assert (_DBUS_ALIGN_ADDRESS (real->str, 8) == real->str);
}

static void
undo_alignment (DBusRealString *real)
{
    if (real->align_offset != 0)
    {
        memmove (real->str - real->align_offset,
                real->str,
                real->len + 1);

        real->str = real->str - real->align_offset;
        real->align_offset = 0;
    }
}

/**
 * Initializes a string that can be up to the given allocation size
 * before it has to realloc. The string starts life with zero length.
 * The string must eventually be freed with _dbus_string_free().
 *
 * @param str memory to hold the string
 * @param allocate_size amount to preallocate
 * @returns #TRUE on success, #FALSE if no memory
 */
dbus_bool_t
_dbus_string_init_preallocated (DBusString *str,
                               int         allocate_size)
{
    DBusRealString *real;

    _dbus_assert (str != NULL);

    _dbus_assert (sizeof (DBusString) == sizeof (DBusRealString));

    real = (DBusRealString*) str;

    /* It's very important not to touch anything
     * other than real->str if we're going to fail,

```

```

    * since we also use this function to reset
    * an existing string, e.g. in _dbus_string_steal_data()
    */

    real->str = dbus_malloc (_DBUS_STRING_ALLOCATION_PADDING +
allocate_size);
    if (real->str == NULL)
        return FALSE;

    real->allocated = _DBUS_STRING_ALLOCATION_PADDING + allocate_size;
    real->len = 0;
    real->str[real->len] = '\\0';

    real->constant = FALSE;
    real->locked = FALSE;
    real->invalid = FALSE;
    real->align_offset = 0;

    fixup_alignment (real);

    return TRUE;
}

/**
 * Initializes a string. The string starts life with zero length. The
 * string must eventually be freed with _dbus_string_free().
 *
 * @param str memory to hold the string
 * @returns #TRUE on success, #FALSE if no memory
 */
dbus_bool_t
_dbus_string_init (DBusString *str)
{
    return _dbus_string_init_preallocated (str, 0);
}

/**
 * Initializes a constant string. The value parameter is not copied
 * (should be static), and the string may never be modified.
 * It is safe but not necessary to call _dbus_string_free()
 * on a const string. The string has a length limit of MAXINT - 8.
 *
 * @param str memory to use for the string
 * @param value a string to be stored in str (not copied!!!)
 */
void
_dbus_string_init_const (DBusString *str,
                        const char *value)
{
    _dbus_assert (value != NULL);

    _dbus_string_init_const_len (str, value,

```

```

        strlen (value));
    }

/**
 * Initializes a constant string with a length. The value parameter is
 * not copied (should be static), and the string may never be
 * modified. It is safe but not necessary to call _dbus_string_free()
 * on a const string.
 *
 * @param str memory to use for the string
 * @param value a string to be stored in str (not copied!!!)
 * @param len the length to use
 */
void
_dbus_string_init_const_len (DBusString *str,
                             const char *value,
                             int len)
{
    DBusRealString *real;

    _dbus_assert (str != NULL);
    _dbus_assert (len == 0 || value != NULL);
    _dbus_assert (len <= _DBUS_STRING_MAX_LENGTH);
    _dbus_assert (len >= 0);

    real = (DBusRealString*) str;

    real->str = (unsigned char*) value;
    real->len = len;
    real->allocated = real->len + _DBUS_STRING_ALLOCATION_PADDING; /* a
lie, just to avoid special-case assertions... */
    real->constant = TRUE;
    real->locked = TRUE;
    real->invalid = FALSE;
    real->align_offset = 0;

    /* We don't require const strings to be 8-byte aligned as the
 * memory is coming from elsewhere.
 */
}

/**
 * Frees a string created by _dbus_string_init().
 *
 * @param str memory where the string is stored.
 */
void
_dbus_string_free (DBusString *str)
{
    DBusRealString *real = (DBusRealString*) str;
    DBUS_GENERIC_STRING_PREAMBLE (real);
}

```

```

    if (real->constant)
        return;
    dbus_free (real->str - real->align_offset);

    real->invalid = TRUE;
}

static dbus_bool_t
compact (DBusRealString *real,
        int max_waste)
{
    unsigned char *new_str;
    int new_allocated;
    int waste;

    waste = real->allocated - (real->len +
        _DBUS_STRING_ALLOCATION_PADDING);

    if (waste <= max_waste)
        return TRUE;

    new_allocated = real->len + _DBUS_STRING_ALLOCATION_PADDING;

    new_str = dbus_realloc (real->str - real->align_offset,
new_allocated);
    if (_DBUS_UNLIKELY (new_str == NULL))
        return FALSE;

    real->str = new_str + real->align_offset;
    real->allocated = new_allocated;
    fixup_alignment (real);

    return TRUE;
}

#ifdef DBUS_BUILD_TESTS
/* Not using this feature at the moment,
 * so marked DBUS_BUILD_TESTS-only
 */
/**
 * Locks a string such that any attempts to change the string will
 * result in aborting the program. Also, if the string is wasting a
 * lot of memory (allocation is sufficiently larger than what the
 * string is really using), _dbus_string_lock() will realloc the
 * string's data to "compact" it.
 *
 * @param str the string to lock.
 */
void
_dbus_string_lock (DBusString *str)
{
    DBUS_LOCKED_STRING_PREAMBLE (str); /* can lock multiple times */
}

```

```

real->locked = TRUE;

/* Try to realloc to avoid excess memory usage, since
 * we know we won't change the string further
 */
#define MAX_WASTE 48
    compact (real, MAX_WASTE);
}
#endif /* DBUS_BUILD_TESTS */

static dbus_bool_t
realloc_for_length (DBusRealString *real,
                   int new_length)
{
    int new_allocated;
    unsigned char *new_str;

    /* at least double our old allocation to avoid O(n), avoiding
     * overflow
     */
    if (real->allocated > (_DBUS_STRING_MAX_LENGTH +
        _DBUS_STRING_ALLOCATION_PADDING) / 2)
        new_allocated = _DBUS_STRING_MAX_LENGTH +
        _DBUS_STRING_ALLOCATION_PADDING;
    else
        new_allocated = real->allocated * 2;

    /* if you change the code just above here, run the tests without
     * the following assert-only hack before you commit
     */
    /* This is keyed off asserts in addition to tests so when you
     * disable asserts to profile, you don't get this destroyer
     * of profiles.
     */
#ifdef DBUS_DISABLE_ASSERT
#else
#ifdef DBUS_BUILD_TESTS
    new_allocated = 0; /* ensure a realloc every time so that we go
     * through all malloc failure codepaths
     */
#endif
#endif /* DBUS_BUILD_TESTS */
#endif /* !DBUS_DISABLE_ASSERT */

    /* But be sure we always alloc at least space for the new length */
    new_allocated = MAX (new_allocated,
        new_length + _DBUS_STRING_ALLOCATION_PADDING);

    _dbus_assert (new_allocated >= real->allocated); /* code relies on
this */
    new_str = dbus_realloc (real->str - real->align_offset,
        new_allocated);

```

```

if (_DBUS_UNLIKELY (new_str == NULL))
    return FALSE;

real->str = new_str + real->align_offset;
real->allocated = new_allocated;
fixup_alignment (real);

return TRUE;
}

/**
 * Compacts the string to avoid wasted memory. Wasted memory is
 * memory that is allocated but not actually required to store the
 * current length of the string. The compact is only done if more
 * than the given amount of memory is being wasted (otherwise the
 * waste is ignored and the call does nothing).
 *
 * @param str the string
 * @param max_waste the maximum amount of waste to ignore
 * @returns #FALSE if the compact failed due to realloc failure
 */
dbus_bool_t
_dbus_string_compact (DBusString *str,
                     int          max_waste)
{
    DBUS_STRING_PREAMBLE (str);

    return compact (real, max_waste);
}

static dbus_bool_t
set_length (DBusRealString *real,
            int             new_length)
{
    /* Note, we are setting the length not including nul termination */

    /* exceeding max length is the same as failure to allocate memory */
    if (_DBUS_UNLIKELY (new_length > _DBUS_STRING_MAX_LENGTH))
        return FALSE;
    else if (new_length > (real->allocated -
        _DBUS_STRING_ALLOCATION_PADDING) &&
        _DBUS_UNLIKELY (!realloc_for_length (real, new_length)))
        return FALSE;
    else
    {
        real->len = new_length;
        real->str[new_length] = '\0';
        return TRUE;
    }
}

static dbus_bool_t

```



```

open_gap (int          len,
         DBusRealString *dest,
         int          insert_at)
{
    if (len == 0)
        return TRUE;

    if (len > _DBUS_STRING_MAX_LENGTH - dest->len)
        return FALSE; /* detected overflow of dest->len + len below */

    if (!set_length (dest, dest->len + len))
        return FALSE;

    memmove (dest->str + insert_at + len,
            dest->str + insert_at,
            dest->len - len - insert_at);

    return TRUE;
}

#ifdef _dbus_string_get_data
/**
 * Gets the raw character buffer from the string. The returned buffer
 * will be nul-terminated, but note that strings may contain binary
 * data so there may be extra nul characters prior to the termination.
 * This function should be little-used, extend DBusString or add
 * stuff to dbus-sysdeps.c instead. It's an error to use this
 * function on a const string.
 *
 * @param str the string
 * @returns the data
 */
char*
_dbus_string_get_data (DBusString *str)
{
    DBUS_STRING_PREAMBLE (str);

    return (char*) real->str;
}
#endif /* _dbus_string_get_data */

/* only do the function if we don't have the macro */
#ifdef _dbus_string_get_const_data
/**
 * Gets the raw character buffer from a const string.
 *
 * @param str the string
 * @returns the string data
 */
const char*
_dbus_string_get_const_data (const DBusString *str)
{

```

```

    DBUS_CONST_STRING_PREAMBLE (str);

    return (const char*) real->str;
}
#endif /* _dbus_string_get_const_data */

/**
 * Gets a sub-portion of the raw character buffer from the
 * string. The "len" field is required simply for error
 * checking, to be sure you don't try to use more
 * string than exists. The nul termination of the
 * returned buffer remains at the end of the entire
 * string, not at start + len.
 *
 * @param str the string
 * @param start byte offset to return
 * @param len length of segment to return
 * @returns the string data
 */
char*
_dbus_string_get_data_len (DBusString *str,
                           int         start,
                           int         len)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (start >= 0);
    _dbus_assert (len >= 0);
    _dbus_assert (start <= real->len);
    _dbus_assert (len <= real->len - start);

    return (char*) real->str + start;
}

/* only do the function if we don't have the macro */
#ifndef _dbus_string_get_const_data_len
/**
 * const version of _dbus_string_get_data_len().
 *
 * @param str the string
 * @param start byte offset to return
 * @param len length of segment to return
 * @returns the string data
 */
const char*
_dbus_string_get_const_data_len (const DBusString *str,
                                 int               start,
                                 int               len)
{
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start >= 0);
    _dbus_assert (len >= 0);
    _dbus_assert (start <= real->len);

```

```

    _dbus_assert (len <= real->len - start);

    return (const char*) real->str + start;
}
#endif /* _dbus_string_get_const_data_len */

/* only do the function if we don't have the macro */
#ifndef _dbus_string_set_byte
/**
 * Sets the value of the byte at the given position.
 *
 * @param str the string
 * @param i the position
 * @param byte the new value
 */
void
_dbus_string_set_byte (DBusString      *str,
                      int              i,
                      unsigned char    byte)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (i < real->len);
    _dbus_assert (i >= 0);

    real->str[i] = byte;
}
#endif /* _dbus_string_set_byte */

/* only have the function if we didn't create a macro */
#ifndef _dbus_string_get_byte
/**
 * Gets the byte at the given position. It is
 * allowed to ask for the nul byte at the end of
 * the string.
 *
 * @param str the string
 * @param start the position
 * @returns the byte at that position
 */
unsigned char
_dbus_string_get_byte (const DBusString *str,
                      int              start)
{
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start <= real->len);
    _dbus_assert (start >= 0);

    return real->str[start];
}
#endif /* _dbus_string_get_byte */

/**

```

```

* Inserts a number of bytes of a given value at the
* given position.
*
* @param str the string
* @param i the position
* @param n_bytes number of bytes
* @param byte the value to insert
* @returns #TRUE on success
*/
dbus_bool_t
_dbus_string_insert_bytes (DBusString  *str,
                           int          i,
                           int          n_bytes,
                           unsigned char byte)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (i <= real->len);
    _dbus_assert (i >= 0);
    _dbus_assert (n_bytes >= 0);

    if (n_bytes == 0)
        return TRUE;

    if (!open_gap (n_bytes, real, i))
        return FALSE;

    memset (real->str + i, byte, n_bytes);

    return TRUE;
}

/**
* Inserts a single byte at the given position.
*
* @param str the string
* @param i the position
* @param byte the value to insert
* @returns #TRUE on success
*/
dbus_bool_t
_dbus_string_insert_byte (DBusString  *str,
                          int          i,
                          unsigned char byte)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (i <= real->len);
    _dbus_assert (i >= 0);

    if (!open_gap (1, real, i))
        return FALSE;

    real->str[i] = byte;
}

```

```

    return TRUE;
}

/**
 * Like _dbus_string_get_data(), but removes the
 * gotten data from the original string. The caller
 * must free the data returned. This function may
 * fail due to lack of memory, and return #FALSE.
 *
 * @param str the string
 * @param data_return location to return the buffer
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_string_steal_data (DBusString      *str,
                        char             **data_return)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (data_return != NULL);

    undo_alignment (real);

    *data_return = (char*) real->str;

    /* reset the string */
    if (!_dbus_string_init (str))
    {
        /* hrm, put it back then */
        real->str = (unsigned char*) *data_return;
        *data_return = NULL;
        fixup_alignment (real);
        return FALSE;
    }

    return TRUE;
}

/**
 * Copies the data from the string into a char*
 *
 * @param str the string
 * @param data_return place to return the data
 * @returns #TRUE on success, #FALSE on no memory
 */
dbus_bool_t
_dbus_string_copy_data (const DBusString *str,
                       char             **data_return)
{
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (data_return != NULL);

```

```

    *data_return = dbus_malloc (real->len + 1);
    if (*data_return == NULL)
        return FALSE;

    memcpy (*data_return, real->str, real->len + 1);

    return TRUE;
}

/**
 * Copies the contents of a DBusString into a different buffer. It is
 * a bug if avail_len is too short to hold the string contents. nul
 * termination is not copied, just the supplied bytes.
 *
 * @param str a string
 * @param buffer a C buffer to copy data to
 * @param avail_len maximum length of C buffer
 */
void
_dbus_string_copy_to_buffer (const DBusString *str,
                             char *buffer,
                             int avail_len)
{
    DBUS_CONST_STRING_PREAMBLE (str);

    _dbus_assert (avail_len >= 0);
    _dbus_assert (avail_len >= real->len);

    memcpy (buffer, real->str, real->len);
}

/**
 * Copies the contents of a DBusString into a different buffer. It is
 * a bug if avail_len is too short to hold the string contents plus a
 * nul byte.
 *
 * @param str a string
 * @param buffer a C buffer to copy data to
 * @param avail_len maximum length of C buffer
 */
void
_dbus_string_copy_to_buffer_with_nul (const DBusString *str,
                                      char *buffer,
                                      int avail_len)
{
    DBUS_CONST_STRING_PREAMBLE (str);

    _dbus_assert (avail_len >= 0);
    _dbus_assert (avail_len > real->len);

    memcpy (buffer, real->str, real->len+1);
}

```

```

/* Only have the function if we don't have the macro */
#ifndef _dbus_string_get_length
/**
 * Gets the length of a string (not including nul termination).
 *
 * @returns the length.
 */
int
_dbus_string_get_length (const DBusString *str)
{
    DBUS_CONST_STRING_PREAMBLE (str);

    return real->len;
}
#endif /* !_dbus_string_get_length */

/**
 * Makes a string longer by the given number of bytes. Checks whether
 * adding additional_length to the current length would overflow an
 * integer, and checks for exceeding a string's max length.
 * The new bytes are not initialized, other than nul-terminating
 * the end of the string. The uninitialized bytes may contain
 * nul bytes or other junk.
 *
 * @param str a string
 * @param additional_length length to add to the string.
 * @returns #TRUE on success.
 */
dbus_bool_t
_dbus_string_lengthen (DBusString *str,
                      int additional_length)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (additional_length >= 0);

    if (_DBUS_UNLIKELY (additional_length > _DBUS_STRING_MAX_LENGTH -
real->len))
        return FALSE; /* would overflow */

    return set_length (real,
                      real->len + additional_length);
}

/**
 * Makes a string shorter by the given number of bytes.
 *
 * @param str a string
 * @param length_to_remove length to remove from the string.
 */
void
_dbus_string_shorten (DBusString *str,

```

```

        int            length_to_remove)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (length_to_remove >= 0);
    _dbus_assert (length_to_remove <= real->len);

    set_length (real,
                real->len - length_to_remove);
}

/**
 * Sets the length of a string. Can be used to truncate or lengthen
 * the string. If the string is lengthened, the function may fail and
 * return #FALSE. Newly-added bytes are not initialized, as with
 * _dbus_string_lengthen().
 *
 * @param str a string
 * @param length new length of the string.
 * @returns #FALSE on failure.
 */
dbus_bool_t
_dbus_string_set_length (DBusString *str,
                        int          length)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (length >= 0);

    return set_length (real, length);
}

static dbus_bool_t
align_insert_point_then_open_gap (DBusString *str,
                                  int          *insert_at_p,
                                  int          alignment,
                                  int          gap_size)
{
    unsigned long new_len; /* ulong to avoid _DBUS_ALIGN_VALUE overflow
 */
    unsigned long gap_pos;
    int insert_at;
    int delta;
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (alignment >= 1);
    _dbus_assert (alignment <= 8); /* it has to be a bug if > 8 */

    insert_at = *insert_at_p;

    _dbus_assert (insert_at <= real->len);

    gap_pos = _DBUS_ALIGN_VALUE (insert_at, alignment);
    new_len = real->len + (gap_pos - insert_at) + gap_size;

```



```

    if (_DBUS_UNLIKELY (new_len > (unsigned long)
_DBUS_STRING_MAX_LENGTH))
        return FALSE;

    delta = new_len - real->len;
    _dbus_assert (delta >= 0);

    if (delta == 0) /* only happens if gap_size == 0 and insert_at is
aligned already */
    {
        _dbus_assert (((unsigned long) *insert_at_p) == gap_pos);
        return TRUE;
    }

    if (_DBUS_UNLIKELY (!open_gap (new_len - real->len,
                                real, insert_at)))
        return FALSE;

    /* nul the padding if we had to add any padding */
    if (gap_size < delta)
    {
        memset (&real->str[insert_at], '\0',
                gap_pos - insert_at);
    }

    *insert_at_p = gap_pos;

    return TRUE;
}

static dbus_bool_t
align_length_then_lengthen (DBusString *str,
                            int         alignment,
                            int         then_lengthen_by)
{
    int insert_at;

    insert_at = _dbus_string_get_length (str);

    return align_insert_point_then_open_gap (str,
                                             &insert_at,
                                             alignment,
                                             then_lengthen_by);
}

/**
 * Align the length of a string to a specific alignment (typically 4
or 8)
 * by appending nul bytes to the string.
 *
 * @param str a string
 * @param alignment the alignment

```

```

    * @returns #FALSE if no memory
    */
dbus_bool_t
_dbus_string_align_length (DBusString *str,
                           int         alignment)
{
    return align_length_then_lengthen (str, alignment, 0);
}

/**
 * Preallocate extra_bytes such that a future lengthening of the
 * string by extra_bytes is guaranteed to succeed without an out of
 * memory error.
 *
 * @param str a string
 * @param extra_bytes bytes to alloc
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_string_alloc_space (DBusString *str,
                          int         extra_bytes)
{
    if (!_dbus_string_lengthen (str, extra_bytes))
        return FALSE;
    _dbus_string_shorten (str, extra_bytes);

    return TRUE;
}

static dbus_bool_t
append (DBusRealString *real,
        const char     *buffer,
        int             buffer_len)
{
    if (buffer_len == 0)
        return TRUE;

    if (!_dbus_string_lengthen ((DBusString*)real, buffer_len))
        return FALSE;

    memcpy (real->str + (real->len - buffer_len),
            buffer,
            buffer_len);

    return TRUE;
}

/**
 * Appends a nul-terminated C-style string to a DBusString.
 *
 * @param str the DBusString
 * @param buffer the nul-terminated characters to append

```

```

    * @returns #FALSE if not enough memory.
    */
dbus_bool_t
_dbus_string_append (DBusString *str,
                    const char *buffer)
{
    unsigned long buffer_len;

    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (buffer != NULL);

    buffer_len = strlen (buffer);
    if (buffer_len > (unsigned long) _DBUS_STRING_MAX_LENGTH)
        return FALSE;

    return append (real, buffer, buffer_len);
}

/** assign 2 bytes from one string to another */
#define ASSIGN_2_OCTETS(p, octets) \
    *((dbus_uint16_t*)(p)) = *((dbus_uint16_t*)(octets));

/** assign 4 bytes from one string to another */
#define ASSIGN_4_OCTETS(p, octets) \
    *((dbus_uint32_t*)(p)) = *((dbus_uint32_t*)(octets));

#ifdef DBUS_HAVE_INT64
/** assign 8 bytes from one string to another */
#define ASSIGN_8_OCTETS(p, octets) \
    *((dbus_uint64_t*)(p)) = *((dbus_uint64_t*)(octets));
#else
/** assign 8 bytes from one string to another */
#define ASSIGN_8_OCTETS(p, octets) \
do { \
    unsigned char *b; \
 \
    b = p; \
 \
    *b++ = octets[0]; \
    *b++ = octets[1]; \
    *b++ = octets[2]; \
    *b++ = octets[3]; \
    *b++ = octets[4]; \
    *b++ = octets[5]; \
    *b++ = octets[6]; \
    *b++ = octets[7]; \
    _dbus_assert (b == p + 8); \
} while (0)
#endif /* DBUS_HAVE_INT64 */

/**
 * Inserts 2 bytes aligned on a 2 byte boundary

```

```

* with any alignment padding initialized to 0.
*
* @param str the DBusString
* @param insert_at where to insert
* @param octets 2 bytes to insert
* @returns #FALSE if not enough memory.
*/
dbus_bool_t
_dbus_string_insert_2_aligned (DBusString      *str,
                              int              insert_at,
                              const unsigned char octets[4])
{
    DBUS_STRING_PREAMBLE (str);

    if (!align_insert_point_then_open_gap (str, &insert_at, 2, 2))
        return FALSE;

    ASSIGN_2_OCTETS (real->str + insert_at, octets);

    return TRUE;
}

/**
* Inserts 4 bytes aligned on a 4 byte boundary
* with any alignment padding initialized to 0.
*
* @param str the DBusString
* @param insert_at where to insert
* @param octets 4 bytes to insert
* @returns #FALSE if not enough memory.
*/
dbus_bool_t
_dbus_string_insert_4_aligned (DBusString      *str,
                              int              insert_at,
                              const unsigned char octets[4])
{
    DBUS_STRING_PREAMBLE (str);

    if (!align_insert_point_then_open_gap (str, &insert_at, 4, 4))
        return FALSE;

    ASSIGN_4_OCTETS (real->str + insert_at, octets);

    return TRUE;
}

/**
* Inserts 8 bytes aligned on an 8 byte boundary
* with any alignment padding initialized to 0.
*
* @param str the DBusString
* @param insert_at where to insert

```

```

* @param octets 8 bytes to insert
* @returns #FALSE if not enough memory.
*/
dbus_bool_t
_dbus_string_insert_8_aligned (DBusString      *str,
                              int              insert_at,
                              const unsigned char octets[8])
{
    DBUS_STRING_PREAMBLE (str);

    if (!align_insert_point_then_open_gap (str, &insert_at, 8, 8))
        return FALSE;

    _dbus_assert (_DBUS_ALIGN_VALUE (insert_at, 8) == (unsigned)
insert_at);

    ASSIGN_8_OCTETS (real->str + insert_at, octets);

    return TRUE;
}

/**
 * Inserts padding at *insert_at such to align it to the given
 * boundary. Initializes the padding to nul bytes. Sets *insert_at
 * to the aligned position.
 *
 * @param str the DBusString
 * @param insert_at location to be aligned
 * @param alignment alignment boundary (1, 2, 4, or 8)
 * @returns #FALSE if not enough memory.
 */
dbus_bool_t
_dbus_string_insert_alignment (DBusString      *str,
                              int              *insert_at,
                              int              alignment)
{
    DBUS_STRING_PREAMBLE (str);

    if (!align_insert_point_then_open_gap (str, insert_at, alignment,
0))
        return FALSE;

    _dbus_assert (_DBUS_ALIGN_VALUE (*insert_at, alignment) ==
(unsigned) *insert_at);

    return TRUE;
}

/**
 * Appends a printf-style formatted string
 * to the #DBusString.

```

```

*
* @param str the string
* @param format printf format
* @param args variable argument list
* @returns #FALSE if no memory
*/
dbus_bool_t
_dbus_string_append_printf_valist (DBusString          *str,
                                   const char          *format,
                                   va_list              args)
{
    int len;
    va_list args_copy;

    DBUS_STRING_PREAMBLE (str);

    DBUS_VA_COPY (args_copy, args);

    /* Measure the message length without terminating nul */
    len = _dbus_printf_string_upper_bound (format, args);

    if (len < 0)
        return FALSE;

    if (!_dbus_string_lengthen (str, len))
    {
        /* don't leak the copy */
        va_end (args_copy);
        return FALSE;
    }

    vsprintf ((char*) (real->str + (real->len - len)),
              format, args_copy);

    va_end (args_copy);

    return TRUE;
}

/**
 * Appends a printf-style formatted string
 * to the #DBusString.
 *
 * @param str the string
 * @param format printf format
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_string_append_printf (DBusString          *str,
                            const char          *format,
                            ...)
{

```

```

    va_list args;
    dbus_bool_t retval;

    va_start (args, format);
    retval = _dbus_string_append_printf_valist (str, format, args);
    va_end (args);

    return retval;
}

/**
 * Appends block of bytes with the given length to a DBusString.
 *
 * @param str the DBusString
 * @param buffer the bytes to append
 * @param len the number of bytes to append
 * @returns #FALSE if not enough memory.
 */
dbus_bool_t
_dbus_string_append_len (DBusString *str,
                        const char *buffer,
                        int len)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (buffer != NULL);
    _dbus_assert (len >= 0);

    return append (real, buffer, len);
}

/**
 * Appends a single byte to the string, returning #FALSE
 * if not enough memory.
 *
 * @param str the string
 * @param byte the byte to append
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_string_append_byte (DBusString *str,
                        unsigned char byte)
{
    DBUS_STRING_PREAMBLE (str);

    if (!set_length (real, real->len + 1))
        return FALSE;

    real->str[real->len-1] = byte;

    return TRUE;
}

```

```

static void
delete (DBusRealString *real,
        int             start,
        int             len)
{
    if (len == 0)
        return;

    memmove (real->str + start, real->str + start + len, real->len -
(start + len));
    real->len -= len;
    real->str[real->len] = '\0';
}

/**
 * Deletes a segment of a DBusString with length len starting at
 * start. (Hint: to clear an entire string, setting length to 0
 * with _dbus_string_set_length() is easier.)
 *
 * @param str the DBusString
 * @param start where to start deleting
 * @param len the number of bytes to delete
 */
void
_dbus_string_delete (DBusString      *str,
                    int             start,
                    int             len)
{
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (start >= 0);
    _dbus_assert (len >= 0);
    _dbus_assert (start <= real->len);
    _dbus_assert (len <= real->len - start);

    delete (real, start, len);
}

static dbus_bool_t
copy (DBusRealString *source,
      int             start,
      int             len,
      DBusRealString *dest,
      int             insert_at)
{
    if (len == 0)
        return TRUE;

    if (!open_gap (len, dest, insert_at))
        return FALSE;

    memmove (dest->str + insert_at,
            source->str + start,

```



```

        len);

    return TRUE;
}

/**
 * Checks assertions for two strings we're copying a segment between,
 * and declares real_source/real_dest variables.
 *
 * @param source the source string
 * @param start the starting offset
 * @param dest the dest string
 * @param insert_at where the copied segment is inserted
 */
#define DBUS_STRING_COPY_PREAMBLE(source, start, dest, insert_at)
\
    DbusRealString *real_source = (DBusRealString*) source;
\
    DbusRealString *real_dest = (DBusRealString*) dest;
\
    _dbus_assert ((source) != (dest));
\
    DBUS_GENERIC_STRING_PREAMBLE (real_source);
\
    DBUS_GENERIC_STRING_PREAMBLE (real_dest);
\
    _dbus_assert (!real_dest->constant);
\
    _dbus_assert (!real_dest->locked);
\
    _dbus_assert ((start) >= 0);
\
    _dbus_assert ((start) <= real_source->len);
\
    _dbus_assert ((insert_at) >= 0);
\
    _dbus_assert ((insert_at) <= real_dest->len)

/**
 * Moves the end of one string into another string. Both strings
 * must be initialized, valid strings.
 *
 * @param source the source string
 * @param start where to chop off the source string
 * @param dest the destination string
 * @param insert_at where to move the chopped-off part of source
string
 * @returns #FALSE if not enough memory
 */
dbus_bool_t
_dbus_string_move (DBusString      *source,
                  int              start,

```

```

        DBusString      *dest,
        int              insert_at)
{
    DBusRealString *real_source = (DBusRealString*) source;
    _dbus_assert (start <= real_source->len);

    return _dbus_string_move_len (source, start,
                                  real_source->len - start,
                                  dest, insert_at);
}

/**
 * Like _dbus_string_move(), but does not delete the section
 * of the source string that's copied to the dest string.
 *
 * @param source the source string
 * @param start where to start copying the source string
 * @param dest the destination string
 * @param insert_at where to place the copied part of source string
 * @returns #FALSE if not enough memory
 */
dbus_bool_t
_dbus_string_copy (const DBusString *source,
                  int start,
                  DBusString *dest,
                  int insert_at)
{
    DBUS_STRING_COPY_PREAMBLE (source, start, dest, insert_at);

    return copy (real_source, start,
                 real_source->len - start,
                 real_dest,
                 insert_at);
}

/**
 * Like _dbus_string_move(), but can move a segment from
 * the middle of the source string.
 *
 * @param source the source string
 * @param start first byte of source string to move
 * @param len length of segment to move
 * @param dest the destination string
 * @param insert_at where to move the bytes from the source string
 * @returns #FALSE if not enough memory
 */
dbus_bool_t
_dbus_string_move_len (DBusString *source,
                      int start,
                      int len,
                      DBusString *dest,
                      int insert_at)

```

```

{
    DBUS_STRING_COPY_PREAMBLE (source, start, dest, insert_at);
    _dbus_assert (len >= 0);
    _dbus_assert ((start + len) <= real_source->len);

    if (len == 0)
    {
        return TRUE;
    }
    else if (start == 0 &&
             len == real_source->len &&
             real_dest->len == 0)
    {
        /* Short-circuit moving an entire existing string to an empty
string
        * by just swapping the buffers.
        */
        /* we assume ->constant doesn't matter as you can't have
        * a constant string involved in a move.
        */
#define ASSIGN_DATA(a, b) do { \
    (a)->str = (b)->str; \
    (a)->len = (b)->len; \
    (a)->allocated = (b)->allocated; \
    (a)->align_offset = (b)->align_offset; \
} while (0)

        DBusRealString tmp;

        ASSIGN_DATA (&tmp, real_source);
        ASSIGN_DATA (real_source, real_dest);
        ASSIGN_DATA (real_dest, &tmp);

        return TRUE;
    }
    else
    {
        if (!copy (real_source, start, len,
                  real_dest,
                  insert_at))
            return FALSE;

        delete (real_source, start,
                len);

        return TRUE;
    }
}

/**

```

```

* Like _dbus_string_copy(), but can copy a segment from the middle of
* the source string.
*
* @param source the source string
* @param start where to start copying the source string
* @param len length of segment to copy
* @param dest the destination string
* @param insert_at where to place the copied segment of source string
* @returns #FALSE if not enough memory
*/
dbus_bool_t
_dbus_string_copy_len (const DBusString *source,
                      int                start,
                      int                len,
                      DBusString        *dest,
                      int                insert_at)
{
    DBUS_STRING_COPY_PREAMBLE (source, start, dest, insert_at);
    _dbus_assert (len >= 0);
    _dbus_assert (start <= real_source->len);
    _dbus_assert (len <= real_source->len - start);

    return copy (real_source, start, len,
                 real_dest,
                 insert_at);
}

/**
* Replaces a segment of dest string with a segment of source string.
*
* @param source the source string
* @param start where to start copying the source string
* @param len length of segment to copy
* @param dest the destination string
* @param replace_at start of segment of dest string to replace
* @param replace_len length of segment of dest string to replace
* @returns #FALSE if not enough memory
*
*/
dbus_bool_t
_dbus_string_replace_len (const DBusString *source,
                          int              start,
                          int              len,
                          DBusString      *dest,
                          int              replace_at,
                          int              replace_len)
{
    DBUS_STRING_COPY_PREAMBLE (source, start, dest, replace_at);
    _dbus_assert (len >= 0);
    _dbus_assert (start <= real_source->len);
    _dbus_assert (len <= real_source->len - start);
    _dbus_assert (replace_at >= 0);
}

```

```

_dbus_assert (replace_at <= real_dest->len);
_dbus_assert (replace_len <= real_dest->len - replace_at);

if (len == replace_len)
{
    memmove (real_dest->str + replace_at,
            real_source->str + start, len);
}
else if (len < replace_len)
{
    memmove (real_dest->str + replace_at,
            real_source->str + start, len);
    delete (real_dest, replace_at + len,
            replace_len - len);
}
else
{
    int diff;

    _dbus_assert (len > replace_len);

    diff = len - replace_len;

    /* First of all we check if destination string can be enlarged
as
    * required, then we overwrite previous bytes
    */

    if (!copy (real_source, start + replace_len, diff,
              real_dest, replace_at + replace_len))
        return FALSE;

    memmove (real_dest->str + replace_at,
            real_source->str + start, replace_len);
}

return TRUE;
}

/**
 * Looks for the first occurrence of a byte, deletes that byte,
 * and moves everything after the byte to the beginning of a
 * separate string. Both strings must be initialized, valid
 * strings.
 *
 * @param source the source string
 * @param byte the byte to remove and split the string at
 * @param tail the split off string
 * @returns #FALSE if not enough memory or if byte could not be found
 */
dbus_bool_t

```

```

_dbus_string_split_on_byte (DBusString      *source,
                           unsigned char   byte,
                           DBusString     *tail)
{
    int byte_position;
    char byte_string[2] = "";
    int head_length;
    int tail_length;

    byte_string[0] = (char) byte;

    if (!_dbus_string_find (source, 0, byte_string, &byte_position))
        return FALSE;

    head_length = byte_position;
    tail_length = _dbus_string_get_length (source) - head_length - 1;

    if (!_dbus_string_move_len (source, byte_position + 1, tail_length,
                               tail, 0))
        return FALSE;

    /* remove the trailing delimiter byte from the head now.
    */
    if (!_dbus_string_set_length (source, head_length))
        return FALSE;

    return TRUE;
}

/* Unicode macros and utf8_validate() from GLib Owen Taylor, Havoc
 * Pennington, and Tom Tromey are the authors and authorized
relicense.
*/

/** computes length and mask of a unicode character
 * @param Char the char
 * @param Mask the mask variable to assign to
 * @param Len the length variable to assign to
 */
#define UTF8_COMPUTE(Char, Mask, Len)
    if (Char < 128)
    {
        Len = 1;
        Mask = 0x7f;
    }
    else if ((Char & 0xe0) == 0xc0)
    {
        Len = 2;
        Mask = 0x1f;
    }
    else if ((Char & 0xf0) == 0xe0)
    {

```

```

        Len = 3;
        Mask = 0x0f;
    }
else if ((Char & 0xf8) == 0xf0)
    {
        Len = 4;
        Mask = 0x07;
    }
else if ((Char & 0xfc) == 0xf8)
    {
        Len = 5;
        Mask = 0x03;
    }
else if ((Char & 0xfe) == 0xfc)
    {
        Len = 6;
        Mask = 0x01;
    }
else
    {
        Len = 0;
        Mask = 0;
    }

/**
 * computes length of a unicode character in UTF-8
 * @param Char the char
 */
#define UTF8_LENGTH(Char)
    ((Char) < 0x80 ? 1 :
     ((Char) < 0x800 ? 2 :
      ((Char) < 0x10000 ? 3 :
       ((Char) < 0x200000 ? 4 :
        ((Char) < 0x4000000 ? 5 : 6))))))

/**
 * Gets a UTF-8 value.
 *
 * @param Result variable for extracted unicode char.
 * @param Chars the bytes to decode
 * @param Count counter variable
 * @param Mask mask for this char
 * @param Len length for this char in bytes
 */
#define UTF8_GET(Result, Chars, Count, Mask, Len)
    (Result) = (Chars)[0] & (Mask);
    for ((Count) = 1; (Count) < (Len); ++(Count))

```

```

        {
            if (((Chars)[(Count)] & 0xc0) != 0x80)
            {
                (Result) = -1;
                break;
            }
            (Result) <= 6;
            (Result) |= ((Chars)[(Count)] & 0x3f);
        }
    }

/**
 * Check whether a Unicode (5.2) char is in a valid range.
 *
 * The first check comes from the Unicode guarantee to never encode
 * a point above 0x0010ffff, since UTF-16 couldn't represent it.
 *
 * The second check covers surrogate pairs (category Cs).
 *
 * The last two checks cover "Noncharacter": defined as:
 * "A code point that is permanently reserved for
 * internal use, and that should never be interchanged. In
 * Unicode 3.1, these consist of the values U+nFFFE and U+nFFFF
 * (where n is from 0 to 10_16) and the values U+FDD0..U+FDEF."
 *
 * @param Char the character
 */
#define UNICODE_VALID(Char)
    ((Char) < 0x110000 &&
     ((Char) & 0xFFFFF800) != 0xD800) &&
     ((Char) < 0xFDD0 || (Char) > 0xFDEF) &&
     ((Char) & 0xFFFE) != 0xFFFE)

/**
 * Finds the given substring in the string,
 * returning #TRUE and filling in the byte index
 * where the substring was found, if it was found.
 * Returns #FALSE if the substring wasn't found.
 * Sets *start to the length of the string if the substring
 * is not found.
 *
 * @param str the string
 * @param start where to start looking
 * @param substr the substring
 * @param found return location for where it was found, or #NULL
 * @returns #TRUE if found
 */
dbus_bool_t
_dbus_string_find (const DBusString *str,
                  int start,
                  const char *substr,

```



```

        int                *found)
{
    return _dbus_string_find_to (str, start,
                                ((const DBusRealString*)str)->len,
                                substr, found);
}

/**
 * Finds end of line ("\r\n" or "\n") in the string,
 * returning #TRUE and filling in the byte index
 * where the eol string was found, if it was found.
 * Returns #FALSE if eol wasn't found.
 *
 * @param str the string
 * @param start where to start looking
 * @param found return location for where eol was found or string
length otherwise
 * @param found_len return length of found eol string or zero
otherwise
 * @returns #TRUE if found
 */
dbus_bool_t
_dbus_string_find_eol (const DBusString *str,
                      int                start,
                      int                *found,
                      int                *found_len)
{
    int i;

    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start <= real->len);
    _dbus_assert (start >= 0);

    i = start;
    while (i < real->len)
        {
            if (real->str[i] == '\r')
                {
                    if ((i+1) < real->len && real->str[i+1] == '\n') /* "\r\n"
*/
                        {
                            if (found)
                                *found = i;
                            if (found_len)
                                *found_len = 2;
                            return TRUE;
                        }
                    else /* only "\r" */
                        {
                            if (found)
                                *found = i;
                            if (found_len)

```

```

        *found_len = 1;
        return TRUE;
    }
}
else if (real->str[i] == '\n') /* only "\n" */
{
    if (found)
        *found = i;
    if (found_len)
        *found_len = 1;
    return TRUE;
}
++i;
}

if (found)
    *found = real->len;

if (found_len)
    *found_len = 0;

return FALSE;
}

/**
 * Finds the given substring in the string,
 * up to a certain position,
 * returning #TRUE and filling in the byte index
 * where the substring was found, if it was found.
 * Returns #FALSE if the substring wasn't found.
 * Sets *start to the length of the string if the substring
 * is not found.
 *
 * @param str the string
 * @param start where to start looking
 * @param end where to stop looking
 * @param substr the substring
 * @param found return location for where it was found, or #NULL
 * @returns #TRUE if found
 */
dbus_bool_t
_dbus_string_find_to (const DBusString *str,
                    int start,
                    int end,
                    const char *substr,
                    int *found)
{
    int i;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (substr != NULL);
    _dbus_assert (start <= real->len);
    _dbus_assert (start >= 0);

```

```

_dbus_assert (substr != NULL);
_dbus_assert (end <= real->len);
_dbus_assert (start <= end);

/* we always "find" an empty string */
if (*substr == '\0')
{
    if (found)
        *found = start;
    return TRUE;
}

i = start;
while (i < end)
{
    if (real->str[i] == substr[0])
    {
        int j = i + 1;

        while (j < end)
        {
            if (substr[j - i] == '\0')
                break;
            else if (real->str[j] != substr[j - i])
                break;

            ++j;
        }

        if (substr[j - i] == '\0')
        {
            if (found)
                *found = i;
            return TRUE;
        }
    }

    ++i;
}

if (found)
    *found = end;

return FALSE;
}

/**
 * Finds a blank (space or tab) in the string. Returns #TRUE
 * if found, #FALSE otherwise. If a blank is not found sets
 * *found to the length of the string.
 *
 * @param str the string

```

```

* @param start byte index to start looking
* @param found place to store the location of the first blank
* @returns #TRUE if a blank was found
*/
dbus_bool_t
_dbus_string_find_blank (const DBusString *str,
                        int start,
                        int *found)
{
    int i;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start <= real->len);
    _dbus_assert (start >= 0);

    i = start;
    while (i < real->len)
    {
        if (real->str[i] == ' ' ||
            real->str[i] == '\t')
        {
            if (found)
                *found = i;
            return TRUE;
        }

        ++i;
    }

    if (found)
        *found = real->len;

    return FALSE;
}

/**
* Skips blanks from start, storing the first non-blank in *end
* (blank is space or tab).
*
* @param str the string
* @param start where to start
* @param end where to store the first non-blank byte index
*/
void
_dbus_string_skip_blank (const DBusString *str,
                        int start,
                        int *end)
{
    int i;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start <= real->len);
    _dbus_assert (start >= 0);

```

```

    i = start;
    while (i < real->len)
    {
        if (!DBUS_IS_ASCII_BLANK (real->str[i]))
            break;

        ++i;
    }

    _dbus_assert (i == real->len || !DBUS_IS_ASCII_WHITE (real->str[i]));

    if (end)
        *end = i;
}

/**
 * Skips whitespace from start, storing the first non-whitespace in
 *end.
 * (whitespace is space, tab, newline, CR).
 *
 * @param str the string
 * @param start where to start
 * @param end where to store the first non-whitespace byte index
 */
void
_dbus_string_skip_white (const DBusString *str,
                        int start,
                        int *end)
{
    int i;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start <= real->len);
    _dbus_assert (start >= 0);

    i = start;
    while (i < real->len)
    {
        if (!DBUS_IS_ASCII_WHITE (real->str[i]))
            break;

        ++i;
    }

    _dbus_assert (i == real->len || !(DBUS_IS_ASCII_WHITE (real->str[i])));

    if (end)
        *end = i;
}

```

```

/**
 * Skips whitespace from end, storing the start index of the trailing
 * whitespace in *start. (whitespace is space, tab, newline, CR).
 *
 * @param str the string
 * @param end where to start scanning backward
 * @param start where to store the start of whitespace chars
 */
void
_dbus_string_skip_white_reverse (const DBusString *str,
                                int end,
                                int *start)
{
    int i;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (end <= real->len);
    _dbus_assert (end >= 0);

    i = end;
    while (i > 0)
    {
        if (!DBUS_IS_ASCII_WHITE (real->str[i-1]))
            break;
        --i;
    }

    _dbus_assert (i >= 0 && (i == 0 || !(DBUS_IS_ASCII_WHITE (real->str[i-1]))));

    if (start)
        *start = i;
}

/**
 * Assigns a newline-terminated or \\r\\n-terminated line from the
 * front
 * of the string to the given dest string. The dest string's previous
 * contents are deleted. If the source string contains no newline,
 * moves the entire source string to the dest string.
 *
 * @todo owen correctly notes that this is a stupid function (it was
 * written purely for test code,
 * e.g. dbus-message-builder.c). Probably should be enforced as test
 * code only with ifdef DBUS_BUILD_TESTS
 *
 * @param source the source string
 * @param dest the destination string (contents are replaced)
 * @returns #FALSE if no memory, or source has length 0
 */
dbus_bool_t
_dbus_string_pop_line (DBusString *source,
                      DBusString *dest)

```

```

{
    int eol, eol_len;

    _dbus_string_set_length (dest, 0);

    eol = 0;
    eol_len = 0;
    if (!_dbus_string_find_eol (source, 0, &eol, &eol_len))
    {
        _dbus_assert (eol == _dbus_string_get_length (source));
        if (eol == 0)
        {
            /* If there's no newline and source has zero length, we're
done */
            return FALSE;
        }
        /* otherwise, the last line of the file has no eol characters */
    }

    /* remember eol can be 0 if it's an empty line, but eol_len should
not be zero also
* since find_eol returned TRUE
*/

    if (!_dbus_string_move_len (source, 0, eol + eol_len, dest, 0))
        return FALSE;

    /* remove line ending */
    if (!_dbus_string_set_length (dest, eol))
    {
        _dbus_assert_not_reached ("out of memory when shortening a
string");
        return FALSE;
    }

    return TRUE;
}

#ifdef DBUS_BUILD_TESTS
/**
* Deletes up to and including the first blank space
* in the string.
*
* @param str the string
*/
void
_dbus_string_delete_first_word (DBusString *str)
{
    int i;

    if (_dbus_string_find_blank (str, 0, &i))
        _dbus_string_skip_blank (str, i, &i);
}

```

```

    _dbus_string_delete (str, 0, i);
}
#endif

#ifdef DBUS_BUILD_TESTS
/**
 * Deletes any leading blanks in the string
 *
 * @param str the string
 */
void
_dbus_string_delete_leading_blanks (DBusString *str)
{
    int i;

    _dbus_string_skip_blank (str, 0, &i);

    if (i > 0)
        _dbus_string_delete (str, 0, i);
}
#endif

/**
 * Deletes leading and trailing whitespace
 *
 * @param str the string
 */
void
_dbus_string_chop_white (DBusString *str)
{
    int i;

    _dbus_string_skip_white (str, 0, &i);

    if (i > 0)
        _dbus_string_delete (str, 0, i);

    _dbus_string_skip_white_reverse (str, _dbus_string_get_length (str),
&i);

    _dbus_string_set_length (str, i);
}

/**
 * Tests two DBusString for equality.
 *
 * @todo memcmp is probably faster
 *
 * @param a first string
 * @param b second string
 * @returns #TRUE if equal

```



```

*/
dbus_bool_t
_dbus_string_equal (const DBusString *a,
                   const DBusString *b)
{
    const unsigned char *ap;
    const unsigned char *bp;
    const unsigned char *a_end;
    const DBusRealString *real_a = (const DBusRealString*) a;
    const DBusRealString *real_b = (const DBusRealString*) b;
    DBUS_GENERIC_STRING_PREAMBLE (real_a);
    DBUS_GENERIC_STRING_PREAMBLE (real_b);

    if (real_a->len != real_b->len)
        return FALSE;

    ap = real_a->str;
    bp = real_b->str;
    a_end = real_a->str + real_a->len;
    while (ap != a_end)
        {
            if (*ap != *bp)
                return FALSE;

            ++ap;
            ++bp;
        }

    return TRUE;
}

/**
 * Tests two DBusString for equality up to the given length.
 * The strings may be shorter than the given length.
 *
 * @todo write a unit test
 *
 * @todo memcmp is probably faster
 *
 * @param a first string
 * @param b second string
 * @param len the maximum length to look at
 * @returns #TRUE if equal for the given number of bytes
 */
dbus_bool_t
_dbus_string_equal_len (const DBusString *a,
                       const DBusString *b,
                       int len)
{
    const unsigned char *ap;
    const unsigned char *bp;
    const unsigned char *a_end;

```

```

const DBusRealString *real_a = (const DBusRealString*) a;
const DBusRealString *real_b = (const DBusRealString*) b;
DBUS_GENERIC_STRING_PREAMBLE (real_a);
DBUS_GENERIC_STRING_PREAMBLE (real_b);

if (real_a->len != real_b->len &&
    (real_a->len < len || real_b->len < len))
    return FALSE;

ap = real_a->str;
bp = real_b->str;
a_end = real_a->str + MIN (real_a->len, len);
while (ap != a_end)
{
    if (*ap != *bp)
        return FALSE;

    ++ap;
    ++bp;
}

return TRUE;
}

/**
 * Tests two sub-parts of two DBusString for equality. The specified
 * range of the first string must exist; the specified start position
 * of the second string must exist.
 *
 * @todo write a unit test
 *
 * @todo memcmp is probably faster
 *
 * @param a first string
 * @param a_start where to start substring in first string
 * @param a_len length of substring in first string
 * @param b second string
 * @param b_start where to start substring in second string
 * @returns #TRUE if the two substrings are equal
 */
dbus_bool_t
_dbus_string_equal_substring (const DBusString *a,
                              int a_start,
                              int a_len,
                              const DBusString *b,
                              int b_start)
{
    const unsigned char *ap;
    const unsigned char *bp;
    const unsigned char *a_end;
    const DBusRealString *real_a = (const DBusRealString*) a;
    const DBusRealString *real_b = (const DBusRealString*) b;

```

```

    DBUS_GENERIC_STRING_PREAMBLE (real_a);
    DBUS_GENERIC_STRING_PREAMBLE (real_b);
    _dbus_assert (a_start >= 0);
    _dbus_assert (a_len >= 0);
    _dbus_assert (a_start <= real_a->len);
    _dbus_assert (a_len <= real_a->len - a_start);
    _dbus_assert (b_start >= 0);
    _dbus_assert (b_start <= real_b->len);

    if (a_len > real_b->len - b_start)
        return FALSE;

    ap = real_a->str + a_start;
    bp = real_b->str + b_start;
    a_end = ap + a_len;
    while (ap != a_end)
    {
        if (*ap != *bp)
            return FALSE;

        ++ap;
        ++bp;
    }

    _dbus_assert (bp <= (real_b->str + real_b->len));

    return TRUE;
}

/**
 * Checks whether a string is equal to a C string.
 *
 * @param a the string
 * @param c_str the C string
 * @returns #TRUE if equal
 */
dbus_bool_t
_dbus_string_equal_c_str (const DBusString *a,
                          const char *c_str)
{
    const unsigned char *ap;
    const unsigned char *bp;
    const unsigned char *a_end;
    const DBusRealString *real_a = (const DBusRealString*) a;
    DBUS_GENERIC_STRING_PREAMBLE (real_a);
    _dbus_assert (c_str != NULL);

    ap = real_a->str;
    bp = (const unsigned char*) c_str;
    a_end = real_a->str + real_a->len;
    while (ap != a_end && *bp)
    {

```

```

        if (*ap != *bp)
            return FALSE;

        ++ap;
        ++bp;
    }

    if (ap != a_end || *bp)
        return FALSE;

    return TRUE;
}

/**
 * Checks whether a string starts with the given C string.
 *
 * @param a the string
 * @param c_str the C string
 * @returns #TRUE if string starts with it
 */
dbus_bool_t
_dbus_string_starts_with_c_str (const DBusString *a,
                               const char      *c_str)
{
    const unsigned char *ap;
    const unsigned char *bp;
    const unsigned char *a_end;
    const DBusRealString *real_a = (const DBusRealString*) a;
    DBUS_GENERIC_STRING_PREAMBLE (real_a);
    _dbus_assert (c_str != NULL);

    ap = real_a->str;
    bp = (const unsigned char*) c_str;
    a_end = real_a->str + real_a->len;
    while (ap != a_end && *bp)
    {
        if (*ap != *bp)
            return FALSE;

        ++ap;
        ++bp;
    }

    if (*bp == '\\0')
        return TRUE;
    else
        return FALSE;
}

/**
 * Appends a two-character hex digit to a string, where the hex digit
 * has the value of the given byte.

```

```

*
* @param str the string
* @param byte the byte
* @returns #FALSE if no memory
*/
dbus_bool_t
_dbus_string_append_byte_as_hex (DBusString *str,
                                int          byte)
{
    const char hexdigits[16] = {
        '0', '1', '2', '3', '4', '5', '6', '7', '8', '9',
        'a', 'b', 'c', 'd', 'e', 'f'
    };

    if (!_dbus_string_append_byte (str,
                                   hexdigits[(byte >> 4)]))
        return FALSE;

    if (!_dbus_string_append_byte (str,
                                   hexdigits[(byte & 0x0f)]))
    {
        _dbus_string_set_length (str,
                                 _dbus_string_get_length (str) - 1);
        return FALSE;
    }

    return TRUE;
}

/**
 * Encodes a string in hex, the way MD5 and SHA-1 are usually
 * encoded. (Each byte is two hex digits.)
 *
 * @param source the string to encode
 * @param start byte index to start encoding
 * @param dest string where encoded data should be placed
 * @param insert_at where to place encoded data
 * @returns #TRUE if encoding was successful, #FALSE if no memory etc.
 */
dbus_bool_t
_dbus_string_hex_encode (const DBusString *source,
                        int                start,
                        DBusString        *dest,
                        int                insert_at)
{
    DBusString result;
    const unsigned char *p;
    const unsigned char *end;
    dbus_bool_t retval;

    _dbus_assert (start <= _dbus_string_get_length (source));

```

```

if (!_dbus_string_init (&result))
    return FALSE;

retval = FALSE;

p = (const unsigned char*) _dbus_string_get_const_data (source);
end = p + _dbus_string_get_length (source);
p += start;

while (p != end)
{
    if (!_dbus_string_append_byte_as_hex (&result, *p))
        goto out;

    ++p;
}

if (!_dbus_string_move (&result, 0, dest, insert_at))
    goto out;

retval = TRUE;

out:
_dbus_string_free (&result);
return retval;
}

/**
 * Decodes a string from hex encoding.
 *
 * @param source the string to decode
 * @param start byte index to start decode
 * @param end_return return location of the end of the hex data, or
#NULL
 * @param dest string where decoded data should be placed
 * @param insert_at where to place decoded data
 * @returns #TRUE if decoding was successful, #FALSE if no memory.
 */
dbus_bool_t
_dbus_string_hex_decode (const DBusString *source,
                        int start,
                        int *end_return,
                        DBusString *dest,
                        int insert_at)
{
    DBusString result;
    const unsigned char *p;
    const unsigned char *end;
    dbus_bool_t retval;
    dbus_bool_t high_bits;

    _dbus_assert (start <= _dbus_string_get_length (source));

```

```
if (!_dbus_string_init (&result))
    return FALSE;

retval = FALSE;

high_bits = TRUE;
p = (const unsigned char*) _dbus_string_get_const_data (source);
end = p + _dbus_string_get_length (source);
p += start;

while (p != end)
{
    unsigned int val;

    switch (*p)
    {
        case '0':
            val = 0;
            break;
        case '1':
            val = 1;
            break;
        case '2':
            val = 2;
            break;
        case '3':
            val = 3;
            break;
        case '4':
            val = 4;
            break;
        case '5':
            val = 5;
            break;
        case '6':
            val = 6;
            break;
        case '7':
            val = 7;
            break;
        case '8':
            val = 8;
            break;
        case '9':
            val = 9;
            break;
        case 'a':
        case 'A':
            val = 10;
            break;
        case 'b':
```

```

    case 'B':
        val = 11;
        break;
    case 'c':
    case 'C':
        val = 12;
        break;
    case 'd':
    case 'D':
        val = 13;
        break;
    case 'e':
    case 'E':
        val = 14;
        break;
    case 'f':
    case 'F':
        val = 15;
        break;
    default:
        goto done;
}

if (high_bits)
{
    if (!_dbus_string_append_byte (&result,
                                   val << 4))
        goto out;
}
else
{
    int len;
    unsigned char b;

    len = _dbus_string_get_length (&result);

    b = _dbus_string_get_byte (&result, len - 1);

    b |= val;

    _dbus_string_set_byte (&result, len - 1, b);
}

high_bits = !high_bits;

++p;
}

done:
if (!_dbus_string_move (&result, 0, dest, insert_at))
    goto out;

```



```

    if (end_return)
        *end_return = p - (const unsigned char*)
_dbus_string_get_const_data (source);

    retval = TRUE;

out:
    _dbus_string_free (&result);
    return retval;
}

/**
 * Checks that the given range of the string is valid ASCII with no
 * nul bytes. If the given range is not entirely contained in the
 * string, returns #FALSE.
 *
 * @todo this is inconsistent with most of DBusString in that
 * it allows a start,len range that extends past the string end.
 *
 * @param str the string
 * @param start first byte index to check
 * @param len number of bytes to check
 * @returns #TRUE if the byte range exists and is all valid ASCII
 */
dbus_bool_t
_dbus_string_validate_ascii (const DBusString *str,
                            int start,
                            int len)
{
    const unsigned char *s;
    const unsigned char *end;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start >= 0);
    _dbus_assert (start <= real->len);
    _dbus_assert (len >= 0);

    if (len > real->len - start)
        return FALSE;

    s = real->str + start;
    end = s + len;
    while (s != end)
    {
        if (_DBUS_UNLIKELY (!_DBUS_ISASCII (*s)))
            return FALSE;

        ++s;
    }

    return TRUE;
}

```

```

/**
 * Converts the given range of the string to lower case.
 *
 * @param str the string
 * @param start first byte index to convert
 * @param len number of bytes to convert
 */
void
_dbus_string_tolower_ascii (const DBusString *str,
                           int start,
                           int len)
{
    unsigned char *s;
    unsigned char *end;
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (start >= 0);
    _dbus_assert (start <= real->len);
    _dbus_assert (len >= 0);
    _dbus_assert (len <= real->len - start);

    s = real->str + start;
    end = s + len;

    while (s != end)
    {
        if (*s >= 'A' && *s <= 'Z')
            *s += 'a' - 'A';
        ++s;
    }
}

/**
 * Converts the given range of the string to upper case.
 *
 * @param str the string
 * @param start first byte index to convert
 * @param len number of bytes to convert
 */
void
_dbus_string_toupper_ascii (const DBusString *str,
                            int start,
                            int len)
{
    unsigned char *s;
    unsigned char *end;
    DBUS_STRING_PREAMBLE (str);
    _dbus_assert (start >= 0);
    _dbus_assert (start <= real->len);
    _dbus_assert (len >= 0);
    _dbus_assert (len <= real->len - start);

    s = real->str + start;

```

```

end = s + len;

while (s != end)
{
    if (*s >= 'a' && *s <= 'z')
        *s += 'A' - 'a';
    ++s;
}

/**
 * Checks that the given range of the string is valid UTF-8. If the
 * given range is not entirely contained in the string, returns
 * #FALSE. If the string contains any nul bytes in the given range,
 * returns #FALSE. If the start and start+len are not on character
 * boundaries, returns #FALSE.
 *
 * @todo this is inconsistent with most of DBusString in that
 * it allows a start,len range that extends past the string end.
 *
 * @param str the string
 * @param start first byte index to check
 * @param len number of bytes to check
 * @returns #TRUE if the byte range exists and is all valid UTF-8
 */
dbus_bool_t
_dbus_string_validate_utf8 (const DBusString *str,
                           int start,
                           int len)
{
    const unsigned char *p;
    const unsigned char *end;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start >= 0);
    _dbus_assert (start <= real->len);
    _dbus_assert (len >= 0);

    /* we are doing _DBUS_UNLIKELY() here which might be
     * dubious in a generic library like GLib, but in D-Bus
     * we know we're validating messages and that it would
     * only be evil/broken apps that would have invalid
     * UTF-8. Also, this function seems to be a performance
     * bottleneck in profiles.
     */

    if (_DBUS_UNLIKELY (len > real->len - start))
        return FALSE;

    p = real->str + start;
    end = p + len;

    while (p < end)

```

```

{
    int i, mask, char_len;
    dbus_unichar_t result;

    /* nul bytes considered invalid */
    if (*p == '\0')
        break;

    /* Special-case ASCII; this makes us go a lot faster in
     * D-Bus profiles where we are typically validating
     * function names and such. We have to know that
     * all following checks will pass for ASCII though,
     * comments follow ...
     */
    if (*p < 128)
    {
        ++p;
        continue;
    }

    UTF8_COMPUTE (*p, mask, char_len);

    if (_DBUS_UNLIKELY (char_len == 0)) /* ASCII: char_len == 1 */
        break;

    /* check that the expected number of bytes exists in the
     remaining length */
    if (_DBUS_UNLIKELY ((end - p) < char_len)) /* ASCII: p < end and
char_len == 1 */
        break;

    UTF8_GET (result, p, i, mask, char_len);

    /* Check for overlong UTF-8 */
    if (_DBUS_UNLIKELY (UTF8_LENGTH (result) != char_len)) /* ASCII:
UTF8_LENGTH == 1 */
        break;
#ifdef 0
    /* The UNICODE_VALID check below will catch this */
    if (_DBUS_UNLIKELY (result == (dbus_unichar_t)-1)) /* ASCII:
result = ascii value */
        break;
#endif

    if (_DBUS_UNLIKELY (!UNICODE_VALID (result))) /* ASCII: always
valid */
        break;

    /* UNICODE_VALID should have caught it */
    _dbus_assert (result != (dbus_unichar_t)-1);

    p += char_len;

```

```

    }

    /* See that we covered the entire length if a length was
    * passed in
    */
    if (_DBUS_UNLIKELY (p != end))
        return FALSE;
    else
        return TRUE;
}

/**
 * Checks that the given range of the string is all nul bytes. If the
 * given range is not entirely contained in the string, returns
 * #FALSE.
 *
 * @todo this is inconsistent with most of DBusString in that
 * it allows a start,len range that extends past the string end.
 *
 * @param str the string
 * @param start first byte index to check
 * @param len number of bytes to check
 * @returns #TRUE if the byte range exists and is all nul bytes
 */
dbus_bool_t
_dbus_string_validate_nul (const DBusString *str,
                          int start,
                          int len)
{
    const unsigned char *s;
    const unsigned char *end;
    DBUS_CONST_STRING_PREAMBLE (str);
    _dbus_assert (start >= 0);
    _dbus_assert (len >= 0);
    _dbus_assert (start <= real->len);

    if (len > real->len - start)
        return FALSE;

    s = real->str + start;
    end = s + len;
    while (s != end)
    {
        if (_DBUS_UNLIKELY (*s != '\0'))
            return FALSE;
        ++s;
    }

    return TRUE;
}

/**

```

```

* Clears all allocated bytes in the string to zero.
*
* @param str the string
*/
void
_dbus_string_zero (DBusString *str)
{
    DBUS_STRING_PREAMBLE (str);

    memset (real->str - real->align_offset, '\0', real->allocated);
}
/** @} */

/* tests are in dbus-string-util.c */

File = dbus-string.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-string.h String utility class (internal to D-Bus
implementation)
*
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#ifdef DBUS_STRING_H
#define DBUS_STRING_H

#include <dbus/dbus-macros.h>
#include <dbus/dbus-types.h>

```

```

#include <dbus/dbus-memory.h>

#include <stdarg.h>

DBUS_BEGIN_DECLS

/**
 * DBusString object
 */

typedef struct DBusString DBusString;

struct DBusString
{
#if defined(DBUS_WIN) && defined(_DEBUG)
    const char *dummy1; /**< placeholder */
#else
    const void *dummy1; /**< placeholder */
#endif
    int    dummy2;      /**< placeholder */
    int    dummy3;      /**< placeholder */
    unsigned int dummy_bit1 : 1; /**< placeholder */
    unsigned int dummy_bit2 : 1; /**< placeholder */
    unsigned int dummy_bit3 : 1; /**< placeholder */
    unsigned int dummy_bits : 3; /**< placeholder */
};

#ifdef DBUS_DISABLE_ASSERT
/* Some simple inlining hacks; the current linker is not smart enough
 * to inline non-exported symbols across files in the library.
 * Note that these break type safety (due to the casts)
 */
#define _dbus_string_get_data(s) ((char*)((DBusString*)(s)->dummy1))
#define _dbus_string_get_length(s) (((DBusString*)(s))->dummy2)
#define _dbus_string_set_byte(s, i, b) (((unsigned char*)((DBusString*)(s)->dummy1))[i]) = (unsigned char)(b))
#define _dbus_string_get_byte(s, i) (((const unsigned char*)((DBusString*)(s)->dummy1))[i])
#define _dbus_string_get_const_data(s) ((const char*)((DBusString*)(s)->dummy1))
#define _dbus_string_get_const_data_len(s, start, len) (((const char*)((DBusString*)(s)->dummy1)) + (start))
#endif

dbus_bool_t    _dbus_string_init                (DBusString
*str);
void          _dbus_string_init_const         (DBusString
*str,
                                             const char
*value);
void          _dbus_string_init_const_len    (DBusString
*str,

```

```

const char
*value,
len);
dbus_bool_t _dbus_string_init_preallocated (DBusString
*str,
int
allocate_size);
void _dbus_string_free (DBusString
*str);
void _dbus_string_lock (DBusString
*str);
dbus_bool_t _dbus_string_compact (DBusString
*str,
int
max_waste);
#ifdef _dbus_string_get_data
char* _dbus_string_get_data (DBusString
*str);
#endif /* _dbus_string_get_data */
#ifdef _dbus_string_get_const_data
const char* _dbus_string_get_const_data (const DBusString
*str);
#endif /* _dbus_string_get_const_data */
char* _dbus_string_get_data_len (DBusString
*str,
int
start,
int
len);
#ifdef _dbus_string_get_const_data_len
const char* _dbus_string_get_const_data_len (const DBusString
*str,
int
start,
int
len);
#endif
void _dbus_string_set_byte (DBusString
*str,
int
i,
unsigned char
byte);
#endif
#ifdef _dbus_string_get_byte
unsigned char _dbus_string_get_byte (const DBusString
*str,
int
start);
#endif /* _dbus_string_get_byte */

```



```

dbus_bool_t _dbus_string_insert_bytes (DBusString
*str,
i,
int n_bytes,
byte);
unsigned char
dbus_bool_t _dbus_string_insert_byte (DBusString
*str,
i,
unsigned char
byte);
char
dbus_bool_t _dbus_string_steal_data (DBusString
*str,
**data_return);
char
dbus_bool_t _dbus_string_steal_data_len (DBusString
*str,
**data_return,
int
start,
int
len);
(char const *)
dbus_bool_t _dbus_string_copy_data (DBusString
*str,
(char const *)
**data_return);
(char const *)
dbus_bool_t _dbus_string_copy_data_len (DBusString
*str,
(char const *)
**data_return,
int
start,
int
len);
(char const *)
void _dbus_string_copy_to_buffer (DBusString
*str,
char
*buffer,
int
len);
(char const *)
void _dbus_string_copy_to_buffer_with_nul (DBusString
*str,
char
*buffer,
int
avail_len);
(char const *)
#ifdef _dbus_string_get_length
int _dbus_string_get_length (DBusString
*str);
#endif /* !_dbus_string_get_length */

```

```

dbus_bool_t  _dbus_string_lengthen      (DBusString
*str,
                                           int
additional_length);
void         _dbus_string_shorten      (DBusString
*str,
                                           int
length_to_remove);
dbus_bool_t  _dbus_string_set_length    (DBusString
*str,
                                           int
length);
dbus_bool_t  _dbus_string_align_length  (DBusString
*str,
                                           int
alignment);
dbus_bool_t  _dbus_string_alloc_space   (DBusString
*str,
                                           int
extra_bytes);
dbus_bool_t  _dbus_string_append        (DBusString
*str,
                                           const char
*buffer);
dbus_bool_t  _dbus_string_append_len    (DBusString
*str,
                                           const char
*buffer,
                                           int
len);
dbus_bool_t  _dbus_string_append_int     (DBusString
*str,
                                           long
value);
dbus_bool_t  _dbus_string_append_uint   (DBusString
*str,
                                           unsigned long
value);
dbus_bool_t  _dbus_string_append_byte    (DBusString
*str,
                                           unsigned char
byte);
dbus_bool_t  _dbus_string_append_printf (DBusString
*str,
                                           const char
*format,
                                           ...)
_DBUS_GNUC_PRINTF (2, 3);
dbus_bool_t  _dbus_string_append_printf_valist (DBusString
*str,

```

```

    *format,
    args);
dbus_bool_t _dbus_string_insert_2_aligned (DBusString
*str,
insert_at,
const unsigned char
octets[2]);
dbus_bool_t _dbus_string_insert_4_aligned (DBusString
*str,
insert_at,
const unsigned char
octets[4]);
dbus_bool_t _dbus_string_insert_8_aligned (DBusString
*str,
insert_at,
const unsigned char
octets[8]);
dbus_bool_t _dbus_string_insert_alignment (DBusString
*str,
*insert_at,
int
alignment);
void _dbus_string_delete (DBusString
*str,
start,
int
len);
dbus_bool_t _dbus_string_move (DBusString
*source,
start,
DBusString
*dest,
int
insert_at);
dbus_bool_t _dbus_string_copy (const DBusString
*source,
start,
DBusString
*dest,
int
insert_at);
dbus_bool_t _dbus_string_move_len (DBusString
*source,

```

```

start,
len,
*dest,
insert_at);
dbus_bool_t    _dbus_string_copy_len
*source,
start,
len,
*dest,
insert_at);
dbus_bool_t    _dbus_string_replace_len
*source,
start,
len,
*dest,
replace_at,
replace_len);
dbus_bool_t    _dbus_string_split_on_byte
*source,
byte,
*tail);
dbus_bool_t    _dbus_string_parse_int
*str,
start,
*value_return,
*end_return);
dbus_bool_t    _dbus_string_parse_uint
*str,
start,
*value_return,
*end_return);

```

int
int
DBusString
int
(const DBusString
int
int
DBusString
int
(const DBusString
int
int
DBusString
int
int
DBusString
(unsigned char
DBusString
(const DBusString
int
long
int
(const DBusString
int
unsigned long
int

```

dbus_bool_t _dbus_string_find (const DBusString
*str,
int
start,
const char
*substr,
int
*found);
dbus_bool_t _dbus_string_find_eol (const DBusString
*str,
int
start,
int
*found,
int
*found_len);
dbus_bool_t _dbus_string_find_to (const DBusString
*str,
int
start,
int
end,
const char
*substr,
int
*found);
dbus_bool_t _dbus_string_find_byte_backward (const DBusString
*str,
int
start,
unsigned char
byte,
int
*found);
dbus_bool_t _dbus_string_find_blank (const DBusString
*str,
int
start,
int
*found);
void _dbus_string_skip_blank (const DBusString
*str,
int
start,
int
*end);
void _dbus_string_skip_white (const DBusString
*str,
int
start,
int
*end);

```



```

dbus_bool_t   _dbus_string_hex_encode      (const DBusString
*source,
start,
*dest,
insert_at);
dbus_bool_t   _dbus_string_hex_decode      (const DBusString
*source,
start,
int
*end_return,
*dest,
insert_at);
void          _dbus_string_tolower_ascii    (const DBusString
*str,
start,
int
len);
void          _dbus_string_toupper_ascii    (const DBusString
*str,
start,
int
len);
dbus_bool_t   _dbus_string_validate_ascii   (const DBusString
*str,
start,
int
len);
dbus_bool_t   _dbus_string_validate_utf8    (const DBusString
*str,
start,
int
len);
dbus_bool_t   _dbus_string_validate_nul     (const DBusString
*str,
start,
int
len);
void          _dbus_string_zero             (DBusString
*str);

/**

```

```

* We allocate 1 byte for nul termination, plus 7 bytes for possible
* align_offset, so we always need 8 bytes on top of the string's
* length to be in the allocated block.
*/
#define _DBUS_STRING_ALLOCATION_PADDING 8

/**
* Defines a static const variable with type #DBusString called "name"
* containing the given string literal.
*
* @param name the name of the variable
* @param str the string value
*/
#define _DBUS_STRING_DEFINE_STATIC(name, str)
\
static const char _dbus_static_string_##name[] = str;
\
static const DBusString name = { _dbus_static_string_##name,
\
                                sizeof(_dbus_static_string_##name),
\
                                sizeof(_dbus_static_string_##name)
+ \
                                _DBUS_STRING_ALLOCATION_PADDING,
\
                                TRUE, TRUE, FALSE, 0 }

DBUS_END_DECLS

#endif /* DBUS_STRING_H */

```

File = dbus-syntax.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-syntax.c - utility functions for strings with special syntax
*
* Author: Simon McVittie <simon.mcvittie@collabora.co.uk>
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```

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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>
#include "dbus-syntax.h"

#include "dbus-internals.h"
#include "dbus-marshall-validate.h"
#include "dbus-shared.h"

/**
 * @defgroup DBusSyntax Utility functions for strings with special
syntax
 * @ingroup DBus
 * @brief Parsing D-Bus type signatures
 * @{
 */

/**
 * Check an object path for validity. Remember that #NULL can always
 * be passed instead of a DBusError *, if you don't care about having
 * an error name and message.
 *
 * This function is suitable for validating C strings, but is not
suitable
 * for validating untrusted data from a network unless the string's
length
 * is also checked, since it assumes that the string ends at the first
zero
 * byte according to normal C conventions.
 *
 * @param path a potentially invalid object path, which must not be
#NULL
 * @param error error return
 * @returns #TRUE if path is valid
 */
dbus_bool_t
dbus_validate_path (const char      *path,
                   DBusError      *error)
{
    DBusString str;
    int len;

    _dbus_return_val_if_fail (path != NULL, FALSE);

```

```

_dbus_string_init_const (&str, path);
len = _dbus_string_get_length (&str);

/* In general, it ought to be valid... */
if (_DBUS_LIKELY (_dbus_validate_path (&str, 0, len)))
    return TRUE;

/* slow path: string is invalid, find out why */

if (!_dbus_string_validate_utf8 (&str, 0, len))
{
    /* don't quote the actual string here, since a DBusError also
needs to
    * be valid UTF-8 */
    dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                    "Object path was not valid UTF-8");
    return FALSE;
}

/* FIXME: later, diagnose exactly how it was invalid */
dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                "Object path was not valid: '%s'", path);
return FALSE;
}

/**
 * Check an interface name for validity. Remember that #NULL can
always
 * be passed instead of a DBusError *, if you don't care about having
 * an error name and message.
 *
 * This function is suitable for validating C strings, but is not
suitable
 * for validating untrusted data from a network unless the string's
length
 * is also checked, since it assumes that the string ends at the first
zero
 * byte according to normal C conventions.
 *
 * @param path a potentially invalid interface name, which must not be
#NULL
 * @param error error return
 * @returns #TRUE if name is valid
 */
dbus_bool_t
dbus_validate_interface (const char          *name,
                        DBusError          *error)
{
    DBusString str;
    int len;

    _dbus_return_val_if_fail (name != NULL, FALSE);

```

```

_dbus_string_init_const (&str, name);
len = _dbus_string_get_length (&str);

/* In general, it ought to be valid... */
if (_DBUS_LIKELY (_dbus_validate_interface (&str, 0, len)))
    return TRUE;

/* slow path: string is invalid, find out why */

if (!_dbus_string_validate_utf8 (&str, 0, len))
{
    /* don't quote the actual string here, since a DBusError also
needs to
    * be valid UTF-8 */
    dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                    "Interface name was not valid UTF-8");
    return FALSE;
}

/* FIXME: later, diagnose exactly how it was invalid */
dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                "Interface name was not valid: '%s'", name);
return FALSE;
}

/**
 * Check a member (method/signal) name for validity. Remember that
#NULL
 * can always be passed instead of a DBusError *, if you don't care
about
 * having an error name and message.
 *
 * This function is suitable for validating C strings, but is not
suitable
 * for validating untrusted data from a network unless the string's
length
 * is also checked, since it assumes that the string ends at the first
zero
 * byte according to normal C conventions.
 *
 * @param path a potentially invalid member name, which must not be
#NULL
 * @param error error return
 * @returns #TRUE if name is valid
 */
dbus_bool_t
dbus_validate_member (const char          *name,
                     DBusError          *error)
{
    DBusString str;
    int len;

```

```

_dbus_return_val_if_fail (name != NULL, FALSE);

_dbus_string_init_const (&str, name);
len = _dbus_string_get_length (&str);

/* In general, it ought to be valid... */
if (_DBUS_LIKELY (_dbus_validate_member (&str, 0, len)))
    return TRUE;

/* slow path: string is invalid, find out why */

if (!_dbus_string_validate_utf8 (&str, 0, len))
{
    /* don't quote the actual string here, since a DBusError also
needs to
    * be valid UTF-8 */
    dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                  "Member name was not valid UTF-8");
    return FALSE;
}

/* FIXME: later, diagnose exactly how it was invalid */
dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                "Member name was not valid: '%s'", name);
return FALSE;
}

/**
 * Check an error name for validity. Remember that #NULL
 * can always be passed instead of a DBusError *, if you don't care
about
 * having an error name and message.
 *
 * This function is suitable for validating C strings, but is not
suitable
 * for validating untrusted data from a network unless the string's
length
 * is also checked, since it assumes that the string ends at the first
zero
 * byte according to normal C conventions.
 *
 * @param path a potentially invalid error name, which must not be
#NULL
 * @param error error return
 * @returns #TRUE if name is valid
 */
dbus_bool_t
dbus_validate_error_name (const char          *name,
                          DBusError          *error)
{
    DBusString str;

```

```

int len;

_dbus_return_val_if_fail (name != NULL, FALSE);

_dbus_string_init_const (&str, name);
len = _dbus_string_get_length (&str);

/* In general, it ought to be valid... */
if (_DBUS_LIKELY (_dbus_validate_error_name (&str, 0, len)))
    return TRUE;

/* slow path: string is invalid, find out why */

if (!_dbus_string_validate_utf8 (&str, 0, len))
{
    /* don't quote the actual string here, since a DBusError also
needs to
    * be valid UTF-8 */
    dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                    "Error name was not valid UTF-8");
    return FALSE;
}

/* FIXME: later, diagnose exactly how it was invalid */
dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                "Error name was not valid: '%s'", name);
return FALSE;
}

/**
 * Check a bus name for validity. Remember that #NULL
 * can always be passed instead of a DBusError *, if you don't care
about
 * having an error name and message.
 *
 * This function is suitable for validating C strings, but is not
suitable
 * for validating untrusted data from a network unless the string's
length
 * is also checked, since it assumes that the string ends at the first
zero
 * byte according to normal C conventions.
 *
 * @param path a potentially invalid bus name, which must not be #NULL
 * @param error error return
 * @returns #TRUE if name is valid
 */
dbus_bool_t
dbus_validate_bus_name (const char          *name,
                       DBusError          *error)
{
    DBusString str;

```

```

int len;

_dbus_return_val_if_fail (name != NULL, FALSE);

_dbus_string_init_const (&str, name);
len = _dbus_string_get_length (&str);

/* In general, it ought to be valid... */
if (_DBUS_LIKELY (_dbus_validate_bus_name (&str, 0, len)))
    return TRUE;

/* slow path: string is invalid, find out why */

if (!_dbus_string_validate_utf8 (&str, 0, len))
{
    /* don't quote the actual string here, since a DBusError also
needs to
    * be valid UTF-8 */
    dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                    "Bus name was not valid UTF-8");
    return FALSE;
}

/* FIXME: later, diagnose exactly how it was invalid */
dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                "Bus name was not valid: '%s'", name);
return FALSE;
}

/**
 * Check a string for validity. Strings on D-Bus must be valid UTF-8.
 * Remember that #NULL can always be passed instead of a DBusError *,
 * if you don't care about having an error name and message.
 *
 * This function is suitable for validating C strings, but is not
suitable
 * for validating untrusted data from a network unless the string's
length
 * is also checked, since it assumes that the string ends at the first
zero
 * byte according to normal C conventions.
 *
 * @param alleged_utf8 a string to be checked, which must not be #NULL
 * @param error return
 * @returns #TRUE if alleged_utf8 is valid UTF-8
 */
dbus_bool_t
dbus_validate_utf8 (const char      *alleged_utf8,
                   DBusError      *error)
{
    DBusString str;

```

```

_dbus_return_val_if_fail (alleged_utf8 != NULL, FALSE);

_dbus_string_init_const (&str, alleged_utf8);

if (_DBUS_LIKELY (_dbus_string_validate_utf8 (&str, 0,
_dbus_string_get_length (&str))))
    return TRUE;

/* don't quote the actual string here, since a DBusError also needs
to
 * be valid UTF-8 */
dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                "String was not valid UTF-8");
return FALSE;
}

/** @} */ /* end of group */

```

File = dbus-syntax.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-syntax.h - utility functions for strings with special syntax
 *
 * Author: Simon McVittie <simon.mcvittie@collabora.co.uk>
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
#endif !defined (DBUS_INSIDE_DBUS_H) && !defined (DBUS_COMPILATION)
#error "Only <dbus/dbus.h> can be included directly, this file may
disappear or change contents."

```

```

#endif

#ifndef DBUS_SYNTAX_H
#define DBUS_SYNTAX_H

#include <dbus/dbus-macros.h>
#include <dbus/dbus-types.h>
#include <dbus/dbus-errors.h>

DBUS_BEGIN_DECLS

DBUS_EXPORT
dbus_bool_t      dbus_validate_path          (const char
*path,
                                             DBusError
*error);
DBUS_EXPORT
dbus_bool_t      dbus_validate_interface    (const char
*name,
                                             DBusError
*error);
DBUS_EXPORT
dbus_bool_t      dbus_validate_member      (const char
*name,
                                             DBusError
*error);
DBUS_EXPORT
dbus_bool_t      dbus_validate_error_name  (const char
*name,
                                             DBusError
*error);
DBUS_EXPORT
dbus_bool_t      dbus_validate_bus_name    (const char
*name,
                                             DBusError
*error);
DBUS_EXPORT
dbus_bool_t      dbus_validate_utf8       (const char
*alleged_utf8,
                                             DBusError
*error);

DBUS_END_DECLS

#endif /* multiple-inclusion guard */

File = dbus-sysdeps-pthread.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */

```



```

/* dbus-sysdeps-pthread.c Implements threads using pthreads (internal
to libdbus)
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>
#include "dbus-internals.h"
#include "dbus-sysdeps.h"
#include "dbus-threads.h"

#include <sys/time.h>
#include <pthread.h>
#include <string.h>

#ifdef HAVE_ERRNO_H
#include <errno.h>
#endif

#include <config.h>

/* Whether we have a "monotonic" clock; i.e. a clock not affected by
* changes in system time.
* This is initialized once in check_monotonic_clock below.
* https://bugs.freedesktop.org/show\_bug.cgi?id=18121
*/
static dbus_bool_t have_monotonic_clock = 0;

struct DBusRMutex {
    pthread_mutex_t lock; /**< the lock */
};

```

```

struct DBusCMutex {
    pthread_mutex_t lock; /**< the lock */
};

struct DBusCondVar {
    pthread_cond_t cond; /**< the condition */
};

#define DBUS_MUTEX(m) ((DBusMutex*) m)
#define DBUS_MUTEX_PTHREAD(m) ((DBusMutexPThread*) m)

#define DBUS_COND_VAR(c) ((DBusCondVar*) c)
#define DBUS_COND_VAR_PTHREAD(c) ((DBusCondVarPThread*) c)

#ifdef DBUS_DISABLE_ASSERT
/* (tmp != 0) is a no-op usage to silence compiler */
#define PTHREAD_CHECK(func_name, result_or_call) \
    do { int tmp = (result_or_call); if (tmp != 0) {;} } while (0)
#else
#define PTHREAD_CHECK(func_name, result_or_call) do {
\
    int tmp = (result_or_call);
\
    if (tmp != 0) {
\
        _dbus_warn_check_failed ("pthread function %s failed with %d %s
in %s\n", \
                                func_name, tmp, strerror(tmp),
                                _DBUS_FUNCTION_NAME); \
    }
\
} while (0)
#endif /* !DBUS_DISABLE_ASSERT */

DBusCMutex *
_dbus_platform_mutex_new (void)
{
    DBusCMutex *pmutex;
    int result;

    pmutex = dbus_new (DBusCMutex, 1);
    if (pmutex == NULL)
        return NULL;

    result = pthread_mutex_init (&pmutex->lock, NULL);

    if (result == ENOMEM || result == EAGAIN)
    {
        dbus_free (pmutex);
        return NULL;
    }
}

```

```

else
{
    PTHREAD_CHECK ("pthread_mutex_init", result);
}

return pmutex;
}

DBusRMutex *
_dbus_platform_rmutex_new (void)
{
    DBusRMutex *pmutex;
    pthread_mutexattr_t mutexattr;
    int result;

    pmutex = dbus_new (DBusRMutex, 1);
    if (pmutex == NULL)
        return NULL;

    pthread_mutexattr_init (&mutexattr);
    pthread_mutexattr_settype (&mutexattr, PTHREAD_MUTEX_RECURSIVE);
    result = pthread_mutex_init (&pmutex->lock, &mutexattr);
    pthread_mutexattr_destroy (&mutexattr);

    if (result == ENOMEM || result == EAGAIN)
    {
        dbus_free (pmutex);
        return NULL;
    }
    else
    {
        PTHREAD_CHECK ("pthread_mutex_init", result);
    }

    return pmutex;
}

void
_dbus_platform_cmutex_free (DBusCMutex *mutex)
{
    PTHREAD_CHECK ("pthread_mutex_destroy", pthread_mutex_destroy
(&mutex->lock));
    dbus_free (mutex);
}

void
_dbus_platform_rmutex_free (DBusRMutex *mutex)
{
    PTHREAD_CHECK ("pthread_mutex_destroy", pthread_mutex_destroy
(&mutex->lock));
    dbus_free (mutex);
}

```

```

void
_dbus_platform_cmutex_lock (DBusCMutex *mutex)
{
    PTHREAD_CHECK ("pthread_mutex_lock", pthread_mutex_lock (&mutex-
>lock));
}

void
_dbus_platform_rmutex_lock (DBusRMutex *mutex)
{
    PTHREAD_CHECK ("pthread_mutex_lock", pthread_mutex_lock (&mutex-
>lock));
}

void
_dbus_platform_cmutex_unlock (DBusCMutex *mutex)
{
    PTHREAD_CHECK ("pthread_mutex_unlock", pthread_mutex_unlock (&mutex-
>lock));
}

void
_dbus_platform_rmutex_unlock (DBusRMutex *mutex)
{
    PTHREAD_CHECK ("pthread_mutex_unlock", pthread_mutex_unlock (&mutex-
>lock));
}

DBusCondVar *
_dbus_platform_condvar_new (void)
{
    DBusCondVar *pcond;
    pthread_condattr_t attr;
    int result;

    pcond = dbus_new (DBusCondVar, 1);
    if (pcond == NULL)
        return NULL;

    pthread_condattr_init (&attr);
#ifdef HAVE_MONOTONIC_CLOCK
    if (have_monotonic_clock)
        pthread_condattr_setclock (&attr, CLOCK_MONOTONIC);
#endif

    result = pthread_cond_init (&pcond->cond, &attr);
    pthread_condattr_destroy (&attr);

    if (result == EAGAIN || result == ENOMEM)
    {
        dbus_free (pcond);
    }
}

```

```

        return NULL;
    }
else
    {
        PTHREAD_CHECK ("pthread_cond_init", result);
    }

    return pcond;
}

void
_dbus_platform_condvar_free (DBusCondVar *cond)
{
    PTHREAD_CHECK ("pthread_cond_destroy", pthread_cond_destroy (&cond->cond));
    dbus_free (cond);
}

void
_dbus_platform_condvar_wait (DBusCondVar *cond,
                             DBusCMutex *mutex)
{
    PTHREAD_CHECK ("pthread_cond_wait", pthread_cond_wait (&cond->cond,
&mutex->lock));
}

dbus_bool_t
_dbus_platform_condvar_wait_timeout (DBusCondVar *cond,
                                     DBusCMutex *mutex,
                                     int
timeout_milliseconds)
{
    struct timeval time_now;
    struct timespec end_time;
    int result;

#ifdef HAVE_MONOTONIC_CLOCK
    if (have_monotonic_clock)
        {
            struct timespec monotonic_timer;
            clock_gettime (CLOCK_MONOTONIC, &monotonic_timer);
            time_now.tv_sec = monotonic_timer.tv_sec;
            time_now.tv_usec = monotonic_timer.tv_nsec / 1000;
        }
    else
        /* This else falls through to gettimeofday */
#endif
    gettimeofday (&time_now, NULL);

    end_time.tv_sec = time_now.tv_sec + timeout_milliseconds / 1000;
    end_time.tv_nsec = (time_now.tv_usec + (timeout_milliseconds % 1000)
* 1000) * 1000;

```

```

    if (end_time.tv_nsec > 1000*1000*1000)
    {
        end_time.tv_sec += 1;
        end_time.tv_nsec -= 1000*1000*1000;
    }

    result = pthread_cond_timedwait (&cond->cond, &mutex->lock,
&end_time);

    if (result != ETIMEDOUT)
    {
        PTHREAD_CHECK ("pthread_cond_timedwait", result);
    }

    /* return true if we did not time out */
    return result != ETIMEDOUT;
}

void
_dbus_platform_condvar_wake_one (DBusCondVar *cond)
{
    PTHREAD_CHECK ("pthread_cond_signal", pthread_cond_signal (&cond-
>cond));
}

static void
check_monotonic_clock (void)
{
#ifdef HAVE_MONOTONIC_CLOCK
    struct timespec dummy;
    if (clock_getres (CLOCK_MONOTONIC, &dummy) == 0)
        have_monotonic_clock = TRUE;
#endif
}

dbus_bool_t
_dbus_threads_init_platform_specific (void)
{
    /* These have static variables, and we need to handle both the case
    * where dbus_threads_init() has been called and when it hasn't;
    * so initialize them before any threads are allowed to enter.
    */
    check_monotonic_clock ();
    (void) _dbus_check_setuid ();
    return dbus_threads_init (NULL);
}

```

File = dbus-sysdeps-thread-win.c

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
```

```

/* dbus-sysdeps-pthread.c Implements threads using Windows threads
(internal to libdbus)
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>
#include "dbus-internals.h"
#include "dbus-sysdeps.h"
#include "dbus-sysdeps-win.h"
#include "dbus-threads.h"
#include "dbus-list.h"

#include <windows.h>

struct DBusCondVar {
    DBusList *list;          /**< list thread-local-stored events waiting
on the cond variable */
    CRITICAL_SECTION lock; /**< lock protecting the list */
};

static DWORD dbus_cond_event_tls = TLS_OUT_OF_INDEXES;

static HMODULE dbus_dll_hmodule;

void *
_dbus_win_get_dll_hmodule (void)
{
    return dbus_dll_hmodule;
}

```

```

#ifdef DBUS_WINCE
#define hinst_t HANDLE
#else
#define hinst_t HINSTANCE
#endif

BOOL WINAPI DllMain (hinst_t, DWORD, LPVOID);

/* We need this to free the TLS events on thread exit */
BOOL WINAPI
DllMain (hinst_t hinstDLL,
         DWORD     fdwReason,
         LPVOID    lpvReserved)
{
    HANDLE event;
    switch (fdwReason)
    {
        case DLL_PROCESS_ATTACH:
            dbus_dll_hmodule = hinstDLL;
            break;
        case DLL_THREAD_DETACH:
            if (dbus_cond_event_tls != TLS_OUT_OF_INDEXES)
            {
                event = TlsGetValue(dbus_cond_event_tls);
                CloseHandle (event);
                TlsSetValue(dbus_cond_event_tls, NULL);
            }
            break;
        case DLL_PROCESS_DETACH:
            if (dbus_cond_event_tls != TLS_OUT_OF_INDEXES)
            {
                event = TlsGetValue(dbus_cond_event_tls);
                CloseHandle (event);
                TlsSetValue(dbus_cond_event_tls, NULL);

                TlsFree(dbus_cond_event_tls);
            }
            break;
        default:
            break;
    }
    return TRUE;
}

DBusCMutex *
_dbus_platform_cmutex_new (void)
{
    HANDLE handle;
    handle = CreateMutex (NULL, FALSE, NULL);
    return (DBusCMutex *) handle;
}

```



```

DBusRMutex *
_dbus_platform_rmutex_new (void)
{
    HANDLE handle;
    handle = CreateMutex (NULL, FALSE, NULL);
    return (DBusRMutex *) handle;
}

void
_dbus_platform_cmutex_free (DBusCMutex *mutex)
{
    CloseHandle ((HANDLE *) mutex);
}

void
_dbus_platform_rmutex_free (DBusRMutex *mutex)
{
    CloseHandle ((HANDLE *) mutex);
}

void
_dbus_platform_cmutex_lock (DBusCMutex *mutex)
{
    WaitForSingleObject ((HANDLE *) mutex, INFINITE);
}

void
_dbus_platform_rmutex_lock (DBusRMutex *mutex)
{
    WaitForSingleObject ((HANDLE *) mutex, INFINITE);
}

void
_dbus_platform_cmutex_unlock (DBusCMutex *mutex)
{
    ReleaseMutex ((HANDLE *) mutex);
}

void
_dbus_platform_rmutex_unlock (DBusRMutex *mutex)
{
    ReleaseMutex ((HANDLE *) mutex);
}

DBusCondVar *
_dbus_platform_condvar_new (void)
{
    DBusCondVar *cond;

    cond = dbus_new (DBusCondVar, 1);
    if (cond == NULL)
        return NULL;
}

```

```

    cond->list = NULL;

    InitializeCriticalSection (&cond->lock);
    return cond;
}

void
_dbus_platform_condvar_free (DBusCondVar *cond)
{
    DeleteCriticalSection (&cond->lock);
    _dbus_list_clear (&cond->list);
    dbus_free (cond);
}

static dbus_bool_t
_dbus_condvar_wait_win32 (DBusCondVar *cond,
                          DBusCMutex *mutex,
                          int milliseconds)
{
    DWORD retval;
    dbus_bool_t ret;
    HANDLE event = TlsGetValue (dbus_cond_event_tls);

    if (!event)
    {
        event = CreateEvent (0, FALSE, FALSE, NULL);
        if (event == 0)
            return FALSE;
        TlsSetValue (dbus_cond_event_tls, event);
    }

    EnterCriticalSection (&cond->lock);

    /* The event must not be signaled. Check this */
    _dbus_assert (WaitForSingleObject (event, 0) == WAIT_TIMEOUT);

    ret = _dbus_list_append (&cond->list, event);

    LeaveCriticalSection (&cond->lock);

    if (!ret)
        return FALSE; /* Prepend failed */

    _dbus_platform_mutex_unlock (mutex);
    retval = WaitForSingleObject (event, milliseconds);
    _dbus_platform_mutex_lock (mutex);

    if (retval == WAIT_TIMEOUT)
    {
        EnterCriticalSection (&cond->lock);
        _dbus_list_remove (&cond->list, event);
    }
}

```

```

    /* In the meantime we could have been signaled, so we must again
    * wait for the signal, this time with no timeout, to reset
    * it. retval is set again to honour the late arrival of the
    * signal */
    retval = WaitForSingleObject (event, 0);

    LeaveCriticalSection (&cond->lock);
}

#ifdef DBUS_DISABLE_ASSERT
    EnterCriticalSection (&cond->lock);

    /* Now event must not be inside the array, check this */
    _dbus_assert (_dbus_list_remove (&cond->list, event) == FALSE);

    LeaveCriticalSection (&cond->lock);
#endif /* !G_DISABLE_ASSERT */

    return retval != WAIT_TIMEOUT;
}

void
_dbus_platform_condvar_wait (DBusCondVar *cond,
                             DBusCMutex *mutex)
{
    _dbus_condvar_wait_win32 (cond, mutex, INFINITE);
}

dbus_bool_t
_dbus_platform_condvar_wait_timeout (DBusCondVar *cond,
                                     DBusCMutex *mutex,
                                     int
                                     timeout_milliseconds)
{
    return _dbus_condvar_wait_win32 (cond, mutex, timeout_milliseconds);
}

void
_dbus_platform_condvar_wake_one (DBusCondVar *cond)
{
    EnterCriticalSection (&cond->lock);

    if (cond->list != NULL)
    {
        SetEvent (_dbus_list_pop_first (&cond->list));
        /* Avoid live lock by pushing the waiter to the mutex lock
        instruction, which is fair. If we don't do this, we could
        acquire the condition variable again before the waiter has a
        chance itself, leading to starvation. */
        Sleep (0);
    }
}

```

```

    LeaveCriticalSection (&cond->lock);
}

dbus_bool_t
_dbus_threads_init_platform_specific (void)
{
    /* We reuse this over several generations, because we can't
     * free the events once they are in use
     */
    if (dbus_cond_event_tls == TLS_OUT_OF_INDEXES)
    {
        dbus_cond_event_tls = TlsAlloc ();
        if (dbus_cond_event_tls == TLS_OUT_OF_INDEXES)
            return FALSE;
    }

    return dbus_threads_init (NULL);
}

```

File = dbus-sysdeps-unix.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps-unix.c Wrappers around UNIX system/libc features
(internal to D-Bus implementation)
*
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02110-1301 USA
*
*/

```

```
#include <config.h>

#include "dbus-internals.h"
#include "dbus-sysdeps.h"
#include "dbus-sysdeps-unix.h"
#include "dbus-threads.h"
#include "dbus-protocol.h"
#include "dbus-transport.h"
#include "dbus-string.h"
#include "dbus-userdb.h"
#include "dbus-list.h"
#include "dbus-credentials.h"
#include "dbus-nonce.h"

#include <sys/types.h>
#include <stdlib.h>
#include <string.h>
#include <signal.h>
#include <unistd.h>
#include <stdio.h>
#include <fcntl.h>
#include <sys/socket.h>
#include <dirent.h>
#include <sys/un.h>
#include <pwd.h>
#include <time.h>
#include <locale.h>
#include <sys/time.h>
#include <sys/stat.h>
#include <sys/wait.h>
#include <netinet/in.h>
#include <netdb.h>
#include <grp.h>
#include <arpa/inet.h>

#ifdef HAVE_ERRNO_H
#include <errno.h>
#endif
#ifdef HAVE_WRITEV
#include <sys/uio.h>
#endif
#ifdef HAVE_POLL
#include <sys/poll.h>
#endif
#ifdef HAVE_BACKTRACE
#include <execinfo.h>
#endif
#ifdef HAVE_GETPEERUCRED
#include <ucred.h>
#endif

#ifdef HAVE_ADT
```

```

#include <bsm/adt.h>
#endif

#include "sd-daemon.h"

#ifndef O_BINARY
#define O_BINARY 0
#endif

#ifndef AI_ADDRCONFIG
#define AI_ADDRCONFIG 0
#endif

#ifndef HAVE_SOCKLEN_T
#define socklen_t int
#endif

#if defined (__sun) || defined (__sun__)
/*
 * CMS_SPACE etc. definitions for Solaris < 10, based on
 * http://mailman.videolan.org/pipermail/vlc-devel/2006-
May/024402.html
 * via
 * http://wiki.opencsw.org/porting-faq#toc10
 *
 * These are only redefined for Solaris, for now: if your OS needs
these too,
 * please file a bug. (Or preferably, improve your OS so they're not
needed.)
 */
#endif

#ifndef MSG_ALIGN
#ifdef __sun__
#define MSG_ALIGN(len) _MSG_DATA_ALIGN (len)
#else
/* aligning to sizeof (long) is assumed to be portable
(fd.o#40235) */
#define MSG_ALIGN(len) (((len) + sizeof (long) - 1) & \
~(sizeof (long) - 1))
#endif
#endif

#ifndef MSG_SPACE
#define MSG_SPACE(len) (MSG_ALIGN (sizeof (struct cmsghdr)) + \
MSG_ALIGN (len))
#endif

#ifndef MSG_LEN
#define MSG_LEN(len) (MSG_ALIGN (sizeof (struct cmsghdr)) + \
(len))
#endif

```

```

#endif /* Solaris */

static dbus_bool_t
_dbus_open_socket (int *fd_p,
                  int domain,
                  int type,
                  int protocol,
                  DBusError *error)
{
#ifdef SOCK_CLOEXEC
    dbus_bool_t cloexec_done;

    *fd_p = socket (domain, type | SOCK_CLOEXEC, protocol);
    cloexec_done = *fd_p >= 0;

    /* Check if kernel seems to be too old to know SOCK_CLOEXEC */
    if (*fd_p < 0 && errno == EINVAL)
#endif
    {
        *fd_p = socket (domain, type, protocol);
    }

    if (*fd_p >= 0)
    {
#ifdef SOCK_CLOEXEC
        if (!cloexec_done)
#endif
        {
            _dbus_fd_set_close_on_exec(*fd_p);
        }

        _dbus_verbose ("socket fd %d opened\n", *fd_p);
        return TRUE;
    }
    else
    {
        dbus_set_error(error,
                      _dbus_error_from_errno (errno),
                      "Failed to open socket: %s",
                      _dbus_strerror (errno));
        return FALSE;
    }
}

/**
 * Opens a UNIX domain socket (as in the socket() call).
 * Does not bind the socket.
 *
 * This will set FD_CLOEXEC for the socket returned
 *
 * @param fd return location for socket descriptor
 * @param error return location for an error

```

```

    * @returns #FALSE if error is set
    */
static dbus_bool_t
_dbus_open_unix_socket (int                *fd,
                       DBusError          *error)
{
    return _dbus_open_socket(fd, PF_UNIX, SOCK_STREAM, 0, error);
}

/**
 * Closes a socket. Should not be used on non-socket
 * file descriptors or handles.
 *
 * @param fd the socket
 * @param error return location for an error
 * @returns #FALSE if error is set
 */
dbus_bool_t
_dbus_close_socket (int                fd,
                   DBusError          *error)
{
    return _dbus_close (fd, error);
}

/**
 * Like _dbus_read(), but only works on sockets so is
 * available on Windows.
 *
 * @param fd the socket
 * @param buffer string to append data to
 * @param count max amount of data to read
 * @returns number of bytes appended to the string
 */
int
_dbus_read_socket (int                fd,
                  DBusString          *buffer,
                  int                 count)
{
    return _dbus_read (fd, buffer, count);
}

/**
 * Like _dbus_write(), but only supports sockets
 * and is thus available on Windows.
 *
 * @param fd the file descriptor to write
 * @param buffer the buffer to write data from
 * @param start the first byte in the buffer to write
 * @param len the number of bytes to try to write
 * @returns the number of bytes written or -1 on error
 */
int

```



```

_dbus_write_socket (int          fd,
                   const DBusString *buffer,
                   int          start,
                   int          len)
{
#ifdef HAVE_DECL_MSG_NOSIGNAL
    const char *data;
    int bytes_written;

    data = _dbus_string_get_const_data_len (buffer, start, len);

again:

    bytes_written = send (fd, data, len, MSG_NOSIGNAL);

    if (bytes_written < 0 && errno == EINTR)
        goto again;

    return bytes_written;
#else
    return _dbus_write (fd, buffer, start, len);
#endif
}

/**
 * Like _dbus_read_socket() but also tries to read unix fds from the
 * socket. When there are more fds to read than space in the array
 * passed this function will fail with ENOSPC.
 *
 * @param fd the socket
 * @param buffer string to append data to
 * @param count max amount of data to read
 * @param fds array to place read file descriptors in
 * @param n_fds on input space in fds array, on output how many fds
 * actually got read
 * @returns number of bytes appended to string
 */
int
_dbus_read_socket_with_unix_fds (int          fd,
                                DBusString   *buffer,
                                int          count,
                                int          *fds,
                                int          *n_fds) {
#ifdef HAVE_UNIX_FD_PASSING
    int r;

    if ((r = _dbus_read_socket(fd, buffer, count)) < 0)
        return r;

    *n_fds = 0;
    return r;

```

```

#else
    int bytes_read;
    int start;
    struct msghdr m;
    struct iovec iov;

    _dbus_assert (count >= 0);
    _dbus_assert (*n_fds >= 0);

    start = _dbus_string_get_length (buffer);

    if (!_dbus_string_lengthen (buffer, count))
    {
        errno = ENOMEM;
        return -1;
    }

    _DBUS_ZERO(iov);
    iov.iov_base = _dbus_string_get_data_len (buffer, start, count);
    iov.iov_len = count;

    _DBUS_ZERO(m);
    m.msg_iov = &iov;
    m.msg_iovlen = 1;

    /* Hmm, we have no clue how long the control data will actually be
       that is queued for us. The least we can do is assume that the
       caller knows. Hence let's make space for the number of fds that
       we shall read at max plus the cmsg header. */
    m.msg_controllen = CMSG_SPACE(*n_fds * sizeof(int));

    /* It's probably safe to assume that systems with SCM_RIGHTS also
       know alloca() */
    m.msg_control = alloca(m.msg_controllen);
    memset(m.msg_control, 0, m.msg_controllen);

again:

    bytes_read = recvmsg(fd, &m, 0
#ifdef MSG_CMSG_CLOEXEC
                                |MSG_CMSG_CLOEXEC
#endif
    );

    if (bytes_read < 0)
    {
        if (errno == EINTR)
            goto again;
        else
            {

```

```

        /* put length back (note that this doesn't actually realloc
anything) */
        _dbus_string_set_length (buffer, start);
        return -1;
    }
}
else
{
    struct cmsghdr *cm;
    dbus_bool_t found = FALSE;

    if (m.msg_flags & MSG_CTRUNC)
    {
        /* Hmm, apparently the control data was truncated. The bad
        thing is that we might have completely lost a couple of
        fds
        a
        without chance to recover them. Hence let's treat this as
        a
        serious error. */

        errno = ENOSPC;
        _dbus_string_set_length (buffer, start);
        return -1;
    }

    for (cm = CMSG_FIRSTHDR(&m); cm; cm = CMSG_NXTHDR(&m, cm))
        if (cm->cmsg_level == SOL_SOCKET && cm->cmsg_type ==
SCM_RIGHTS)
        {
            unsigned i;

            _dbus_assert(cm->cmsg_len <= CMSG_LEN(*n_fds *
sizeof(int)));
            *n_fds = (cm->cmsg_len - CMSG_LEN(0)) / sizeof(int);

            memcpy(fds, CMSG_DATA(cm), *n_fds * sizeof(int));
            found = TRUE;

            /* Linux doesn't tell us whether MSG_CMSG_CLOEXEC actually
            worked, hence we need to go through this list and set
            CLOEXEC everywhere in any case */
            for (i = 0; i < *n_fds; i++)
                _dbus_fd_set_close_on_exec(fds[i]);

            break;
        }

    if (!found)
        *n_fds = 0;

    /* put length back (doesn't actually realloc) */
    _dbus_string_set_length (buffer, start + bytes_read);

```

```

#if 0
    if (bytes_read > 0)
        _dbus_verbose_bytes_of_string (buffer, start, bytes_read);
#endif

    return bytes_read;
}
#endif
}

int
_dbus_write_socket_with_unix_fds(int fd,
                                const DBusString *buffer,
                                int start,
                                int len,
                                const int *fds,
                                int n_fds) {

#ifdef HAVE_UNIX_FD_PASSING

    if (n_fds > 0) {
        errno = ENOTSUP;
        return -1;
    }

    return _dbus_write_socket(fd, buffer, start, len);
#else
    return _dbus_write_socket_with_unix_fds_two(fd, buffer, start, len,
        NULL, 0, 0, fds, n_fds);
#endif
}

int
_dbus_write_socket_with_unix_fds_two(int fd,
                                    const DBusString *buffer1,
                                    int start1,
                                    int len1,
                                    const DBusString *buffer2,
                                    int start2,
                                    int len2,
                                    const int *fds,
                                    int n_fds) {

#ifdef HAVE_UNIX_FD_PASSING

    if (n_fds > 0) {
        errno = ENOTSUP;
        return -1;
    }

    return _dbus_write_socket_two(fd,

```

```

        buffer1, start1, len1,
        buffer2, start2, len2);
#else

    struct msghdr m;
    struct cmsghdr *cm;
    struct iovec iov[2];
    int bytes_written;

    _dbus_assert (len1 >= 0);
    _dbus_assert (len2 >= 0);
    _dbus_assert (n_fds >= 0);

    _DBUS_ZERO(iov);
    iov[0].iov_base = (char*) _dbus_string_get_const_data_len (buffer1,
start1, len1);
    iov[0].iov_len = len1;

    if (buffer2)
    {
        iov[1].iov_base = (char*) _dbus_string_get_const_data_len
(buffer2, start2, len2);
        iov[1].iov_len = len2;
    }

    _DBUS_ZERO(m);
    m.msg_iov = iov;
    m.msg_iovlen = buffer2 ? 2 : 1;

    if (n_fds > 0)
    {
        m.msg_controllen = CMSG_SPACE(n_fds * sizeof(int));
        m.msg_control = alloca(m.msg_controllen);
        memset(m.msg_control, 0, m.msg_controllen);

        cm = CMSG_FIRSTHDR(&m);
        cm->cmsg_level = SOL_SOCKET;
        cm->cmsg_type = SCM_RIGHTS;
        cm->cmsg_len = CMSG_LEN(n_fds * sizeof(int));
        memcpy(CMSG_DATA(cm), fds, n_fds * sizeof(int));
    }

    again:

    bytes_written = sendmsg (fd, &m, 0
#ifdef HAVE_DECL_MSG_NOSIGNAL
        |MSG_NOSIGNAL
#endif
    );

    if (bytes_written < 0 && errno == EINTR)
        goto again;

```

```

#if 0
    if (bytes_written > 0)
        _dbus_verbose_bytes_of_string (buffer, start, bytes_written);
#endif

    return bytes_written;
#endif
}

/**
 * Like _dbus_write_two() but only works on sockets and is thus
 * available on Windows.
 *
 * @param fd the file descriptor
 * @param buffer1 first buffer
 * @param start1 first byte to write in first buffer
 * @param len1 number of bytes to write from first buffer
 * @param buffer2 second buffer, or #NULL
 * @param start2 first byte to write in second buffer
 * @param len2 number of bytes to write in second buffer
 * @returns total bytes written from both buffers, or -1 on error
 */
int
_dbus_write_socket_two (int          fd,
                       const DBusString *buffer1,
                       int          start1,
                       int          len1,
                       const DBusString *buffer2,
                       int          start2,
                       int          len2)
{
#if HAVE_DECL_MSG_NOSIGNAL
    struct iovec vectors[2];
    const char *data1;
    const char *data2;
    int bytes_written;
    struct msghdr m;

    _dbus_assert (buffer1 != NULL);
    _dbus_assert (start1 >= 0);
    _dbus_assert (start2 >= 0);
    _dbus_assert (len1 >= 0);
    _dbus_assert (len2 >= 0);

    data1 = _dbus_string_get_const_data_len (buffer1, start1, len1);

    if (buffer2 != NULL)
        data2 = _dbus_string_get_const_data_len (buffer2, start2, len2);
    else
    {
        data2 = NULL;

```

```

        start2 = 0;
        len2 = 0;
    }

    vectors[0].iov_base = (char*) data1;
    vectors[0].iov_len = len1;
    vectors[1].iov_base = (char*) data2;
    vectors[1].iov_len = len2;

    _DBUS_ZERO(m);
    m.msg_iov = vectors;
    m.msg_iovlen = data2 ? 2 : 1;

again:

    bytes_written = sendmsg (fd, &m, MSG_NOSIGNAL);

    if (bytes_written < 0 && errno == EINTR)
        goto again;

    return bytes_written;

#else
    return _dbus_write_two (fd, buffer1, start1, len1,
                           buffer2, start2, len2);
#endif
}

dbus_bool_t
_dbus_socket_is_invalid (int fd)
{
    return fd < 0 ? TRUE : FALSE;
}

/**
 * Thin wrapper around the read() system call that appends
 * the data it reads to the DBusString buffer. It appends
 * up to the given count, and returns the same value
 * and same errno as read(). The only exception is that
 * _dbus_read() handles EINTR for you. Also, _dbus_read() can
 * return ENOMEM, even though regular UNIX read doesn't.
 *
 * Unlike _dbus_read_socket(), _dbus_read() is not available
 * on Windows.
 *
 * @param fd the file descriptor to read from
 * @param buffer the buffer to append data to
 * @param count the amount of data to read
 * @returns the number of bytes read or -1
 */
int
_dbus_read (int                fd,

```

```

        DBusString      *buffer,
        int              count)
{
    int bytes_read;
    int start;
    char *data;

    _dbus_assert (count >= 0);

    start = _dbus_string_get_length (buffer);

    if (!_dbus_string_lengthen (buffer, count))
    {
        errno = ENOMEM;
        return -1;
    }

    data = _dbus_string_get_data_len (buffer, start, count);

again:

    bytes_read = read (fd, data, count);

    if (bytes_read < 0)
    {
        if (errno == EINTR)
            goto again;
        else
        {
            /* put length back (note that this doesn't actually realloc
anything) */
            _dbus_string_set_length (buffer, start);
            return -1;
        }
    }
    else
    {
        /* put length back (doesn't actually realloc) */
        _dbus_string_set_length (buffer, start + bytes_read);
    }

#ifdef 0
    if (bytes_read > 0)
        _dbus_verbose_bytes_of_string (buffer, start, bytes_read);
#endif

    return bytes_read;
}

/**
 * Thin wrapper around the write() system call that writes a part of a
 * DBusString and handles EINTR for you.

```



```

*
* @param fd the file descriptor to write
* @param buffer the buffer to write data from
* @param start the first byte in the buffer to write
* @param len the number of bytes to try to write
* @returns the number of bytes written or -1 on error
*/
int
_dbus_write (int          fd,
             const DBusString *buffer,
             int          start,
             int          len)
{
    const char *data;
    int bytes_written;

    data = _dbus_string_get_const_data_len (buffer, start, len);

again:

    bytes_written = write (fd, data, len);

    if (bytes_written < 0 && errno == EINTR)
        goto again;

#ifdef 0
    if (bytes_written > 0)
        _dbus_verbose_bytes_of_string (buffer, start, bytes_written);
#endif

    return bytes_written;
}

/**
 * Like _dbus_write() but will use writev() if possible
 * to write both buffers in sequence. The return value
 * is the number of bytes written in the first buffer,
 * plus the number written in the second. If the first
 * buffer is written successfully and an error occurs
 * writing the second, the number of bytes in the first
 * is returned (i.e. the error is ignored), on systems that
 * don't have writev. Handles EINTR for you.
 * The second buffer may be #NULL.
 *
 * @param fd the file descriptor
 * @param buffer1 first buffer
 * @param start1 first byte to write in first buffer
 * @param len1 number of bytes to write from first buffer
 * @param buffer2 second buffer, or #NULL
 * @param start2 first byte to write in second buffer
 * @param len2 number of bytes to write in second buffer
 * @returns total bytes written from both buffers, or -1 on error

```

```

*/
int
_dbus_write_two (int          fd,
                 const DBusString *buffer1,
                 int          start1,
                 int          len1,
                 const DBusString *buffer2,
                 int          start2,
                 int          len2)
{
    _dbus_assert (buffer1 != NULL);
    _dbus_assert (start1 >= 0);
    _dbus_assert (start2 >= 0);
    _dbus_assert (len1 >= 0);
    _dbus_assert (len2 >= 0);

#ifdef HAVE_WRITEV
    {
        struct iovec vectors[2];
        const char *data1;
        const char *data2;
        int bytes_written;

        data1 = _dbus_string_get_const_data_len (buffer1, start1, len1);

        if (buffer2 != NULL)
            data2 = _dbus_string_get_const_data_len (buffer2, start2, len2);
        else
            {
                data2 = NULL;
                start2 = 0;
                len2 = 0;
            }

        vectors[0].iov_base = (char*) data1;
        vectors[0].iov_len = len1;
        vectors[1].iov_base = (char*) data2;
        vectors[1].iov_len = len2;

        again:

        bytes_written = writev (fd,
                                vectors,
                                data2 ? 2 : 1);

        if (bytes_written < 0 && errno == EINTR)
            goto again;

        return bytes_written;
    }
#else /* HAVE_WRITEV */
    {

```

```

int ret1;

ret1 = _dbus_write (fd, buffer1, start1, len1);
if (ret1 == len1 && buffer2 != NULL)
    {
        ret2 = _dbus_write (fd, buffer2, start2, len2);
        if (ret2 < 0)
            ret2 = 0; /* we can't report an error as the first write was
OK */

        return ret1 + ret2;
    }
else
    return ret1;
}
#endif /* !HAVE_WRITEV */
}

#define _DBUS_MAX_SUN_PATH_LENGTH 99

/**
 * @def _DBUS_MAX_SUN_PATH_LENGTH
 *
 * Maximum length of the path to a UNIX domain socket,
 * sockaddr_un::sun_path member. POSIX requires that all systems
 * support at least 100 bytes here, including the nul termination.
 * We use 99 for the max value to allow for the nul.
 *
 * We could probably also do sizeof (addr.sun_path)
 * but this way we are the same on all platforms
 * which is probably a good idea.
 */

/**
 * Creates a socket and connects it to the UNIX domain socket at the
 * given path. The connection fd is returned, and is set up as
 * nonblocking.
 *
 * Uses abstract sockets instead of filesystem-linked sockets if
 * requested (it's possible only on Linux; see "man 7 unix" on Linux).
 * On non-Linux abstract socket usage always fails.
 *
 * This will set FD_CLOEXEC for the socket returned.
 *
 * @param path the path to UNIX domain socket
 * @param abstract #TRUE to use abstract namespace
 * @param error return location for error code
 * @returns connection file descriptor or -1 on error
 */
int
_dbus_connect_unix_socket (const char      *path,
                          dbus_bool_t    abstract,

```

```

                                DBusError      *error)
{
    int fd;
    size_t path_len;
    struct sockaddr_un addr;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    _dbus_verbose ("connecting to unix socket %s abstract=%d\n",
                  path, abstract);

    if (!_dbus_open_unix_socket (&fd, error))
    {
        _DBUS_ASSERT_ERROR_IS_SET(error);
        return -1;
    }
    _DBUS_ASSERT_ERROR_IS_CLEAR(error);

    _DBUS_ZERO (addr);
    addr.sun_family = AF_UNIX;
    path_len = strlen (path);

    if (abstract)
    {
#ifdef HAVE_ABSTRACT_SOCKETS
        addr.sun_path[0] = '\0'; /* this is what says "use abstract" */
        path_len++; /* Account for the extra nul byte added to the start
of sun_path */

        if (path_len > _DBUS_MAX_SUN_PATH_LENGTH)
        {
            dbus_set_error (error, DBUS_ERROR_BAD_ADDRESS,
                          "Abstract socket name too long\n");
            _dbus_close (fd, NULL);
            return -1;
        }

        strncpy (&addr.sun_path[1], path, path_len);
        /* _dbus_verbose_bytes (addr.sun_path, sizeof (addr.sun_path));
*/
#else /* HAVE_ABSTRACT_SOCKETS */
        dbus_set_error (error, DBUS_ERROR_NOT_SUPPORTED,
                      "Operating system does not support abstract
socket namespace\n");
        _dbus_close (fd, NULL);
        return -1;
#endif /* ! HAVE_ABSTRACT_SOCKETS */
    }
    else
    {
        if (path_len > _DBUS_MAX_SUN_PATH_LENGTH)

```

```

        {
            dbus_set_error (error, DBUS_ERROR_BAD_ADDRESS,
                           "Socket name too long\n");
            _dbus_close (fd, NULL);
            return -1;
        }

        strncpy (addr.sun_path, path, path_len);
    }

    if (connect (fd, (struct sockaddr*) &addr, _DBUS_STRUCT_OFFSET
                (struct sockaddr_un, sun_path) + path_len) < 0)
    {
        dbus_set_error (error,
                       _dbus_error_from_errno (errno),
                       "Failed to connect to socket %s: %s",
                       path, _dbus_strerror (errno));

        _dbus_close (fd, NULL);
        return -1;
    }

    if (!_dbus_set_fd_nonblocking (fd, error))
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);

        _dbus_close (fd, NULL);
        return -1;
    }

    return fd;
}

/**
 * Creates a UNIX domain socket and connects it to the specified
 * process to execute.
 *
 * This will set FD_CLOEXEC for the socket returned.
 *
 * @param path the path to the executable
 * @param argv the argument list for the process to execute.
 * @param argv[0] typically is identical to the path of the executable
 * @param error return location for error code
 * @returns connection file descriptor or -1 on error
 */
int
_dbus_connect_exec (const char    *path,
                   char *const   argv[],
                   DBusError     *error)
{
    int fds[2];
    pid_t pid;

```

```

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    _dbus_verbose ("connecting to process %s\n", path);

    if (socketpair (AF_UNIX, SOCK_STREAM
#ifdef SOCK_CLOEXEC
                    |SOCK_CLOEXEC
#endif
                    , 0, fds) < 0)
    {
        dbus_set_error (error,
                        _dbus_error_from_errno (errno),
                        "Failed to create socket pair: %s",
                        _dbus_strerror (errno));

        return -1;
    }

    _dbus_fd_set_close_on_exec (fds[0]);
    _dbus_fd_set_close_on_exec (fds[1]);

    pid = fork ();
    if (pid < 0)
    {
        dbus_set_error (error,
                        _dbus_error_from_errno (errno),
                        "Failed to fork() to call %s: %s",
                        path, _dbus_strerror (errno));

        close (fds[0]);
        close (fds[1]);
        return -1;
    }

    if (pid == 0)
    {
        /* child */
        close (fds[0]);

        dup2 (fds[1], STDIN_FILENO);
        dup2 (fds[1], STDOUT_FILENO);

        if (fds[1] != STDIN_FILENO &&
            fds[1] != STDOUT_FILENO)
            close (fds[1]);

        /* Inherit STDERR and the controlling terminal from the
           parent */

        _dbus_close_all ();

        execvp (path, argv);
    }

```

```

        fprintf (stderr, "Failed to execute process %s: %s\n", path,
_dbus_strerror (errno));

        _exit(1);
    }

    /* parent */
    close (fds[1]);

    if (!_dbus_set_fd_nonblocking (fds[0], error))
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);

        close (fds[0]);
        return -1;
    }

    return fds[0];
}

/**
 * Enables or disables the reception of credentials on the given
socket during
 * the next message transmission. This is only effective if the
#LOCAL_CREDS
 * system feature exists, in which case the other side of the
connection does
 * not have to do anything special to send the credentials.
 *
 * @param fd socket on which to change the #LOCAL_CREDS flag.
 * @param on whether to enable or disable the #LOCAL_CREDS flag.
 */
static dbus_bool_t
_dbus_set_local_creds (int fd, dbus_bool_t on)
{
    dbus_bool_t retval = TRUE;

#ifdef HAVE_MSGCRED
    /* NOOP just to make sure only one codepath is used
 * and to prefer MSGCRED
 */
#endif
#ifdef LOCAL_CREDS
    int val = on ? 1 : 0;
    if (setsockopt (fd, 0, LOCAL_CREDS, &val, sizeof (val)) < 0)
    {
        _dbus_verbose ("Unable to set LOCAL_CREDS socket option on fd
%d\n", fd);
        retval = FALSE;
    }
}
else
    _dbus_verbose ("LOCAL_CREDS %s for further messages on fd %d\n",
on ? "enabled" : "disabled", fd);

```

```

#endif

    return retval;
}

/**
 * Creates a socket and binds it to the given path,
 * then listens on the socket. The socket is
 * set to be nonblocking.
 *
 * Uses abstract sockets instead of filesystem-linked
 * sockets if requested (it's possible only on Linux;
 * see "man 7 unix" on Linux).
 * On non-Linux abstract socket usage always fails.
 *
 * This will set FD_CLOEXEC for the socket returned
 *
 * @param path the socket name
 * @param abstract #TRUE to use abstract namespace
 * @param error return location for errors
 * @returns the listening file descriptor or -1 on error
 */
int
_dbus_listen_unix_socket (const char    *path,
                          dbus_bool_t   abstract,
                          DBusError*    *error)
{
    int listen_fd;
    struct sockaddr_un addr;
    size_t path_len;
    unsigned int reuseaddr;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    _dbus_verbose ("listening on unix socket %s abstract=%d\n",
                  path, abstract);

    if (!_dbus_open_unix_socket (&listen_fd, error))
    {
        _DBUS_ASSERT_ERROR_IS_SET(error);
        return -1;
    }
    _DBUS_ASSERT_ERROR_IS_CLEAR(error);

    _DBUS_ZERO (addr);
    addr.sun_family = AF_UNIX;
    path_len = strlen (path);

    if (abstract)
    {
#ifdef HAVE_ABSTRACT_SOCKETS
        /* remember that abstract names aren't nul-terminated so we rely

```



```

    * on sun_path being filled in with zeroes above.
    */
    addr.sun_path[0] = '\0'; /* this is what says "use abstract" */
    path_len++; /* Account for the extra nul byte added to the start
of sun_path */

    if (path_len > _DBUS_MAX_SUN_PATH_LENGTH)
    {
        dbus_set_error (error, DBUS_ERROR_BAD_ADDRESS,
            "Abstract socket name too long\n");
        _dbus_close (listen_fd, NULL);
        return -1;
    }

    strncpy (&addr.sun_path[1], path, path_len);
    /* _dbus_verbose_bytes (addr.sun_path, sizeof (addr.sun_path));
*/
#else /* HAVE_ABSTRACT_SOCKETS */
    dbus_set_error (error, DBUS_ERROR_NOT_SUPPORTED,
        "Operating system does not support abstract
socket namespace\n");
    _dbus_close (listen_fd, NULL);
    return -1;
#endif /* ! HAVE_ABSTRACT_SOCKETS */
}
else
{
    /* Discussed security implications of this with Nalin,
    * and we couldn't think of where it would kick our ass, but
    * it still seems a bit sucky. It also has non-security suckage;
    * really we'd prefer to exit if the socket is already in use.
    * But there doesn't seem to be a good way to do this.
    *
    * Just to be extra careful, I threw in the stat() - clearly
    * the stat() can't *fix* any security issue, but it at least
    * avoids inadvertent/accidental data loss.
    */
    {
        struct stat sb;

        if (stat (path, &sb) == 0 &&
            S_ISSOCK (sb.st_mode))
            unlink (path);
    }

    if (path_len > _DBUS_MAX_SUN_PATH_LENGTH)
    {
        dbus_set_error (error, DBUS_ERROR_BAD_ADDRESS,
            "Abstract socket name too long\n");
        _dbus_close (listen_fd, NULL);
        return -1;
    }
}

```

```

    strncpy (addr.sun_path, path, path_len);
}

reuseaddr = 1;
if (setsockopt (listen_fd, SOL_SOCKET, SO_REUSEADDR, &reuseaddr,
sizeof(reuseaddr))==-1)
{
    _dbus_warn ("Failed to set socket option\"%s\": %s",
                path, _dbus_strerror (errno));
}

if (bind (listen_fd, (struct sockaddr*) &addr, _DBUS_STRUCT_OFFSET
(struct sockaddr_un, sun_path) + path_len) < 0)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                    "Failed to bind socket \"%s\": %s",
                    path, _dbus_strerror (errno));
    _dbus_close (listen_fd, NULL);
    return -1;
}

if (listen (listen_fd, 30 /* backlog */) < 0)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                    "Failed to listen on socket \"%s\": %s",
                    path, _dbus_strerror (errno));
    _dbus_close (listen_fd, NULL);
    return -1;
}

if (!_dbus_set_local_creds (listen_fd, TRUE))
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                    "Failed to enable LOCAL_CREDS on socket \"%s\":
%s",
                    path, _dbus_strerror (errno));
    close (listen_fd);
    return -1;
}

if (!_dbus_set_fd_nonblocking (listen_fd, error))
{
    _DBUS_ASSERT_ERROR_IS_SET (error);
    _dbus_close (listen_fd, NULL);
    return -1;
}

/* Try opening up the permissions, but if we can't, just go ahead
 * and continue, maybe it will be good enough.
 */
if (!abstract && chmod (path, 0777) < 0)

```

```

        _dbus_warn ("Could not set mode 0777 on socket %s\n",
                    path);

    return listen_fd;
}

/**
 * Acquires one or more sockets passed in from systemd. The sockets
 * are set to be nonblocking.
 *
 * This will set FD_CLOEXEC for the sockets returned.
 *
 * @oaram fds the file descriptors
 * @param error return location for errors
 * @returns the number of file descriptors
 */
int
_dbus_listen_systemd_sockets (int          **fds,
                              DBusError *error)
{
    int r, n;
    unsigned fd;
    int *new_fds;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    n = sd_listen_fds (TRUE);
    if (n < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (-n),
                       "Failed to acquire systemd socket: %s",
                       _dbus_strerror (-n));

        return -1;
    }

    if (n <= 0)
    {
        dbus_set_error (error, DBUS_ERROR_BAD_ADDRESS,
                       "No socket received.");

        return -1;
    }

    for (fd = SD_LISTEN_FDS_START; fd < SD_LISTEN_FDS_START + n; fd++)
    {
        r = sd_is_socket (fd, AF_UNSPEC, SOCK_STREAM, 1);
        if (r < 0)
        {
            dbus_set_error (error, _dbus_error_from_errno (-r),
                           "Failed to verify systemd socket type: %s",
                           _dbus_strerror (-r));

            return -1;
        }
    }
}

```

```

    if (!r)
    {
        dbus_set_error (error, DBUS_ERROR_BAD_ADDRESS,
                        "Passed socket has wrong type.");
        return -1;
    }
}

/* OK, the file descriptors are all good, so let's take possession of
   them then. */

new_fds = dbus_new (int, n);
if (!new_fds)
{
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
                    "Failed to allocate file handle array.");
    goto fail;
}

for (fd = SD_LISTEN_FDS_START; fd < SD_LISTEN_FDS_START + n; fd ++)
{
    if (!_dbus_set_local_creds (fd, TRUE))
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                        "Failed to enable LOCAL_CREDS on systemd
socket: %s",
                        _dbus_strerror (errno));
        goto fail;
    }

    if (!_dbus_set_fd_nonblocking (fd, error))
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        goto fail;
    }

    new_fds[fd - SD_LISTEN_FDS_START] = fd;
}

*fds = new_fds;
return n;

fail:

for (fd = SD_LISTEN_FDS_START; fd < SD_LISTEN_FDS_START + n; fd ++)
{
    _dbus_close (fd, NULL);
}

dbus_free (new_fds);
return -1;

```

```

}

/**
 * Creates a socket and connects to a socket at the given host
 * and port. The connection fd is returned, and is set up as
 * nonblocking.
 *
 * This will set FD_CLOEXEC for the socket returned
 *
 * @param host the host name to connect to
 * @param port the port to connect to
 * @param family the address family to listen on, NULL for all
 * @param error return location for error code
 * @returns connection file descriptor or -1 on error
 */
int
_dbus_connect_tcp_socket (const char      *host,
                        const char      *port,
                        const char      *family,
                        DBusError       *error)
{
    return _dbus_connect_tcp_socket_with_nonce (host, port, family,
        (const char*)NULL, error);
}

int
_dbus_connect_tcp_socket_with_nonce (const char      *host,
                                    const char      *port,
                                    const char      *family,
                                    const char      *noncefile,
                                    DBusError       *error)
{
    int saved_errno = 0;
    int fd = -1, res;
    struct addrinfo hints;
    struct addrinfo *ai, *tmp;

    _DBUS_ASSERT_ERROR_IS_CLEAR(error);

    _DBUS_ZERO (hints);

    if (!family)
        hints.ai_family = AF_UNSPEC;
    else if (!strcmp(family, "ipv4"))
        hints.ai_family = AF_INET;
    else if (!strcmp(family, "ipv6"))
        hints.ai_family = AF_INET6;
    else
    {
        dbus_set_error (error,
            DBUS_ERROR_BAD_ADDRESS,
            "Unknown address family %s", family);
    }
}

```

```

        return -1;
    }
    hints.ai_protocol = IPPROTO_TCP;
    hints.ai_socktype = SOCK_STREAM;
    hints.ai_flags = AI_ADDRCONFIG;

    if ((res = getaddrinfo(host, port, &hints, &ai)) != 0)
    {
        dbus_set_error (error,
                       _dbus_error_from_errno (errno),
                       "Failed to lookup host/port: \"%s:%s\": %s
(%d)",
                       host, port, gai_strerror(res), res);
        return -1;
    }

    tmp = ai;
    while (tmp)
    {
        if (!_dbus_open_socket (&fd, tmp->ai_family, SOCK_STREAM, 0,
error))
        {
            freeaddrinfo(ai);
            _DBUS_ASSERT_ERROR_IS_SET(error);
            return -1;
        }
        _DBUS_ASSERT_ERROR_IS_CLEAR(error);

        if (connect (fd, (struct sockaddr*) tmp->ai_addr, tmp-
>ai_addrlen) < 0)
        {
            saved_errno = errno;
            _dbus_close(fd, NULL);
            fd = -1;
            tmp = tmp->ai_next;
            continue;
        }

        break;
    }
    freeaddrinfo(ai);

    if (fd == -1)
    {
        dbus_set_error (error,
                       _dbus_error_from_errno (saved_errno),
                       "Failed to connect to socket \"%s:%s\" %s",
                       host, port, _dbus_strerror(saved_errno));
        return -1;
    }

    if (noncefile != NULL)

```

```

    {
        DBusString noncefileStr;
        dbus_bool_t ret;
        _dbus_string_init_const (&noncefileStr, noncefile);
        ret = _dbus_send_nonce (fd, &noncefileStr, error);
        _dbus_string_free (&noncefileStr);

        if (!ret)
        {
            _dbus_close (fd, NULL);
            return -1;
        }
    }

    if (!_dbus_set_fd_nonblocking (fd, error))
    {
        _dbus_close (fd, NULL);
        return -1;
    }

    return fd;
}

/**
 * Creates a socket and binds it to the given path, then listens on
 * the socket. The socket is set to be nonblocking. In case of port=0
 * a random free port is used and returned in the port parameter.
 * If inaddr_any is specified, the hostname is ignored.
 *
 * This will set FD_CLOEXEC for the socket returned
 *
 * @param host the host name to listen on
 * @param port the port to listen on, if zero a free port will be used
 * @param family the address family to listen on, NULL for all
 * @param retport string to return the actual port listened on
 * @param fds_p location to store returned file descriptors
 * @param error return location for errors
 * @returns the number of listening file descriptors or -1 on error
 */
int
_dbus_listen_tcp_socket (const char    *host,
                        const char    *port,
                        const char    *family,
                        DBusString    *retport,
                        int            **fds_p,
                        DBusError     *error)
{
    int saved_errno;
    int nlisten_fd = 0, *listen_fd = NULL, res, i;
    struct addrinfo hints;
    struct addrinfo *ai, *tmp;
    unsigned int reuseaddr;

```

```

*fds_p = NULL;
_DBUS_ASSERT_ERROR_IS_CLEAR (error);

_DBUS_ZERO (hints);

if (!family)
    hints.ai_family = AF_UNSPEC;
else if (!strcmp(family, "ipv4"))
    hints.ai_family = AF_INET;
else if (!strcmp(family, "ipv6"))
    hints.ai_family = AF_INET6;
else
    {
        dbus_set_error (error,
                        DBUS_ERROR_BAD_ADDRESS,
                        "Unknown address family %s", family);

        return -1;
    }

hints.ai_protocol = IPPROTO_TCP;
hints.ai_socktype = SOCK_STREAM;
hints.ai_flags = AI_ADDRCONFIG | AI_PASSIVE;

redo_lookup_with_port:
ai = NULL;
if ((res = getaddrinfo(host, port, &hints, &ai)) != 0 || !ai)
    {
        dbus_set_error (error,
                        _dbus_error_from_errno (errno),
                        "Failed to lookup host/port: \"%s:%s\": %s
(%d)",
                        host ? host : "*", port, gai_strerror(res),
res);
        goto failed;
    }

tmp = ai;
while (tmp)
    {
        int fd = -1, *newlisten_fd;
        if (!_dbus_open_socket (&fd, tmp->ai_family, SOCK_STREAM, 0,
error))
            {
                _DBUS_ASSERT_ERROR_IS_SET(error);
                goto failed;
            }
        _DBUS_ASSERT_ERROR_IS_CLEAR(error);

        reuseaddr = 1;
        if (setsockopt (fd, SOL_SOCKET, SO_REUSEADDR, &reuseaddr,
sizeof(reuseaddr))== -1)

```



```

        {
            _dbus_warn ("Failed to set socket option \"%s:%s\": %s",
                host ? host : "*", port, _dbus_strerror
(errno));
        }

    if (bind (fd, (struct sockaddr*) tmp->ai_addr, tmp->ai_addrlen)
< 0)
    {
        saved_errno = errno;
        _dbus_close(fd, NULL);
        if (saved_errno == EADDRINUSE)
        {
            /* Depending on kernel policy, it may or may not
                be necessary to bind to both IPv4 & 6 addresses
                so ignore EADDRINUSE here */
            tmp = tmp->ai_next;
            continue;
        }
        dbus_set_error (error, _dbus_error_from_errno (saved_errno),
            "Failed to bind socket \"%s:%s\": %s",
            host ? host : "*", port, _dbus_strerror
(saved_errno));
        goto failed;
    }

    if (listen (fd, 30 /* backlog */) < 0)
    {
        saved_errno = errno;
        _dbus_close (fd, NULL);
        dbus_set_error (error, _dbus_error_from_errno (saved_errno),
            "Failed to listen on socket \"%s:%s\": %s",
            host ? host : "*", port, _dbus_strerror
(saved_errno));
        goto failed;
    }

    newlisten_fd = dbus_realloc(listen_fd,
sizeof(int)*(nlisten_fd+1));
    if (!newlisten_fd)
    {
        saved_errno = errno;
        _dbus_close (fd, NULL);
        dbus_set_error (error, _dbus_error_from_errno (saved_errno),
            "Failed to allocate file handle array: %s",
            _dbus_strerror (saved_errno));

        goto failed;
    }
    listen_fd = newlisten_fd;
    listen_fd[nlisten_fd] = fd;
    nlisten_fd++;

```

```

if (!_dbus_string_get_length(retport))
{
    /* If the user didn't specify a port, or used 0, then
       the kernel chooses a port. After the first address
       is bound to, we need to force all remaining addresses
       to use the same port */
    if (!port || !strcmp(port, "0"))
    {
        int result;
        struct sockaddr_storage addr;
        socklen_t addrlen;
        char portbuf[50];

        addrlen = sizeof(addr);
        result = getsockname(fd, (struct sockaddr*) &addr,
&addrlen);

        if (result == -1 ||
            (res = getnameinfo ((struct sockaddr*)&addr,
addrlen, NULL, 0,
                                portbuf, sizeof(portbuf),
                                NI_NUMERICHOST)) != 0)
        {
            dbus_set_error (error, _dbus_error_from_errno
(errno),
                                "Failed to resolve port \"%s:%s\":
%s (%s)",
                                host ? host : "*", port,
gai_strerror(res), res);
            goto failed;
        }
        if (!_dbus_string_append(retport, portbuf))
        {
            dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
            goto failed;
        }

        /* Release current address list & redo lookup */
        port = _dbus_string_get_const_data(retport);
        freeaddrinfo(ai);
        goto redo_lookup_with_port;
    }
    else
    {
        if (!_dbus_string_append(retport, port))
        {
            dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
NULL);
            goto failed;
        }
    }
}
}

```

```

        tmp = tmp->ai_next;
    }
    freeaddrinfo(ai);
    ai = NULL;

    if (!nlisten_fd)
    {
        errno = EADDRINUSE;
        dbus_set_error (error, _dbus_error_from_errno (errno),
            "Failed to bind socket \"%s:%s\": %s",
            host ? host : "*", port, _dbus_strerror
(errno));
        goto failed;
    }

    for (i = 0 ; i < nlisten_fd ; i++)
    {
        if (!_dbus_set_fd_nonblocking (listen_fd[i], error))
        {
            goto failed;
        }
    }

    *fds_p = listen_fd;

    return nlisten_fd;

failed:
    if (ai)
        freeaddrinfo(ai);
    for (i = 0 ; i < nlisten_fd ; i++)
        _dbus_close(listen_fd[i], NULL);
    dbus_free(listen_fd);
    return -1;
}

static dbus_bool_t
write_credentials_byte (int server_fd,
                        DBusError *error)
{
    int bytes_written;
    char buf[1] = { '\0' };
#ifdef HAVE_MSGCRED
    union {
        struct cmsghdr hdr;
        char cred[MSG_SPACE (sizeof (struct msgcred))];
    } msg;
    struct iovec iov;
    struct msghdr msg;
    iov.iov_base = buf;
    iov.iov_len = 1;
#endif
}

```

```

    _DBUS_ZERO(msg);
    msg.msg_iov = &iov;
    msg.msg_iovlen = 1;

    msg.msg_control = (caddr_t) &cmsg;
    msg.msg_controllen = CMSG_SPACE (sizeof (struct cmsgcred));
    _DBUS_ZERO(cmsg);
    cmsg.hdr.cmsg_len = CMSG_LEN (sizeof (struct cmsgcred));
    cmsg.hdr.cmsg_level = SOL_SOCKET;
    cmsg.hdr.cmsg_type = SCM_CREDS;
#endif

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

again:

#ifdef HAVE_CMSGCRED
    bytes_written = sendmsg (server_fd, &msg, 0
#ifdef HAVE_DECL_MSG_NOSIGNAL
        |MSG_NOSIGNAL
#endif
    );
#else
    bytes_written = send (server_fd, buf, 1, 0
#ifdef HAVE_DECL_MSG_NOSIGNAL
        |MSG_NOSIGNAL
#endif
    );
#endif

    if (bytes_written < 0 && errno == EINTR)
        goto again;

    if (bytes_written < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
            "Failed to write credentials byte: %s",
            _dbus_strerror (errno));
        return FALSE;
    }
    else if (bytes_written == 0)
    {
        dbus_set_error (error, DBUS_ERROR_IO_ERROR,
            "wrote zero bytes writing credentials byte");
        return FALSE;
    }
    else
    {
        _dbus_assert (bytes_written == 1);
        _dbus_verbose ("wrote credentials byte\n");
        return TRUE;
    }

```

```

    }
}

/**
 * Reads a single byte which must be nul (an error occurs otherwise),
 * and reads unix credentials if available. Clears the credentials
 * object, then adds pid/uid if available, so any previous credentials
 * stored in the object are lost.
 *
 * Return value indicates whether a byte was read, not whether
 * we got valid credentials. On some systems, such as Linux,
 * reading/writing the byte isn't actually required, but we do it
 * anyway just to avoid multiple codepaths.
 *
 * Fails if no byte is available, so you must select() first.
 *
 * The point of the byte is that on some systems we have to
 * use sendmsg()/recvmsg() to transmit credentials.
 *
 * @param client_fd the client file descriptor
 * @param credentials object to add client credentials to
 * @param error location to store error code
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_read_credentials_socket (int client_fd,
                              DBusCredentials *credentials,
                              DBusError *error)
{
    struct msghdr msg;
    struct iovec iov;
    char buf;
    dbus_uid_t uid_read;
    dbus_pid_t pid_read;
    int bytes_read;

#ifdef HAVE_CMSGCRED
    union {
        struct cmsghdr hdr;
        char cred[CMSG_SPACE (sizeof (struct cmsgcred))];
    } cmsg;

#elif defined(LOCAL_CREDS)
    struct {
        struct cmsghdr hdr;
        struct sockcred cred;
    } cmsg;
#endif

    uid_read = DBUS_UID_UNSET;
    pid_read = DBUS_PID_UNSET;

```

```

_DBUS_ASSERT_ERROR_IS_CLEAR (error);

/* The POSIX spec certainly doesn't promise this, but
 * we need these assertions to fail as soon as we're wrong about
 * it so we can do the porting fixups
 */
_dbus_assert (sizeof (pid_t) <= sizeof (dbus_pid_t));
_dbus_assert (sizeof (uid_t) <= sizeof (dbus_uid_t));
_dbus_assert (sizeof (gid_t) <= sizeof (dbus_gid_t));

_dbus_credentials_clear (credentials);

/* Systems supporting LOCAL_CREDS are configured to have this
feature
 * enabled (if it does not conflict with HAVE_CMSGCRED) prior
accepting
 * the connection. Therefore, the received message must carry the
 * credentials information without doing anything special.
 */

iov.iov_base = &buf;
iov.iov_len = 1;

_DBUS_ZERO(msg);
msg.msg_iov = &iov;
msg.msg_iovlen = 1;

#ifdef HAVE_CMSGCRED || defined(LOCAL_CREDS)
_DBUS_ZERO(cmsg);
msg.msg_control = (caddr_t) &cmsg;
msg.msg_controllen = CMSG_SPACE (sizeof (struct cmsgcred));
#endif

again:
bytes_read = recvmsg (client_fd, &msg, 0);

if (bytes_read < 0)
{
    if (errno == EINTR)
        goto again;

    /* EAGAIN or EWOULDBLOCK would be unexpected here since we would
     * normally only call read_credentials if the socket was ready
     * for reading
     */

    dbus_set_error (error, _dbus_error_from_errno (errno),
                   "Failed to read credentials byte: %s",
                   _dbus_strerror (errno));

    return FALSE;
}
else if (bytes_read == 0)

```

```

    {
        /* this should not happen unless we are using recvmsg wrong,
         * so is essentially here for paranoia
         */
        dbus_set_error (error, DBUS_ERROR_FAILED,
            "Failed to read credentials byte (zero-length
read)");
        return FALSE;
    }
    else if (buf != '\0')
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
            "Credentials byte was not nul");
        return FALSE;
    }
}

#ifdef HAVE_MSGCRED || defined(LOCAL_CREDS)
    if (cmsg.hdr.cmsg_len < CMSG_LEN (sizeof (struct cmsgcred))
        || cmsg.hdr.cmsg_type != SCM_CREDS)
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
            "Message from recvmsg() was not SCM_CREDS");
        return FALSE;
    }
#endif

    _dbus_verbose ("read credentials byte\n");

    {
#ifdef SO_PEERCRECRED
#ifdef __OpenBSD__
        struct sockpeercred cr;
#else
        struct ucred cr;
#endif
#endif
        int cr_len = sizeof (cr);

        if (getsockopt (client_fd, SOL_SOCKET, SO_PEERCRECRED, &cr, &cr_len)
            == 0 &&
            cr_len == sizeof (cr))
        {
            pid_read = cr.pid;
            uid_read = cr.uid;
        }
        else
        {
            _dbus_verbose ("Failed to getsockopt() credentials, returned len
%d/%d: %s\n",
                cr_len, (int) sizeof (cr), _dbus_strerror (errno));
        }
    }
#ifdef HAVE_MSGCRED
    struct cmsgcred *cred;
#endif

```

```

    cred = (struct cmsgcred *) CMSG_DATA (&msg.hdr);
    pid_read = cred->cmcred_pid;
    uid_read = cred->cmcred_euid;
#elif defined(LOCAL_CREDS)
    pid_read = DBUS_PID_UNSET;
    uid_read = msg.cred.sc_uid;
    /* Since we have already got the credentials from this socket, we
can
    * disable its LOCAL_CREDS flag if it was ever set. */
    _dbus_set_local_creds (client_fd, FALSE);
#elif defined(HAVE_GETPEEREID)
    uid_t euid;
    gid_t egid;
    if (getpeereid (client_fd, &euid, &egid) == 0)
    {
        uid_read = euid;
    }
    else
    {
        _dbus_verbose ("Failed to getpeereid() credentials: %s\n",
_dbus_strerror (errno));
    }
#elif defined(HAVE_GETPEERUCRED)
    ucred_t * ucred = NULL;
    if (getpeerucred (client_fd, &ucred) == 0)
    {
        pid_read = ucred_getpid (ucred);
        uid_read = ucred_geteuid (ucred);
#ifdef HAVE_ADT
        /* generate audit session data based on socket ucred */
        adt_session_data_t *adth = NULL;
        adt_export_data_t *data = NULL;
        size_t size = 0;
        if (adt_start_session (&adth, NULL, 0) || (adth == NULL))
        {
            _dbus_verbose ("Failed to adt_start_session(): %s\n",
_dbus_strerror (errno));
        }
        else
        {
            if (adt_set_from_ucred (adth, ucred, ADT_NEW))
            {
                _dbus_verbose ("Failed to adt_set_from_ucred(): %s\n",
_dbus_strerror (errno));
            }
            else
            {
                size = adt_export_session_data (adth, &data);
                if (size <= 0)
                {

```



```

        _dbus_verbose ("Failed to
adt_export_session_data(): %s\n", _dbus_strerror (errno));
    }
    else
    {
        _dbus_credentials_add_adt_audit_data (credentials,
data, size);
        free (data);
    }
    }
    (void) adt_end_session (adth);
}
#endif /* HAVE_ADT */
}
else
{
    _dbus_verbose ("Failed to getpeerucred() credentials: %s\n",
_dbus_strerror (errno));
}
if (ucred != NULL)
    ucred_free (ucred);
#else /* !SO_PEERCREDS && !HAVE_MSGCRED && !HAVE_GETPEEREID &&
!HAVE_GETPEERUCRED */
_dbus_verbose ("Socket credentials not supported on this OS\n");
#endif
}

_dbus_verbose ("Credentials:"
    " pid "DBUS_PID_FORMAT
    " uid "DBUS_UID_FORMAT
    "\n",
    pid_read,
    uid_read);

if (pid_read != DBUS_PID_UNSET)
{
    if (!_dbus_credentials_add_unix_pid (credentials, pid_read))
    {
        _DBUS_SET_OOM (error);
        return FALSE;
    }
}

if (uid_read != DBUS_UID_UNSET)
{
    if (!_dbus_credentials_add_unix_uid (credentials, uid_read))
    {
        _DBUS_SET_OOM (error);
        return FALSE;
    }
}
}

```

```

    return TRUE;
}

/**
 * Sends a single nul byte with our UNIX credentials as ancillary
 * data. Returns #TRUE if the data was successfully written. On
 * systems that don't support sending credentials, just writes a byte,
 * doesn't send any credentials. On some systems, such as Linux,
 * reading/writing the byte isn't actually required, but we do it
 * anyway just to avoid multiple codepaths.
 *
 * Fails if no byte can be written, so you must select() first.
 *
 * The point of the byte is that on some systems we have to
 * use sendmsg()/recvmsg() to transmit credentials.
 *
 * @param server_fd file descriptor for connection to server
 * @param error return location for error code
 * @returns #TRUE if the byte was sent
 */
dbus_bool_t
_dbus_send_credentials_socket (int server_fd,
                              DBusError *error)
{
    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (write_credentials_byte (server_fd, error))
        return TRUE;
    else
        return FALSE;
}

/**
 * Accepts a connection on a listening socket.
 * Handles EINTR for you.
 *
 * This will enable FD_CLOEXEC for the returned socket.
 *
 * @param listen_fd the listen file descriptor
 * @returns the connection fd of the client, or -1 on error
 */
int
_dbus_accept (int listen_fd)
{
    int client_fd;
    struct sockaddr addr;
    socklen_t addrlen;
#ifdef HAVE_ACCEPT4
    dbus_bool_t cloexec_done;
#endif

    addrlen = sizeof (addr);

```

```

retry:

#ifdef HAVE_ACCEPT4
    /* We assume that if accept4 is available SOCK_CLOEXEC is too */
    client_fd = accept4 (listen_fd, &addr, &addrlen, SOCK_CLOEXEC);
    cloexec_done = client_fd >= 0;

    if (client_fd < 0 && errno == ENOSYS)
#endif
    {
        client_fd = accept (listen_fd, &addr, &addrlen);
    }

    if (client_fd < 0)
    {
        if (errno == EINTR)
            goto retry;
    }

    _dbus_verbose ("client fd %d accepted\n", client_fd);

#ifdef HAVE_ACCEPT4
    if (!cloexec_done)
#endif
    {
        _dbus_fd_set_close_on_exec(client_fd);
    }

    return client_fd;
}

/**
 * Checks to make sure the given directory is
 * private to the user
 *
 * @param dir the name of the directory
 * @param error return
 * @returns #FALSE on failure
 */
dbus_bool_t
_dbus_check_dir_is_private_to_user (DBusString *dir, DBusError *error)
{
    const char *directory;
    struct stat sb;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    directory = _dbus_string_get_const_data (dir);

    if (stat (directory, &sb) < 0)
    {

```

```

        dbus_set_error (error, _dbus_error_from_errno (errno),
                        "%s", _dbus_strerror (errno));

        return FALSE;
    }

    if ((S_IROTH & sb.st_mode) || (S_IWOTH & sb.st_mode) ||
        (S_IRGRP & sb.st_mode) || (S_IWGRP & sb.st_mode))
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
                        "%s directory is not private to the user",
directory);
        return FALSE;
    }

    return TRUE;
}

static dbus_bool_t
fill_user_info_from_passwd (struct passwd *p,
                            DBusUserInfo *info,
                            DBusError *error)
{
    _dbus_assert (p->pw_name != NULL);
    _dbus_assert (p->pw_dir != NULL);

    info->uid = p->pw_uid;
    info->primary_gid = p->pw_gid;
    info->username = _dbus_strdup (p->pw_name);
    info->homedir = _dbus_strdup (p->pw_dir);

    if (info->username == NULL ||
        info->homedir == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return FALSE;
    }

    return TRUE;
}

static dbus_bool_t
fill_user_info (DBusUserInfo *info,
                dbus_uid_t uid,
                const DBusString *username,
                DBusError *error)
{
    const char *username_c;

    /* exactly one of username/uid provided */
    _dbus_assert (username != NULL || uid != DBUS_UID_UNSET);
    _dbus_assert (username == NULL || uid == DBUS_UID_UNSET);
}

```

```

info->uid = DBUS_UID_UNSET;
info->primary_gid = DBUS_GID_UNSET;
info->group_ids = NULL;
info->n_group_ids = 0;
info->username = NULL;
info->homedir = NULL;

if (username != NULL)
    username_c = _dbus_string_get_const_data (username);
else
    username_c = NULL;

/* For now assuming that the getpwnam() and getpwuid() flavors
 * are always symmetrical, if not we have to add more configure
 * checks
 */

#ifdef HAVE_POSIX_GETPWNAM_R || defined
(HAVE_NONPOSIX_GETPWNAM_R)
{
    struct passwd *p;
    int result;
    size_t buflen;
    char *buf;
    struct passwd p_str;

    /* retrieve maximum needed size for buf */
    buflen = sysconf (_SC_GETPW_R_SIZE_MAX);

    /* sysconf actually returns a long, but everything else expects
size_t,
 * so just recast here.
 * https://bugs.freedesktop.org/show_bug.cgi?id=17061
 */
    if ((long) buflen <= 0)
        buflen = 1024;

    result = -1;
    while (1)
    {
        buf = dbus_malloc (buflen);
        if (buf == NULL)
        {
            dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
            return FALSE;
        }

        p = NULL;
#ifdef HAVE_POSIX_GETPWNAM_R
        if (uid != DBUS_UID_UNSET)
            result = getpwuid_r (uid, &p_str, buf, buflen,

```

```

                                &p);
else
    result = getpwnam_r (username_c, &p_str, buf, buflen,
                        &p);
#else
    if (uid != DBUS_UID_UNSET)
        p = getpwuid_r (uid, &p_str, buf, buflen);
    else
        p = getpwnam_r (username_c, &p_str, buf, buflen);
    result = 0;
#endif /* !HAVE_POSIX_GETPWNAM_R */
//Try a bigger buffer if ERANGE was returned
if (result == ERANGE && buflen < 512 * 1024)
    {
        dbus_free (buf);
        buflen *= 2;
    }
else
    {
        break;
    }
}
if (result == 0 && p == &p_str)
    {
        if (!fill_user_info_from_passwd (p, info, error))
            {
                dbus_free (buf);
                return FALSE;
            }
        dbus_free (buf);
    }
else
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                       "User \"%s\" unknown or no memory to allocate
password entry\n",
                       username_c ? username_c : "???");
        _dbus_verbose ("User %s unknown\n", username_c ? username_c :
"???");
        dbus_free (buf);
        return FALSE;
    }
}
#else /* ! HAVE_GETPWNAM_R */
{
    /* I guess we're screwed on thread safety here */
    struct passwd *p;

    if (uid != DBUS_UID_UNSET)
        p = getpwuid (uid);
    else
        p = getpwnam (username_c);

```

```

if (p != NULL)
{
    if (!fill_user_info_from_passwd (p, info, error))
    {
        return FALSE;
    }
}
else
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
        "User \"%s\" unknown or no memory to allocate
password entry\n",
        username_c ? username_c : "???");
    _dbus_verbose ("User %s unknown\n", username_c ? username_c :
"???");
    return FALSE;
}
}
#endif /* ! HAVE_GETPWNAM_R */

/* Fill this in so we can use it to get groups */
username_c = info->username;

#ifdef HAVE_GETGROUPLIST
{
    gid_t *buf;
    int buf_count;
    int i;
    int initial_buf_count;

    initial_buf_count = 17;
    buf_count = initial_buf_count;
    buf = dbus_new (gid_t, buf_count);
    if (buf == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto failed;
    }

    if (getgrouplist (username_c,
        info->primary_gid,
        buf, &buf_count) < 0)
    {
        gid_t *new;
        /* Presumed cause of negative return code: buf has
insufficient
        entries to hold the entire group list. The Linux behavior
in this
        case is to pass back the actual number of groups in
buf_count, but
        on Mac OS X 10.5, buf_count is unhelpfully left alone.

```

So as a hack, try to help out a bit by guessing a larger number of groups, within reason.. might still fail, of course, but we can at least print a more informative message. I looked up the "right way" to do this by downloading Apple's own source code for the "id" command, and it turns out that they use an undocumented library function `getgrouplist_2 (!)` which is not declared in any header in `/usr/include (!!)`. That did not seem like the way to go here.

```
*/
if (buf_count == initial_buf_count)
{
    buf_count *= 16; /* Retry with an arbitrarily scaled-up
array */
}
new = dbus_realloc (buf, buf_count * sizeof (buf[0]));
if (new == NULL)
{
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
    dbus_free (buf);
    goto failed;
}

buf = new;

errno = 0;
if (getgrouplist (username_c, info->primary_gid, buf,
&buf_count) < 0)
{
    if (errno == 0)
    {
        _dbus_warn ("It appears that username \"%s\" is in
more than %d groups.\nProceeding with just the first %d groups.",
                    username_c, buf_count, buf_count);
    }
    else
    {
        dbus_set_error (error,
                        _dbus_error_from_errno (errno),
                        "Failed to get groups for username
\"%s\" primary GID "
                        DBUS_GID_FORMAT ": %s\n",
                        username_c, info->primary_gid,
                        _dbus_strerror (errno));
        dbus_free (buf);
        goto failed;
    }
}
}
```



```

    }

    info->group_ids = dbus_new (dbus_gid_t, buf_count);
    if (info->group_ids == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        dbus_free (buf);
        goto failed;
    }

    for (i = 0; i < buf_count; ++i)
        info->group_ids[i] = buf[i];

    info->n_group_ids = buf_count;

    dbus_free (buf);
}
#else /* HAVE_GETGROUPLIST */
{
    /* We just get the one group ID */
    info->group_ids = dbus_new (dbus_gid_t, 1);
    if (info->group_ids == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto failed;
    }

    info->n_group_ids = 1;

    (info->group_ids)[0] = info->primary_gid;
}
#endif /* HAVE_GETGROUPLIST */

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    return TRUE;

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    return FALSE;
}

/**
 * Gets user info for the given username.
 *
 * @param info user info object to initialize
 * @param username the username
 * @param error error return
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_user_info_fill (DBusUserInfo      *info,

```

```

        const DBusString *username,
        DBusError        *error)
{
    return fill_user_info (info, DBUS_UID_UNSET,
                          username, error);
}

/**
 * Gets user info for the given user ID.
 *
 * @param info user info object to initialize
 * @param uid the user ID
 * @param error error return
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_user_info_fill_uid (DBusUserInfo *info,
                          dbus_uid_t   uid,
                          DBusError    *error)
{
    return fill_user_info (info, uid,
                          NULL, error);
}

/**
 * Adds the credentials of the current process to the
 * passed-in credentials object.
 *
 * @param credentials credentials to add to
 * @returns #FALSE if no memory; does not properly roll back on
 * failure, so only some credentials may have been added
 */
dbus_bool_t
_dbus_credentials_add_from_current_process (DBusCredentials
*credentials)
{
    /* The POSIX spec certainly doesn't promise this, but
     * we need these assertions to fail as soon as we're wrong about
     * it so we can do the porting fixups
     */
    _dbus_assert (sizeof (pid_t) <= sizeof (dbus_pid_t));
    _dbus_assert (sizeof (uid_t) <= sizeof (dbus_uid_t));
    _dbus_assert (sizeof (gid_t) <= sizeof (dbus_gid_t));

    if (!_dbus_credentials_add_unix_pid(credentials, _dbus_getpid()))
        return FALSE;
    if (!_dbus_credentials_add_unix_uid(credentials, _dbus_geteuid()))
        return FALSE;

    return TRUE;
}

```

```

/**
 * Append to the string the identity we would like to have when we
 * authenticate, on UNIX this is the current process UID and on
 * Windows something else, probably a Windows SID string. No escaping
 * is required, that is done in dbus-auth.c. The username here
 * need not be anything human-readable, it can be the machine-readable
 * form i.e. a user id.
 *
 * @param str the string to append to
 * @returns #FALSE on no memory
 */
dbus_bool_t
_dbus_append_user_from_current_process (DBusString *str)
{
    return _dbus_string_append_uint (str,
                                     _dbus_geteuid ());
}

/**
 * Gets our process ID
 * @returns process ID
 */
dbus_pid_t
_dbus_getpid (void)
{
    return getpid ();
}

/** Gets our UID
 * @returns process UID
 */
dbus_uid_t
_dbus_getuid (void)
{
    return getuid ();
}

/** Gets our effective UID
 * @returns process effective UID
 */
dbus_uid_t
_dbus_geteuid (void)
{
    return geteuid ();
}

/**
 * The only reason this is separate from _dbus_getpid() is to allow it
 * on Windows for logging but not for other purposes.
 *
 * @returns process ID to put in log messages
 */

```

```

unsigned long
_dbus_pid_for_log (void)
{
    return getpid ();
}

/**
 * Gets a UID from a UID string.
 *
 * @param uid_str the UID in string form
 * @param uid UID to fill in
 * @returns #TRUE if successfully filled in UID
 */
dbus_bool_t
_dbus_parse_uid (const DBusString      *uid_str,
                 dbus_uid_t           *uid)
{
    int end;
    long val;

    if (_dbus_string_get_length (uid_str) == 0)
    {
        _dbus_verbose ("UID string was zero length\n");
        return FALSE;
    }

    val = -1;
    end = 0;
    if (!_dbus_string_parse_int (uid_str, 0, &val,
                                &end))
    {
        _dbus_verbose ("could not parse string as a UID\n");
        return FALSE;
    }

    if (end != _dbus_string_get_length (uid_str))
    {
        _dbus_verbose ("string contained trailing stuff after UID\n");
        return FALSE;
    }

    *uid = val;

    return TRUE;
}

#ifdef !DBUS_USE_SYNC
_DBUS_DEFINE_GLOBAL_LOCK (atomic);
#endif

/**
 * Atomically increments an integer

```

```

*
* @param atomic pointer to the integer to increment
* @returns the value before incrementing
*/
dbus_int32_t
_dbus_atomic_inc (DBusAtomic *atomic)
{
#ifdef DBUS_USE_SYNC
    return __sync_add_and_fetch(&atomic->value, 1)-1;
#else
    dbus_int32_t res;
    _DBUS_LOCK (atomic);
    res = atomic->value;
    atomic->value += 1;
    _DBUS_UNLOCK (atomic);
    return res;
#endif
}

/**
 * Atomically decrement an integer
 *
 * @param atomic pointer to the integer to decrement
 * @returns the value before decrementing
 */
dbus_int32_t
_dbus_atomic_dec (DBusAtomic *atomic)
{
#ifdef DBUS_USE_SYNC
    return __sync_sub_and_fetch(&atomic->value, 1)+1;
#else
    dbus_int32_t res;

    _DBUS_LOCK (atomic);
    res = atomic->value;
    atomic->value -= 1;
    _DBUS_UNLOCK (atomic);
    return res;
#endif
}

/**
 * Atomically get the value of an integer. It may change at any time
 * thereafter, so this is mostly only useful for assertions.
 *
 * @param atomic pointer to the integer to get
 * @returns the value at this moment
 */
dbus_int32_t
_dbus_atomic_get (DBusAtomic *atomic)
{
#ifdef DBUS_USE_SYNC

```

```

    __sync_synchronize ();
    return atomic->value;
#else
    dbus_int32_t res;

    _DBUS_LOCK (atomic);
    res = atomic->value;
    _DBUS_UNLOCK (atomic);
    return res;
#endif
}

/**
 * Wrapper for poll().
 *
 * @param fds the file descriptors to poll
 * @param n_fds number of descriptors in the array
 * @param timeout_milliseconds timeout or -1 for infinite
 * @returns numbers of fds with revents, or <0 on error
 */
int
_dbus_poll (DBusPollFD *fds,
            int          n_fds,
            int          timeout_milliseconds)
{
#if defined(HAVE_POLL) && !defined(BROKEN_POLL)
    /* This big thing is a constant expression and should get optimized
     * out of existence. So it's more robust than a configure check at
     * no cost.
     */
    if ( (_DBUS_POLLIN == POLLIN &&
          _DBUS_POLLPRI == POLLPRI &&
          _DBUS_POLLOUT == POLLOUT &&
          _DBUS_POLLERR == POLLERR &&
          _DBUS_POLLHUP == POLLHUP &&
          _DBUS_POLLNVAL == POLLNVAL &&
          sizeof (DBusPollFD) == sizeof (struct pollfd) &&
          _DBUS_STRUCT_OFFSET (DBusPollFD, fd) ==
          _DBUS_STRUCT_OFFSET (struct pollfd, fd) &&
          _DBUS_STRUCT_OFFSET (DBusPollFD, events) ==
          _DBUS_STRUCT_OFFSET (struct pollfd, events) &&
          _DBUS_STRUCT_OFFSET (DBusPollFD, revents) ==
          _DBUS_STRUCT_OFFSET (struct pollfd, revents))
        {
            return poll ((struct pollfd*) fds,
                        n_fds,
                        timeout_milliseconds);
        }
    else
    {
        /* We have to convert the DBusPollFD to an array of
         * struct pollfd, poll, and convert back.

```

```

        */
        _dbus_warn ("didn't implement poll() properly for this system
yet\n");
        return -1;
    }
#else /* ! HAVE_POLL */

    fd_set read_set, write_set, err_set;
    int max_fd = 0;
    int i;
    struct timeval tv;
    int ready;

    FD_ZERO (&read_set);
    FD_ZERO (&write_set);
    FD_ZERO (&err_set);

    for (i = 0; i < n_fds; i++)
    {
        DBusPollFD *fdp = &fds[i];

        if (fdp->events & _DBUS_POLLIN)
            FD_SET (fdp->fd, &read_set);

        if (fdp->events & _DBUS_POLLOUT)
            FD_SET (fdp->fd, &write_set);

        FD_SET (fdp->fd, &err_set);

        max_fd = MAX (max_fd, fdp->fd);
    }

    tv.tv_sec = timeout_milliseconds / 1000;
    tv.tv_usec = (timeout_milliseconds % 1000) * 1000;

    ready = select (max_fd + 1, &read_set, &write_set, &err_set,
                    timeout_milliseconds < 0 ? NULL : &tv);

    if (ready > 0)
    {
        for (i = 0; i < n_fds; i++)
        {
            DBusPollFD *fdp = &fds[i];

            fdp->revents = 0;

            if (FD_ISSET (fdp->fd, &read_set))
                fdp->revents |= _DBUS_POLLIN;

            if (FD_ISSET (fdp->fd, &write_set))
                fdp->revents |= _DBUS_POLLOUT;
        }
    }
#endif

```

```

        if (FD_ISSET (fdp->fd, &err_set))
            fdp->revents |= _DBUS_POLLERR;
    }
}

return ready;
#endif
}

/**
 * Get current time, as in gettimeofday(). Use the monotonic clock if
 * available, to avoid problems when the system time changes.
 *
 * @param tv_sec return location for number of seconds
 * @param tv_usec return location for number of microseconds
 */
void
_dbus_get_monotonic_time (long *tv_sec,
                          long *tv_usec)
{
#ifdef HAVE_MONOTONIC_CLOCK
    struct timespec ts;
    clock_gettime (CLOCK_MONOTONIC, &ts);

    if (tv_sec)
        *tv_sec = ts.tv_sec;
    if (tv_usec)
        *tv_usec = ts.tv_nsec / 1000;
#else
    struct timeval t;

    gettimeofday (&t, NULL);

    if (tv_sec)
        *tv_sec = t.tv_sec;
    if (tv_usec)
        *tv_usec = t.tv_usec;
#endif
}

/**
 * Get current time, as in gettimeofday(). Never uses the monotonic
 * clock.
 *
 * @param tv_sec return location for number of seconds
 * @param tv_usec return location for number of microseconds
 */
void
_dbus_get_real_time (long *tv_sec,
                    long *tv_usec)
{
    struct timeval t;

```



```

    gettimeofday (&t, NULL);

    if (tv_sec)
        *tv_sec = t.tv_sec;
    if (tv_usec)
        *tv_usec = t.tv_usec;
}

/**
 * Creates a directory; succeeds if the directory
 * is created or already existed.
 *
 * @param filename directory filename
 * @param error initialized error object
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_create_directory (const DBusString *filename,
                       DBusError      *error)
{
    const char *filename_c;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    filename_c = _dbus_string_get_const_data (filename);

    if (mkdir (filename_c, 0700) < 0)
    {
        if (errno == EEXIST)
            return TRUE;

        dbus_set_error (error, DBUS_ERROR_FAILED,
                       "Failed to create directory %s: %s\n",
                       filename_c, _dbus_strerror (errno));

        return FALSE;
    }
    else
        return TRUE;
}

/**
 * Appends the given filename to the given directory.
 *
 * @todo it might be cute to collapse multiple '/' such as "foo//"
 * concat "//bar"
 *
 * @param dir the directory name
 * @param next_component the filename
 * @returns #TRUE on success
 */
dbus_bool_t

```

```

_dbus_concat_dir_and_file (DBusString      *dir,
                          const DBusString *next_component)
{
    dbus_bool_t dir_ends_in_slash;
    dbus_bool_t file_starts_with_slash;

    if (_dbus_string_get_length (dir) == 0 ||
        _dbus_string_get_length (next_component) == 0)
        return TRUE;

    dir_ends_in_slash = '/' == _dbus_string_get_byte (dir,
_dbus_string_get_length (dir) - 1);

    file_starts_with_slash = '/' == _dbus_string_get_byte
(next_component, 0);

    if (dir_ends_in_slash && file_starts_with_slash)
    {
        _dbus_string_shorten (dir, 1);
    }
    else if (!(dir_ends_in_slash || file_starts_with_slash))
    {
        if (!_dbus_string_append_byte (dir, '/'))
            return FALSE;
    }

    return _dbus_string_copy (next_component, 0, dir,
        _dbus_string_get_length (dir));
}

/** nanoseconds in a second */
#define NANOSECONDS_PER_SECOND      1000000000
/** microseconds in a second */
#define MICROSECONDS_PER_SECOND     1000000
/** milliseconds in a second */
#define MILLISECONDS_PER_SECOND     1000
/** nanoseconds in a millisecond */
#define NANOSECONDS_PER_MILLISECOND 1000000
/** microseconds in a millisecond */
#define MICROSECONDS_PER_MILLISECOND 1000

/**
 * Sleeps the given number of milliseconds.
 * @param milliseconds number of milliseconds
 */
void
_dbus_sleep_milliseconds (int milliseconds)
{
#ifdef HAVE_NANOSLEEP
    struct timespec req;
    struct timespec rem;

```

```

    req.tv_sec = milliseconds / MILLISECONDS_PER_SECOND;
    req.tv_nsec = (milliseconds % MILLISECONDS_PER_SECOND) *
NANOSECONDS_PER_MILLISECOND;
    rem.tv_sec = 0;
    rem.tv_nsec = 0;

    while (nanosleep (&req, &rem) < 0 && errno == EINTR)
        req = rem;
#ifdef HAVE_USLEEP
    usleep (milliseconds * MICROSECONDS_PER_MILLISECOND);
#else /* ! HAVE_USLEEP */
    sleep (MAX (milliseconds / 1000, 1));
#endif
}

static dbus_bool_t
_dbus_generate_pseudorandom_bytes (DBusString *str,
                                  int          n_bytes)
{
    int old_len;
    char *p;

    old_len = _dbus_string_get_length (str);

    if (!_dbus_string_lengthen (str, n_bytes))
        return FALSE;

    p = _dbus_string_get_data_len (str, old_len, n_bytes);

    _dbus_generate_pseudorandom_bytes_buffer (p, n_bytes);

    return TRUE;
}

/**
 * Generates the given number of random bytes,
 * using the best mechanism we can come up with.
 *
 * @param str the string
 * @param n_bytes the number of random bytes to append to string
 * @returns #TRUE on success, #FALSE if no memory
 */
dbus_bool_t
_dbus_generate_random_bytes (DBusString *str,
                             int        n_bytes)
{
    int old_len;
    int fd;

    /* FALSE return means "no memory", if it could
     * mean something else then we'd need to return

```

```

    * a DBusError. So we always fall back to pseudorandom
    * if the I/O fails.
    */

old_len = _dbus_string_get_length (str);
fd = -1;

/* note, urandom on linux will fall back to pseudorandom */
fd = open ("/dev/urandom", O_RDONLY);
if (fd < 0)
    return _dbus_generate_pseudorandom_bytes (str, n_bytes);

_dbus_verbose ("/dev/urandom fd %d opened\n", fd);

if (_dbus_read (fd, str, n_bytes) != n_bytes)
{
    _dbus_close (fd, NULL);
    _dbus_string_set_length (str, old_len);
    return _dbus_generate_pseudorandom_bytes (str, n_bytes);
}

_dbus_verbose ("Read %d bytes from /dev/urandom\n",
              n_bytes);

_dbus_close (fd, NULL);

return TRUE;
}

/**
 * Exit the process, returning the given value.
 *
 * @param code the exit code
 */
void
_dbus_exit (int code)
{
    _exit (code);
}

/**
 * A wrapper around strerror() because some platforms
 * may be lame and not have strerror(). Also, never
 * returns NULL.
 *
 * @param error_number errno.
 * @returns error description.
 */
const char*
_dbus_strerror (int error_number)
{
    const char *msg;

```

```

    msg = strerror (error_number);
    if (msg == NULL)
        msg = "unknown";

    return msg;
}

/**
 * signal (SIGPIPE, SIG_IGN);
 */
void
_dbus_disable_sigpipe (void)
{
    signal (SIGPIPE, SIG_IGN);
}

/**
 * Sets the file descriptor to be close
 * on exec. Should be called for all file
 * descriptors in D-Bus code.
 *
 * @param fd the file descriptor
 */
void
_dbus_fd_set_close_on_exec (intptr_t fd)
{
    int val;

    val = fcntl (fd, F_GETFD, 0);

    if (val < 0)
        return;

    val |= FD_CLOEXEC;

    fcntl (fd, F_SETFD, val);
}

/**
 * Closes a file descriptor.
 *
 * @param fd the file descriptor
 * @param error error object
 * @returns #FALSE if error set
 */
dbus_bool_t
_dbus_close (int fd,
             DBusError *error)
{
    _DBUS_ASSERT_ERROR_IS_CLEAR (error);
}

```

```

again:
    if (close (fd) < 0)
    {
        if (errno == EINTR)
            goto again;

        dbus_set_error (error, _dbus_error_from_errno (errno),
                        "Could not close fd %d", fd);
        return FALSE;
    }

    return TRUE;
}

/**
 * Duplicates a file descriptor. Makes sure the fd returned is >= 3
 * (i.e. avoids stdin/stdout/stderr). Sets O_CLOEXEC.
 *
 * @param fd the file descriptor to duplicate
 * @returns duplicated file descriptor
 * */
int
_dbus_dup(int          fd,
          DBusError *error)
{
    int new_fd;

#ifdef F_DUPFD_CLOEXEC
    dbus_bool_t cloexec_done;

    new_fd = fcntl(fd, F_DUPFD_CLOEXEC, 3);
    cloexec_done = new_fd >= 0;

    if (new_fd < 0 && errno == EINVAL)
#endif
    {
        new_fd = fcntl(fd, F_DUPFD, 3);
    }

    if (new_fd < 0) {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                        "Could not duplicate fd %d", fd);
        return -1;
    }

#ifdef F_DUPFD_CLOEXEC
    if (!cloexec_done)
#endif
    {
        _dbus_fd_set_close_on_exec(new_fd);
    }
}

```

```

    return new_fd;
}

/**
 * Sets a file descriptor to be nonblocking.
 *
 * @param fd the file descriptor.
 * @param error address of error location.
 * @returns #TRUE on success.
 */
dbus_bool_t
_dbus_set_fd_nonblocking (int          fd,
                          DBusError   *error)
{
    int val;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    val = fcntl (fd, F_GETFL, 0);
    if (val < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                       "Failed to get flags from file descriptor %d: %s",
                       fd, _dbus_strerror (errno));
        _dbus_verbose ("Failed to get flags for fd %d: %s\n", fd,
                       _dbus_strerror (errno));
        return FALSE;
    }

    if (fcntl (fd, F_SETFL, val | O_NONBLOCK) < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                       "Failed to set nonblocking flag of file descriptor %d: %s",
                       fd, _dbus_strerror (errno));
        _dbus_verbose ("Failed to set fd %d nonblocking: %s\n",
                       fd, _dbus_strerror (errno));

        return FALSE;
    }

    return TRUE;
}

/**
 * On GNU libc systems, print a crude backtrace to stderr.  On other
 * systems, print "no backtrace support" and block for possible gdb
 * attachment if an appropriate environment variable is set.
 */
void

```

```

_dbus_print_backtrace (void)
{
#ifdef HAVE_BACKTRACE) && defined (DBUS_BUILT_R_DYNAMIC)
    void *bt[500];
    int bt_size;
    int i;
    char **syms;

    bt_size = backtrace (bt, 500);

    syms = backtrace_symbols (bt, bt_size);

    i = 0;
    while (i < bt_size)
    {
        /* don't use dbus_warn since it can _dbus_abort() */
        fprintf (stderr, " %s\n", syms[i]);
        ++i;
    }
    fflush (stderr);

    free (syms);
#endif
#ifdef HAVE_BACKTRACE) && ! defined (DBUS_BUILT_R_DYNAMIC)
    fprintf (stderr, " D-Bus not built with -rdynamic so unable to
print a backtrace\n");
#else
    fprintf (stderr, " D-Bus not compiled with backtrace support so
unable to print a backtrace\n");
#endif
}

/**
 * Creates a full-duplex pipe (as in socketpair()).
 * Sets both ends of the pipe nonblocking.
 *
 * Marks both file descriptors as close-on-exec
 *
 * @param fd1 return location for one end
 * @param fd2 return location for the other end
 * @param blocking #TRUE if pipe should be blocking
 * @param error error return
 * @returns #FALSE on failure (if error is set)
 */
dbus_bool_t
_dbus_full_duplex_pipe (int          *fd1,
                       int          *fd2,
                       dbus_bool_t blocking,
                       DBusError   *error)
{
#ifdef HAVE_SOCKETPAIR
    int fds[2];
    int retval;

```



```

#ifdef SOCK_CLOEXEC
    dbus_bool_t cloexec_done;

    retval = socketpair(AF_UNIX, SOCK_STREAM|SOCK_CLOEXEC, 0, fds);
    cloexec_done = retval >= 0;

    if (retval < 0 && errno == EINVAL)
#endif
    {
        retval = socketpair(AF_UNIX, SOCK_STREAM, 0, fds);
    }

    if (retval < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
            "Could not create full-duplex pipe");
        return FALSE;
    }

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

#ifdef SOCK_CLOEXEC
    if (!cloexec_done)
#endif
    {
        _dbus_fd_set_close_on_exec (fds[0]);
        _dbus_fd_set_close_on_exec (fds[1]);
    }

    if (!blocking &&
        (!_dbus_set_fd_nonblocking (fds[0], NULL) ||
         !_dbus_set_fd_nonblocking (fds[1], NULL)))
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
            "Could not set full-duplex pipe nonblocking");

        _dbus_close (fds[0], NULL);
        _dbus_close (fds[1], NULL);

        return FALSE;
    }

    *fd1 = fds[0];
    *fd2 = fds[1];

    _dbus_verbose ("full-duplex pipe %d <-> %d\n",
        *fd1, *fd2);

    return TRUE;
#else

```

```

    _dbus_warn ("_dbus_full_duplex_pipe() not implemented on this
OS\n");
    dbus_set_error (error, DBUS_ERROR_FAILED,
                    "_dbus_full_duplex_pipe() not implemented on this
OS");
    return FALSE;
#endif
}

/**
 * Measure the length of the given format string and arguments,
 * not including the terminating nul.
 *
 * @param format a printf-style format string
 * @param args arguments for the format string
 * @returns length of the given format string and args, or -1 if no
memory
 */
int
_dbus_printf_string_upper_bound (const char *format,
                                va_list     args)
{
    char static_buf[1024];
    int bufsize = sizeof (static_buf);
    int len;

    len = vsnprintf (static_buf, bufsize, format, args);

    /* If vsnprintf() returned non-negative, then either the string fits
in
    * static_buf, or this OS has the POSIX and C99 behaviour where
vsnprintf
    * returns the number of characters that were needed, or this OS
returns the
    * truncated length.
    *
    * We ignore the possibility that snprintf might just ignore the
length and
    * overrun the buffer (64-bit Solaris 7), because that's
pathological.
    * If your libc is really that bad, come back when you have a better
one. */
    if (len == bufsize)
    {
        /* This could be the truncated length (Tru64 and IRIX have this
bug),
        * or the real length could be coincidentally the same. Which is
it?
        * If vsnprintf returns the truncated length, we'll go to the
slow
        * path. */
        if (vsnprintf (static_buf, 1, format, args) == 1)

```

```

        len = -1;
    }

    /* If vsnprintf() returned negative, we have to do more work.
     * HP-UX returns negative. */
    while (len < 0)
    {
        char *buf;

        bufsize *= 2;

        buf = dbus_malloc (bufsize);

        if (buf == NULL)
            return -1;

        len = vsnprintf (buf, bufsize, format, args);
        dbus_free (buf);

        /* If the reported length is exactly the buffer size, round up
to the
         * next size, in case vsnprintf has been returning the truncated
         * length */
        if (len == bufsize)
            len = -1;
    }

    return len;
}

/**
 * Gets the temporary files directory by inspecting the environment
variables
 * TMPDIR, TMP, and TEMP in that order. If none of those are set
"/tmp" is returned
 *
 * @returns location of temp directory
 */
const char*
_dbus_get_tmpdir(void)
{
    static const char* tmpdir = NULL;

    if (tmpdir == NULL)
    {
        /* TMPDIR is what glibc uses, then
         * glibc falls back to the P_tmpdir macro which
         * just expands to "/tmp"
         */
        if (tmpdir == NULL)
            tmpdir = getenv("TMPDIR");
    }
}

```

```

    /* These two env variables are probably
     * broken, but maybe some OS uses them?
     */
    if (tmpdir == NULL)
        tmpdir = getenv("TMP");
    if (tmpdir == NULL)
        tmpdir = getenv("TEMP");

    /* And this is the sane fallback. */
    if (tmpdir == NULL)
        tmpdir = "/tmp";
}

_dbus_assert(tmpdir != NULL);

return tmpdir;
}

/**
 * Execute a subprocess, returning up to 1024 bytes of output
 * into @p result.
 *
 * If successful, returns #TRUE and appends the output to @p
 * result. If a failure happens, returns #FALSE and
 * sets an error in @p error.
 *
 * @note It's not an error if the subprocess terminates normally
 * without writing any data to stdout. Verify the @p result length
 * before and after this function call to cover this case.
 *
 * @param progname initial path to exec (may or may not be absolute)
 * @param path_fallback if %TRUE, search PATH for executable
 * @param argv NULL-terminated list of arguments
 * @param result a DBusString where the output can be append
 * @param error a DBusError to store the error in case of failure
 * @returns #TRUE on success, #FALSE if an error happened
 */
static dbus_bool_t
_read_subprocess_line_argv (const char *proppath,
                           dbus_bool_t path_fallback,
                           char * const *argv,
                           DBusString *result,
                           DBusError *error)
{
    int result_pipe[2] = { -1, -1 };
    int errors_pipe[2] = { -1, -1 };
    pid_t pid;
    int ret;
    int status;
    int orig_len;

    dbus_bool_t retval;

```

```

sigset_t new_set, old_set;

_DBUS_ASSERT_ERROR_IS_CLEAR (error);
retval = FALSE;

/* We need to block any existing handlers for SIGCHLD temporarily;
they
* will cause waitpid() below to fail.
* https://bugs.freedesktop.org/show_bug.cgi?id=21347
*/
sigemptyset (&new_set);
sigaddset (&new_set, SIGCHLD);
sigprocmask (SIG_BLOCK, &new_set, &old_set);

orig_len = _dbus_string_get_length (result);

#define READ_END      0
#define WRITE_END    1
if (pipe (result_pipe) < 0)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                   "Failed to create a pipe to call %s: %s",
                   progpath, _dbus_strerror (errno));
    _dbus_verbose ("Failed to create a pipe to call %s: %s\n",
                  progpath, _dbus_strerror (errno));
    goto out;
}
if (pipe (errors_pipe) < 0)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                   "Failed to create a pipe to call %s: %s",
                   progpath, _dbus_strerror (errno));
    _dbus_verbose ("Failed to create a pipe to call %s: %s\n",
                  progpath, _dbus_strerror (errno));
    goto out;
}

pid = fork ();
if (pid < 0)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                   "Failed to fork() to call %s: %s",
                   progpath, _dbus_strerror (errno));
    _dbus_verbose ("Failed to fork() to call %s: %s\n",
                  progpath, _dbus_strerror (errno));
    goto out;
}

if (pid == 0)
{
    /* child process */
    int fd;

```

```

fd = open ("/dev/null", O_RDWR);
if (fd == -1)
    /* huh?! can't open /dev/null? */
    _exit (1);

_dbus_verbose ("/dev/null fd %d opened\n", fd);

/* set-up stdXXX */
close (result_pipe[READ_END]);
close (errors_pipe[READ_END]);
close (0);          /* close stdin */
close (1);          /* close stdout */
close (2);          /* close stderr */

if (dup2 (fd, 0) == -1)
    _exit (1);
if (dup2 (result_pipe[WRITE_END], 1) == -1)
    _exit (1);
if (dup2 (errors_pipe[WRITE_END], 2) == -1)
    _exit (1);

_dbus_close_all ();

sigprocmask (SIG_SETMASK, &old_set, NULL);

/* If it looks fully-qualified, try execv first */
if (progp[0] == '/')
    {
    execv (progp, argv);
    /* Ok, that failed. Now if path_fallback is given, let's
     * try unqualified. This is mostly a hack to work
     * around systems which ship dbus-launch in /usr/bin
     * but everything else in /bin (because dbus-launch
     * depends on X11).
     */
    if (path_fallback)
        /* We must have a slash, because we checked above */
        execvp (strrchr (progp, '/')+1, argv);
    }
else
    execvp (progp, argv);

/* still nothing, we failed */
_exit (1);
}

/* parent process */
close (result_pipe[WRITE_END]);
close (errors_pipe[WRITE_END]);
result_pipe[WRITE_END] = -1;
errors_pipe[WRITE_END] = -1;

```

```

ret = 0;
do
{
    ret = _dbus_read (result_pipe[READ_END], result, 1024);
}
while (ret > 0);

/* reap the child process to avoid it lingering as zombie */
do
{
    ret = waitpid (pid, &status, 0);
}
while (ret == -1 && errno == EINTR);

/* We succeeded if the process exited with status 0 and
anything was read */
if (!WIFEXITED (status) || WEXITSTATUS (status) != 0 )
{
    /* The process ended with error */
    DBusString error_message;
    if (!_dbus_string_init (&error_message))
    {
        _DBUS_SET_OOM (error);
        goto out;
    }

    ret = 0;
    do
    {
        ret = _dbus_read (errors_pipe[READ_END], &error_message,
1024);
    }
    while (ret > 0);

    _dbus_string_set_length (result, orig_len);
    if (_dbus_string_get_length (&error_message) > 0)
        dbus_set_error (error, DBUS_ERROR_SPAWN_EXEC_FAILED,
"%s terminated abnormally with the following
error: %s",
                                prospath, _dbus_string_get_data
(&error_message));
    else
        dbus_set_error (error, DBUS_ERROR_SPAWN_EXEC_FAILED,
"%s terminated abnormally without any error
message",
                                prospath);
    goto out;
}

retval = TRUE;

```

```

out:
    sigprocmask (SIG_SETMASK, &old_set, NULL);

    if (retval)
        _DBUS_ASSERT_ERROR_IS_CLEAR (error);
    else
        _DBUS_ASSERT_ERROR_IS_SET (error);

    if (result_pipe[0] != -1)
        close (result_pipe[0]);
    if (result_pipe[1] != -1)
        close (result_pipe[1]);
    if (errors_pipe[0] != -1)
        close (errors_pipe[0]);
    if (errors_pipe[1] != -1)
        close (errors_pipe[1]);

    return retval;
}

/**
 * Returns the address of a new session bus.
 *
 * If successful, returns #TRUE and appends the address to @p
 * address. If a failure happens, returns #FALSE and
 * sets an error in @p error.
 *
 * @param address a DBusString where the address can be stored
 * @param error a DBusError to store the error in case of failure
 * @returns #TRUE on success, #FALSE if an error happened
 */
dbus_bool_t
_dbus_get_autolaunch_address (const char *scope,
                             DBusString *address,
                             DBusError *error)
{
#ifdef DBUS_ENABLE_X11_AUTOLAUNCH
    /* Perform X11-based autolaunch. (We also support launchd-based
    autolaunch,
    * but that's done elsewhere, and if it worked, this function
    wouldn't
    * be called.) */
    const char *display;
    static char *argv[6];
    int i;
    DBusString uuid;
    dbus_bool_t retval;

    if (_dbus_check_setuid ())
    {
        dbus_set_error_const (error, DBUS_ERROR_NOT_SUPPORTED,
                              "Unable to autolaunch when setuid");
    }
#endif
}

```



```

    return FALSE;
}

_DBUS_ASSERT_ERROR_IS_CLEAR (error);
retval = FALSE;

/* fd.o #19997: if $DISPLAY isn't set to something useful, then
 * dbus-launch-x11 is just going to fail. Rather than trying to
 * run it, we might as well bail out early with a nice error. */
display = _dbus_getenv ("DISPLAY");

if (display == NULL || display[0] == '\\0')
{
    dbus_set_error_const (error, DBUS_ERROR_NOT_SUPPORTED,
        "Unable to autolaunch a dbus-daemon without a $DISPLAY for
X11");
    return FALSE;
}

if (!_dbus_string_init (&uuid))
{
    _DBUS_SET_OOM (error);
    return FALSE;
}

if (!_dbus_get_local_machine_uuid_encoded (&uuid))
{
    _DBUS_SET_OOM (error);
    goto out;
}

i = 0;
argv[i] = "dbus-launch";
++i;
argv[i] = "--autolaunch";
++i;
argv[i] = _dbus_string_get_data (&uuid);
++i;
argv[i] = "--binary-syntax";
++i;
argv[i] = "--close-stderr";
++i;
argv[i] = NULL;
++i;

_dbus_assert (i == _DBUS_N_ELEMENTS (argv));

retval = _read_subprocess_line_argv (DBUS_BINDIR "/dbus-launch",
    TRUE,
    argv, address, error);

out:

```

```

    _dbus_string_free (&uuid);
    return retval;
#else
    dbus_set_error_const (error, DBUS_ERROR_NOT_SUPPORTED,
        "Using X11 for dbus-daemon autolaunch was disabled at compile
time, "
        "set your DBUS_SESSION_BUS_ADDRESS instead");
    return FALSE;
#endif
}

/**
 * Reads the uuid of the machine we're running on from
 * the dbus configuration. Optionally try to create it
 * (only root can do this usually).
 *
 * On UNIX, reads a file that gets created by dbus-uuidgen
 * in a post-install script. On Windows, if there's a standard
 * machine uuid we could just use that, but I can't find one
 * with the right properties (the hardware profile guid can change
 * without rebooting I believe). If there's no standard one
 * we might want to use the registry instead of a file for
 * this, and I'm not sure how we'd ensure the uuid gets created.
 *
 * @param machine_id guid to init with the machine's uuid
 * @param create_if_not_found try to create the uuid if it doesn't
exist
 * @param error the error return
 * @returns #FALSE if the error is set
 */
dbus_bool_t
_dbus_read_local_machine_uuid (DBusGUID *machine_id,
                               dbus_bool_t create_if_not_found,
                               DBusError *error)
{
    DBusString filename;
    dbus_bool_t b;

    _dbus_string_init_const (&filename, DBUS_MACHINE_UUID_FILE);

    b = _dbus_read_uuid_file (&filename, machine_id,
create_if_not_found, error);
    if (b)
        return TRUE;

    dbus_error_free (error);

    /* Fallback to the system machine ID */
    _dbus_string_init_const (&filename, "/etc/machine-id");
    return _dbus_read_uuid_file (&filename, machine_id, FALSE, error);
}

```

```

#define DBUS_UNIX_STANDARD_SESSION_SERVICEDIR "/dbus-1/services"
#define DBUS_UNIX_STANDARD_SYSTEM_SERVICEDIR "/dbus-1/system-services"

/**
 * queries launchd for a specific env var which holds the socket path.
 * @param launchd_env_var the env var to look up
 * @param error a DBusError to store the error in case of failure
 * @return the value of the env var
 */
dbus_bool_t
_dbus_lookup_launchd_socket (DBusString *socket_path,
                             const char *launchd_env_var,
                             DBusError *error)
{
#ifdef DBUS_ENABLE_LAUNCHD
    char *argv[4];
    int i;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (_dbus_check_setuid ())
    {
        dbus_set_error_const (error, DBUS_ERROR_NOT_SUPPORTED,
                             "Unable to find launchd socket when
setuid");
        return FALSE;
    }

    i = 0;
    argv[i] = "launchctl";
    ++i;
    argv[i] = "getenv";
    ++i;
    argv[i] = (char*)launchd_env_var;
    ++i;
    argv[i] = NULL;
    ++i;

    _dbus_assert (i == _DBUS_N_ELEMENTS (argv));

    if (!_dbus_read_subprocess_line_argv(argv[0], TRUE, argv, socket_path,
error))
    {
        return FALSE;
    }

    /* no error, but no result either */
    if (_dbus_string_get_length(socket_path) == 0)
    {
        return FALSE;
    }

```

```

    /* strip the carriage-return */
    _dbus_string_shorten(socket_path, 1);
    return TRUE;
#else /* DBUS_ENABLE_LAUNCHD */
    dbus_set_error(error, DBUS_ERROR_NOT_SUPPORTED,
                  "can't lookup socket from launchd; launchd support not
compiled in");
    return FALSE;
#endif
}

#ifdef DBUS_ENABLE_LAUNCHD
static dbus_bool_t
_dbus_lookup_session_address_launchd (DBusString *address, DBusError
*error)
{
    dbus_bool_t valid_socket;
    DBusString socket_path;

    if (_dbus_check_setuid ())
    {
        dbus_set_error_const (error, DBUS_ERROR_NOT_SUPPORTED,
setuid");
        return FALSE;
    }

    if (!_dbus_string_init (&socket_path))
    {
        _DBUS_SET_OOM (error);
        return FALSE;
    }

    valid_socket = _dbus_lookup_launchd_socket (&socket_path,
"DBUS_LAUNCHD_SESSION_BUS_SOCKET", error);

    if (dbus_error_is_set(error))
    {
        _dbus_string_free(&socket_path);
        return FALSE;
    }

    if (!valid_socket)
    {
        dbus_set_error(error, "no socket path",
                        "launchd did not provide a socket path, "
loaded!");
        _dbus_string_free(&socket_path);
        return FALSE;
    }
    if (!_dbus_string_append (address, "unix:path="))

```

```

    {
        _DBUS_SET_OOM (error);
        _dbus_string_free(&socket_path);
        return FALSE;
    }
    if (!_dbus_string_copy (&socket_path, 0, address,
                           _dbus_string_get_length (address)))
    {
        _DBUS_SET_OOM (error);
        _dbus_string_free(&socket_path);
        return FALSE;
    }

    _dbus_string_free(&socket_path);
    return TRUE;
}
#endif

/**
 * Determines the address of the session bus by querying a
 * platform-specific method.
 *
 * The first parameter will be a boolean specifying whether
 * or not a dynamic session lookup is supported on this platform.
 *
 * If supported is TRUE and the return value is #TRUE, the
 * address will be appended to @p address.
 * If a failure happens, returns #FALSE and sets an error in
 * @p error.
 *
 * If supported is FALSE, ignore the return value.
 *
 * @param supported returns whether this method is supported
 * @param address a DBusString where the address can be stored
 * @param error a DBusError to store the error in case of failure
 * @returns #TRUE on success, #FALSE if an error happened
 */
dbus_bool_t
_dbus_lookup_session_address (dbus_bool_t *supported,
                              DBusString *address,
                              DBusError *error)
{
#ifdef DBUS_ENABLE_LAUNCHD
    *supported = TRUE;
    return _dbus_lookup_session_address_launchd (address, error);
#else
    /* On non-Mac Unix platforms, if the session address isn't already
     * set in DBUS_SESSION_BUS_ADDRESS environment variable, we punt and
     * fall back to the autolaunch: global default; see
     * init_session_address in dbus/dbus-bus.c. */
    *supported = FALSE;
    return TRUE;
#endif
}

```

```

#endif
}

/**
 * Returns the standard directories for a session bus to look for
service
 * activation files
 *
 * On UNIX this should be the standard xdg freedesktop.org data
directories:
 *
 * XDG_DATA_HOME=${XDG_DATA_HOME-$HOME/.local/share}
 * XDG_DATA_DIRS=${XDG_DATA_DIRS-/usr/local/share:/usr/share}
 *
 * and
 *
 * DBUS_DATADIR
 *
 * @param dirs the directory list we are returning
 * @returns #FALSE on OOM
 */

dbus_bool_t
_dbus_get_standard_session_servicedirs (DBusList **dirs)
{
    const char *xdg_data_home;
    const char *xdg_data_dirs;
    DBusString servicedir_path;

    if (!_dbus_string_init (&servicedir_path))
        return FALSE;

    xdg_data_home = _dbus_getenv ("XDG_DATA_HOME");
    xdg_data_dirs = _dbus_getenv ("XDG_DATA_DIRS");

    if (xdg_data_home != NULL)
    {
        if (!_dbus_string_append (&servicedir_path, xdg_data_home))
            goto oom;
    }
    else
    {
        const DBusString *homedir;
        DBusString local_share;

        if (!_dbus_homedir_from_current_process (&homedir))
            goto oom;

        if (!_dbus_string_append (&servicedir_path,
_dbus_string_get_const_data (homedir)))
            goto oom;
    }
}

```

```

    _dbus_string_init_const (&local_share, "/.local/share");
    if (!_dbus_concat_dir_and_file (&servicedir_path, &local_share))
        goto oom;
}

if (!_dbus_string_append (&servicedir_path, ":"))
    goto oom;

if (xdg_data_dirs != NULL)
{
    if (!_dbus_string_append (&servicedir_path, xdg_data_dirs))
        goto oom;

    if (!_dbus_string_append (&servicedir_path, ":"))
        goto oom;
}
else
{
    if (!_dbus_string_append (&servicedir_path,
"/usr/local/share:/usr/share:"))
        goto oom;
}

/*
 * add configured datadir to defaults
 * this may be the same as an xdg dir
 * however the config parser should take
 * care of duplicates
 */
if (!_dbus_string_append (&servicedir_path, DBUS_DATADIR))
    goto oom;

if (!_dbus_split_paths_and_append (&servicedir_path,
DBUS_UNIX_STANDARD_SESSION_SERVICEDIR,
                                dirs))
    goto oom;

_dbus_string_free (&servicedir_path);
return TRUE;

oom:
_dbus_string_free (&servicedir_path);
return FALSE;
}

/**
 * Returns the standard directories for a system bus to look for
service
 * activation files
 *

```

```

* On UNIX this should be the standard xdg freedesktop.org data
directories:
*
* XDG_DATA_DIRS=${XDG_DATA_DIRS-/usr/local/share:/usr/share}
*
* and
*
* DBUS_DATADIR
*
* On Windows there is no system bus and this function can return
nothing.
*
* @param dirs the directory list we are returning
* @returns #FALSE on OOM
*/

dbus_bool_t
_dbus_get_standard_system_servicedirs (DBusList **dirs)
{
    /*
     * DBUS_DATADIR may be the same as one of the standard directories.
    However,
     * the config parser should take care of the duplicates.
     *
     * Also, append /lib as counterpart of /usr/share on the root
     * directory (the root directory does not know /share), in order to
     * facilitate early boot system bus activation where /usr might not
     * be available.
     */
    static const char standard_search_path[] =
        "/usr/local/share:"
        "/usr/share:"
        DBUS_DATADIR ":"
        "/lib";
    DBusString servicedir_path;

    _dbus_string_init_const (&servicedir_path, standard_search_path);

    return _dbus_split_paths_and_append (&servicedir_path,

DBUS_UNIX_STANDARD_SYSTEM_SERVICEDIR,
                                     dirs);
}

/**
 * Append the absolute path of the system.conf file
 * (there is no system bus on Windows so this can just
 * return FALSE and print a warning or something)
 *
 * @param str the string to append to
 * @returns #FALSE if no memory
 */

```



```

dbus_bool_t
_dbus_append_system_config_file (DBusString *str)
{
    return _dbus_string_append (str, DBUS_SYSTEM_CONFIG_FILE);
}

/**
 * Append the absolute path of the session.conf file.
 *
 * @param str the string to append to
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_append_session_config_file (DBusString *str)
{
    return _dbus_string_append (str, DBUS_SESSION_CONFIG_FILE);
}

/**
 * Called when the bus daemon is signaled to reload its configuration;
any
 * caches should be nuked. Of course any caches that need explicit
reload
 * are probably broken, but c'est la vie.
 *
 *
 */
void
_dbus_flush_caches (void)
{
    _dbus_user_database_flush_system ();
}

/**
 * Appends the directory in which a keyring for the given credentials
 * should be stored. The credentials should have either a Windows or
 * UNIX user in them. The directory should be an absolute path.
 *
 * On UNIX the directory is ~/.dbus-keyrings while on Windows it
should probably
 * be something else, since the dotfile convention is not normal on
Windows.
 *
 * @param directory string to append directory to
 * @param credentials credentials the directory should be for
 *
 * @returns #FALSE on no memory
 */
dbus_bool_t
_dbus_append_keyring_directory_for_credentials (DBusString
*directory,

```

DBusCredentials

```

*credentials)
{
    DBusString homedir;
    DBusString dotdir;
    dbus_uid_t uid;

    _dbus_assert (credentials != NULL);
    _dbus_assert (!_dbus_credentials_are_anonymous (credentials));

    if (!_dbus_string_init (&homedir))
        return FALSE;

    uid = _dbus_credentials_get_unix_uid (credentials);
    _dbus_assert (uid != DBUS_UID_UNSET);

    if (!_dbus_homedir_from_uid (uid, &homedir))
        goto failed;

#ifdef DBUS_BUILD_TESTS
    {
        const char *override;

        override = _dbus_getenv ("DBUS_TEST_HOMEDIR");
        if (override != NULL && *override != '\0')
        {
            _dbus_string_set_length (&homedir, 0);
            if (!_dbus_string_append (&homedir, override))
                goto failed;

            _dbus_verbose ("Using fake homedir for testing: %s\n",
                _dbus_string_get_const_data (&homedir));
        }
        else
        {
            static dbus_bool_t already_warned = FALSE;
            if (!already_warned)
            {
                _dbus_warn ("Using your real home directory for testing,
set DBUS_TEST_HOMEDIR to avoid\n");
                already_warned = TRUE;
            }
        }
    }
#endif

    _dbus_string_init_const (&dotdir, ".dbus-keyrings");
    if (!_dbus_concat_dir_and_file (&homedir,
                                    &dotdir))
        goto failed;

    if (!_dbus_string_copy (&homedir, 0,

```

```

                                directory, _dbus_string_get_length
(directory))) {
    goto failed;
}

_dbus_string_free (&homedir);
return TRUE;

failed:
_dbus_string_free (&homedir);
return FALSE;
}

//PENDING(kdab) docs
dbus_bool_t
_dbus_daemon_publish_session_bus_address (const char* addr,
                                           const char *scope)
{
    return TRUE;
}

//PENDING(kdab) docs
void
_dbus_daemon_unpublish_session_bus_address (void)
{
}

/**
 * See if errno is EAGAIN or EWOULDBLOCK (this has to be done
differently
 * for Winsock so is abstracted)
 *
 * @returns #TRUE if errno == EAGAIN or errno == EWOULDBLOCK
 */
dbus_bool_t
_dbus_get_is_errno_eagain_or_ewouldblock (void)
{
    return errno == EAGAIN || errno == EWOULDBLOCK;
}

/**
 * Removes a directory; Directory must be empty
 *
 * @param filename directory filename
 * @param error initialized error object
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_delete_directory (const DBusString *filename,
                       DBusError      *error)
{

```

```

const char *filename_c;

_DBUS_ASSERT_ERROR_IS_CLEAR (error);

filename_c = _dbus_string_get_const_data (filename);

if (rmdir (filename_c) != 0)
{
    dbus_set_error (error, DBUS_ERROR_FAILED,
                   "Failed to remove directory %s: %s\n",
                   filename_c, _dbus_strerror (errno));
    return FALSE;
}

return TRUE;
}

/**
 * Checks whether file descriptors may be passed via the socket
 *
 * @param fd the socket
 * @return TRUE when fd passing over this socket is supported
 */
dbus_bool_t
_dbus_socket_can_pass_unix_fd(int fd) {

#ifdef SCM_RIGHTS
    union {
        struct sockaddr sa;
        struct sockaddr_storage storage;
        struct sockaddr_un un;
    } sa_buf;

    socklen_t sa_len = sizeof(sa_buf);

    _DBUS_ZERO(sa_buf);

    if (getsockname(fd, &sa_buf.sa, &sa_len) < 0)
        return FALSE;

    return sa_buf.sa.sa_family == AF_UNIX;

#else
    return FALSE;

#endif
}

/**
 * replaces the term DBUS_PREFIX in configure_time_path by the

```

```

    * current dbus installation directory. On unix this function is a
noop
    *
    * @param configure_time_path
    * @return real path
    */
const char *
_dbus_replace_install_prefix (const char *configure_time_path)
{
    return configure_time_path;
}

/**
 * Closes all file descriptors except the first three (i.e. stdin,
 * stdout, stderr).
 */
void
_dbus_close_all (void)
{
    int maxfds, i;

#ifdef __linux__
    DIR *d;

    /* On Linux we can optimize this a bit if /proc is available. If it
       isn't available, fall back to the brute force way. */

    d = opendir ("/proc/self/fd");
    if (d)
    {
        for (;;)
        {
            struct dirent buf, *de;
            int k, fd;
            long l;
            char *e = NULL;

            k = readdir_r (d, &buf, &de);
            if (k != 0 || !de)
                break;

            if (de->d_name[0] == '.')
                continue;

            errno = 0;
            l = strtol (de->d_name, &e, 10);
            if (errno != 0 || e == NULL || *e != '\0')
                continue;

            fd = (int) l;
            if (fd < 3)
                continue;

```

```

        if (fd == dirfd (d))
            continue;

        close (fd);
    }

    closedir (d);
    return;
}
#endif

maxfds = sysconf (_SC_OPEN_MAX);

/* Pick something reasonable if for some reason sysconf says
 * unlimited.
 */
if (maxfds < 0)
    maxfds = 1024;

/* close all inherited fds */
for (i = 3; i < maxfds; i++)
    close (i);
}

/**
 * **NOTE**: If you modify this function, please also consider making
 * the corresponding change in GLib. See
 * glib/gutils.c:g_check_setuid().
 *
 * Returns TRUE if the current process was executed as setuid (or an
 * equivalent __libc_enable_secure is available). See:
 * http://osdir.com/ml/linux.lfs.hardened/2007-04/msg00032.html
 */
dbus_bool_t
_dbus_check_setuid (void)
{
    /* TODO: get __libc_enable_secure exported from glibc.
     * See http://www.openwall.com/lists/owl-dev/2012/08/14/1
     */
#ifdef HAVE_LIBC_ENABLE_SECURE
    {
        /* See glibc/include/unistd.h */
        extern int __libc_enable_secure;
        return __libc_enable_secure;
    }
#elif defined(HAVE_ISSETUGID)
    /* BSD: http://www.freebsd.org/cgi/man.cgi?query=issetugid&sektion=2
     */
    return issetugid ();
#else
    uid_t ruid, euid, suid; /* Real, effective and saved user ID's */

```

```

gid_t rgid, egid, sgid; /* Real, effective and saved group ID's */

static dbus_bool_t check_setuid_initialised;
static dbus_bool_t is_setuid;

if (_DBUS_UNLIKELY (!check_setuid_initialised))
{
#ifdef HAVE_GETRESUID
    if (getresuid (&ruid, &euid, &suid) != 0 ||
        getresgid (&rgid, &egid, &sgid) != 0)
#endif /* HAVE_GETRESUID */
    {
        suid = ruid = getuid ();
        sgid = rgid = getgid ();
        euid = geteuid ();
        egid = getegid ();
    }

    check_setuid_initialised = TRUE;
    is_setuid = (ruid != euid || ruid != suid ||
                rgid != egid || rgid != sgid);
}
return is_setuid;
#endif
}

/**
 * Read the address from the socket and append it to the string
 *
 * @param fd the socket
 * @param address
 * @param error return location for error code
 */
dbus_bool_t
_dbus_append_address_from_socket (int fd,
                                  DBusString *address,
                                  DBusError *error)
{
    union {
        struct sockaddr sa;
        struct sockaddr_storage storage;
        struct sockaddr_un un;
        struct sockaddr_in ipv4;
        struct sockaddr_in6 ipv6;
    } socket;
    char hostip[INET6_ADDRSTRLEN];
    int size = sizeof (socket);

    if (getsockname (fd, &socket.sa, &size))
        goto err;
}

```

```

switch (socket.sa.sa_family)
{
case AF_UNIX:
    if (socket.un.sun_path[0]=='\0')
    {
        if (_dbus_string_append_printf (address, "unix:abstract=%s",
&(socket.un.sun_path[1])))
            return TRUE;
    }
    else
    {
        if (_dbus_string_append_printf (address, "unix:path=%s",
socket.un.sun_path))
            return TRUE;
    }
    break;
case AF_INET:
    if (inet_ntop (AF_INET, &socket.ipv4.sin_addr, hostip, sizeof
(hostip)))
        if (_dbus_string_append_printf (address,
"tcp:family=ipv4,host=%s,port=%u",
            hostip, ntohs (socket.ipv4.sin_port)))
            return TRUE;
        break;
#ifdef AF_INET6
case AF_INET6:
    if (inet_ntop (AF_INET6, &socket.ipv6.sin6_addr, hostip, sizeof
(hostip)))
        if (_dbus_string_append_printf (address,
"tcp:family=ipv6,host=%s,port=%u",
            hostip, ntohs (socket.ipv6.sin6_port)))
            return TRUE;
        break;
#endif
default:
    dbus_set_error (error,
                    _dbus_error_from_errno (EINVAL),
                    "Failed to read address from socket: Unknown
socket type.");
    return FALSE;
}
err:
    dbus_set_error (error,
                    _dbus_error_from_errno (errno),
                    "Failed to open socket: %s",
                    _dbus_strerror (errno));
    return FALSE;
}

/* tests in dbus-sysdeps-util.c */

```



```

File = dbus-sysdeps-unix.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps-unix.h UNIX-specific wrappers around system/libc
features (internal to D-Bus implementation)
*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#ifndef DBUS_SYSDEPS_UNIX_H
#define DBUS_SYSDEPS_UNIX_H

#include <dbus/dbus-sysdeps.h>

#ifdef DBUS_WIN
#error "Don't include this on Windows"
#endif

DBUS_BEGIN_DECLS

/**
 * @defgroup DBusSysdepsUnix UNIX-specific internal API
 * @ingroup DBusInternals
 * @brief Internal system-dependent API available on UNIX only
 * @{
 */

dbus_bool_t
_dbus_close (int fd,
             DBusError *error);

```

```

int _dbus_dup      (int          fd,
                   DBusError   *error);

int
_dbus_read        (int          fd,
                   DBusString  *buffer,
                   int          count);

int
_dbus_write       (int          fd,
                   const DBusString *buffer,
                   int          start,
                   int          len);

int
_dbus_write_two   (int          fd,
                   const DBusString *buffer1,
                   int          start1,
                   int          len1,
                   const DBusString *buffer2,
                   int          start2,
                   int          len2);

int _dbus_connect_unix_socket (const char *path,
                              dbus_bool_t  abstract,
                              DBusError   *error);

int _dbus_listen_unix_socket  (const char *path,
                              dbus_bool_t  abstract,
                              DBusError   *error);

int _dbus_connect_exec (const char *path,
                       char *const argv[],
                       DBusError   *error);

int _dbus_listen_systemd_sockets (int **fd,
                                  DBusError *error);

dbus_bool_t _dbus_read_credentials (int          client_fd,
                                   DBusCredentials *credentials,
                                   DBusError   *error);

dbus_bool_t _dbus_send_credentials (int          server_fd,
                                   DBusError   *error);

dbus_bool_t _dbus_lookup_launchd_socket (DBusString *socket_path,
                                         const char *launchd_env_var,
                                         DBusError *error);

/** Information about a UNIX user */
typedef struct DBusUserInfo DBusUserInfo;
/** Information about a UNIX group */
typedef struct DBusGroupInfo DBusGroupInfo;

/**
 * Information about a UNIX user
 */

```

```

struct DBusUserInfo
{
    dbus_uid_t    uid;           /**< UID */
    dbus_gid_t    primary_gid;   /**< GID */
    dbus_gid_t    *group_ids;    /**< Groups IDs, *including* above
primary group */
    int           n_group_ids;    /**< Size of group IDs array */
    char          *username;      /**< Username */
    char          *homedir;       /**< Home directory */
};

/**
 * Information about a UNIX group
 */
struct DBusGroupInfo
{
    dbus_gid_t    gid;           /**< GID */
    char          *groupname;     /**< Group name */
};

dbus_bool_t _dbus_user_info_fill      (DBusUserInfo    *info,
                                       const DBusString *username,
                                       DBusError        *error);
dbus_bool_t _dbus_user_info_fill_uid (DBusUserInfo    *info,
                                       dbus_uid_t       uid,
                                       DBusError        *error);
void        _dbus_user_info_free      (DBusUserInfo    *info);

dbus_bool_t _dbus_group_info_fill     (DBusGroupInfo   *info,
                                       const DBusString *groupname,
                                       DBusError        *error);
dbus_bool_t _dbus_group_info_fill_gid (DBusGroupInfo   *info,
                                       dbus_gid_t       gid,
                                       DBusError        *error);
void        _dbus_group_info_free     (DBusGroupInfo   *info);

dbus_uid_t  _dbus_getuid (void);
dbus_uid_t  _dbus_geteuid (void);

dbus_bool_t _dbus_parse_uid (const DBusString *uid_str,
                             dbus_uid_t      *uid);

void _dbus_close_all (void);

dbus_bool_t _dbus_append_address_from_socket (int      fd,
                                              DBusString *address,
                                              DBusError *error);

/** @} */

DBUS_END_DECLS

```

```
#endif /* DBUS_SYSDEPS_UNIX_H */
```

```
File = dbus-sysdeps-util-unix.c
```

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */  
/* dbus-sysdeps-util-unix.c Would be in dbus-sysdeps-unix.c, but not  
used in libdbus
```

```
*
```

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```
*/
```

```
#include <config.h>
```

```
#include "dbus-sysdeps.h"
```

```
#include "dbus-sysdeps-unix.h"
```

```
#include "dbus-internals.h"
```

```
#include "dbus-pipe.h"
```

```
#include "dbus-protocol.h"
```

```
#include "dbus-string.h"
```

```
#define DBUS_USERDB_INCLUDES_PRIVATE 1
```

```
#include "dbus-userdb.h"
```

```
#include "dbus-test.h"
```

```
#include <sys/types.h>
```

```
#include <stdlib.h>
```

```
#include <string.h>
```

```
#include <signal.h>
```

```
#include <unistd.h>
```

```
#include <stdio.h>
```

```
#include <errno.h>
```

```

#include <fcntl.h>
#include <sys/stat.h>
#ifdef HAVE_SYS_RESOURCE_H
#include <sys/resource.h>
#endif
#include <grp.h>
#include <sys/socket.h>
#include <dirent.h>
#include <sys/un.h>
#include <syslog.h>

#ifdef HAVE_SYS_SYSLIMITS_H
#include <sys/syslimits.h>
#endif

#ifndef O_BINARY
#define O_BINARY 0
#endif

/**
 * @addtogroup DBusInternalsUtils
 * @{
 */

/**
 * Does the chdir, fork, setsid, etc. to become a daemon process.
 *
 * @param pidfile #NULL, or pidfile to create
 * @param print_pid_pipe pipe to print daemon's pid to, or -1 for none
 * @param error return location for errors
 * @param keep_umask #TRUE to keep the original umask
 * @returns #FALSE on failure
 */
dbus_bool_t
_dbus_become_daemon (const DBusString *pidfile,
                    DBusPipe *print_pid_pipe,
                    DBusError *error,
                    dbus_bool_t keep_umask)
{
    const char *s;
    pid_t child_pid;
    int dev_null_fd;

    _dbus_verbose ("Becoming a daemon...\n");

    _dbus_verbose ("chdir to /\n");
    if (chdir ("/") < 0)
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
                      "Could not chdir() to root directory");
        return FALSE;
    }

```



```

        _dbus_verbose ("pid file or pipe write failed: %s\n",
                      error->message);
        kill (child_pid, SIGTERM);
        return FALSE;
    }

    _dbus_verbose ("parent exiting\n");
    _exit (0);
    break;
}

return TRUE;
}

/**
 * Creates a file containing the process ID.
 *
 * @param filename the filename to write to
 * @param pid our process ID
 * @param error return location for errors
 * @returns #FALSE on failure
 */
static dbus_bool_t
_dbus_write_pid_file (const DBusString *filename,
                    unsigned long pid,
                    DBusError *error)
{
    const char *cfilename;
    int fd;
    FILE *f;

    cfilename = _dbus_string_get_const_data (filename);

    fd = open (cfilename, O_WRONLY|O_CREAT|O_EXCL|O_BINARY, 0644);

    if (fd < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                      "Failed to open \"%s\": %s", cfilename,
                      _dbus_strerror (errno));

        return FALSE;
    }

    if ((f = fdopen (fd, "w")) == NULL)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                      "Failed to fdopen fd %d: %s", fd, _dbus_strerror
(errno));
        _dbus_close (fd, NULL);
        return FALSE;
    }
}

```

```

if (fprintf (f, "%lu\n", pid) < 0)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                    "Failed to write to \"%s\": %s", cfilename,
                    _dbus_strerror (errno));

    fclose (f);
    return FALSE;
}

if (fclose (f) == EOF)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                    "Failed to close \"%s\": %s", cfilename,
                    _dbus_strerror (errno));

    return FALSE;
}

return TRUE;
}

/**
 * Writes the given pid_to_write to a pidfile (if non-NULL) and/or to
 * a
 * pipe (if non-NULL). Does nothing if pidfile and print_pid_pipe are
 * both
 * NULL.
 *
 * @param pidfile the file to write to or #NULL
 * @param print_pid_pipe the pipe to write to or #NULL
 * @param pid_to_write the pid to write out
 * @param error error on failure
 * @returns FALSE if error is set
 */
dbus_bool_t
_dbus_write_pid_to_file_and_pipe (const DBusString *pidfile,
                                  DBusPipe          *print_pid_pipe,
                                  dbus_pid_t        pid_to_write,
                                  DBusError         *error)
{
    if (pidfile)
    {
        _dbus_verbose ("writing pid file %s\n",
            _dbus_string_get_const_data (pidfile));
        if (!_dbus_write_pid_file (pidfile,
                                   pid_to_write,
                                   error))
        {
            _dbus_verbose ("pid file write failed\n");
            _DBUS_ASSERT_ERROR_IS_SET(error);
            return FALSE;
        }
    }
}

```



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    }
}
else
{
    _dbus_verbose ("No pid file requested\n");
}

if (print_pid_pipe != NULL && _dbus_pipe_is_valid (print_pid_pipe))
{
    DBusString pid;
    int bytes;

    _dbus_verbose ("writing our pid to pipe %d\n",
        print_pid_pipe->fd);

    if (!_dbus_string_init (&pid))
    {
        _DBUS_SET_OOM (error);
        return FALSE;
    }

    if (!_dbus_string_append_int (&pid, pid_to_write) ||
        !_dbus_string_append (&pid, "\n"))
    {
        _dbus_string_free (&pid);
        _DBUS_SET_OOM (error);
        return FALSE;
    }

    bytes = _dbus_string_get_length (&pid);
    if (_dbus_pipe_write (print_pid_pipe, &pid, 0, bytes, error) !=
bytes)
    {
        /* _dbus_pipe_write sets error only on failure, not short
write */
        if (error != NULL && !dbus_error_is_set(error))
        {
            dbus_set_error (error, DBUS_ERROR_FAILED,
                "Printing message bus PID: did not write
enough bytes\n");
        }
        _dbus_string_free (&pid);
        return FALSE;
    }

    _dbus_string_free (&pid);
}
else
{
    _dbus_verbose ("No pid pipe to write to\n");
}

```

```

    return TRUE;
}

/**
 * Verify that after the fork we can successfully change to this user.
 *
 * @param user the username given in the daemon configuration
 * @returns #TRUE if username is valid
 */
dbus_bool_t
_dbus_verify_daemon_user (const char *user)
{
    DBusString u;

    _dbus_string_init_const (&u, user);

    return _dbus_get_user_id_and_primary_group (&u, NULL, NULL);
}

/* The HAVE_LIBAUDIT case lives in selinux.c */
#ifdef HAVE_LIBAUDIT
/**
 * Changes the user and group the bus is running as.
 *
 * @param user the user to become
 * @param error return location for errors
 * @returns #FALSE on failure
 */
dbus_bool_t
_dbus_change_to_daemon_user (const char *user,
                             DBusError *error)
{
    dbus_uid_t uid;
    dbus_gid_t gid;
    DBusString u;

    _dbus_string_init_const (&u, user);

    if (!_dbus_get_user_id_and_primary_group (&u, &uid, &gid))
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
                       "User '%s' does not appear to exist?",
                       user);

        return FALSE;
    }

    /* setgroups() only works if we are a privileged process,
     * so we don't return error on failure; the only possible
     * failure is that we don't have perms to do it.
     *
     * not sure this is right, maybe if setuid()

```

```

    * is going to work then setgroups() should also work.
    */
    if (setgroups (0, NULL) < 0)
        _dbus_warn ("Failed to drop supplementary groups: %s\n",
                    _dbus_strerror (errno));

    /* Set GID first, or the setuid may remove our permission
    * to change the GID
    */
    if (setgid (gid) < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                        "Failed to set GID to %lu: %s", gid,
                        _dbus_strerror (errno));

        return FALSE;
    }

    if (setuid (uid) < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                        "Failed to set UID to %lu: %s", uid,
                        _dbus_strerror (errno));

        return FALSE;
    }

    return TRUE;
}
#endif /* !HAVE_LIBAUDIT */

/**
 * Attempt to ensure that the current process can open
 * at least @limit file descriptors.
 *
 * If @limit is lower than the current, it will not be
 * lowered. No error is returned if the request can
 * not be satisfied.
 *
 * @limit Number of file descriptors
 */
void
_dbus_request_file_descriptor_limit (unsigned int limit)
{
#ifdef HAVE_SETRLIMIT
    struct rlimit lim;
    struct rlimit target_lim;

    /* No point to doing this practically speaking
    * if we're not uid 0. We expect the system
    * bus to use this before we change UID, and
    * the session bus takes the Linux default
    * of 1024 for both cur and max.
    */

```

```

    */
    if (getuid () != 0)
        return;

    if (getrlimit (RLIMIT_NOFILE, &lim) < 0)
        return;

    if (lim.rlim_cur >= limit)
        return;

    /* Ignore "maximum limit", assume we have the "superuser"
     * privileges.  On Linux this is CAP_SYS_RESOURCE.
     */
    target_lim.rlim_cur = target_lim.rlim_max = limit;
    /* Also ignore errors; if we fail, we will at least work
     * up to whatever limit we had, which seems better than
     * just outright aborting.
     *
     * However, in the future we should probably log this so OS builders
     * have a chance to notice any misconfiguration like dbus-daemon
     * being started without CAP_SYS_RESOURCE.
     */
    setrlimit (RLIMIT_NOFILE, &target_lim);
#endif
}

void
_dbus_init_system_log (void)
{
#ifdef HAVE_DECL_LOG_PERROR
    openlog ("dbus", LOG_PID | LOG_PERROR, LOG_DAEMON);
#else
    openlog ("dbus", LOG_PID, LOG_DAEMON);
#endif
}

/**
 * Log a message to the system log file (e.g. syslog on Unix).
 *
 * @param severity a severity value
 * @param msg a printf-style format string
 * @param args arguments for the format string
 */
void
_dbus_system_log (DBusSystemLogSeverity severity, const char *msg,
...)
{
    va_list args;

    va_start (args, msg);

```

```

    _dbus_system_logv (severity, msg, args);

    va_end (args);
}

/**
 * Log a message to the system log file (e.g. syslog on Unix).
 *
 * @param severity a severity value
 * @param msg a printf-style format string
 * @param args arguments for the format string
 *
 * If the FATAL severity is given, this function will terminate the
program
 * with an error code.
 */
void
_dbus_system_logv (DBusSystemLogSeverity severity, const char *msg,
va_list args)
{
    int flags;
    switch (severity)
    {
        case DBUS_SYSTEM_LOG_INFO:
            flags = LOG_DAEMON | LOG_NOTICE;
            break;
        case DBUS_SYSTEM_LOG_SECURITY:
            flags = LOG_AUTH | LOG_NOTICE;
            break;
        case DBUS_SYSTEM_LOG_FATAL:
            flags = LOG_DAEMON|LOG_CRIT;
            break;
        default:
            return;
    }

#ifdef HAVE_DECL_LOG_PERROR
    {
        /* vsyslog() won't write to stderr, so we'd better do it */
        va_list tmp;

        DBUS_VA_COPY (tmp, args);
        fprintf (stderr, "dbus[" DBUS_PID_FORMAT "]: ", _dbus_getpid
());
        vfprintf (stderr, msg, tmp);
        fputc ('\n', stderr);
        va_end (tmp);
    }
#endif

    vsyslog (flags, msg, args);

```

```

    if (severity == DBUS_SYSTEM_LOG_FATAL)
        exit (1);
}

/** Installs a UNIX signal handler
 *
 * @param sig the signal to handle
 * @param handler the handler
 */
void
_dbus_set_signal_handler (int sig,
                        DBusSignalHandler handler)
{
    struct sigaction act;
    sigset_t empty_mask;

    sigemptyset (&empty_mask);
    act.sa_handler = handler;
    act.sa_mask = empty_mask;
    act.sa_flags = 0;
    sigaction (sig, &act, NULL);
}

/** Checks if a file exists
 *
 * @param file full path to the file
 * @returns #TRUE if file exists
 */
dbus_bool_t
_dbus_file_exists (const char *file)
{
    return (access (file, F_OK) == 0);
}

/** Checks if user is at the console
 *
 * @param username user to check
 * @param error return location for errors
 * @returns #TRUE is the user is at the console and there are no
errors
 */
dbus_bool_t
_dbus_user_at_console (const char *username,
                      DBusError *error)
{
    DBusString u, f;
    dbus_bool_t result;

    result = FALSE;
    if (!_dbus_string_init (&f))
        {

```

```

        _DBUS_SET_OOM (error);
        return FALSE;
    }

    if (!_dbus_string_append (&f, DBUS_CONSOLE_AUTH_DIR))
    {
        _DBUS_SET_OOM (error);
        goto out;
    }

    _dbus_string_init_const (&u, username);

    if (!_dbus_concat_dir_and_file (&f, &u))
    {
        _DBUS_SET_OOM (error);
        goto out;
    }

    result = _dbus_file_exists (_dbus_string_get_const_data (&f));

out:
    _dbus_string_free (&f);

    return result;
}

/**
 * Checks whether the filename is an absolute path
 *
 * @param filename the filename
 * @returns #TRUE if an absolute path
 */
dbus_bool_t
_dbus_path_is_absolute (const DBusString *filename)
{
    if (_dbus_string_get_length (filename) > 0)
        return _dbus_string_get_byte (filename, 0) == '/';
    else
        return FALSE;
}

/**
 * stat() wrapper.
 *
 * @param filename the filename to stat
 * @param statbuf the stat info to fill in
 * @param error return location for error
 * @returns #FALSE if error was set
 */
dbus_bool_t
_dbus_stat (const DBusString *filename,

```

```

        DBusStat      *statbuf,
        DBusError     *error)
{
    const char *filename_c;
    struct stat sb;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    filename_c = _dbus_string_get_const_data (filename);

    if (stat (filename_c, &sb) < 0)
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
                       "%s", _dbus_strerror (errno));
        return FALSE;
    }

    statbuf->mode = sb.st_mode;
    statbuf->nlink = sb.st_nlink;
    statbuf->uid = sb.st_uid;
    statbuf->gid = sb.st_gid;
    statbuf->size = sb.st_size;
    statbuf->atime = sb.st_atime;
    statbuf->mtime = sb.st_mtime;
    statbuf->ctime = sb.st_ctime;

    return TRUE;
}

/**
 * Internals of directory iterator
 */
struct DBusDirIter
{
    DIR *d; /**< The DIR* from opendir() */
};

/**
 * Open a directory to iterate over.
 *
 * @param filename the directory name
 * @param error exception return object or #NULL
 * @returns new iterator, or #NULL on error
 */
DBusDirIter*
_dbus_directory_open (const DBusString *filename,
                     DBusError      *error)
{
    DIR *d;
    DBusDirIter *iter;

```



```

const char *filename_c;

_DBUS_ASSERT_ERROR_IS_CLEAR (error);

filename_c = _dbus_string_get_const_data (filename);

d = opendir (filename_c);
if (d == NULL)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                  "Failed to read directory \"%s\": %s",
                  filename_c,
                  _dbus_strerror (errno));

    return NULL;
}
iter = dbus_new0 (DBusDirIter, 1);
if (iter == NULL)
{
    closedir (d);
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
                  "Could not allocate memory for directory
iterator");
    return NULL;
}

iter->d = d;

return iter;
}

/**
 * Get next file in the directory. Will not return "." or ".." on
 * UNIX. If an error occurs, the contents of "filename" are
 * undefined. The error is never set if the function succeeds.
 *
 * This function is not re-entrant, and not necessarily thread-safe.
 * Only use it for test code or single-threaded utilities.
 *
 * @param iter the iterator
 * @param filename string to be set to the next file in the dir
 * @param error return location for error
 * @returns #TRUE if filename was filled in with a new filename
 */
dbus_bool_t
_dbus_directory_get_next_file (DBusDirIter      *iter,
                              DBusString       *filename,
                              DBusError        *error)
{
    struct dirent *ent;
    int err;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

```

```

again:
    errno = 0;
    ent = readdir (iter->d);

    if (!ent)
    {
        err = errno;

        if (err != 0)
            dbus_set_error (error,
                _dbus_error_from_errno (err),
                "%s", _dbus_strerror (err));

        return FALSE;
    }
    else if (ent->d_name[0] == '.' &&
        (ent->d_name[1] == '\\0' ||
        (ent->d_name[1] == '.' && ent->d_name[2] == '\\0')))
        goto again;
    else
    {
        _dbus_string_set_length (filename, 0);
        if (!_dbus_string_append (filename, ent->d_name))
        {
            dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
                "No memory to read directory entry");
            return FALSE;
        }
        else
        {
            return TRUE;
        }
    }
}

/**
 * Closes a directory iteration.
 */
void
_dbus_directory_close (DBusDirIter *iter)
{
    closedir (iter->d);
    dbus_free (iter);
}

static dbus_bool_t
fill_user_info_from_group (struct group *g,
                           DBusGroupInfo *info,
                           DBusError *error)
{
    _dbus_assert (g->gr_name != NULL);

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info->gid = g->gr_gid;
info->groupname = _dbus_strdup (g->gr_name);

/* info->members = dbus_strdupv (g->gr_mem) */

if (info->groupname == NULL)
{
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
    return FALSE;
}

return TRUE;
}

static dbus_bool_t
fill_group_info (DBusGroupInfo *info,
                dbus_gid_t gid,
                const DBusString *groupname,
                DBusError *error)
{
    const char *group_c_str;

    _dbus_assert (groupname != NULL || gid != DBUS_GID_UNSET);
    _dbus_assert (groupname == NULL || gid == DBUS_GID_UNSET);

    if (groupname)
        group_c_str = _dbus_string_get_const_data (groupname);
    else
        group_c_str = NULL;

    /* For now assuming that the getgrnam() and getgrgid() flavors
     * always correspond to the pwnam flavors, if not we have
     * to add more configure checks.
     */

#ifdef HAVE_POSIX_GETPWNAM_R || defined
(HAVE_NONPOSIX_GETPWNAM_R)
{
    struct group *g;
    int result;
    size_t buflen;
    char *buf;
    struct group g_str;
    dbus_bool_t b;

    /* retrieve maximum needed size for buf */
    buflen = sysconf (_SC_GETGR_R_SIZE_MAX);

    /* sysconf actually returns a long, but everything else expects
size_t,
     * so just recast here.

```

```

* https://bugs.freedesktop.org/show_bug.cgi?id=17061
*/
if ((long) buflen <= 0)
    buflen = 1024;

result = -1;
while (1)
{
    buf = dbus_malloc (buflen);
    if (buf == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return FALSE;
    }

    g = NULL;
#ifdef HAVE_POSIX_GETPWNAM_R
    if (group_c_str)
        result = getgrnam_r (group_c_str, &g_str, buf, buflen,
                             &g);
    else
        result = getgrgid_r (gid, &g_str, buf, buflen,
                             &g);
#else
    g = getgrnam_r (group_c_str, &g_str, buf, buflen);
    result = 0;
#endif /* !HAVE_POSIX_GETPWNAM_R */
    /* Try a bigger buffer if ERANGE was returned:
       https://bugs.freedesktop.org/show_bug.cgi?id=16727
    */
    if (result == ERANGE && buflen < 512 * 1024)
    {
        dbus_free (buf);
        buflen *= 2;
    }
    else
    {
        break;
    }
}

if (result == 0 && g == &g_str)
{
    b = fill_user_info_from_group (g, info, error);
    dbus_free (buf);
    return b;
}
else
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
                   "Group %s unknown or failed to look it up\n",
                   group_c_str ? group_c_str : "???");
}

```

```

        dbus_free (buf);
        return FALSE;
    }
}
#else /* ! HAVE_GETPWNAM_R */
{
    /* I guess we're screwed on thread safety here */
    struct group *g;

    g = getgrnam (group_c_str);

    if (g != NULL)
    {
        return fill_user_info_from_group (g, info, error);
    }
    else
    {
        dbus_set_error (error, _dbus_error_from_errno (errno),
            "Group %s unknown or failed to look it up\n",
            group_c_str ? group_c_str : "???");
        return FALSE;
    }
}
#endif /* ! HAVE_GETPWNAM_R */
}

/**
 * Initializes the given DBusGroupInfo struct
 * with information about the given group name.
 *
 * @param info the group info struct
 * @param groupname name of group
 * @param error the error return
 * @returns #FALSE if error is set
 */
dbus_bool_t
_dbus_group_info_fill (DBusGroupInfo *info,
                      const DBusString *groupname,
                      DBusError *error)
{
    return fill_group_info (info, DBUS_GID_UNSET,
                          groupname, error);
}

/**
 * Initializes the given DBusGroupInfo struct
 * with information about the given group ID.
 *
 * @param info the group info struct
 * @param gid group ID
 * @param error the error return
 */

```

```

    * @returns #FALSE if error is set
    */
dbus_bool_t
_dbus_group_info_fill_gid (DBusGroupInfo *info,
                           dbus_gid_t    gid,
                           DBusError     *error)
{
    return fill_group_info (info, gid, NULL, error);
}

/**
 * Parse a UNIX user from the bus config file. On Windows, this should
 * simply always fail (just return #FALSE).
 *
 * @param username the username text
 * @param uid_p place to return the uid
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_parse_unix_user_from_config (const DBusString *username,
                                   dbus_uid_t       *uid_p)
{
    return _dbus_get_user_id (username, uid_p);
}

/**
 * Parse a UNIX group from the bus config file. On Windows, this
 * should
 * simply always fail (just return #FALSE).
 *
 * @param groupname the groupname text
 * @param gid_p place to return the gid
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_parse_unix_group_from_config (const DBusString *groupname,
                                    dbus_gid_t       *gid_p)
{
    return _dbus_get_group_id (groupname, gid_p);
}

/**
 * Gets all groups corresponding to the given UNIX user ID. On UNIX,
 * just calls _dbus_groups_from_uid(). On Windows, should always
 * fail since we don't know any UNIX groups.
 *
 * @param uid the UID
 * @param group_ids return location for array of group IDs
 * @param n_group_ids return location for length of returned array
 * @returns #TRUE if the UID existed and we got some credentials
 */

```

```

dbus_bool_t
_dbus_unix_groups_from_uid (dbus_uid_t      uid,
                           dbus_gid_t      **group_ids,
                           int              *n_group_ids)
{
    return _dbus_groups_from_uid (uid, group_ids, n_group_ids);
}

/**
 * Checks to see if the UNIX user ID is at the console.
 * Should always fail on Windows (set the error to
 * #DBUS_ERROR_NOT_SUPPORTED).
 *
 * @param uid UID of person to check
 * @param error return location for errors
 * @returns #TRUE if the UID is the same as the console user and there
are no errors
 */
dbus_bool_t
_dbus_unix_user_is_at_console (dbus_uid_t      uid,
                              DBusError        *error)
{
    return _dbus_is_console_user (uid, error);
}

/**
 * Checks to see if the UNIX user ID matches the UID of
 * the process. Should always return #FALSE on Windows.
 *
 * @param uid the UNIX user ID
 * @returns #TRUE if this uid owns the process.
 */
dbus_bool_t
_dbus_unix_user_is_process_owner (dbus_uid_t uid)
{
    return uid == _dbus_geteuid ();
}

/**
 * Checks to see if the Windows user SID matches the owner of
 * the process. Should always return #FALSE on UNIX.
 *
 * @param windows_sid the Windows user SID
 * @returns #TRUE if this user owns the process.
 */
dbus_bool_t
_dbus_windows_user_is_process_owner (const char *windows_sid)
{
    return FALSE;
}

```

```

/** @} */ /* End of DBusInternalsUtils functions */

/**
 * @addtogroup DBusString
 *
 * @{
 */
/**
 * Get the directory name from a complete filename
 * @param filename the filename
 * @param dirname string to append directory name to
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_string_get_dirname (const DBusString *filename,
                          DBusString      *dirname)
{
    int sep;

    _dbus_assert (filename != dirname);
    _dbus_assert (filename != NULL);
    _dbus_assert (dirname != NULL);

    /* Ignore any separators on the end */
    sep = _dbus_string_get_length (filename);
    if (sep == 0)
        return _dbus_string_append (dirname, "."); /* empty string passed
in */

    while (sep > 0 && _dbus_string_get_byte (filename, sep - 1) == '/')
        --sep;

    _dbus_assert (sep >= 0);

    if (sep == 0)
        return _dbus_string_append (dirname, "/");

    /* Now find the previous separator */
    _dbus_string_find_byte_backward (filename, sep, '/', &sep);
    if (sep < 0)
        return _dbus_string_append (dirname, ".");

    /* skip multiple separators */
    while (sep > 0 && _dbus_string_get_byte (filename, sep - 1) == '/')
        --sep;

    _dbus_assert (sep >= 0);

    if (sep == 0 &&
        _dbus_string_get_byte (filename, 0) == '/')
        return _dbus_string_append (dirname, "/");
    else

```



```

        return _dbus_string_copy_len (filename, 0, sep - 0,
                                      dirname, _dbus_string_get_length
(dirname));
}
/** @} */ /* DBusString stuff */

static void
string_squash_nonprintable (DBusString *str)
{
    unsigned char *buf;
    int i, len;

    buf = _dbus_string_get_data (str);
    len = _dbus_string_get_length (str);

    for (i = 0; i < len; i++)
    {
        unsigned char c = (unsigned char) buf[i];
        if (c == '\\0')
            buf[i] = ' ';
        else if (c < 0x20 || c > 127)
            buf[i] = '?';
    }
}

/**
 * Get a printable string describing the command used to execute
 * the process with pid. This string should only be used for
 * informative purposes such as logging; it may not be trusted.
 *
 * The command is guaranteed to be printable ASCII and no longer
 * than max_len.
 *
 * @param pid Process id
 * @param str Append command to this string
 * @param max_len Maximum length of returned command
 * @param error return location for errors
 * @returns #FALSE on error
 */
dbus_bool_t
_dbus_command_for_pid (unsigned long pid,
                      DBusString *str,
                      int max_len,
                      DBusError *error)
{
    /* This is all Linux-specific for now */
    DBusString path;
    DBusString cmdline;
    int fd;

    if (!_dbus_string_init (&path))
    {

```

```

    _DBUS_SET_OOM (error);
    return FALSE;
}

if (!_dbus_string_init (&cmdline))
{
    _DBUS_SET_OOM (error);
    _dbus_string_free (&path);
    return FALSE;
}

if (!_dbus_string_append_printf (&path, "/proc/%ld/cmdline", pid))
    goto oom;

fd = open (_dbus_string_get_const_data (&path), O_RDONLY);
if (fd < 0)
{
    dbus_set_error (error,
                    _dbus_error_from_errno (errno),
                    "Failed to open \"%s\": %s",
                    _dbus_string_get_const_data (&path),
                    _dbus_strerror (errno));

    goto fail;
}

if (!_dbus_read (fd, &cmdline, max_len))
{
    dbus_set_error (error,
                    _dbus_error_from_errno (errno),
                    "Failed to read from \"%s\": %s",
                    _dbus_string_get_const_data (&path),
                    _dbus_strerror (errno));

    goto fail;
}

if (!_dbus_close (fd, error))
    goto fail;

string_squash_nonprintable (&cmdline);

if (!_dbus_string_copy (&cmdline, 0, str, _dbus_string_get_length
(str)))
    goto oom;

_dbus_string_free (&cmdline);
_dbus_string_free (&path);
return TRUE;
oom:
_DBUS_SET_OOM (error);
fail:
_dbus_string_free (&cmdline);
_dbus_string_free (&path);

```

```
    return FALSE;
}
```

File = dbus-sysdeps-util-win.c

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps-util.c Would be in dbus-sysdeps.c, but not used in
libdbus
*
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include <config.h>
```

```
#define STRSAFE_NO_DEPRECATED
```

```
#include "dbus-sysdeps.h"
#include "dbus-internals.h"
#include "dbus-protocol.h"
#include "dbus-string.h"
#include "dbus-sysdeps.h"
#include "dbus-sysdeps-win.h"
#include "dbus-sockets-win.h"
#include "dbus-memory.h"
#include "dbus-pipe.h"
```

```
#include <stdio.h>
#include <stdlib.h>
#if HAVE_ERRNO_H
```

```

#include <errno.h>
#endif
#include <winsock2.h> // WSA error codes

#ifdef DBUS_WINCE
#include <io.h>
#include <lm.h>
#include <sys/stat.h>
#endif

/**
 * Does the chdir, fork, setsid, etc. to become a daemon process.
 *
 * @param pidfile #NULL, or pidfile to create
 * @param print_pid_fd file descriptor to print daemon's pid to, or -1
for none
 * @param error return location for errors
 * @param keep_umask #TRUE to keep the original umask
 * @returns #FALSE on failure
 */
dbus_bool_t
_dbus_become_daemon (const DBusString *pidfile,
                    DBusPipe         *print_pid_pipe,
                    DBusError        *error,
                    dbus_bool_t      keep_umask)
{
    return TRUE;
}

/**
 * Creates a file containing the process ID.
 *
 * @param filename the filename to write to
 * @param pid our process ID
 * @param error return location for errors
 * @returns #FALSE on failure
 */
static dbus_bool_t
_dbus_write_pid_file (const DBusString *filename,
                    unsigned long     pid,
                    DBusError        *error)
{
    const char *cfilename;
    HANDLE hnd;
    char pidstr[20];
    int total;
    int bytes_to_write;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    cfilename = _dbus_string_get_const_data (filename);

```

```

hnd = CreateFileA (cfilename, GENERIC_WRITE,
                  FILE_SHARE_READ | FILE_SHARE_WRITE,
                  NULL, CREATE_NEW, FILE_ATTRIBUTE_NORMAL,
                  INVALID_HANDLE_VALUE);
if (hnd == INVALID_HANDLE_VALUE)
{
    char *emsg = _dbus_win_error_string (GetLastError ());
    dbus_set_error (error, _dbus_win_error_from_last_error (),
                  "Could not create PID file %s: %s",
                  cfilename, emsg);
    _dbus_win_free_error_string (emsg);
    return FALSE;
}

if (snprintf (pidstr, sizeof (pidstr), "%lu\n", pid) < 0)
{
    dbus_set_error (error, _dbus_error_from_system_errno (),
                  "Failed to format PID for \"%s\": %s",
cfilename,
                  _dbus_strerror_from_errno ());
    CloseHandle (hnd);
    return FALSE;
}

total = 0;
bytes_to_write = strlen (pidstr);

while (total < bytes_to_write)
{
    DWORD bytes_written;
    BOOL res;

    res = WriteFile (hnd, pidstr + total, bytes_to_write - total,
                    &bytes_written, NULL);

    if (res == 0 || bytes_written <= 0)
    {
        char *emsg = _dbus_win_error_string (GetLastError ());
        dbus_set_error (error, _dbus_win_error_from_last_error (),
                        "Could not write to %s: %s", cfilename,
emsg);
        _dbus_win_free_error_string (emsg);
        CloseHandle (hnd);
        return FALSE;
    }

    total += bytes_written;
}

if (CloseHandle (hnd) == 0)
{

```

```

    char *emsg = _dbus_win_error_string (GetLastError ());
    dbus_set_error (error, _dbus_win_error_from_last_error (),
                   "Could not close file %s: %s",
                   cfilename, emsg);
    _dbus_win_free_error_string (emsg);

    return FALSE;
}

return TRUE;
}

/**
 * Writes the given pid_to_write to a pidfile (if non-NULL) and/or to
 * a pipe (if non-NULL). Does nothing if pidfile and print_pid_pipe are
 * both
 * NULL.
 *
 * @param pidfile the file to write to or #NULL
 * @param print_pid_pipe the pipe to write to or #NULL
 * @param pid_to_write the pid to write out
 * @param error error on failure
 * @returns FALSE if error is set
 */
dbus_bool_t
_dbus_write_pid_to_file_and_pipe (const DBusString *pidfile,
                                  DBusPipe          *print_pid_pipe,
                                  dbus_pid_t        pid_to_write,
                                  DBusError         *error)
{
    if (pidfile)
    {
        _dbus_verbose ("writing pid file %s\n",
            _dbus_string_get_const_data (pidfile));
        if (!_dbus_write_pid_file (pidfile,
                                   pid_to_write,
                                   error))
        {
            _dbus_verbose ("pid file write failed\n");
            _DBUS_ASSERT_ERROR_IS_SET(error);
            return FALSE;
        }
    }
    else
    {
        _dbus_verbose ("No pid file requested\n");
    }

    if (print_pid_pipe != NULL && _dbus_pipe_is_valid (print_pid_pipe))
    {
        DBusString pid;

```

```

    int bytes;

    _dbus_verbose ("writing our pid to pipe %d\n", print_pid_pipe-
>fd);

    if (!_dbus_string_init (&pid))
    {
        _DBUS_SET_OOM (error);
        return FALSE;
    }

    if (!_dbus_string_append_int (&pid, pid_to_write) ||
        !_dbus_string_append (&pid, "\n"))
    {
        _dbus_string_free (&pid);
        _DBUS_SET_OOM (error);
        return FALSE;
    }

    bytes = _dbus_string_get_length (&pid);
    if (_dbus_pipe_write (print_pid_pipe, &pid, 0, bytes, error) !=
bytes)
    {
        /* _dbus_pipe_write sets error only on failure, not short
write */
        if (error != NULL && !dbus_error_is_set(error))
        {
            dbus_set_error (error, DBUS_ERROR_FAILED,
                "Printing message bus PID: did not write
enough bytes\n");
        }
        _dbus_string_free (&pid);
        return FALSE;
    }

    _dbus_string_free (&pid);
}
else
{
    _dbus_verbose ("No pid pipe to write to\n");
}

return TRUE;
}

/**
 * Verify that after the fork we can successfully change to this user.
 *
 * @param user the username given in the daemon configuration
 * @returns #TRUE if username is valid
 */
dbus_bool_t

```

```

_dbus_verify_daemon_user (const char *user)
{
    return TRUE;
}

/**
 * Changes the user and group the bus is running as.
 *
 * @param user the user to become
 * @param error return location for errors
 * @returns #FALSE on failure
 */
dbus_bool_t
_dbus_change_to_daemon_user (const char *user,
                             DBusError *error)
{
    return TRUE;
}

void
_dbus_request_file_descriptor_limit (unsigned int limit)
{
}

void
_dbus_init_system_log (void)
{
    /* OutputDebugStringA doesn't need any special initialization, do
nothing */
}

/**
 * Log a message to the system log file (e.g. syslog on Unix).
 *
 * @param severity a severity value
 * @param msg a printf-style format string
 * @param args arguments for the format string
 *
 */
void
_dbus_system_log (DBusSystemLogSeverity severity, const char *msg,
...)
{
    va_list args;

    va_start (args, msg);

    _dbus_system_logv (severity, msg, args);

    va_end (args);
}

```



```

/**
 * Log a message to the system log file (e.g. syslog on Unix).
 *
 * @param severity a severity value
 * @param msg a printf-style format string
 * @param args arguments for the format string
 *
 * If the FATAL severity is given, this function will terminate the
program
 * with an error code.
 */
void
_dbus_system_logv (DBusSystemLogSeverity severity, const char *msg,
va_list args)
{
    char *s = "";
    char buf[1024];

    switch(severity)
    {
        case DBUS_SYSTEM_LOG_INFO: s = "info"; break;
        case DBUS_SYSTEM_LOG_SECURITY: s = "security"; break;
        case DBUS_SYSTEM_LOG_FATAL: s = "fatal"; break;
    }

    sprintf(buf, "%s%s", s, msg);
    vsprintf(buf, buf, args);
    OutputDebugStringA(buf);

    if (severity == DBUS_SYSTEM_LOG_FATAL)
        exit (1);
}

/** Installs a signal handler
 *
 * @param sig the signal to handle
 * @param handler the handler
 */
void
_dbus_set_signal_handler (int sig,
DBusSignalHandler handler)
{
    _dbus_verbose ("_dbus_set_signal_handler() has to be
implemented\n");
}

/**
 * stat() wrapper.
 *
 * @param filename the filename to stat
 * @param statbuf the stat info to fill in
 * @param error return location for error

```

```

* @returns #FALSE if error was set
*/
dbus_bool_t
_dbus_stat(const DBusString *filename,
           DBusStat         *statbuf,
           DBusError        *error)
{
    const char *filename_c;
    WIN32_FILE_ATTRIBUTE_DATA wfad;
    char *lastdot;
    DWORD rc;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    filename_c = _dbus_string_get_const_data (filename);

    if (!GetFileAttributesExA (filename_c, GetFileExInfoStandard,
&wfad))
    {
        _dbus_win_set_error_from_win_error (error, GetLastError ());
        return FALSE;
    }

    if (wfad.dwFileAttributes & FILE_ATTRIBUTE_DIRECTORY)
        statbuf->mode = _S_IFDIR;
    else
        statbuf->mode = _S_IFREG;

    statbuf->mode |= _S_IREAD;
    if (wfad.dwFileAttributes & FILE_ATTRIBUTE_READONLY)
        statbuf->mode |= _S_IWRITE;

    lastdot = strrchr (filename_c, '.');
    if (lastdot && stricmp (lastdot, ".exe") == 0)
        statbuf->mode |= _S_IEXEC;

    statbuf->mode |= (statbuf->mode & 0700) >> 3;
    statbuf->mode |= (statbuf->mode & 0700) >> 6;

    statbuf->nlink = 1;

#ifdef ENABLE_UID_TO_SID
    {
        PSID owner_sid, group_sid;
        PSECURITY_DESCRIPTOR sd;

        sd = NULL;
        rc = GetNamedSecurityInfo ((char *) filename_c, SE_FILE_OBJECT,
                                OWNER_SECURITY_INFORMATION |
                                GROUP_SECURITY_INFORMATION,
                                &owner_sid, &group_sid,
                                NULL, NULL,

```

```

                                &sd);
if (rc != ERROR_SUCCESS)
{
    _dbus_win_set_error_from_win_error (error, rc);
    if (sd != NULL)
        LocalFree (sd);
    return FALSE;
}

/* FIXME */
statbuf->uid = _dbus_win_sid_to_uid_t (owner_sid);
statbuf->gid = _dbus_win_sid_to_uid_t (group_sid);

LocalFree (sd);
}
#else
statbuf->uid = DBUS_UID_UNSET;
statbuf->gid = DBUS_GID_UNSET;
#endif

statbuf->size = ((dbus_int64_t) wfad.nFileSizeHigh << 32) +
wfad.nFileSizeLow;

statbuf->atime =
    (((dbus_int64_t) wfad.ftLastAccessTime.dwHighDateTime << 32) +
    wfad.ftLastAccessTime.dwLowDateTime) / 10000000 -
DBUS_INT64_CONSTANT (116444736000000000);

statbuf->mtime =
    (((dbus_int64_t) wfad.ftLastWriteTime.dwHighDateTime << 32) +
    wfad.ftLastWriteTime.dwLowDateTime) / 10000000 -
DBUS_INT64_CONSTANT (116444736000000000);

statbuf->ctime =
    (((dbus_int64_t) wfad.ftCreationTime.dwHighDateTime << 32) +
    wfad.ftCreationTime.dwLowDateTime) / 10000000 -
DBUS_INT64_CONSTANT (116444736000000000);

return TRUE;
}

/* This file is part of the KDE project
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libc/sys/linux/sys/dirent.h - Directory entry as returned by readdir

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```

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```
*/
#define HAVE_NO_D_NAMLEN    /* no struct dirent->d_namlen */
#define HAVE_DD_LOCK        /* have locking mechanism */

#define MAXNAMLEN 255      /* sizeof(struct dirent.d_name)-1 */

#define __dirfd(dir) (dir)->dd_fd

/* struct dirent - same as Unix */
struct dirent
{
    long d_ino;             /* inode (always 1 in WIN32) */
    off_t d_off;           /* offset to this dirent */
    unsigned short d_reclen; /* length of d_name */
    char d_name[_MAX_FNAME+1]; /* filename (null terminated) */
};

/* typedef DIR - not the same as Unix */
typedef struct
{
    HANDLE handle;         /* FindFirst/FindNext handle */
    short offset;          /* offset into directory */
    short finished;        /* 1 if there are not more files */
    WIN32_FIND_DATA fileinfo; /* from FindFirst/FindNext */
    char *dir;             /* the dir we are reading */
    struct dirent dent;    /* the dirent to return */
}
DIR;

/*****
*
* Implement dirent-style opendir/readdir/closedir on Window 95/NT
*
* Functions defined are opendir(), readdir() and closedir() with the
* same prototypes as the normal dirent.h implementation.
*
* Does not implement telldir(), seekdir(), rewinddir() or scandir().
* The dirent struct is compatible with Unix, except that d_ino is
* always 1 and d_off is made up as we go along.
*
* Error codes are not available with errno but GetLastError.
*
*****/
```

```

* The DIR typedef is not compatible with Unix.
*****
/

static DIR * _dbus_opendir(const char *dir)
{
    DIR *dp;
    char *filespec;
    HANDLE handle;
    int index;

    filespec = malloc(strlen(dir) + 2 + 1);
    strcpy(filespec, dir);
    index = strlen(filespec) - 1;
    if (index >= 0 && (filespec[index] == '/' || filespec[index] ==
'\'))
        filespec[index] = '\0';
    strcat(filespec, "\\*");

    dp = (DIR *)malloc(sizeof(DIR));
    dp->offset = 0;
    dp->finished = 0;
    dp->dir = strdup(dir);

    handle = FindFirstFileA(filespec, &(dp->fileinfo));
    if (handle == INVALID_HANDLE_VALUE)
    {
        if (GetLastError() == ERROR_NO_MORE_FILES)
            dp->finished = 1;
        else
            return NULL;
    }

    dp->handle = handle;
    free(filespec);

    return dp;
}

static struct dirent * _dbus_readdir(DIR *dp)
{
    int saved_err = GetLastError();

    if (!dp || dp->finished)
        return NULL;

    if (dp->offset != 0)
    {
        if (FindNextFileA(dp->handle, &(dp->fileinfo)) == 0)
        {
            if (GetLastError() == ERROR_NO_MORE_FILES)
            {

```



```

DBusDirIter *iter;
const char *filename_c;

_DBUS_ASSERT_ERROR_IS_CLEAR (error);

filename_c = _dbus_string_get_const_data (filename);

d = _dbus_opendir (filename_c);
if (d == NULL)
{
    char *emsg = _dbus_win_error_string (GetLastError ());
    dbus_set_error (error, _dbus_win_error_from_last_error (),
                   "Failed to read directory \"%s\": %s",
                   filename_c, emsg);
    _dbus_win_free_error_string (emsg);
    return NULL;
}
iter = dbus_new0 (DBusDirIter, 1);
if (iter == NULL)
{
    _dbus_closedir (d);
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
                   "Could not allocate memory for directory
iterator");
    return NULL;
}

iter->d = d;

return iter;
}

/**
 * Get next file in the directory. Will not return "." or ".." on
 * UNIX. If an error occurs, the contents of "filename" are
 * undefined. The error is never set if the function succeeds.
 *
 * @todo for thread safety, I think we have to use
 * readdir_r(). (GLib has the same issue, should file a bug.)
 *
 * @param iter the iterator
 * @param filename string to be set to the next file in the dir
 * @param error return location for error
 * @returns #TRUE if filename was filled in with a new filename
 */
dbus_bool_t
_dbus_directory_get_next_file (DBusDirIter      *iter,
                              DBusString       *filename,
                              DBusError        *error)
{
    struct dirent *ent;

```

```

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

again:
    SetLastError (0);
    ent = _dbus_readdir (iter->d);
    if (ent == NULL)
        {
            if (GetLastError() != 0)
                {
                    char *emsg = _dbus_win_error_string (GetLastError ());
                    dbus_set_error (error, _dbus_win_error_from_last_error (),
                                   "Failed to get next in directory: %s",
emsg);
                    _dbus_win_free_error_string (emsg);
                }
            return FALSE;
        }
    else if (ent->d_name[0] == '.' &&
             (ent->d_name[1] == '\\0' ||
              (ent->d_name[1] == '.' && ent->d_name[2] == '\\0')))
        goto again;
    else
        {
            _dbus_string_set_length (filename, 0);
            if (!_dbus_string_append (filename, ent->d_name))
                {
                    dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
                                   "No memory to read directory entry");
                    return FALSE;
                }
            else
                return TRUE;
        }
    }

/**
 * Closes a directory iteration.
 */
void
_dbus_directory_close (DBusDirIter *iter)
{
    _dbus_closedir (iter->d);
    dbus_free (iter);
}

/** @} */ /* End of DBusInternalsUtils functions */

/**
 * @addtogroup DBusString
 *
 * @{
 */

```



```

/**
 * Get the directory name from a complete filename
 * @param filename the filename
 * @param dirname string to append directory name to
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_string_get_dirname(const DBusString *filename,
                        DBusString      *dirname)
{
    int sep;

    _dbus_assert (filename != dirname);
    _dbus_assert (filename != NULL);
    _dbus_assert (dirname != NULL);

    /* Ignore any separators on the end */
    sep = _dbus_string_get_length (filename);
    if (sep == 0)
        return _dbus_string_append (dirname, "."); /* empty string passed
in */

    while (sep > 0 &&
           (_dbus_string_get_byte (filename, sep - 1) == '/' ||
            _dbus_string_get_byte (filename, sep - 1) == '\\'))
        --sep;

    _dbus_assert (sep >= 0);

    if (sep == 0 ||
        (sep == 2 &&
         _dbus_string_get_byte (filename, 1) == ':' &&
         isalpha (_dbus_string_get_byte (filename, 0))))
        return _dbus_string_copy_len (filename, 0, sep + 1,
                                     dirname, _dbus_string_get_length
(dirname));

    {
        int sep1, sep2;
        _dbus_string_find_byte_backward (filename, sep, '/', &sep1);
        _dbus_string_find_byte_backward (filename, sep, '\\', &sep2);

        sep = MAX (sep1, sep2);
    }
    if (sep < 0)
        return _dbus_string_append (dirname, ".");

    while (sep > 0 &&
           (_dbus_string_get_byte (filename, sep - 1) == '/' ||
            _dbus_string_get_byte (filename, sep - 1) == '\\'))
        --sep;

```

```

_dbus_assert (sep >= 0);

if ((sep == 0 ||
    (sep == 2 &&
     _dbus_string_get_byte (filename, 1) == ':' &&
     isalpha (_dbus_string_get_byte (filename, 0))))
    &&
    (_dbus_string_get_byte (filename, sep) == '/' ||
     _dbus_string_get_byte (filename, sep) == '\\'))
    return _dbus_string_copy_len (filename, 0, sep + 1,
                                  dirname, _dbus_string_get_length
(dirname));
else
    return _dbus_string_copy_len (filename, 0, sep - 0,
                                  dirname, _dbus_string_get_length
(dirname));
}

/**
 * Checks to see if the UNIX user ID matches the UID of
 * the process. Should always return #FALSE on Windows.
 *
 * @param uid the UNIX user ID
 * @returns #TRUE if this uid owns the process.
 */
dbus_bool_t
_dbus_unix_user_is_process_owner (dbus_uid_t uid)
{
    return FALSE;
}

dbus_bool_t _dbus_windows_user_is_process_owner (const char
*windows_sid)
{
    return TRUE;
}

/*=====
=
    unix emulation functions - should be removed sometime in the future
=====
*/

/**
 * Checks to see if the UNIX user ID is at the console.
 * Should always fail on Windows (set the error to
 * #DBUS_ERROR_NOT_SUPPORTED).
 *
 * @param uid UID of person to check
 * @param error return location for errors

```

```

    * @returns #TRUE if the UID is the same as the console user and there
    are no errors
    */
dbus_bool_t
_dbus_unix_user_is_at_console (dbus_uid_t      uid,
                              DBusError      *error)
{
    dbus_set_error (error, DBUS_ERROR_NOT_SUPPORTED,
                   "UNIX user IDs not supported on Windows\n");
    return FALSE;
}

/**
 * Parse a UNIX group from the bus config file. On Windows, this
 should
 * simply always fail (just return #FALSE).
 *
 * @param groupname the groupname text
 * @param gid_p place to return the gid
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_parse_unix_group_from_config (const DBusString *groupname,
                                   dbus_gid_t      *gid_p)
{
    return FALSE;
}

/**
 * Parse a UNIX user from the bus config file. On Windows, this should
 * simply always fail (just return #FALSE).
 *
 * @param username the username text
 * @param uid_p place to return the uid
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_parse_unix_user_from_config (const DBusString *username,
                                  dbus_uid_t      *uid_p)
{
    return FALSE;
}

/**
 * Gets all groups corresponding to the given UNIX user ID. On UNIX,
 * just calls _dbus_groups_from_uid(). On Windows, should always
 * fail since we don't know any UNIX groups.
 *
 * @param uid the UID
 * @param group_ids return location for array of group IDs

```

```

* @param n_group_ids return location for length of returned array
* @returns #TRUE if the UID existed and we got some credentials
*/
dbus_bool_t
_dbus_unix_groups_from_uid (dbus_uid_t          uid,
                           dbus_gid_t          **group_ids,
                           int                 *n_group_ids)
{
    return FALSE;
}

/** @} */ /* DBusString stuff */

/*****
***

error handling

*****/

/* lan manager error codes */
const char*
_dbus_lm_strerror(int error_number)
{
#ifdef DBUS_WINCE
    // TODO
    return "unknown";
#else
    const char *msg;
    switch (error_number)
    {
        case NERR_NetNotStarted:
            return "The workstation driver is not installed.";
        case NERR_UnknownServer:
            return "The server could not be located.";
        case NERR_ShareMem:
            return "An internal error occurred. The network cannot access a
shared memory segment.";
        case NERR_NoNetworkResource:
            return "A network resource shortage occurred.";
        case NERR_RemoteOnly:
            return "This operation is not supported on workstations.";
        case NERR_DevNotRedirected:
            return "The device is not connected.";
    }

```

```
case NERR_ServerNotStarted:
    return "The Server service is not started.";
case NERR_ItemNotFound:
    return "The queue is empty.";
case NERR_UnknownDevDir:
    return "The device or directory does not exist.";
case NERR_RedirectedPath:
    return "The operation is invalid on a redirected resource.";
case NERR_DuplicateShare:
    return "The name has already been shared.";
case NERR_NoRoom:
    return "The server is currently out of the requested resource.";
case NERR_TooManyItems:
    return "Requested addition of items exceeds the maximum
allowed.";
case NERR_InvalidMaxUsers:
    return "The Peer service supports only two simultaneous users.";
case NERR_BufTooSmall:
    return "The API return buffer is too small.";
case NERR_RemoteErr:
    return "A remote API error occurred.";
case NERR_LanmanIniError:
    return "An error occurred when opening or reading the
configuration file.";
case NERR_NetworkError:
    return "A general network error occurred.";
case NERR_WkstaInconsistentState:
    return "The Workstation service is in an inconsistent state.
Restart the computer before restarting the Workstation service.";
case NERR_WkstaNotStarted:
    return "The Workstation service has not been started.";
case NERR_BrowserNotStarted:
    return "The requested information is not available.";
case NERR_InternalError:
    return "An internal error occurred.";
case NERR_BadTransactConfig:
    return "The server is not configured for transactions.";
case NERR_InvalidAPI:
    return "The requested API is not supported on the remote
server.";
case NERR_BadEventName:
    return "The event name is invalid.";
case NERR_DupNameReboot:
    return "The computer name already exists on the network. Change
it and restart the computer.";
case NERR_CfgCompNotFound:
    return "The specified component could not be found in the
configuration information.";
case NERR_CfgParamNotFound:
    return "The specified parameter could not be found in the
configuration information.";
case NERR_LineTooLong:
```

```
    return "A line in the configuration file is too long.";
case NERR_QNotFound:
    return "The printer does not exist.";
case NERR_JobNotFound:
    return "The print job does not exist.";
case NERR_DestNotFound:
    return "The printer destination cannot be found.";
case NERR_DestExists:
    return "The printer destination already exists.";
case NERR_QExists:
    return "The printer queue already exists.";
case NERR_QNoRoom:
    return "No more printers can be added.";
case NERR_JobNoRoom:
    return "No more print jobs can be added.";
case NERR_DestNoRoom:
    return "No more printer destinations can be added.";
case NERR_DestIdle:
    return "This printer destination is idle and cannot accept
control operations.";
case NERR_DestInvalidOp:
    return "This printer destination request contains an invalid
control function.";
case NERR_ProcNoRespond:
    return "The print processor is not responding.";
case NERR_SpoolerNotLoaded:
    return "The spooler is not running.";
case NERR_DestInvalidState:
    return "This operation cannot be performed on the print
destination in its current state.";
case NERR_QInvalidState:
    return "This operation cannot be performed on the printer queue
in its current state.";
case NERR_JobInvalidState:
    return "This operation cannot be performed on the print job in
its current state.";
case NERR_SpoolNoMemory:
    return "A spooler memory allocation failure occurred.";
case NERR_DriverNotFound:
    return "The device driver does not exist.";
case NERR_DataTypeInvalid:
    return "The data type is not supported by the print processor.";
case NERR_ProcNotFound:
    return "The print processor is not installed.";
case NERR_ServiceTableLocked:
    return "The service database is locked.";
case NERR_ServiceTableFull:
    return "The service table is full.";
case NERR_ServiceInstalled:
    return "The requested service has already been started.";
case NERR_ServiceEntryLocked:
    return "The service does not respond to control actions.";
```

```
case NERR_ServiceNotInstalled:
    return "The service has not been started.";
case NERR_BadServiceName:
    return "The service name is invalid.";
case NERR_ServiceCtlTimeout:
    return "The service is not responding to the control function.";
case NERR_ServiceCtlBusy:
    return "The service control is busy.";
case NERR_BadServiceProgName:
    return "The configuration file contains an invalid service
program name.";
case NERR_ServiceNotCtrl:
    return "The service could not be controlled in its present
state.";
case NERR_ServiceKillProc:
    return "The service ended abnormally.";
case NERR_ServiceCtlNotValid:
    return "The requested pause or stop is not valid for this
service.";
case NERR_NotInDispatchTbl:
    return "The service control dispatcher could not find the
service name in the dispatch table.";
case NERR_BadControlRecv:
    return "The service control dispatcher pipe read failed.";
case NERR_ServiceNotStarting:
    return "A thread for the new service could not be created.";
case NERR_AlreadyLoggedOn:
    return "This workstation is already logged on to the local-area
network.";
case NERR_NotLoggedOn:
    return "The workstation is not logged on to the local-area
network.";
case NERR_BadUsername:
    return "The user name or group name parameter is invalid.";
case NERR_BadPassword:
    return "The password parameter is invalid.";
case NERR_UnableToAddName_W:
    return "@W The logon processor did not add the message alias.";
case NERR_UnableToAddName_F:
    return "The logon processor did not add the message alias.";
case NERR_UnableToDelName_W:
    return "@W The logoff processor did not delete the message
alias.";
case NERR_UnableToDelName_F:
    return "The logoff processor did not delete the message alias.";
case NERR_LogonsPaused:
    return "Network logons are paused.";
case NERR_LogonServerConflict:
    return "A centralized logon-server conflict occurred.";
case NERR_LogonNoUserPath:
    return "The server is configured without a valid user path.";
case NERR_LogonScriptError:
```

```
    return "An error occurred while loading or running the logon
script.";
    case NERR_StandAloneLogon:
        return "The logon server was not specified. Your computer will
be logged on as STANDALONE.";
    case NERR_LogonServerNotFound:
        return "The logon server could not be found.";
    case NERR_LogonDomainExists:
        return "There is already a logon domain for this computer.";
    case NERR_NonValidatedLogon:
        return "The logon server could not validate the logon.";
    case NERR_ACFNotFound:
        return "The security database could not be found.";
    case NERR_GroupNotFound:
        return "The group name could not be found.";
    case NERR_UserNotFound:
        return "The user name could not be found.";
    case NERR_ResourceNotFound:
        return "The resource name could not be found.";
    case NERR_GroupExists:
        return "The group already exists.";
    case NERR_UserExists:
        return "The user account already exists.";
    case NERR_ResourceExists:
        return "The resource permission list already exists.";
    case NERR_NotPrimary:
        return "This operation is only allowed on the primary domain
controller of the domain.";
    case NERR_ACFNotLoaded:
        return "The security database has not been started.";
    case NERR_ACFNoRoom:
        return "There are too many names in the user accounts
database.";
    case NERR_ACFFileIOFail:
        return "A disk I/O failure occurred.";
    case NERR_ACFTooManyLists:
        return "The limit of 64 entries per resource was exceeded.";
    case NERR_UserLogon:
        return "Deleting a user with a session is not allowed.";
    case NERR_ACFNoParent:
        return "The parent directory could not be located.";
    case NERR_CanNotGrowSegment:
        return "Unable to add to the security database session cache
segment.";
    case NERR_SpeGroupOp:
        return "This operation is not allowed on this special group.";
    case NERR_NotInCache:
        return "This user is not cached in user accounts database
session cache.";
    case NERR_UserInGroup:
        return "The user already belongs to this group.";
    case NERR_UserNotInGroup:
```



```
    return "The user does not belong to this group.";
case NERR_AccountUndefined:
    return "This user account is undefined.";
case NERR_AccountExpired:
    return "This user account has expired.";
case NERR_InvalidWorkstation:
    return "The user is not allowed to log on from this
workstation.";
case NERR_InvalidLogonHours:
    return "The user is not allowed to log on at this time.";
case NERR_PasswordExpired:
    return "The password of this user has expired.";
case NERR_PasswordCantChange:
    return "The password of this user cannot change.";
case NERR_PasswordHistConflict:
    return "This password cannot be used now.";
case NERR_PasswordTooShort:
    return "The password does not meet the password policy
requirements. Check the minimum password length, password complexity
and password history requirements.";
case NERR_PasswordTooRecent:
    return "The password of this user is too recent to change.";
case NERR_InvalidDatabase:
    return "The security database is corrupted.";
case NERR_DatabaseUpToDate:
    return "No updates are necessary to this replicant network/local
security database.";
case NERR_SyncRequired:
    return "This replicant database is outdated; synchronization is
required.";
case NERR_UseNotFound:
    return "The network connection could not be found.";
case NERR_BadAsgType:
    return "This asg_type is invalid.";
case NERR_DeviceIsShared:
    return "This device is currently being shared.";
case NERR_NoComputerName:
    return "The computer name could not be added as a message alias.
The name may already exist on the network.";
case NERR_MsgAlreadyStarted:
    return "The Messenger service is already started.";
case NERR_MsgInitFailed:
    return "The Messenger service failed to start.";
case NERR_NameNotFound:
    return "The message alias could not be found on the network.";
case NERR_AlreadyForwarded:
    return "This message alias has already been forwarded.";
case NERR_AddForwarded:
    return "This message alias has been added but is still
forwarded.";
case NERR_AlreadyExists:
    return "This message alias already exists locally.";
```

```
    case NERR_TooManyNames:
        return "The maximum number of added message aliases has been
exceeded.";
    case NERR_DelComputerName:
        return "The computer name could not be deleted.";
    case NERR_LocalForward:
        return "Messages cannot be forwarded back to the same
workstation.";
    case NERR_GrpMsgProcessor:
        return "An error occurred in the domain message processor.";
    case NERR_PausedRemote:
        return "The message was sent, but the recipient has paused the
Messenger service.";
    case NERR_BadReceive:
        return "The message was sent but not received.";
    case NERR_NameInUse:
        return "The message alias is currently in use. Try again
later.";
    case NERR_MsgNotStarted:
        return "The Messenger service has not been started.";
    case NERR_NotLocalName:
        return "The name is not on the local computer.";
    case NERR_NoForwardName:
        return "The forwarded message alias could not be found on the
network.";
    case NERR_RemoteFull:
        return "The message alias table on the remote station is full.";
    case NERR_NameNotForwarded:
        return "Messages for this alias are not currently being
forwarded.";
    case NERR_TruncatedBroadcast:
        return "The broadcast message was truncated.";
    case NERR_InvalidDevice:
        return "This is an invalid device name.";
    case NERR_WriteFault:
        return "A write fault occurred.";
    case NERR_DuplicateName:
        return "A duplicate message alias exists on the network.";
    case NERR_DeleteLater:
        return "@W This message alias will be deleted later.";
    case NERR_IncompleteDel:
        return "The message alias was not successfully deleted from all
networks.";
    case NERR_MultipleNets:
        return "This operation is not supported on computers with
multiple networks.";
    case NERR_NetNameNotFound:
        return "This shared resource does not exist.";
    case NERR_DeviceNotShared:
        return "This device is not shared.";
    case NERR_ClientNameNotFound:
        return "A session does not exist with that computer name.";
```

```

    case NERR_FileIdNotFound:
        return "There is not an open file with that identification
number.";
    case NERR_ExecFailure:
        return "A failure occurred when executing a remote
administration command.";
    case NERR_TmpFile:
        return "A failure occurred when opening a remote temporary
file.";
    case NERR_TooMuchData:
        return "The data returned from a remote administration command
has been truncated to 64K.";
    case NERR_DeviceShareConflict:
        return "This device cannot be shared as both a spooled and a
non-spooled resource.";
    case NERR_BrowserTableIncomplete:
        return "The information in the list of servers may be
incorrect.";
    case NERR_NotLocalDomain:
        return "The computer is not active in this domain.";
#ifdef NERR_IsDfsShare

    case NERR_IsDfsShare:
        return "The share must be removed from the Distributed File
System before it can be deleted.";
#endif

    case NERR_DevInvalidOpCode:
        return "The operation is invalid for this device.";
    case NERR_DevNotFound:
        return "This device cannot be shared.";
    case NERR_DevNotOpen:
        return "This device was not open.";
    case NERR_BadQueueDevString:
        return "This device name list is invalid.";
    case NERR_BadQueuePriority:
        return "The queue priority is invalid.";
    case NERR_NoCommDevs:
        return "There are no shared communication devices.";
    case NERR_QueueNotFound:
        return "The queue you specified does not exist.";
    case NERR_BadDevString:
        return "This list of devices is invalid.";
    case NERR_BadDev:
        return "The requested device is invalid.";
    case NERR_InUseBySpooler:
        return "This device is already in use by the spooler.";
    case NERR_CommDevInUse:
        return "This device is already in use as a communication
device.";
    case NERR_InvalidComputer:
        return "This computer name is invalid.";

```

```
case NERR_MaxLenExceeded:
    return "The string and prefix specified are too long.";
case NERR_BadComponent:
    return "This path component is invalid.";
case NERR_CantType:
    return "Could not determine the type of input.";
case NERR_TooManyEntries:
    return "The buffer for types is not big enough.";
case NERR_ProfileFileTooBig:
    return "Profile files cannot exceed 64K.";
case NERR_ProfileOffset:
    return "The start offset is out of range.";
case NERR_ProfileCleanup:
    return "The system cannot delete current connections to network
resources.";
case NERR_ProfileUnknownCmd:
    return "The system was unable to parse the command line in this
file.";
case NERR_ProfileLoadErr:
    return "An error occurred while loading the profile file.";
case NERR_ProfileSaveErr:
    return "@W Errors occurred while saving the profile file. The
profile was partially saved.";
case NERR_LogOverflow:
    return "Log file %1 is full.";
case NERR_LogFileChanged:
    return "This log file has changed between reads.";
case NERR_LogFileCorrupt:
    return "Log file %1 is corrupt.";
case NERR_SourceIsDir:
    return "The source path cannot be a directory.";
case NERR_BadSource:
    return "The source path is illegal.";
case NERR_BadDest:
    return "The destination path is illegal.";
case NERR_DifferentServers:
    return "The source and destination paths are on different
servers.";
case NERR_RunSrvPaused:
    return "The Run server you requested is paused.";
case NERR_ErrCommRunSrv:
    return "An error occurred when communicating with a Run
server.";
case NERR_ErrorExecingGhost:
    return "An error occurred when starting a background process.";
case NERR_ShareNotFound:
    return "The shared resource you are connected to could not be
found.";
case NERR_InvalidLana:
    return "The LAN adapter number is invalid.";
case NERR_OpenFiles:
    return "There are open files on the connection.";
```

```
case NERR_ActiveConns:
    return "Active connections still exist.";
case NERR_BadPasswordCore:
    return "This share name or password is invalid.";
case NERR_DevInUse:
    return "The device is being accessed by an active process.";
case NERR_LocalDrive:
    return "The drive letter is in use locally.";
case NERR_AlertExists:
    return "The specified client is already registered for the
specified event.";
case NERR_TooManyAlerts:
    return "The alert table is full.";
case NERR_NoSuchAlert:
    return "An invalid or nonexistent alert name was raised.";
case NERR_BadRecipient:
    return "The alert recipient is invalid.";
case NERR_AcctLimitExceeded:
    return "A user's session with this server has been deleted.";
case NERR_InvalidLogSeek:
    return "The log file does not contain the requested record
number.";
case NERR_BadUasConfig:
    return "The user accounts database is not configured
correctly.";
case NERR_InvalidUASOp:
    return "This operation is not permitted when the Netlogon
service is running.";
case NERR_LastAdmin:
    return "This operation is not allowed on the last administrative
account.";
case NERR_DCNotFound:
    return "Could not find domain controller for this domain.";
case NERR_LogonTrackingError:
    return "Could not set logon information for this user.";
case NERR_NetlogonNotStarted:
    return "The Netlogon service has not been started.";
case NERR_CanNotGrowUASFile:
    return "Unable to add to the user accounts database.";
case NERR_TimeDiffAtDC:
    return "This server's clock is not synchronized with the primary
domain controller's clock.";
case NERR_PasswordMismatch:
    return "A password mismatch has been detected.";
case NERR_NoSuchServer:
    return "The server identification does not specify a valid
server.";
case NERR_NoSuchSession:
    return "The session identification does not specify a valid
session.";
case NERR_NoSuchConnection:
```

```

        return "The connection identification does not specify a valid
connection.";
    case NERR_TooManyServers:
        return "There is no space for another entry in the table of
available servers.";
    case NERR_TooManySessions:
        return "The server has reached the maximum number of sessions it
supports.";
    case NERR_TooManyConnections:
        return "The server has reached the maximum number of connections
it supports.";
    case NERR_TooManyFiles:
        return "The server cannot open more files because it has reached
its maximum number.";
    case NERR_NoAlternateServers:
        return "There are no alternate servers registered on this
server.";
    case NERR_TryDownLevel:
        return "Try down-level (remote admin protocol) version of API
instead.";
    case NERR_UPSDriverNotStarted:
        return "The UPS driver could not be accessed by the UPS
service.";
    case NERR_UPSInvalidConfig:
        return "The UPS service is not configured correctly.";
    case NERR_UPSInvalidCommPort:
        return "The UPS service could not access the specified Comm
Port.";
    case NERR_UPSSignalAsserted:
        return "The UPS indicated a line fail or low battery situation.
Service not started.";
    case NERR_UPSShutdownFailed:
        return "The UPS service failed to perform a system shut down.";
    case NERR_BadDosRetCode:
        return "The program below returned an MS-DOS error code:";
    case NERR_ProgNeedsExtraMem:
        return "The program below needs more memory:";
    case NERR_BadDosFunction:
        return "The program below called an unsupported MS-DOS
function:";
    case NERR_RemoteBootFailed:
        return "The workstation failed to boot.";
    case NERR_BadFileCheckSum:
        return "The file below is corrupt.";
    case NERR_NoRplBootSystem:
        return "No loader is specified in the boot-block definition
file.";
    case NERR_RplLoadrNetBiosErr:
        return "NetBIOS returned an error:          The NCB and SMB are
dumped above.";
    case NERR_RplLoadrDiskErr:
        return "A disk I/O error occurred.";

```

```
case NERR_ImageParamErr:
    return "Image parameter substitution failed.";
case NERR_TooManyImageParams:
    return "Too many image parameters cross disk sector
boundaries.";
case NERR_NonDosFloppyUsed:
    return "The image was not generated from an MS-DOS diskette
formatted with /S.";
case NERR_RplBootRestart:
    return "Remote boot will be restarted later.";
case NERR_RplSrvrCallFailed:
    return "The call to the Remoteboot server failed.";
case NERR_CantConnectRplSrvr:
    return "Cannot connect to the Remoteboot server.";
case NERR_CantOpenImageFile:
    return "Cannot open image file on the Remoteboot server.";
case NERR_CallingRplSrvr:
    return "Connecting to the Remoteboot server...";
case NERR_StartingRplBoot:
    return "Connecting to the Remoteboot server...";
case NERR_RplBootServiceTerm:
    return "Remote boot service was stopped; check the error log for
the cause of the problem.";
case NERR_RplBootStartFailed:
    return "Remote boot startup failed; check the error log for the
cause of the problem.";
case NERR_RPL_CONNECTED:
    return "A second connection to a Remoteboot resource is not
allowed.";
case NERR_BrowserConfiguredToNotRun:
    return "The browser service was configured with
MaintainServerList=No.";
case NERR_RplNoAdaptersStarted:
    return "Service failed to start since none of the network
adapters started with this service.";
case NERR_RplBadRegistry:
    return "Service failed to start due to bad startup information
in the registry.";
case NERR_RplBadDatabase:
    return "Service failed to start because its database is absent
or corrupt.";
case NERR_RplRplfilesShare:
    return "Service failed to start because RPLFILES share is
absent.";
case NERR_RplNotRplServer:
    return "Service failed to start because RPLUSER group is
absent.";
case NERR_RplCannotEnum:
    return "Cannot enumerate service records.";
case NERR_RplWkstaInfoCorrupted:
    return "Workstation record information has been corrupted.";
case NERR_RplWkstaNotFound:
```

```
    return "Workstation record was not found.";
case NERR_RplWkstaNameUnavailable:
    return "Workstation name is in use by some other workstation.";
case NERR_RplProfileInfoCorrupted:
    return "Profile record information has been corrupted.";
case NERR_RplProfileNotFound:
    return "Profile record was not found.";
case NERR_RplProfileNameUnavailable:
    return "Profile name is in use by some other profile.";
case NERR_RplProfileNotEmpty:
    return "There are workstations using this profile.";
case NERR_RplConfigInfoCorrupted:
    return "Configuration record information has been corrupted.";
case NERR_RplConfigNotFound:
    return "Configuration record was not found.";
case NERR_RplAdapterInfoCorrupted:
    return "Adapter ID record information has been corrupted.";
case NERR_RplInternal:
    return "An internal service error has occurred.";
case NERR_RplVendorInfoCorrupted:
    return "Vendor ID record information has been corrupted.";
case NERR_RplBootInfoCorrupted:
    return "Boot block record information has been corrupted.";
case NERR_RplWkstaNeedsUserAcct:
    return "The user account for this workstation record is
missing.";
case NERR_RplNeedsRPLUSERAcct:
    return "The RPLUSER local group could not be found.";
case NERR_RplBootNotFound:
    return "Boot block record was not found.";
case NERR_RplIncompatibleProfile:
    return "Chosen profile is incompatible with this workstation.";
case NERR_RplAdapterNameUnavailable:
    return "Chosen network adapter ID is in use by some other
workstation.";
case NERR_RplConfigNotEmpty:
    return "There are profiles using this configuration.";
case NERR_RplBootInUse:
    return "There are workstations, profiles, or configurations
using this boot block.";
case NERR_RplBackupDatabase:
    return "Service failed to backup Remoteboot database.";
case NERR_RplAdapterNotFound:
    return "Adapter record was not found.";
case NERR_RplVendorNotFound:
    return "Vendor record was not found.";
case NERR_RplVendorNameUnavailable:
    return "Vendor name is in use by some other vendor record.";
case NERR_RplBootNameUnavailable:
    return "(boot name, vendor ID) is in use by some other boot
block record.";
case NERR_RplConfigNameUnavailable:
```



```
    return "Configuration name is in use by some other
configuration.";
    case NERR_DfsInternalCorruption:
        return "The internal database maintained by the Dfs service is
corrupt.";
    case NERR_DfsVolumeDataCorrupt:
        return "One of the records in the internal Dfs database is
corrupt.";
    case NERR_DfsNoSuchVolume:
        return "There is no DFS name whose entry path matches the input
Entry Path.";
    case NERR_DfsVolumeAlreadyExists:
        return "A root or link with the given name already exists.";
    case NERR_DfsAlreadyShared:
        return "The server share specified is already shared in the
Dfs.";
    case NERR_DfsNoSuchShare:
        return "The indicated server share does not support the
indicated DFS namespace.";
    case NERR_DfsNotALeafVolume:
        return "The operation is not valid on this portion of the
namespace.";
    case NERR_DfsLeafVolume:
        return "The operation is not valid on this portion of the
namespace.";
    case NERR_DfsVolumeHasMultipleServers:
        return "The operation is ambiguous because the link has multiple
servers.";
    case NERR_DfsCantCreateJunctionPoint:
        return "Unable to create a link.";
    case NERR_DfsServerNotDfsAware:
        return "The server is not Dfs Aware.";
    case NERR_DfsBadRenamePath:
        return "The specified rename target path is invalid.";
    case NERR_DfsVolumeIsOffline:
        return "The specified DFS link is offline.";
    case NERR_DfsNoSuchServer:
        return "The specified server is not a server for this link.";
    case NERR_DfsCyclicalName:
        return "A cycle in the Dfs name was detected.";
    case NERR_DfsNotSupportedInServerDfs:
        return "The operation is not supported on a server-based Dfs.";
    case NERR_DfsDuplicateService:
        return "This link is already supported by the specified server-
share.";
    case NERR_DfsCantRemoveLastServerShare:
        return "Can't remove the last server-share supporting this root
or link.";
    case NERR_DfsVolumeIsInterDfs:
        return "The operation is not supported for an Inter-DFS link.";
    case NERR_DfsInconsistent:
```

```

        return "The internal state of the Dfs Service has become
inconsistent.";
        case NERR_DfsServerUpgraded:
            return "The Dfs Service has been installed on the specified
server.";
        case NERR_DfsDataIsIdentical:
            return "The Dfs data being reconciled is identical.";
        case NERR_DfsCantRemoveDfsRoot:
            return "The DFS root cannot be deleted. Uninstall DFS if
required.";
        case NERR_DfsChildOrParentInDfs:
            return "A child or parent directory of the share is already in a
Dfs.";
        case NERR_DfsInternalError:
            return "Dfs internal error.";
            /* the following are not defined in mingw */
#ifdef 0

        case NERR_SetupAlreadyJoined:
            return "This machine is already joined to a domain.";
        case NERR_SetupNotJoined:
            return "This machine is not currently joined to a domain.";
        case NERR_SetupDomainController:
            return "This machine is a domain controller and cannot be
unjoined from a domain.";
        case NERR_DefaultJoinRequired:
            return "The destination domain controller does not support
creating machine accounts in OUs.";
        case NERR_InvalidWorkgroupName:
            return "The specified workgroup name is invalid.";
        case NERR_NameUsesIncompatibleCodePage:
            return "The specified computer name is incompatible with the
default language used on the domain controller.";
        case NERR_ComputerAccountNotFound:
            return "The specified computer account could not be found.";
        case NERR_PersonalSku:
            return "This version of Windows cannot be joined to a domain.";
        case NERR_PasswordMustChange:
            return "The password must change at the next logon.";
        case NERR_AccountLockedOut:
            return "The account is locked out.";
        case NERR_PasswordTooLong:
            return "The password is too long.";
        case NERR_PasswordNotComplexEnough:
            return "The password does not meet the complexity policy.";
        case NERR_PasswordFilterError:
            return "The password does not meet the requirements of the
password filter DLLs.";
#endif

    }
    msg = strerror (error_number);

```

```

    if (msg == NULL)
        msg = "unknown";

    return msg;
#endif //DBUS_WINCE
}

/**
 * Get a printable string describing the command used to execute
 * the process with pid. This string should only be used for
 * informative purposes such as logging; it may not be trusted.
 *
 * The command is guaranteed to be printable ASCII and no longer
 * than max_len.
 *
 * @param pid Process id
 * @param str Append command to this string
 * @param max_len Maximum length of returned command
 * @param error return location for errors
 * @returns #FALSE on error
 */
dbus_bool_t
_dbus_command_for_pid (unsigned long pid,
                      DBusString *str,
                      int max_len,
                      DBusError *error)
{
    // FIXME
    return FALSE;
}

```

File = dbus-sysdeps-util.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps-util.c Tests for dbus-sysdeps.h API
 *
 * Copyright (C) 2002, 2003, 2004, 2005 Red Hat, Inc.
 * Copyright (C) 2003 CodeFactory AB
 *
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```

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*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include <config.h>
#include "dbus-sysdeps.h"
#include "dbus-internals.h"
#include "dbus-string.h"
#include "dbus-test.h"
```

```
#include <stdlib.h>
```

```
#ifndef DBUS_WIN
/* do nothing, it's in stdlib.h */
#elif (defined __APPLE__)
# include <crt_externs.h>
# define environ (*_NSGetEnviron())
#else
extern char **environ;
#endif
```

```
/**
 * Gets a #NULL-terminated list of key=value pairs from the
 * environment. Use dbus_free_string_array to free it.
 *
 * @returns the environment or #NULL on OOM
 */
```

```
char **
_dbus_get_environment (void)
{
    int i, length;
    char **environment;

    _dbus_assert (environ != NULL);

    for (length = 0; environ[length] != NULL; length++);

    /* Add one for NULL */
    length++;

    environment = dbus_new0 (char *, length);

    if (environment == NULL)
        return NULL;

    for (i = 0; environ[i] != NULL; i++)
```

```

    {
        environment[i] = _dbus_strdup (environ[i]);

        if (environment[i] == NULL)
            break;
    }

    if (environ[i] != NULL)
    {
        dbus_free_string_array (environment);
        environment = NULL;
    }

    return environment;
}

#ifdef DBUS_BUILD_TESTS
static void
check_dirname (const char *filename,
               const char *dirname)
{
    DBusString f, d;

    _dbus_string_init_const (&f, filename);

    if (!_dbus_string_init (&d))
        _dbus_assert_not_reached ("no memory");

    if (!_dbus_string_get_dirname (&f, &d))
        _dbus_assert_not_reached ("no memory");

    if (!_dbus_string_equal_c_str (&d, dirname))
    {
        _dbus_warn ("For filename \"%s\" got dirname \"%s\" and expected
\"%s\"\\n",
                  filename,
                  _dbus_string_get_const_data (&d),
                  dirname);
        exit (1);
    }

    _dbus_string_free (&d);
}

static void
check_path_absolute (const char *path,
                    dbus_bool_t expected)
{
    DBusString p;

    _dbus_string_init_const (&p, path);

```

```

if (_dbus_path_is_absolute (&p) != expected)
{
    _dbus_warn ("For path \"%s\" expected absolute = %d got %d\n",
                path, expected, _dbus_path_is_absolute (&p));
    exit (1);
}
}

/**
 * Unit test for dbus-sysdeps.c.
 *
 * @returns #TRUE on success.
 */
dbus_bool_t
_dbus_sysdeps_test (void)
{
#ifdef DBUS_WIN
    check_dirname ("foo\\bar", "foo");
    check_dirname ("foo\\\\bar", "foo");
    check_dirname ("foo\\/\\/bar", "foo");
    check_dirname ("foo\\bar/", "foo");
    check_dirname ("foo//bar\\", "foo");
    check_dirname ("foo\\bar/", "foo");
    check_dirname ("foo/bar\\\\", "foo");
    check_dirname ("\\foo", "\\");
    check_dirname ("\\\\foo", "\\");
    check_dirname ("\\", "\\");
    check_dirname ("\\\\", "\\");
    check_dirname ("\\/", "\\");
    check_dirname ("/\\/", "/");
    check_dirname ("c:\\foo\\bar", "c:\\foo");
    check_dirname ("c:\\foo", "c:\\");
    check_dirname ("c:/foo", "c:/");
    check_dirname ("c:\\", "c:\\");
    check_dirname ("c:/", "c:/");
    check_dirname ("", ".");
#else
    check_dirname ("foo", ".");
    check_dirname ("foo/bar", "foo");
    check_dirname ("foo//bar", "foo");
    check_dirname ("foo///bar", "foo");
    check_dirname ("foo/bar/", "foo");
    check_dirname ("foo//bar/", "foo");
    check_dirname ("foo///bar/", "foo");
    check_dirname ("foo/bar//", "foo");
    check_dirname ("foo//bar///", "foo");
    check_dirname ("foo///bar////", "foo");
    check_dirname ("/foo", "/");
    check_dirname ("////foo", "/");
    check_dirname ("/foo/bar", "/foo");
    check_dirname ("/foo//bar", "/foo");
    check_dirname ("/foo///bar", "/foo");

```

```

    check_dirname ("/", "/");
    check_dirname ("///", "/");
    check_dirname ("", ".");
#endif

#ifdef DBUS_WIN
    check_path_absolute ("c:/", TRUE);
    check_path_absolute ("c:/foo", TRUE);
    check_path_absolute ("", FALSE);
    check_path_absolute ("foo", FALSE);
    check_path_absolute ("foo/bar", FALSE);
    check_path_absolute ("", FALSE);
    check_path_absolute ("foo\\bar", FALSE);
    check_path_absolute ("c:\\", TRUE);
    check_path_absolute ("c:\\foo", TRUE);
    check_path_absolute ("c:", TRUE);
    check_path_absolute ("c:\\foo\\bar", TRUE);
    check_path_absolute ("\\", TRUE);
    check_path_absolute ("/", TRUE);
#else
    check_path_absolute ("/", TRUE);
    check_path_absolute ("/foo", TRUE);
    check_path_absolute ("", FALSE);
    check_path_absolute ("foo", FALSE);
    check_path_absolute ("foo/bar", FALSE);
#endif

    return TRUE;
}
#endif /* DBUS_BUILD_TESTS */

```

File = dbus-sysdeps-win.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps.c Wrappers around system/libc features (internal to D-
BUS implementation)
*
* Copyright (C) 2002, 2003 Red Hat, Inc.
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* Copyright (C) 2006 Peter KÄmmel <syntheticcpp@gmx.net>
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* Copyright (C) 2006-2010 Ralf Habacker <ralf.habacker@freenet.de>
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*/
```

```
#include <config.h>
```

```
#define STRSAFE_NO_DEPRECATED
```

```
#ifndef DBUS_WINCE
#ifndef _WIN32_WINNT
#define _WIN32_WINNT 0x0501
#endif
#endif
```

```
#include "dbus-internals.h"
#include "dbus-sha.h"
#include "dbus-sysdeps.h"
#include "dbus-threads.h"
#include "dbus-protocol.h"
#include "dbus-string.h"
#include "dbus-sysdeps.h"
#include "dbus-sysdeps-win.h"
#include "dbus-protocol.h"
#include "dbus-hash.h"
#include "dbus-sockets-win.h"
#include "dbus-list.h"
#include "dbus-nonce.h"
#include "dbus-credentials.h"
```

```
#include <windows.h>
#include <ws2tcpip.h>
#include <wincrypt.h>
```

```
/* Declarations missing in mingw's headers */
extern BOOL WINAPI ConvertStringSidToSidA (LPCSTR StringSid, PSID
*Sid);
extern BOOL WINAPI ConvertSidToStringSidA (PSID Sid, LPSTR
*StringSid);
```

```
#include <stdio.h>
```



```

#include <string.h>
#if HAVE_ERRNO_H
#include <errno.h>
#endif
#ifndef DBUS_WINCE
#include <mbstring.h>
#include <sys/stat.h>
#include <sys/types.h>
#endif

#ifdef HAVE_WS2TCPIP_H
/* getaddrinfo for Windows CE (and Windows). */
#include <ws2tcpip.h>
#endif

#ifdef HAVE_WSPIAPI_H
// needed for w2k compatibility (getaddrinfo/freeaddrinfo/getnameinfo)
#ifdef __GNUC__
#define _inline
#include "wspiapi.h"
#else
#include <wsapiapi.h>
#endif
#endif // HAVE_WSPIAPI_H

#ifndef O_BINARY
#define O_BINARY 0
#endif

typedef int socklen_t;

void
_dbus_win_set_errno (int err)
{
#ifdef DBUS_WINCE
    SetLastError (err);
#else
    errno = err;
#endif
}

/* Convert GetLastError() to a dbus error. */
const char*
_dbus_win_error_from_last_error (void)
{
    switch (GetLastError())
    {
        case 0:
            return DBUS_ERROR_FAILED;
    }
}

```

```

case ERROR_NO_MORE_FILES:
case ERROR_TOO_MANY_OPEN_FILES:
    return DBUS_ERROR_LIMITS_EXCEEDED; /* kernel out of memory */

case ERROR_ACCESS_DENIED:
case ERROR_CANNOT_MAKE:
    return DBUS_ERROR_ACCESS_DENIED;

case ERROR_NOT_ENOUGH_MEMORY:
    return DBUS_ERROR_NO_MEMORY;

case ERROR_FILE_EXISTS:
    return DBUS_ERROR_FILE_EXISTS;

case ERROR_FILE_NOT_FOUND:
case ERROR_PATH_NOT_FOUND:
    return DBUS_ERROR_FILE_NOT_FOUND;
}

return DBUS_ERROR_FAILED;
}

char*
_dbus_win_error_string (int error_number)
{
    char *msg;

    FormatMessageA (FORMAT_MESSAGE_ALLOCATE_BUFFER |
                   FORMAT_MESSAGE_IGNORE_INSERTS |
                   FORMAT_MESSAGE_FROM_SYSTEM,
                   NULL, error_number, 0,
                   (LPSTR) &msg, 0, NULL);

    if (msg[strlen (msg) - 1] == '\n')
        msg[strlen (msg) - 1] = '\0';
    if (msg[strlen (msg) - 1] == '\r')
        msg[strlen (msg) - 1] = '\0';

    return msg;
}

void
_dbus_win_free_error_string (char *string)
{
    LocalFree (string);
}

/**
 * Socket interface
 *
 */

```

```

/**
 * Thin wrapper around the read() system call that appends
 * the data it reads to the DBusString buffer. It appends
 * up to the given count, and returns the same value
 * and same errno as read(). The only exception is that
 * _dbus_read_socket() handles EINTR for you.
 * _dbus_read_socket() can return ENOMEM, even though
 * regular UNIX read doesn't.
 *
 * @param fd the file descriptor to read from
 * @param buffer the buffer to append data to
 * @param count the amount of data to read
 * @returns the number of bytes read or -1
 */

int
_dbus_read_socket (int          fd,
                  DBusString  *buffer,
                  int          count)
{
    int bytes_read;
    int start;
    char *data;

    _dbus_assert (count >= 0);

    start = _dbus_string_get_length (buffer);

    if (!_dbus_string_lengthen (buffer, count))
    {
        _dbus_win_set_errno (ENOMEM);
        return -1;
    }

    data = _dbus_string_get_data_len (buffer, start, count);

again:

    _dbus_verbose ("recv: count=%d fd=%d\n", count, fd);
    bytes_read = recv (fd, data, count, 0);

    if (bytes_read == SOCKET_ERROR)
    {
        DBUS_SOCKET_SET_ERRNO();
        _dbus_verbose ("recv: failed: %s (%d)\n", _dbus_strerror
(errno), errno);
        bytes_read = -1;
    }
    else
        _dbus_verbose ("recv: = %d\n", bytes_read);
}

```

```

    if (bytes_read < 0)
    {
        if (errno == EINTR)
            goto again;
        else
            {
                /* put length back (note that this doesn't actually realloc
anything) */
                _dbus_string_set_length (buffer, start);
                return -1;
            }
    }
    else
    {
        /* put length back (doesn't actually realloc) */
        _dbus_string_set_length (buffer, start + bytes_read);
    }

#ifdef 0
    if (bytes_read > 0)
        _dbus_verbose_bytes_of_string (buffer, start, bytes_read);
#endif

    return bytes_read;
}

/**
 * Thin wrapper around the write() system call that writes a part of a
 * DBusString and handles EINTR for you.
 *
 * @param fd the file descriptor to write
 * @param buffer the buffer to write data from
 * @param start the first byte in the buffer to write
 * @param len the number of bytes to try to write
 * @returns the number of bytes written or -1 on error
 */
int
_dbus_write_socket (int          fd,
                   const DBusString *buffer,
                   int          start,
                   int          len)
{
    const char *data;
    int bytes_written;

    data = _dbus_string_get_const_data_len (buffer, start, len);

again:

    _dbus_verbose ("send: len=%d fd=%d\n", len, fd);
    bytes_written = send (fd, data, len, 0);

```

```

if (bytes_written == SOCKET_ERROR)
{
    DBUS_SOCKET_SET_ERRNO();
    _dbus_verbose ("send: failed: %s\n", _dbus_strerror_from_errno
());
    bytes_written = -1;
}
else
    _dbus_verbose ("send: = %d\n", bytes_written);

if (bytes_written < 0 && errno == EINTR)
    goto again;

#if 0
if (bytes_written > 0)
    _dbus_verbose_bytes_of_string (buffer, start, bytes_written);
#endif

return bytes_written;
}

/**
 * Closes a file descriptor.
 *
 * @param fd the file descriptor
 * @param error error object
 * @returns #FALSE if error set
 */
dbus_bool_t
_dbus_close_socket (int fd,
                   DBusError *error)
{
    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

again:
if (closesocket (fd) == SOCKET_ERROR)
{
    DBUS_SOCKET_SET_ERRNO ();

    if (errno == EINTR)
        goto again;

    dbus_set_error (error, _dbus_error_from_errno (errno),
                   "Could not close socket: socket=%d, , %s",
                   fd, _dbus_strerror_from_errno ());

    return FALSE;
}
_dbus_verbose ("_dbus_close_socket: socket=%d, \n", fd);

return TRUE;
}

```

```

/**
 * Sets the file descriptor to be close
 * on exec. Should be called for all file
 * descriptors in D-Bus code.
 *
 * @param fd the file descriptor
 */
void
_dbus_fd_set_close_on_exec (intptr_t handle)
{
    if ( !SetHandleInformation( (HANDLE) handle,
                                HANDLE_FLAG_INHERIT |
HANDLE_FLAG_PROTECT_FROM_CLOSE,
                                0 /*disable both flags*/ ) )
    {
        _dbus_win_warn_win_error ("Disabling socket handle inheritance
failed:", GetLastError());
    }
}

/**
 * Sets a file descriptor to be nonblocking.
 *
 * @param fd the file descriptor.
 * @param error address of error location.
 * @returns #TRUE on success.
 */
dbus_bool_t
_dbus_set_fd_nonblocking (int          handle,
                          DBusError   *error)
{
    u_long one = 1;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (ioctlsocket (handle, FIONBIO, &one) == SOCKET_ERROR)
    {
        DBUS_SOCKET_SET_ERRNO ();
        dbus_set_error (error, _dbus_error_from_errno (errno),
                        "Failed to set socket %d:%d to nonblocking: %s",
handle,
                        _dbus_strerror_from_errno ());
        return FALSE;
    }

    return TRUE;
}

/**
 * Like _dbus_write() but will use writev() if possible

```

```

* to write both buffers in sequence. The return value
* is the number of bytes written in the first buffer,
* plus the number written in the second. If the first
* buffer is written successfully and an error occurs
* writing the second, the number of bytes in the first
* is returned (i.e. the error is ignored), on systems that
* don't have writev. Handles EINTR for you.
* The second buffer may be #NULL.
*
* @param fd the file descriptor
* @param buffer1 first buffer
* @param start1 first byte to write in first buffer
* @param len1 number of bytes to write from first buffer
* @param buffer2 second buffer, or #NULL
* @param start2 first byte to write in second buffer
* @param len2 number of bytes to write in second buffer
* @returns total bytes written from both buffers, or -1 on error
*/
int
_dbus_write_socket_two (int          fd,
                       const DBusString *buffer1,
                       int          start1,
                       int          len1,
                       const DBusString *buffer2,
                       int          start2,
                       int          len2)
{
    WSABUF vectors[2];
    const char *data1;
    const char *data2;
    int rc;
    DWORD bytes_written;

    _dbus_assert (buffer1 != NULL);
    _dbus_assert (start1 >= 0);
    _dbus_assert (start2 >= 0);
    _dbus_assert (len1 >= 0);
    _dbus_assert (len2 >= 0);

    data1 = _dbus_string_get_const_data_len (buffer1, start1, len1);

    if (buffer2 != NULL)
        data2 = _dbus_string_get_const_data_len (buffer2, start2, len2);
    else
    {
        data2 = NULL;
        start2 = 0;
        len2 = 0;
    }

    vectors[0].buf = (char*) data1;

```

```

vectors[0].len = len1;
vectors[1].buf = (char*) data2;
vectors[1].len = len2;

again:

_dbus_verbose ("WSASend: len1+2=%d+%d fd=%d\n", len1, len2, fd);
rc = WSASend (fd,
              vectors,
              data2 ? 2 : 1,
              &bytes_written,
              0,
              NULL,
              NULL);

if (rc == SOCKET_ERROR)
{
    DBUS_SOCKET_SET_ERRNO ();
    _dbus_verbose ("WSASend: failed: %s\n",
_dbus_strerror_from_errno ());
    bytes_written = -1;
}
else
    _dbus_verbose ("WSASend: = %ld\n", bytes_written);

if (bytes_written < 0 && errno == EINTR)
    goto again;

return bytes_written;
}

dbus_bool_t
_dbus_socket_is_invalid (int fd)
{
    return fd == INVALID_SOCKET ? TRUE : FALSE;
}

#if 0

/**
 * Opens the client side of a Windows named pipe. The connection D-BUS
 * file descriptor index is returned. It is set up as nonblocking.
 *
 * @param path the path to named pipe socket
 * @param error return location for error code
 * @returns connection D-BUS file descriptor or -1 on error
 */
int
_dbus_connect_named_pipe (const char    *path,
                        DBusError    *error)
{
    _dbus_assert_not_reached ("not implemented");
}

```



```

}

#endif

void
_dbus_win_startup_winsock (void)
{
    /* Straight from MSDN, deuglified */

    static dbus_bool_t beenhere = FALSE;

    WORD wVersionRequested;
    WSADATA wsaData;
    int err;

    if (beenhere)
        return;

    wVersionRequested = MAKEWORD (2, 0);

    err = WSStartup (wVersionRequested, &wsaData);
    if (err != 0)
    {
        _dbus_assert_not_reached ("Could not initialize WinSock");
        _dbus_abort ();
    }

    /* Confirm that the WinSock DLL supports 2.0.  Note that if the DLL
     * supports versions greater than 2.0 in addition to 2.0, it will
     * still return 2.0 in wVersion since that is the version we
     * requested.
     */
    if (LOBYTE (wsaData.wVersion) != 2 ||
        HIBYTE (wsaData.wVersion) != 0)
    {
        _dbus_assert_not_reached ("No usable WinSock found");
        _dbus_abort ();
    }

    beenhere = TRUE;
}

```

```

/*****
***

UTF / string code

*****/

/**
 * Measure the message length without terminating nul
 */
int _dbus_printf_string_upper_bound (const char *format,
                                     va_list args)
{
    /* MSVCRT's vsnprintf semantics are a bit different */
    char buf[1024];
    int bufsize;
    int len;

    bufsize = sizeof (buf);
    len = _vsnprintf (buf, bufsize - 1, format, args);

    while (len == -1) /* try again */
    {
        char *p;

        bufsize *= 2;

        p = malloc (bufsize);

        if (p == NULL)
            return -1;

        len = _vsnprintf (p, bufsize - 1, format, args);
        free (p);
    }

    return len;
}

/**
 * Returns the UTF-16 form of a UTF-8 string. The result should be
 * freed with dbus_free() when no longer needed.
 *
 * @param str the UTF-8 string
 * @param error return location for error code
 */
wchar_t *
_dbus_win_utf8_to_utf16 (const char *str,
                        DBusError *error)

```

```

{
    DBusString s;
    int n;
    wchar_t *retval;

    _dbus_string_init_const (&s, str);

    if (!_dbus_string_validate_utf8 (&s, 0, _dbus_string_get_length
(&s)))
    {
        dbus_set_error_const (error, DBUS_ERROR_FAILED, "Invalid UTF-
8");
        return NULL;
    }

    n = MultiByteToWideChar (CP_UTF8, 0, str, -1, NULL, 0);

    if (n == 0)
    {
        _dbus_win_set_error_from_win_error (error, GetLastError ());
        return NULL;
    }

    retval = dbus_new (wchar_t, n);

    if (!retval)
    {
        _DBUS_SET_OOM (error);
        return NULL;
    }

    if (MultiByteToWideChar (CP_UTF8, 0, str, -1, retval, n) != n)
    {
        dbus_free (retval);
        dbus_set_error_const (error, DBUS_ERROR_FAILED,
"MultiByteToWideChar inconsistency");
        return NULL;
    }

    return retval;
}

/**
 * Returns the UTF-8 form of a UTF-16 string. The result should be
 * freed with dbus_free() when no longer needed.
 *
 * @param str the UTF-16 string
 * @param error return location for error code
 */
char *
_dbus_win_utf16_to_utf8 (const wchar_t *str,
                        DBusError *error)

```

```

{
    int n;
    char *retval;

    n = WideCharToMultiByte (CP_UTF8, 0, str, -1, NULL, 0, NULL, NULL);

    if (n == 0)
    {
        _dbus_win_set_error_from_win_error (error, GetLastError ());
        return NULL;
    }

    retval = dbus_malloc (n);

    if (!retval)
    {
        _DBUS_SET_OOM (error);
        return NULL;
    }

    if (WideCharToMultiByte (CP_UTF8, 0, str, -1, retval, n, NULL, NULL)
    != n)
    {
        dbus_free (retval);
        dbus_set_error_const (error, DBUS_ERROR_FAILED,
        "WideCharToMultiByte inconsistency");
        return NULL;
    }

    return retval;
}

```

```

/*****
***

```

```

*****/

```

```

dbus_bool_t
_dbus_win_account_to_sid (const wchar_t *waccount,
                          void          **ppsid,
                          DBusError    *error)
{
    dbus_bool_t retval = FALSE;
    DWORD sid_length, wdomain_length;

```

```

SID_NAME_USE use;
wchar_t *wdomain;

*ppsid = NULL;

sid_length = 0;
wdomain_length = 0;
if (!LookupAccountNameW (NULL, waccount, NULL, &sid_length,
                        NULL, &wdomain_length, &use) &&
    GetLastError () != ERROR_INSUFFICIENT_BUFFER)
{
    _dbus_win_set_error_from_win_error (error, GetLastError ());
    return FALSE;
}

*ppsid = dbus_malloc (sid_length);
if (!*ppsid)
{
    _DBUS_SET_OOM (error);
    return FALSE;
}

wdomain = dbus_new (wchar_t, wdomain_length);
if (!wdomain)
{
    _DBUS_SET_OOM (error);
    goto out1;
}

if (!LookupAccountNameW (NULL, waccount, (PSID) *ppsid, &sid_length,
                        wdomain, &wdomain_length, &use))
{
    _dbus_win_set_error_from_win_error (error, GetLastError ());
    goto out2;
}

if (!IsValidSid ((PSID) *ppsid))
{
    dbus_set_error_const (error, DBUS_ERROR_FAILED, "Invalid SID");
    goto out2;
}

retval = TRUE;

out2:
    dbus_free (wdomain);
out1:
    if (!retval)
    {
        dbus_free (*ppsid);
        *ppsid = NULL;
    }

```

```

    return retval;
}

/** @} end of sysdeps-win */

/**
 * The only reason this is separate from _dbus_getpid() is to allow it
 * on Windows for logging but not for other purposes.
 *
 * @returns process ID to put in log messages
 */
unsigned long
_dbus_pid_for_log (void)
{
    return _dbus_getpid ();
}

#ifdef DBUS_WINCE
/** Gets our SID
 * @param points to sid buffer, need to be freed with LocalFree()
 * @returns process sid
 */
static dbus_bool_t
_dbus_getsid(char **sid)
{
    HANDLE process_token = INVALID_HANDLE_VALUE;
    TOKEN_USER *token_user = NULL;
    DWORD n;
    PSID psid;
    int retval = FALSE;

    if (!OpenProcessToken (GetCurrentProcess (), TOKEN_QUERY,
&process_token))
    {
        _dbus_win_warn_win_error ("OpenProcessToken failed",
GetLastError ());
        goto failed;
    }
    if ((!GetTokenInformation (process_token, TokenUser, NULL, 0, &n)
        && GetLastError () != ERROR_INSUFFICIENT_BUFFER)
        || (token_user = alloca (n)) == NULL
        || !GetTokenInformation (process_token, TokenUser,
token_user, n, &n))
    {
        _dbus_win_warn_win_error ("GetTokenInformation failed",
GetLastError ());
        goto failed;
    }
    psid = token_user->User.Sid;

```

```

if (!IsValidSid (psid))
{
    _dbus_verbose("%s invalid sid\n",__FUNCTION__);
    goto failed;
}
if (!ConvertSidToStringSidA (psid, sid))
{
    _dbus_verbose("%s invalid sid\n",__FUNCTION__);
    goto failed;
}
//okay:
retval = TRUE;

failed:
if (process_token != INVALID_HANDLE_VALUE)
    CloseHandle (process_token);

    _dbus_verbose("_dbus_getsid() returns %d\n",retval);
return retval;
}
#endif

/*****
***

pipes

*****/

/**
 * Creates a full-duplex pipe (as in socketpair()).
 * Sets both ends of the pipe nonblocking.
 *
 * @param fd1 return location for one end
 * @param fd2 return location for the other end
 * @param blocking #TRUE if pipe should be blocking
 * @param error return
 * @returns #FALSE on failure (if error is set)
 */
dbus_bool_t
_dbus_full_duplex_pipe (int          *fd1,
                       int          *fd2,
                       dbus_bool_t  blocking,
                       DBusError   *error)
{
    SOCKET temp, socket1 = -1, socket2 = -1;
    struct sockaddr_in saddr;
    int len;
    u_long arg;

```

```

_dbus_win_startup_winsock ();

temp = socket (AF_INET, SOCK_STREAM, 0);
if (temp == INVALID_SOCKET)
{
    DBUS_SOCKET_SET_ERRNO ();
    goto out0;
}

_DBUS_ZERO (saddr);
saddr.sin_family = AF_INET;
saddr.sin_port = 0;
saddr.sin_addr.s_addr = htonl (INADDR_LOOPBACK);

if (bind (temp, (struct sockaddr *)&saddr, sizeof (saddr)) ==
SOCKET_ERROR)
{
    DBUS_SOCKET_SET_ERRNO ();
    goto out0;
}

if (listen (temp, 1) == SOCKET_ERROR)
{
    DBUS_SOCKET_SET_ERRNO ();
    goto out0;
}

len = sizeof (saddr);
if (getsockname (temp, (struct sockaddr *)&saddr, &len) ==
SOCKET_ERROR)
{
    DBUS_SOCKET_SET_ERRNO ();
    goto out0;
}

socket1 = socket (AF_INET, SOCK_STREAM, 0);
if (socket1 == INVALID_SOCKET)
{
    DBUS_SOCKET_SET_ERRNO ();
    goto out0;
}

if (connect (socket1, (struct sockaddr *)&saddr, len) ==
SOCKET_ERROR)
{
    DBUS_SOCKET_SET_ERRNO ();
    goto out1;
}

socket2 = accept (temp, (struct sockaddr *)&saddr, &len);
if (socket2 == INVALID_SOCKET)
{

```



```

        DBUS_SOCKET_SET_ERRNO ();
        goto out1;
    }

    if (!blocking)
    {
        arg = 1;
        if (ioctlsocket (socket1, FIONBIO, &arg) == SOCKET_ERROR)
        {
            DBUS_SOCKET_SET_ERRNO ();
            goto out2;
        }

        arg = 1;
        if (ioctlsocket (socket2, FIONBIO, &arg) == SOCKET_ERROR)
        {
            DBUS_SOCKET_SET_ERRNO ();
            goto out2;
        }
    }

    *fd1 = socket1;
    *fd2 = socket2;

    _dbus_verbose ("full-duplex pipe %d:%d <-> %d:%d\n",
                   *fd1, socket1, *fd2, socket2);

    closesocket (temp);

    return TRUE;

out2:
    closesocket (socket2);
out1:
    closesocket (socket1);
out0:
    closesocket (temp);

    dbus_set_error (error, _dbus_error_from_errno (errno),
                   "Could not setup socket pair: %s",
                   _dbus_strerror_from_errno ());

    return FALSE;
}

/**
 * Wrapper for poll().
 *
 * @param fds the file descriptors to poll
 * @param n_fds number of descriptors in the array
 * @param timeout_milliseconds timeout or -1 for infinite
 * @returns numbers of fds with revents, or <0 on error
 */

```

```

*/
int
_dbus_poll (DBusPollFD *fds,
            int          n_fds,
            int          timeout_milliseconds)
{
#define USE_CHRIS_IMPL 0

#if USE_CHRIS_IMPL

#define DBUS_POLL_CHAR_BUFFER_SIZE 2000
char msg[DBUS_POLL_CHAR_BUFFER_SIZE];
char *msgp;

int ret = 0;
int i;
struct timeval tv;
int ready;

#define DBUS_STACK_WSAEVENTS 256
WSAEVENT eventsOnStack[DBUS_STACK_WSAEVENTS];
WSAEVENT *pEvents = NULL;
if (n_fds > DBUS_STACK_WSAEVENTS)
    pEvents = calloc(sizeof(WSAEVENT), n_fds);
else
    pEvents = eventsOnStack;

#ifdef DBUS_ENABLE_VERBOSE_MODE
msgp = msg;
msgp += sprintf (msgp, "WSAEventSelect: to=%d\n\t",
timeout_milliseconds);
for (i = 0; i < n_fds; i++)
    {
        DBusPollFD *fdp = &fds[i];

        if (fdp->events & _DBUS_POLLIN)
            msgp += sprintf (msgp, "R:%d ", fdp->fd);

        if (fdp->events & _DBUS_POLLOUT)
            msgp += sprintf (msgp, "W:%d ", fdp->fd);

        msgp += sprintf (msgp, "E:%d\n\t", fdp->fd);

        // FIXME: more robust code for long msg
        //          create on heap when msg[] becomes too small
        if (msgp >= msg + DBUS_POLL_CHAR_BUFFER_SIZE)
            {
                _dbus_assert_not_reached ("buffer overflow in _dbus_poll");
            }
    }
#endif
}

```

```

msgp += sprintf (msgp, "\n");
_dbus_verbose ("%s",msg);
#endif
for (i = 0; i < n_fds; i++)
{
    DBusPollFD *fdp = &fds[i];
    WSAEVENT ev;
    long lNetworkEvents = FD_OOB;

    ev = WSACreateEvent();

    if (fdp->events & _DBUS_POLLIN)
        lNetworkEvents |= FD_READ | FD_ACCEPT | FD_CLOSE;

    if (fdp->events & _DBUS_POLLOUT)
        lNetworkEvents |= FD_WRITE | FD_CONNECT;

    WSAEventSelect(fdp->fd, ev, lNetworkEvents);

    pEvents[i] = ev;
}

ready = WSAWaitForMultipleEvents (n_fds, pEvents, FALSE,
timeout_milliseconds, FALSE);

if (DBUS_SOCKET_API_RETURNS_ERROR (ready))
{
    DBUS_SOCKET_SET_ERRNO ();
    if (errno != WSAEWOULDBLOCK)
        _dbus_verbose ("WSAWaitForMultipleEvents: failed: %s\n",
_dbus_strerror_from_errno ());
    ret = -1;
}
else if (ready == WSA_WAIT_TIMEOUT)
{
    _dbus_verbose ("WSAWaitForMultipleEvents: WSA_WAIT_TIMEOUT\n");
    ret = 0;
}
else if (ready >= WSA_WAIT_EVENT_0 && ready < (int)(WSA_WAIT_EVENT_0
+ n_fds))
{
    msgp = msg;
    msgp += sprintf (msgp, "WSAWaitForMultipleEvents: =%d\n\t",
ready);

    for (i = 0; i < n_fds; i++)
    {
        DBusPollFD *fdp = &fds[i];
        WSANETWORKEVENTS ne;

```

```

    fdp->revents = 0;

    WSAEnumNetworkEvents(fdp->fd, pEvents[i], &ne);

    if (ne.lNetworkEvents & (FD_READ | FD_ACCEPT | FD_CLOSE))
        fdp->revents |= _DBUS_POLLIN;

    if (ne.lNetworkEvents & (FD_WRITE | FD_CONNECT))
        fdp->revents |= _DBUS_POLLOUT;

    if (ne.lNetworkEvents & (FD_OOB))
        fdp->revents |= _DBUS_POLLERR;

    if (ne.lNetworkEvents & (FD_READ | FD_ACCEPT | FD_CLOSE))
        msgp += sprintf (msgp, "R:%d ", fdp->fd);

    if (ne.lNetworkEvents & (FD_WRITE | FD_CONNECT))
        msgp += sprintf (msgp, "W:%d ", fdp->fd);

    if (ne.lNetworkEvents & (FD_OOB))
        msgp += sprintf (msgp, "E:%d ", fdp->fd);

    msgp += sprintf (msgp, "lNetworkEvents:%d ",
ne.lNetworkEvents);

    if(ne.lNetworkEvents)
        ret++;

    WSAEventSelect(fdp->fd, pEvents[i], 0);
}

    msgp += sprintf (msgp, "\n");
    _dbus_verbose ("%s",msg);
}
else
{
    _dbus_verbose ("WSAWaitForMultipleEvents: failed for unknown
reason!");
    ret = -1;
}

for(i = 0; i < n_fds; i++)
{
    WSACloseEvent(pEvents[i]);
}

if (n_fds > DBUS_STACK_WSAEVENTS)
    free(pEvents);

return ret;

#else /* USE_CHRIS_IMPL */

```

```

#define DBUS_POLL_CHAR_BUFFER_SIZE 2000
char msgp[DBUS_POLL_CHAR_BUFFER_SIZE];
char *msggp;

fd_set read_set, write_set, err_set;
int max_fd = 0;
int i;
struct timeval tv;
int ready;

FD_ZERO (&read_set);
FD_ZERO (&write_set);
FD_ZERO (&err_set);

#ifdef DBUS_ENABLE_VERBOSE_MODE
msgp = msg;
msgp += sprintf (msgp, "select: to=%d\n\t", timeout_milliseconds);
for (i = 0; i < n_fds; i++)
{
    DBusPollFD *fdp = &fds[i];

    if (fdp->events & _DBUS_POLLIN)
        msgp += sprintf (msgp, "R:%d ", fdp->fd);

    if (fdp->events & _DBUS_POLLOUT)
        msgp += sprintf (msgp, "W:%d ", fdp->fd);

    msgp += sprintf (msgp, "E:%d\n\t", fdp->fd);

    // FIXME: more robust code for long msg
    //         create on heap when msg[] becomes too small
    if (msgp >= msg + DBUS_POLL_CHAR_BUFFER_SIZE)
        {
            _dbus_assert_not_reached ("buffer overflow in _dbus_poll");
        }
}

msgp += sprintf (msgp, "\n");
_dbus_verbose ("%s",msg);
#endif
for (i = 0; i < n_fds; i++)
{
    DBusPollFD *fdp = &fds[i];

    if (fdp->events & _DBUS_POLLIN)
        FD_SET (fdp->fd, &read_set);

    if (fdp->events & _DBUS_POLLOUT)
        FD_SET (fdp->fd, &write_set);
}

```

```

    FD_SET (fdp->fd, &err_set);

    max_fd = MAX (max_fd, fdp->fd);
}

// Avoid random lockups with send(), for lack of a better solution
so far
tv.tv_sec = timeout_milliseconds < 0 ? 1 : timeout_milliseconds /
1000;
tv.tv_usec = timeout_milliseconds < 0 ? 0 : (timeout_milliseconds %
1000) * 1000;

ready = select (max_fd + 1, &read_set, &write_set, &err_set, &tv);

if (DBUS_SOCKET_API_RETURNS_ERROR (ready))
{
    DBUS_SOCKET_SET_ERRNO ();
    if (errno != WSAEWOULDBLOCK)
        _dbus_verbose ("select: failed: %s\n",
_dbus_strerror_from_errno ());
}
else if (ready == 0)
    _dbus_verbose ("select: = 0\n");
else
    if (ready > 0)
    {
#ifdef DBUS_ENABLE_VERBOSE_MODE
        msgp = msg;
        msgp += sprintf (msgp, "select: = %d:\n\t", ready);

        for (i = 0; i < n_fds; i++)
        {
            DbusPollFD *fdp = &fds[i];

            if (FD_ISSET (fdp->fd, &read_set))
                msgp += sprintf (msgp, "R:%d ", fdp->fd);

            if (FD_ISSET (fdp->fd, &write_set))
                msgp += sprintf (msgp, "W:%d ", fdp->fd);

            if (FD_ISSET (fdp->fd, &err_set))
                msgp += sprintf (msgp, "E:%d\n\t", fdp->fd);
        }
        msgp += sprintf (msgp, "\n");
        _dbus_verbose ("%s",msg);
#endif
    }

    for (i = 0; i < n_fds; i++)
    {
        DbusPollFD *fdp = &fds[i];

```

```

        fdp->revents = 0;

        if (FD_ISSET (fdp->fd, &read_set))
            fdp->revents |= _DBUS_POLLIN;

        if (FD_ISSET (fdp->fd, &write_set))
            fdp->revents |= _DBUS_POLLOUT;

        if (FD_ISSET (fdp->fd, &err_set))
            fdp->revents |= _DBUS_POLLERR;
    }
}
return ready;
#endif /* USE_CHRIS_IMPL */
}

/*****
*****

Original CVS version of dbus-sysdeps.c

*****
*****/
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps.c Wrappers around system/libc features (internal to D-
Bus implementation)
*
* Copyright (C) 2002, 2003 Red Hat, Inc.
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA

```

```

*
*/

/**
 * Exit the process, returning the given value.
 *
 * @param code the exit code
 */
void
_dbus_exit (int code)
{
    _exit (code);
}

/**
 * Creates a socket and connects to a socket at the given host
 * and port. The connection fd is returned, and is set up as
 * nonblocking.
 *
 * @param host the host name to connect to
 * @param port the port to connect to
 * @param family the address family to listen on, NULL for all
 * @param error return location for error code
 * @returns connection file descriptor or -1 on error
 */
int
_dbus_connect_tcp_socket (const char    *host,
                          const char    *port,
                          const char    *family,
                          DBusError     *error)
{
    return _dbus_connect_tcp_socket_with_nonce (host, port, family,
                                                (const char*)NULL, error);
}

int
_dbus_connect_tcp_socket_with_nonce (const char    *host,
                                     const char    *port,
                                     const char    *family,
                                     const char    *noncefile,
                                     DBusError     *error)
{
    int fd = -1, res;
    struct addrinfo hints;
    struct addrinfo *ai, *tmp;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    _dbus_win_startup_winsock ();

    _DBUS_ZERO (hints);

```



```

if (!family)
    hints.ai_family = AF_UNSPEC;
else if (!strcmp(family, "ipv4"))
    hints.ai_family = AF_INET;
else if (!strcmp(family, "ipv6"))
    hints.ai_family = AF_INET6;
else
    {
        dbus_set_error (error,
                        DBUS_ERROR_INVALID_ARGS,
                        "Unknown address family %s", family);

        return -1;
    }
hints.ai_protocol = IPPROTO_TCP;
hints.ai_socktype = SOCK_STREAM;
#ifdef AI_ADDRCONFIG
    hints.ai_flags = AI_ADDRCONFIG;
#else
    hints.ai_flags = 0;
#endif

if ((res = getaddrinfo(host, port, &hints, &ai)) != 0 || !ai)
    {
        dbus_set_error (error,
                        _dbus_error_from_errno (res),
                        "Failed to lookup host/port: \"%s:%s\": %s
(%d)",
                        host, port, _dbus_strerror(res), res);

        return -1;
    }

tmp = ai;
while (tmp)
    {
        if ((fd = socket (tmp->ai_family, SOCK_STREAM, 0)) ==
INVALID_SOCKET)
            {
                DBUS_SOCKET_SET_ERRNO ();
                dbus_set_error (error,
                                _dbus_error_from_errno (errno),
                                "Failed to open socket: %s",
                                _dbus_strerror_from_errno ());

                freeaddrinfo(ai);
                return -1;
            }
        _DBUS_ASSERT_ERROR_IS_CLEAR(error);

        if (connect (fd, (struct sockaddr*) tmp->ai_addr, tmp-
>ai_addrlen) == SOCKET_ERROR)
            {
                DBUS_SOCKET_SET_ERRNO ();

```

```

        closesocket(fd);
        fd = -1;
        tmp = tmp->ai_next;
        continue;
    }

    break;
}
freeaddrinfo(ai);

if (fd == -1)
{
    dbus_set_error (error,
                    _dbus_error_from_errno (errno),
                    "Failed to connect to socket \"%s:%s\" %s",
                    host, port, _dbus_strerror_from_errno ());
    return -1;
}

if (noncefile != NULL)
{
    DBusString noncefileStr;
    dbus_bool_t ret;
    if (!_dbus_string_init (&noncefileStr) ||
        !_dbus_string_append(&noncefileStr, noncefile))
    {
        closesocket (fd);
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return -1;
    }

    ret = _dbus_send_nonce (fd, &noncefileStr, error);

    _dbus_string_free (&noncefileStr);

    if (!ret)
    {
        closesocket (fd);
        return -1;
    }
}

_dbus_fd_set_close_on_exec (fd);

if (!_dbus_set_fd_nonblocking (fd, error))
{
    closesocket (fd);
    return -1;
}

return fd;
}

```

```

/**
 * Creates a socket and binds it to the given path, then listens on
 * the socket. The socket is set to be nonblocking. In case of port=0
 * a random free port is used and returned in the port parameter.
 * If inaddr_any is specified, the hostname is ignored.
 *
 * @param host the host name to listen on
 * @param port the port to listen on, if zero a free port will be used
 * @param family the address family to listen on, NULL for all
 * @param retport string to return the actual port listened on
 * @param fds_p location to store returned file descriptors
 * @param error return location for errors
 * @returns the number of listening file descriptors or -1 on error
 */

int
_dbus_listen_tcp_socket (const char      *host,
                       const char      *port,
                       const char      *family,
                       DBusString      *retport,
                       int              **fds_p,
                       DBusError       *error)
{
    int nlisten_fd = 0, *listen_fd = NULL, res, i, port_num = -1;
    struct addrinfo hints;
    struct addrinfo *ai, *tmp;

    // On Vista, sockaddr_gen must be a sockaddr_in6, and not a
    sockaddr_in6_old
    //That's required for family == IPV6(which is the default on Vista
    if family is not given)
    //So we use our own union instead of sockaddr_gen:

    typedef union {
        struct sockaddr Address;
        struct sockaddr_in AddressIn;
        struct sockaddr_in6 AddressIn6;
    } mysockaddr_gen;

    *fds_p = NULL;
    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    _dbus_win_startup_winsock ();

    _DBUS_ZERO (hints);

    if (!family)
        hints.ai_family = AF_UNSPEC;
    else if (!strcmp(family, "ipv4"))
        hints.ai_family = AF_INET;
    else if (!strcmp(family, "ipv6"))

```

```

    hints.ai_family = AF_INET6;
else
    {
        dbus_set_error (error,
                        DBUS_ERROR_INVALID_ARGS,
                        "Unknown address family %s", family);

        return -1;
    }

    hints.ai_protocol = IPPROTO_TCP;
    hints.ai_socktype = SOCK_STREAM;
#ifdef AI_ADDRCONFIG
    hints.ai_flags = AI_ADDRCONFIG | AI_PASSIVE;
#else
    hints.ai_flags = AI_PASSIVE;
#endif

redo_lookup_with_port:
    if ((res = getaddrinfo(host, port, &hints, &ai)) != 0 || !ai)
    {
        dbus_set_error (error,
                        _dbus_error_from_errno (res),
                        "Failed to lookup host/port: \"%s:%s\": %s
(%d)",
                        host ? host : "*", port, _dbus_strerror(res),
res);
        return -1;
    }

    tmp = ai;
    while (tmp)
    {
        int fd = -1, *newlisten_fd;
        if ((fd = socket (tmp->ai_family, SOCK_STREAM, 0)) ==
INVALID_SOCKET)
        {
            DBUS_SOCKET_SET_ERRNO ();
            dbus_set_error (error,
                            _dbus_error_from_errno (errno),
                            "Failed to open socket: %s",
                            _dbus_strerror_from_errno ());

            goto failed;
        }
        _DBUS_ASSERT_ERROR_IS_CLEAR(error);

        if (bind (fd, (struct sockaddr*) tmp->ai_addr, tmp->ai_addrlen)
== SOCKET_ERROR)
        {
            DBUS_SOCKET_SET_ERRNO ();
            dbus_set_error (error, _dbus_error_from_errno (errno),
                            "Failed to bind socket \"%s:%s\": %s",

```

```

        host ? host : "*", port,
_dbus_strerror_from_errno ());
        closesocket (fd);
        goto failed;
    }

    if (listen (fd, 30 /* backlog */) == SOCKET_ERROR)
    {
        DBUS_SOCKET_SET_ERRNO ();
        dbus_set_error (error, _dbus_error_from_errno (errno),
            "Failed to listen on socket \"%s:%s\": %s",
            host ? host : "*", port,
_dbus_strerror_from_errno ());
        closesocket (fd);
        goto failed;
    }

    newlisten_fd = dbus_realloc(listen_fd,
sizeof(int)*(nlisten_fd+1));
    if (!newlisten_fd)
    {
        closesocket (fd);
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
            "Failed to allocate file handle array");
        goto failed;
    }
    listen_fd = newlisten_fd;
    listen_fd[nlisten_fd] = fd;
    nlisten_fd++;

    if (!_dbus_string_get_length(retport))
    {
        /* If the user didn't specify a port, or used 0, then
        the kernel chooses a port. After the first address
        is bound to, we need to force all remaining addresses
        to use the same port */
        if (!port || !strcmp(port, "0"))
        {
            mysockaddr_gen addr;
            socklen_t addrlen = sizeof(addr);
            char portbuf[10];

            if (getsockname(fd, &addr.Address, &addrlen) ==
SOCKET_ERROR)
            {
                DBUS_SOCKET_SET_ERRNO ();
                dbus_set_error (error, _dbus_error_from_errno
(errno),
                    "Failed to resolve port \"%s:%s\":
%s",
                    host ? host : "*", port,
_dbus_strerror_from_errno ());

```

```

        goto failed;
    }
    snprintf( portbuf, sizeof( portbuf ) - 1, "%d",
addr.AddressIn.sin_port );
    if (!_dbus_string_append(retport, portbuf))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto failed;
    }

    /* Release current address list & redo lookup */
    port = _dbus_string_get_const_data(retport);
    freeaddrinfo(ai);
    goto redo_lookup_with_port;
}
else
{
    if (!_dbus_string_append(retport, port))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY,
NULL);
        goto failed;
    }
}

    tmp = tmp->ai_next;
}
freeaddrinfo(ai);
ai = NULL;

if (!nlisten_fd)
{
    _dbus_win_set_errno (WSAEADDRINUSE);
    dbus_set_error (error, _dbus_error_from_errno (errno),
        "Failed to bind socket \"%s:%s\": %s",
        host ? host : "*", port,
_dbus_strerror_from_errno ());
    return -1;
}

sscanf(_dbus_string_get_const_data(retport), "%d", &port_num);

for (i = 0 ; i < nlisten_fd ; i++)
{
    _dbus_fd_set_close_on_exec (listen_fd[i]);
    if (!_dbus_set_fd_nonblocking (listen_fd[i], error))
    {
        goto failed;
    }
}

```

```

    *fds_p = listen_fd;

    return nlisten_fd;

failed:
    if (ai)
        freeaddrinfo(ai);
    for (i = 0 ; i < nlisten_fd ; i++)
        closesocket (listen_fd[i]);
    dbus_free(listen_fd);
    return -1;
}

/**
 * Accepts a connection on a listening socket.
 * Handles EINTR for you.
 *
 * @param listen_fd the listen file descriptor
 * @returns the connection fd of the client, or -1 on error
 */
int
_dbus_accept (int listen_fd)
{
    int client_fd;

retry:
    client_fd = accept (listen_fd, NULL, NULL);

    if (DBUS_SOCKET_IS_INVALID (client_fd))
    {
        DBUS_SOCKET_SET_ERRNO ();
        if (errno == EINTR)
            goto retry;
    }

    _dbus_verbose ("client fd %d accepted\n", client_fd);

    return client_fd;
}

dbus_bool_t
_dbus_send_credentials_socket (int handle,
                               DBusError *error)
{
    /* FIXME: for the session bus credentials shouldn't matter (?), but
     * for the system bus they are presumably essential. A rough outline
     * of a way to implement the credential transfer would be this:
     */

```

```

* client waits to *read* a byte.
*
* server creates a named pipe with a random name, sends a byte
* containing its length, and its name.
*
* client reads the name, connects to it (using Win32 API).
*
* server waits for connection to the named pipe, then calls
* ImpersonateNamedPipeClient(), notes its now-current credentials,
* calls RevertToSelf(), closes its handles to the named pipe, and
* is done. (Maybe there is some other way to get the SID of a named
* pipe client without having to use impersonation?)
*
* client closes its handles and is done.
*
* Ralf: Why not sending credentials over the given this connection ?
* Using named pipes makes it impossible to be connected from a unix
client.
*/
int bytes_written;
DBusString buf;

_dbus_string_init_const_len (&buf, "\0", 1);
again:
bytes_written = _dbus_write_socket (handle, &buf, 0, 1 );

if (bytes_written < 0 && errno == EINTR)
    goto again;

if (bytes_written < 0)
{
    dbus_set_error (error, _dbus_error_from_errno (errno),
        "Failed to write credentials byte: %s",
        _dbus_strerror_from_errno ());
    return FALSE;
}
else if (bytes_written == 0)
{
    dbus_set_error (error, DBUS_ERROR_IO_ERROR,
        "wrote zero bytes writing credentials byte");
    return FALSE;
}
else
{
    _dbus_assert (bytes_written == 1);
    _dbus_verbose ("wrote 1 zero byte, credential sending isn't
implemented yet\n");
    return TRUE;
}
return TRUE;
}

```



```

/**
 * Reads a single byte which must be nul (an error occurs otherwise),
 * and reads unix credentials if available. Fills in pid/uid/gid with
 * -1 if no credentials are available. Return value indicates whether
 * a byte was read, not whether we got valid credentials. On some
 * systems, such as Linux, reading/writing the byte isn't actually
 * required, but we do it anyway just to avoid multiple codepaths.
 *
 * Fails if no byte is available, so you must select() first.
 *
 * The point of the byte is that on some systems we have to
 * use sendmsg()/recvmsg() to transmit credentials.
 *
 * @param client_fd the client file descriptor
 * @param credentials struct to fill with credentials of client
 * @param error location to store error code
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_read_credentials_socket (int handle,
                              DBusCredentials *credentials,
                              DBusError *error)
{
    int bytes_read = 0;
    DBusString buf;

    // could fail due too OOM
    if (_dbus_string_init(&buf))
    {
        bytes_read = _dbus_read_socket(handle, &buf, 1 );

        if (bytes_read > 0)
            _dbus_verbose("got one zero byte from server");

        _dbus_string_free(&buf);
    }

    _dbus_credentials_add_from_current_process (credentials);
    _dbus_verbose("FIXME: get faked credentials from current process");

    return TRUE;
}

/**
 * Checks to make sure the given directory is
 * private to the user
 *
 * @param dir the name of the directory
 * @param error error return
 * @returns #FALSE on failure
 */

```



```

}

/*----- DBusCredentials -----*/

/**
 * Adds the credentials corresponding to the given username.
 *
 * @param credentials credentials to fill in
 * @param username the username
 * @returns #TRUE if the username existed and we got some credentials
 */
dbus_bool_t
_dbus_credentials_add_from_user (DBusCredentials *credentials,
                                const DBusString *username)
{
    return _dbus_credentials_add_windows_sid (credentials,
                                              _dbus_string_get_const_data(username));
}

/**
 * Adds the credentials of the current process to the
 * passed-in credentials object.
 *
 * @param credentials credentials to add to
 * @returns #FALSE if no memory; does not properly roll back on
 * failure, so only some credentials may have been added
 */

dbus_bool_t
_dbus_credentials_add_from_current_process (DBusCredentials
*credentials)
{
    dbus_bool_t retval = FALSE;
    char *sid = NULL;

    if (!_dbus_getsid(&sid))
        goto failed;

    if (!_dbus_credentials_add_unix_pid(credentials, _dbus_getpid()))
        goto failed;

    if (!_dbus_credentials_add_windows_sid (credentials,sid))
        goto failed;

    retval = TRUE;
    goto end;
failed:
    retval = FALSE;
end:
    if (sid)
        LocalFree(sid);
}

```

```

    return retval;
}

/**
 * Append to the string the identity we would like to have when we
 * authenticate, on UNIX this is the current process UID and on
 * Windows something else, probably a Windows SID string. No escaping
 * is required, that is done in dbus-auth.c. The username here
 * need not be anything human-readable, it can be the machine-readable
 * form i.e. a user id.
 *
 * @param str the string to append to
 * @returns #FALSE on no memory
 * @todo to which class belongs this
 */
dbus_bool_t
_dbus_append_user_from_current_process (DBusString *str)
{
    dbus_bool_t retval = FALSE;
    char *sid = NULL;

    if (!_dbus_getsid(&sid))
        return FALSE;

    retval = _dbus_string_append (str,sid);

    LocalFree(sid);
    return retval;
}

/**
 * Gets our process ID
 * @returns process ID
 */
dbus_pid_t
_dbus_getpid (void)
{
    return GetCurrentProcessId ();
}

/** nanoseconds in a second */
#define NANOSECONDS_PER_SECOND    1000000000
/** microseconds in a second */
#define MICROSECONDS_PER_SECOND   1000000
/** milliseconds in a second */
#define MILLISECONDS_PER_SECOND   1000
/** nanoseconds in a millisecond */
#define NANOSECONDS_PER_MILLISECOND 1000000
/** microseconds in a millisecond */
#define MICROSECONDS_PER_MILLISECOND 1000

```

```

/**
 * Sleeps the given number of milliseconds.
 * @param milliseconds number of milliseconds
 */
void
_dbus_sleep_milliseconds (int milliseconds)
{
    Sleep (milliseconds);
}

/**
 * Get current time, as in gettimeofday(). Never uses the monotonic
 * clock.
 *
 * @param tv_sec return location for number of seconds
 * @param tv_usec return location for number of microseconds
 */
void
_dbus_get_real_time (long *tv_sec,
                    long *tv_usec)
{
    FILETIME ft;
    dbus_uint64_t time64;

    GetSystemTimeAsFileTime (&ft);

    memcpy (&time64, &ft, sizeof (time64));

    /* Convert from 100s of nanoseconds since 1601-01-01
     * to Unix epoch. Yes, this is Y2038 unsafe.
     */
    time64 -= DBUS_INT64_CONSTANT (116444736000000000);
    time64 /= 10;

    if (tv_sec)
        *tv_sec = time64 / 1000000;

    if (tv_usec)
        *tv_usec = time64 % 1000000;
}

/**
 * Get current time, as in gettimeofday(). Use the monotonic clock if
 * available, to avoid problems when the system time changes.
 *
 * @param tv_sec return location for number of seconds
 * @param tv_usec return location for number of microseconds
 */
void
_dbus_get_monotonic_time (long *tv_sec,
                         long *tv_usec)

```

```

{
    /* no implementation yet, fall back to wall-clock time */
    _dbus_get_real_time (tv_sec, tv_usec);
}

/**
 * signal (SIGPIPE, SIG_IGN);
 */
void
_dbus_disable_sigpipe (void)
{
}

/**
 * Creates a directory; succeeds if the directory
 * is created or already existed.
 *
 * @param filename directory filename
 * @param error initialized error object
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_create_directory (const DBusString *filename,
                       DBusError      *error)
{
    const char *filename_c;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    filename_c = _dbus_string_get_const_data (filename);

    if (!CreateDirectoryA (filename_c, NULL))
    {
        if (GetLastError () == ERROR_ALREADY_EXISTS)
            return TRUE;

        dbus_set_error (error, DBUS_ERROR_FAILED,
                       "Failed to create directory %s: %s\n",
                       filename_c, _dbus_strerror_from_errno ());

        return FALSE;
    }
    else
        return TRUE;
}

/**
 * Generates the given number of random bytes,
 * using the best mechanism we can come up with.
 *
 * @param str the string
 * @param n_bytes the number of random bytes to append to string

```

```

    * @returns #TRUE on success, #FALSE if no memory
    */
dbus_bool_t
_dbus_generate_random_bytes (DBusString *str,
                             int         n_bytes)
{
    int old_len;
    char *p;
    HCRYPTPROV hprov;

    old_len = _dbus_string_get_length (str);

    if (!_dbus_string_lengthen (str, n_bytes))
        return FALSE;

    p = _dbus_string_get_data_len (str, old_len, n_bytes);

    if (!CryptAcquireContext (&hprov, NULL, NULL, PROV_RSA_FULL,
                              CRYPT_VERIFYCONTEXT))
        return FALSE;

    if (!CryptGenRandom (hprov, n_bytes, p))
    {
        CryptReleaseContext (hprov, 0);
        return FALSE;
    }

    CryptReleaseContext (hprov, 0);

    return TRUE;
}

/**
 * Gets the temporary files directory by inspecting the environment
 * variables
 * TMPDIR, TMP, and TEMP in that order. If none of those are set
 * "/tmp" is returned
 *
 * @returns location of temp directory
 */
const char*
_dbus_get_tmpdir(void)
{
    static const char* tmpdir = NULL;
    static char buf[1000];

    if (tmpdir == NULL)
    {
        char *last_slash;

        if (!GetTempPathA (sizeof (buf), buf))
            {

```

```

        _dbus_warn ("GetTempPath failed\n");
        _dbus_abort ();
    }

    /* Drop terminating backslash or slash */
    last_slash = _mbsrchr (buf, '\\');
    if (last_slash > buf && last_slash[1] == '\\0')
        last_slash[0] = '\\0';
    last_slash = _mbsrchr (buf, '/');
    if (last_slash > buf && last_slash[1] == '\\0')
        last_slash[0] = '\\0';

    tmpdir = buf;
}

_dbus_assert(tmpdir != NULL);

return tmpdir;
}

/**
 * Deletes the given file.
 *
 * @param filename the filename
 * @param error error location
 *
 * @returns #TRUE if unlink() succeeded
 */
dbus_bool_t
_dbus_delete_file (const DBusString *filename,
                  DBusError *error)
{
    const char *filename_c;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    filename_c = _dbus_string_get_const_data (filename);

    if (DeleteFileA (filename_c) == 0)
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
                       "Failed to delete file %s: %s\n",
                       filename_c, _dbus_strerror_from_errno ());

        return FALSE;
    }
    else
        return TRUE;
}

/**
 * replaces the term DBUS_PREFIX in configure_time_path by the

```



```

* current dbus installation directory. On unix this function is a
noop
*
* @param configure_time_path
* @return real path
*/
const char *
_dbus_replace_install_prefix (const char *configure_time_path)
{
#ifdef DBUS_PREFIX
    return configure_time_path;
#else
    static char retval[1000];
    static char runtime_prefix[1000];
    int len = 1000;
    int i;

    if (!configure_time_path)
        return NULL;

    if ((!_dbus_get_install_root(runtime_prefix, len) ||
        strcmp (configure_time_path, DBUS_PREFIX "/",
                strlen (DBUS_PREFIX) + 1))) {
        strcat (retval, configure_time_path);
        return retval;
    }

    strcpy (retval, runtime_prefix);
    strcat (retval, configure_time_path + strlen (DBUS_PREFIX) + 1);

    /* Somehow, in some situations, backslashes get collapsed in the
string.
* Since windows C library accepts both forward and backslashes as
* path separators, convert all backslashes to forward slashes.
*/

    for(i = 0; retval[i] != '\0'; i++) {
        if(retval[i] == '\\')
            retval[i] = '/';
    }
    return retval;
#endif
}

#ifdef DBUS_DISABLE_ASSERTS || defined(DBUS_BUILD_TESTS)

#ifdef _MSC_VER || defined(DBUS_WINCE)
#define BACKTRACES
#undef BACKTRACES
#else
#define BACKTRACES
#endif

```

```

#endif

#ifdef BACKTRACES
/*
 * Backtrace Generator
 *
 * Copyright 2004 Eric Poech
 * Copyright 2004 Robert Shearman
 *
 * This library is free software; you can redistribute it and/or
 * modify it under the terms of the GNU Lesser General Public
 * License as published by the Free Software Foundation; either
 * version 2.1 of the License, or (at your option) any later version.
 *
 * This library is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
 * Lesser General Public License for more details.
 *
 * You should have received a copy of the GNU Lesser General Public
 * License along with this library; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */

#include <winver.h>
#include <imagehlp.h>
#include <stdio.h>

#define DPRINTF _dbus_warn

#ifdef _MSC_VER
#define BOOL int

#define __i386__
#endif

// #define MAKE_FUNCPtr(f) static typeof(f) * p##f

// MAKE_FUNCPtr(StackWalk);
// MAKE_FUNCPtr(SymGetModuleBase);
// MAKE_FUNCPtr(SymFunctionTableAccess);
// MAKE_FUNCPtr(SymInitialize);
// MAKE_FUNCPtr(SymGetSymFromAddr);
// MAKE_FUNCPtr(SymGetModuleInfo);
static BOOL (WINAPI *pStackWalk)(
    DWORD MachineType,
    HANDLE hProcess,
    HANDLE hThread,
    LPSTACKFRAME StackFrame,
    PVOID ContextRecord,
    PREAD_PROCESS_MEMORY_ROUTINE ReadMemoryRoutine,

```

```

    PFUNCTION_TABLE_ACCESS_ROUTINE FunctionTableAccessRoutine,
    PGET_MODULE_BASE_ROUTINE GetModuleBaseRoutine,
    PTRANSULATE_ADDRESS_ROUTINE TranslateAddress
);
#ifdef _WIN64
static DWORD64 (WINAPI *pSymGetModuleBase)(
    HANDLE hProcess,
    DWORD64 dwAddr
);
static PVOID (WINAPI *pSymFunctionTableAccess)(
    HANDLE hProcess,
    DWORD64 AddrBase
);
#else
static DWORD (WINAPI *pSymGetModuleBase)(
    HANDLE hProcess,
    DWORD dwAddr
);
static PVOID (WINAPI *pSymFunctionTableAccess)(
    HANDLE hProcess,
    DWORD AddrBase
);
#endif
static BOOL (WINAPI *pSymInitialize)(
    HANDLE hProcess,
    PSTR UserSearchPath,
    BOOL fInvadeProcess
);
static BOOL (WINAPI *pSymGetSymFromAddr)(
    HANDLE hProcess,
    DWORD Address,
    PDWORD Displacement,
    PIMAGEHLP_SYMBOL Symbol
);
static BOOL (WINAPI *pSymGetModuleInfo)(
    HANDLE hProcess,
    DWORD dwAddr,
    PIMAGEHLP_MODULE ModuleInfo
);
static DWORD (WINAPI *pSymSetOptions)(
    DWORD SymOptions
);

static BOOL init_backtrace()
{
    HMODULE hmodDbgHelp = LoadLibraryA("dbghelp");
    /*
    #define GETFUNC(x) \
    p##x = (typeof(x)*)GetProcAddress(hmodDbgHelp, #x); \
    if (!p##x) \
    { \

```

```

        return FALSE; \
    }
    */

//     GETFUNC (StackWalk);
//     GETFUNC (SymGetModuleBase);
//     GETFUNC (SymFunctionTableAccess);
//     GETFUNC (SymInitialize);
//     GETFUNC (SymGetSymFromAddr);
//     GETFUNC (SymGetModuleInfo);

#define FUNC(x) #x

        pStackWalk = (BOOL (WINAPI *) (
DWORD MachineType,
HANDLE hProcess,
HANDLE hThread,
LPSTACKFRAME StackFrame,
PVOID ContextRecord,
PREAD_PROCESS_MEMORY_ROUTINE ReadMemoryRoutine,
PFUNCTION_TABLE_ACCESS_ROUTINE FunctionTableAccessRoutine,
PGET_MODULE_BASE_ROUTINE GetModuleBaseRoutine,
PTRANSULATE_ADDRESS_ROUTINE TranslateAddress
))GetProcAddress (hmodDbgHelp, FUNC (StackWalk));
#ifdef _WIN64
        pSymGetModuleBase=(DWORD64 (WINAPI *) (
        HANDLE hProcess,
        DWORD64 dwAddr
))GetProcAddress (hmodDbgHelp, FUNC (SymGetModuleBase));
        pSymFunctionTableAccess=(PVOID (WINAPI *) (
        HANDLE hProcess,
        DWORD64 AddrBase
))GetProcAddress (hmodDbgHelp, FUNC (SymFunctionTableAccess));
#else
        pSymGetModuleBase=(DWORD (WINAPI *) (
        HANDLE hProcess,
        DWORD dwAddr
))GetProcAddress (hmodDbgHelp, FUNC (SymGetModuleBase));
        pSymFunctionTableAccess=(PVOID (WINAPI *) (
        HANDLE hProcess,
        DWORD AddrBase
))GetProcAddress (hmodDbgHelp, FUNC (SymFunctionTableAccess));
#endif
        pSymInitialize = (BOOL (WINAPI *) (
        HANDLE hProcess,
        PSTR UserSearchPath,
        BOOL fInvadeProcess
))GetProcAddress (hmodDbgHelp, FUNC (SymInitialize));
        pSymGetSymFromAddr = (BOOL (WINAPI *) (
        HANDLE hProcess,
        DWORD Address,

```

```

    PDWORD Displacement,
    PIMAGEHLP_SYMBOL Symbol
))GetProcAddress (hmodDbgHelp, FUNC(SymGetSymFromAddr));
    pSymGetModuleInfo = (BOOL (WINAPI *) (
    HANDLE hProcess,
    DWORD dwAddr,
    PIMAGEHLP_MODULE ModuleInfo
))GetProcAddress (hmodDbgHelp, FUNC(SymGetModuleInfo));
pSymSetOptions = (DWORD (WINAPI *) (
DWORD SymOptions
))GetProcAddress (hmodDbgHelp, FUNC(SymSetOptions));

    pSymSetOptions(SYMOPT_UNDNAMES);

    pSymInitialize(GetCurrentProcess(), NULL, TRUE);

    return TRUE;
}

static void dump_backtrace_for_thread(HANDLE hThread)
{
    STACKFRAME sf;
    CONTEXT context;
    DWORD dwImageType;

    if (!pStackWalk)
        if (!init_backtrace())
            return;

    /* can't use this function for current thread as GetThreadContext
    * doesn't support getting context from current thread */
    if (hThread == GetCurrentThread())
        return;

    DPRINTF("Backtrace:\n");

    _DBUS_ZERO(context);
    context.ContextFlags = CONTEXT_FULL;

    SuspendThread(hThread);

    if (!GetThreadContext(hThread, &context))
    {
        DPRINTF("Couldn't get thread context (error %ld)\n",
        GetLastError());
        ResumeThread(hThread);
        return;
    }

    _DBUS_ZERO(sf);

```

```

#ifdef __i386__
    sf.AddrFrame.Offset = context.Ebp;
    sf.AddrFrame.Mode = AddrModeFlat;
    sf.AddrPC.Offset = context.Eip;
    sf.AddrPC.Mode = AddrModeFlat;
    dwImageType = IMAGE_FILE_MACHINE_I386;
#elif _M_X64
    dwImageType = IMAGE_FILE_MACHINE_AMD64;
    sf.AddrPC.Offset = context.Rip;
    sf.AddrPC.Mode = AddrModeFlat;
    sf.AddrFrame.Offset = context.Rsp;
    sf.AddrFrame.Mode = AddrModeFlat;
    sf.AddrStack.Offset = context.Rsp;
    sf.AddrStack.Mode = AddrModeFlat;
#elif _M_IA64
    dwImageType = IMAGE_FILE_MACHINE_IA64;
    sf.AddrPC.Offset = context.StIIP;
    sf.AddrPC.Mode = AddrModeFlat;
    sf.AddrFrame.Offset = context.IntSp;
    sf.AddrFrame.Mode = AddrModeFlat;
    sf.AddrBStore.Offset = context.RsBSP;
    sf.AddrBStore.Mode = AddrModeFlat;
    sf.AddrStack.Offset = context.IntSp;
    sf.AddrStack.Mode = AddrModeFlat;
#else
    # error You need to fill in the STACKFRAME structure for your
    architecture
#endif

    while (pStackWalk(dwImageType, GetCurrentProcess(),
                    hThread, &sf, &context, NULL,
                    pSymFunctionTableAccess,
                    pSymGetModuleBase, NULL))
    {
        BYTE buffer[256];
        IMAGEHLP_SYMBOL * pSymbol = (IMAGEHLP_SYMBOL *)buffer;
        DWORD dwDisplacement;

        pSymbol->SizeOfStruct = sizeof(IMAGEHLP_SYMBOL);
        pSymbol->MaxNameLength = sizeof(buffer) -
sizeof(IMAGEHLP_SYMBOL) + 1;

        if (!pSymGetSymFromAddr(GetCurrentProcess(), sf.AddrPC.Offset,
                                &dwDisplacement, pSymbol))
        {
            IMAGEHLP_MODULE ModuleInfo;
            ModuleInfo.SizeOfStruct = sizeof(ModuleInfo);

            if (!pSymGetModuleInfo(GetCurrentProcess(),
sf.AddrPC.Offset,
                                &ModuleInfo))
                DPRINTF("1\t%p\n", (void*)sf.AddrPC.Offset);
        }
    }

```

```

        else
            DPRINTF("2\t%s+0x%lx\n", ModuleInfo.ImageName,
                sf.AddrPC.Offset - ModuleInfo.BaseOfImage);
    }
    else if (dwDisplacement)
        DPRINTF("3\t%s+0x%lx\n", pSymbol->Name, dwDisplacement);
    else
        DPRINTF("4\t%s\n", pSymbol->Name);
}

ResumeThread(hThread);
}

static DWORD WINAPI dump_thread_proc(LPVOID lpParameter)
{
    dump_backtrace_for_thread((HANDLE)lpParameter);
    return 0;
}

/* cannot get valid context from current thread, so we have to execute
 * backtrace from another thread */
static void dump_backtrace()
{
    HANDLE hCurrentThread;
    HANDLE hThread;
    DWORD dwThreadId;
    DuplicateHandle(GetCurrentProcess(), GetCurrentThread(),
        GetCurrentProcess(), &hCurrentThread, 0, FALSE,
DUPLICATE_SAME_ACCESS);
    hThread = CreateThread(NULL, 0, dump_thread_proc,
(LPVOID)hCurrentThread,
        0, &dwThreadId);
    WaitForSingleObject(hThread, INFINITE);
    CloseHandle(hThread);
    CloseHandle(hCurrentThread);
}
#endif
#endif /* asserts or tests enabled */

#ifdef BACKTRACES
void _dbus_print_backtrace(void)
{
    init_backtrace();
    dump_backtrace();
}
#else
void _dbus_print_backtrace(void)
{
    _dbus_verbose (" D-Bus not compiled with backtrace support\n");
}
#endif

```

```

static dbus_uint32_t fromAscii(char ascii)
{
    if(ascii >= '0' && ascii <= '9')
        return ascii - '0';
    if(ascii >= 'A' && ascii <= 'F')
        return ascii - 'A' + 10;
    if(ascii >= 'a' && ascii <= 'f')
        return ascii - 'a' + 10;
    return 0;
}

dbus_bool_t _dbus_read_local_machine_uuid      (DBusGUID
*machine_id,                                  dbus_bool_t
create_if_not_found,                          DBusError      *error)
{
#ifdef DBUS_WINCE
    return TRUE;
    // TODO
#else
    HW_PROFILE_INFOA info;
    char *lpc = &info.szHwProfileGuid[0];
    dbus_uint32_t u;

    // the hw-profile guid lives long enough
    if(!GetCurrentHwProfileA(&info))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL); // FIXME
        return FALSE;
    }

    // Form: {12340001-4980-1920-6788-123456789012}
    lpc++;
    // 12340001
    u = ((fromAscii(lpc[0]) << 0) |
        (fromAscii(lpc[1]) << 4) |
        (fromAscii(lpc[2]) << 8) |
        (fromAscii(lpc[3]) << 12) |
        (fromAscii(lpc[4]) << 16) |
        (fromAscii(lpc[5]) << 20) |
        (fromAscii(lpc[6]) << 24) |
        (fromAscii(lpc[7]) << 28));
    machine_id->as_uint32s[0] = u;

    lpc += 9;
    // 4980-1920
    u = ((fromAscii(lpc[0]) << 0) |
        (fromAscii(lpc[1]) << 4) |
        (fromAscii(lpc[2]) << 8) |
        (fromAscii(lpc[3]) << 12) |
        (fromAscii(lpc[5]) << 16) |

```



```

        (fromAscii(lpc[6]) << 20) |
        (fromAscii(lpc[7]) << 24) |
        (fromAscii(lpc[8]) << 28));
machine_id->as_uint32s[1] = u;

lpc += 10;
// 6788-1234
u = ((fromAscii(lpc[0]) << 0) |
     (fromAscii(lpc[1]) << 4) |
     (fromAscii(lpc[2]) << 8) |
     (fromAscii(lpc[3]) << 12) |
     (fromAscii(lpc[5]) << 16) |
     (fromAscii(lpc[6]) << 20) |
     (fromAscii(lpc[7]) << 24) |
     (fromAscii(lpc[8]) << 28));
machine_id->as_uint32s[2] = u;

lpc += 9;
// 56789012
u = ((fromAscii(lpc[0]) << 0) |
     (fromAscii(lpc[1]) << 4) |
     (fromAscii(lpc[2]) << 8) |
     (fromAscii(lpc[3]) << 12) |
     (fromAscii(lpc[4]) << 16) |
     (fromAscii(lpc[5]) << 20) |
     (fromAscii(lpc[6]) << 24) |
     (fromAscii(lpc[7]) << 28));
machine_id->as_uint32s[3] = u;
#endif
return TRUE;
}

static
HANDLE _dbus_global_lock (const char *mutexname)
{
HANDLE mutex;
DWORD gotMutex;

mutex = CreateMutexA( NULL, FALSE, mutexname );
if( !mutex )
{
return FALSE;
}

gotMutex = WaitForSingleObject( mutex, INFINITE );
switch( gotMutex )
{
case WAIT_ABANDONED:
ReleaseMutex (mutex);
CloseHandle (mutex);
return 0;
case WAIT_FAILED:

```

```

        case WAIT_TIMEOUT:
            return 0;
    }

    return mutex;
}

static
void _dbus_global_unlock (HANDLE mutex)
{
    ReleaseMutex (mutex);
    CloseHandle (mutex);
}

// for proper cleanup in dbus-daemon
static HANDLE hDBusDaemonMutex = NULL;
static HANDLE hDBusSharedMem = NULL;
// sync _dbus_daemon_publish_session_bus_address,
_dbus_daemon_unpublish_session_bus_address and
_dbus_daemon_already_runs
static const char *cUniqueDBusInitMutex = "UniqueDBusInitMutex";
// sync _dbus_get_autolaunch_address
static const char *cDBusAutolaunchMutex = "DBusAutolaunchMutex";
// mutex to determine if dbus-daemon is already started (per user)
static const char *cDBusDaemonMutex = "DBusDaemonMutex";
// named shm for dbus address info (per user)
static const char *cDBusDaemonAddressInfo = "DBusDaemonAddressInfo";

static dbus_bool_t
_dbus_get_install_root_as_hash(DBusString *out)
{
    DBusString install_path;

    char path[MAX_PATH*2];
    int path_size = sizeof(path);

    if (!_dbus_get_install_root(path,path_size))
        return FALSE;

    _dbus_string_init(&install_path);
    _dbus_string_append(&install_path,path);

    _dbus_string_init(out);

    _dbus_string_tolower_ascii(&install_path,0,_dbus_string_get_length(&install_path));

    if (!_dbus_sha_compute (&install_path, out))
        return FALSE;

    return TRUE;
}

```

```

static dbus_bool_t
_dbus_get_address_string (DBusString *out, const char *basestring,
const char *scope)
{
    _dbus_string_init(out);
    _dbus_string_append(out,basestring);

    if (!scope)
        {
            return TRUE;
        }
    else if (strcmp(scope,"*install-path") == 0
             // for 1.3 compatibility
             || strcmp(scope,"install-path") == 0)
        {
            DBusString temp;
            if (!_dbus_get_install_root_as_hash(&temp))
                {
                    _dbus_string_free(out);
                    return FALSE;
                }
            _dbus_string_append(out,"-");
            _dbus_string_append(out,_dbus_string_get_const_data(&temp));
            _dbus_string_free(&temp);
        }
    else if (strcmp(scope,"*user") == 0)
        {
            _dbus_string_append(out,"-");
            if (!_dbus_append_user_from_current_process(out))
                {
                    _dbus_string_free(out);
                    return FALSE;
                }
        }
    else if (strlen(scope) > 0)
        {
            _dbus_string_append(out,"-");
            _dbus_string_append(out,scope);
            return TRUE;
        }
    return TRUE;
}

static dbus_bool_t
_dbus_get_shm_name (DBusString *out,const char *scope)
{
    return _dbus_get_address_string (out,cDBusDaemonAddressInfo,scope);
}

static dbus_bool_t
_dbus_get_mutex_name (DBusString *out,const char *scope)

```

```

{
    return _dbus_get_address_string (out, cDBusDaemonMutex, scope);
}

dbus_bool_t
_dbus_daemon_is_session_bus_address_published (const char *scope)
{
    HANDLE lock;
    DBusString mutex_name;

    if (!_dbus_get_mutex_name(&mutex_name, scope))
    {
        _dbus_string_free( &mutex_name );
        return FALSE;
    }

    if (hDBusDaemonMutex)
        return TRUE;

    // sync _dbus_daemon_publish_session_bus_address,
    _dbus_daemon_unpublish_session_bus_address and
    _dbus_daemon_already_runs
    lock = _dbus_global_lock( cUniqueDBusInitMutex );

    // we use CreateMutex instead of OpenMutex because of possible race
    conditions,
    // see http://msdn.microsoft.com/en-us/library/ms684315%28VS.85%29.aspx
    hDBusDaemonMutex = CreateMutexA( NULL, FALSE,
    _dbus_string_get_const_data(&mutex_name) );

    /* The client uses mutex ownership to detect a running server, so
    the server should do so too.
    Fortunately the client deletes the mutex in the lock protected
    area, so checking presence
    will work too. */

    _dbus_global_unlock( lock );

    _dbus_string_free( &mutex_name );

    if (hDBusDaemonMutex == NULL)
        return FALSE;
    if (GetLastError() == ERROR_ALREADY_EXISTS)
    {
        CloseHandle(hDBusDaemonMutex);
        hDBusDaemonMutex = NULL;
        return TRUE;
    }
    // mutex wasn't created before, so return false.
    // We leave the mutex name allocated for later reuseage
    // in _dbus_daemon_publish_session_bus_address.

```

```

    return FALSE;
}

dbus_bool_t
_dbus_daemon_publish_session_bus_address (const char* address, const
char *scope)
{
    HANDLE lock;
    char *shared_addr = NULL;
    DBusString shm_name;
    DBusString mutex_name;

    _dbus_assert (address);

    if (!_dbus_get_mutex_name(&mutex_name, scope))
    {
        _dbus_string_free( &mutex_name );
        return FALSE;
    }

    // sync _dbus_daemon_publish_session_bus_address,
    _dbus_daemon_unpublish_session_bus_address and
    _dbus_daemon_already_runs
    lock = _dbus_global_lock( cUniqueDBusInitMutex );

    if (!hDBusDaemonMutex)
    {
        hDBusDaemonMutex = CreateMutexA( NULL, FALSE,
        _dbus_string_get_const_data(&mutex_name) );
    }
    _dbus_string_free( &mutex_name );

    // acquire the mutex
    if (WaitForSingleObject( hDBusDaemonMutex, 10 ) != WAIT_OBJECT_0)
    {
        _dbus_global_unlock( lock );
        CloseHandle( hDBusDaemonMutex );
        return FALSE;
    }

    if (!_dbus_get_shm_name(&shm_name, scope))
    {
        _dbus_string_free( &shm_name );
        _dbus_global_unlock( lock );
        return FALSE;
    }

    // create shm
    hDBusSharedMem = CreateFileMappingA( INVALID_HANDLE_VALUE, NULL,
    PAGE_READWRITE,
    0, strlen( address ) + 1,
    _dbus_string_get_const_data(&shm_name) );

```

```

    _dbus_assert( hDBusSharedMem );

    shared_addr = MapViewOfFile( hDBusSharedMem, FILE_MAP_WRITE, 0, 0, 0
);

    _dbus_assert (shared_addr);

    strcpy( shared_addr, address);

    // cleanup
    UnmapViewOfFile( shared_addr );

    _dbus_global_unlock( lock );
    _dbus_verbose( "published session bus address at
%s\n", _dbus_string_get_const_data (&shm_name) );

    _dbus_string_free( &shm_name );
    return TRUE;
}

void
_dbus_daemon_unpublish_session_bus_address (void)
{
    HANDLE lock;

    // sync _dbus_daemon_publish_session_bus_address,
    _dbus_daemon_unpublish_session_bus_address and
    _dbus_daemon_already_runs
    lock = _dbus_global_lock( cUniqueDBusInitMutex );

    CloseHandle( hDBusSharedMem );

    hDBusSharedMem = NULL;

    ReleaseMutex( hDBusDaemonMutex );

    CloseHandle( hDBusDaemonMutex );

    hDBusDaemonMutex = NULL;

    _dbus_global_unlock( lock );
}

static dbus_bool_t
_dbus_get_autolaunch_shm (DBusString *address, DBusString *shm_name)
{
    HANDLE sharedMem;
    char *shared_addr;
    int i;

    // read shm
    for(i=0;i<20;++i) {

```

```

        // we know that dbus-daemon is available, so we wait until shm
is available
        sharedMem = OpenFileMappingA( FILE_MAP_READ, FALSE,
_dbus_string_get_const_data(shm_name));
        if( sharedMem == 0 )
            Sleep( 100 );
        if ( sharedMem != 0)
            break;
    }

    if( sharedMem == 0 )
        return FALSE;

    shared_addr = MapViewOfFile( sharedMem, FILE_MAP_READ, 0, 0, 0 );

    if( !shared_addr )
        return FALSE;

    _dbus_string_init( address );

    _dbus_string_append( address, shared_addr );

    // cleanup
    UnmapViewOfFile( shared_addr );

    CloseHandle( sharedMem );

    return TRUE;
}

static dbus_bool_t
_dbus_daemon_already_runs (DBusString *address, DBusString *shm_name,
const char *scope)
{
    HANDLE lock;
    HANDLE daemon;
    DBusString mutex_name;
    dbus_bool_t bRet = TRUE;

    if (!_dbus_get_mutex_name(&mutex_name, scope))
    {
        _dbus_string_free( &mutex_name );
        return FALSE;
    }

    // sync _dbus_daemon_publish_session_bus_address,
_dbus_daemon_unpublish_session_bus_address and
_dbus_daemon_already_runs
    lock = _dbus_global_lock( cUniqueDBusInitMutex );

    // do checks

```

```

    daemon = CreateMutexA( NULL, FALSE,
_dbus_string_get_const_data(&mutex_name) );
    if(WaitForSingleObject( daemon, 10 ) != WAIT_TIMEOUT)
    {
        ReleaseMutex (daemon);
        CloseHandle (daemon);

        _dbus_global_unlock( lock );
        _dbus_string_free( &mutex_name );
        return FALSE;
    }

// read shm
bRet = _dbus_get_autolaunch_shm( address, shm_name );

// cleanup
CloseHandle ( daemon );

_dbus_global_unlock( lock );
_dbus_string_free( &mutex_name );

return bRet;
}

dbus_bool_t
_dbus_get_autolaunch_address (const char *scope, DBusString *address,
                             DBusError *error)
{
    HANDLE mutex;
    STARTUPINFOA si;
    PROCESS_INFORMATION pi;
    dbus_bool_t retval = FALSE;
    LPSTR lpFile;
    char dbus_exe_path[MAX_PATH];
    char dbus_args[MAX_PATH * 2];
    const char * daemon_name = DBUS_DAEMON_NAME ".exe";
    DBusString shm_name;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (!_dbus_get_shm_name(&shm_name,scope))
    {
        dbus_set_error_const (error, DBUS_ERROR_FAILED, "could not
determine shm name");
        return FALSE;
    }

    mutex = _dbus_global_lock ( cDBusAutolaunchMutex );

    if (_dbus_daemon_already_runs(address,&shm_name,scope))
    {
        _dbus_verbose( "found running dbus daemon at %s\n",

```



```

        _dbus_string_get_const_data (&shm_name) );
    retval = TRUE;
    goto out;
}

if (!SearchPathA(NULL, daemon_name, NULL, sizeof(dbus_exe_path),
dbus_exe_path, &lpFile))
{
    // Look in directory containing dbus shared library
    HMODULE hmod;
    char dbus_module_path[MAX_PATH];
    DWORD rc;

    _dbus_verbose( "did not found dbus daemon executable on default
search path, "
        "trying path where dbus shared library is located");

    hmod = _dbus_win_get_dll_hmodule();
    rc = GetModuleFileNameA(hmod, dbus_module_path,
sizeof(dbus_module_path));
    if (rc <= 0)
    {
        dbus_set_error_const (error, DBUS_ERROR_FAILED, "could not
retrieve dbus shared library file name");
        retval = FALSE;
        goto out;
    }
    else
    {
        char *ext_idx = strrchr(dbus_module_path, '\\');
        if (ext_idx)
            *ext_idx = '\\0';
        if (!SearchPathA(dbus_module_path, daemon_name, NULL,
sizeof(dbus_exe_path), dbus_exe_path, &lpFile))
        {
            dbus_set_error_const (error, DBUS_ERROR_FAILED, "could
not find dbus-daemon executable");
            retval = FALSE;
            printf ("please add the path to %s to your PATH
environment variable\n", daemon_name);
            printf ("or start the daemon manually\n\n");
            goto out;
        }
        _dbus_verbose( "found dbus daemon executable at
%s", dbus_module_path);
    }
}

// Create process
ZeroMemory( &si, sizeof(si) );
si.cb = sizeof(si);

```

```

ZeroMemory( &pi, sizeof(pi) );

    _snprintf(dbus_args, sizeof(dbus_args) - 1, "\"%s\" %s",
dbus_exe_path, "--session");

// argv[i] = "--config-file=bus\\session.conf";
// printf("create process \"%s\" %s\n", dbus_exe_path, dbus_args);
if(CreateProcessA(dbus_exe_path, dbus_args, NULL, NULL, FALSE,
CREATE_NO_WINDOW, NULL, NULL, &si, &pi))
    {
        CloseHandle (pi.hThread);
        CloseHandle (pi.hProcess);
        retval = _dbus_get_autolaunch_shm( address, &shm_name );
        if (retval == FALSE)
            dbus_set_error_const (error, DBUS_ERROR_FAILED, "Failed to get
autolaunch address from launched dbus-daemon");
    }
else
    {
        dbus_set_error_const (error, DBUS_ERROR_FAILED, "Failed to
launch dbus-daemon");
        retval = FALSE;
    }

out:
if (retval)
    _DBUS_ASSERT_ERROR_IS_CLEAR (error);
else
    _DBUS_ASSERT_ERROR_IS_SET (error);

    _dbus_global_unlock (mutex);

return retval;
}

/** Makes the file readable by every user in the system.
 *
 * @param filename the filename
 * @param error error location
 * @returns #TRUE if the file's permissions could be changed.
 */
dbus_bool_t
_dbus_make_file_world_readable(const DBusString *filename,
                              DBusError *error)
{
    // TODO
    return TRUE;
}

/**
 * return the relocated DATADIR

```

```

*
* @returns relocated DATADIR static string
*/

static const char *
_dbus_windows_get_datadir (void)
{
    return _dbus_replace_install_prefix(DBUS_DATADIR);
}

#undef DBUS_DATADIR
#define DBUS_DATADIR _dbus_windows_get_datadir ()

#define DBUS_STANDARD_SESSION_SERVICEDIR "/dbus-1/services"
#define DBUS_STANDARD_SYSTEM_SERVICEDIR "/dbus-1/system-services"

/**
 * Returns the standard directories for a session bus to look for
 * service
 * activation files
 *
 * On Windows this should be data directories:
 *
 * %CommonProgramFiles%/dbus
 *
 * and
 *
 * relocated DBUS_DATADIR
 *
 * @param dirs the directory list we are returning
 * @returns #FALSE on OOM
 */

dbus_bool_t
_dbus_get_standard_session_servicedirs (DBusList **dirs)
{
    const char *common_progs;
    DBusString servicedir_path;

    if (!_dbus_string_init (&servicedir_path))
        return FALSE;

#ifdef DBUS_WINCE
    {
        /* On Windows CE, we adjust datadir dynamically to installation
        location. */
        const char *data_dir = _dbus_getenv ("DBUS_DATADIR");

        if (data_dir != NULL)
            {
                if (!_dbus_string_append (&servicedir_path, data_dir))

```

```

        goto oom;

        if (!_dbus_string_append (&servicedir_path,
_DBUS_PATH_SEPARATOR))
            goto oom;
    }
}
#else
/*
the code for accessing services requires absolute base paths
in case DBUS_DATADIR is relative make it absolute
*/
#ifdef DBUS_WIN
{
    DBusString p;

    _dbus_string_init_const (&p, DBUS_DATADIR);

    if (!_dbus_path_is_absolute (&p))
    {
        char install_root[1000];
        if (_dbus_get_install_root (install_root,
sizeof(install_root)))
            if (!_dbus_string_append (&servicedir_path, install_root))
                goto oom;
    }
}
#endif
if (!_dbus_string_append (&servicedir_path, DBUS_DATADIR))
    goto oom;

if (!_dbus_string_append (&servicedir_path, _DBUS_PATH_SEPARATOR))
    goto oom;
#endif

common_progs = _dbus_getenv ("CommonProgramFiles");

if (common_progs != NULL)
{
    if (!_dbus_string_append (&servicedir_path, common_progs))
        goto oom;

    if (!_dbus_string_append (&servicedir_path,
_DBUS_PATH_SEPARATOR))
        goto oom;
}

if (!_dbus_split_paths_and_append (&servicedir_path,
DBUS_STANDARD_SESSION_SERVICEDIR,
dirs))
    goto oom;

```

```

    _dbus_string_free (&servicedir_path);
    return TRUE;

oom:
    _dbus_string_free (&servicedir_path);
    return FALSE;
}

/**
 * Returns the standard directories for a system bus to look for
service
 * activation files
 *
 * On UNIX this should be the standard xdg freedesktop.org data
directories:
 *
 * XDG_DATA_DIRS=${XDG_DATA_DIRS-/usr/local/share:/usr/share}
 *
 * and
 *
 * DBUS_DATADIR
 *
 * On Windows there is no system bus and this function can return
nothing.
 *
 * @param dirs the directory list we are returning
 * @returns #FALSE on OOM
 */

dbus_bool_t
_dbus_get_standard_system_servicedirs (DBusList **dirs)
{
    *dirs = NULL;
    return TRUE;
}

_DBUS_DEFINE_GLOBAL_LOCK (atomic);

/**
 * Atomically increments an integer
 *
 * @param atomic pointer to the integer to increment
 * @returns the value before incrementing
 */

dbus_int32_t
_dbus_atomic_inc (DBusAtomic *atomic)
{
    // +/- 1 is needed here!
    // no volatile argument with mingw
    return InterlockedIncrement (&atomic->value) - 1;
}

```

```

/**
 * Atomically decrement an integer
 *
 * @param atomic pointer to the integer to decrement
 * @returns the value before decrementing
 *
 */
dbus_int32_t
_dbus_atomic_dec (DBusAtomic *atomic)
{
    // +/- 1 is needed here!
    // no volatile argument with mingw
    return InterlockedDecrement (&atomic->value) + 1;
}

/**
 * Atomically get the value of an integer. It may change at any time
 * thereafter, so this is mostly only useful for assertions.
 *
 * @param atomic pointer to the integer to get
 * @returns the value at this moment
 *
 */
dbus_int32_t
_dbus_atomic_get (DBusAtomic *atomic)
{
    /* this is what GLib does, hopefully it's right... */
    MemoryBarrier ();
    return atomic->value;
}

/**
 * Called when the bus daemon is signaled to reload its configuration;
 * any
 * caches should be nuked. Of course any caches that need explicit
 * reload
 * are probably broken, but c'est la vie.
 *
 *
 */
void
_dbus_flush_caches (void)
{
}

/**
 * See if errno is EAGAIN or EWOULDBLOCK (this has to be done
 * differently
 * for Winsock so is abstracted)
 *
 * @returns #TRUE if errno == EAGAIN or errno == EWOULDBLOCK
 */

```

```

dbus_bool_t
_dbus_get_is_errno_eagain_or_ewouldblock (void)
{
    return errno == WSAEWOULDBLOCK;
}

/**
 * return the absolute path of the dbus installation
 *
 * @param s buffer for installation path
 * @param len length of buffer
 * @returns #FALSE on failure
 */
dbus_bool_t
_dbus_get_install_root(char *prefix, int len)
{
    //To find the prefix, we cut the filename and also \bin\ if
present
    DWORD pathLength;
    char *lastSlash;
    SetLastError( 0 );
    pathLength = GetModuleFileNameA(_dbus_win_get_dll_hmodule(),
prefix, len);
    if ( pathLength == 0 || GetLastError() != 0 ) {
        *prefix = '\0';
        return FALSE;
    }
    lastSlash = _mbsrchr(prefix, '\\');
    if (lastSlash == NULL) {
        *prefix = '\0';
        return FALSE;
    }
    //cut off binary name
    lastSlash[1] = 0;

    //cut possible "\\bin"

    //this fails if we are in a double-byte system codepage and the
//folder's name happens to end with the *bytes*
//"\\bin"... (I.e. the second byte of some Han character and then
//the Latin "bin", but that is not likely I think...
    if (lastSlash - prefix >= 4 && strnicmp(lastSlash - 4, "\\bin", 4)
== 0)
        lastSlash[-3] = 0;
    else if (lastSlash - prefix >= 10 && strnicmp(lastSlash - 10,
"\\bin\\debug", 10) == 0)
        lastSlash[-9] = 0;
    else if (lastSlash - prefix >= 12 && strnicmp(lastSlash - 12,
"\\bin\\release", 12) == 0)
        lastSlash[-11] = 0;

    return TRUE;
}

```

```

}

/**
 find config file either from installation or build root according to
 the following path layout
   install-root/
     bin/dbus-daemon[d].exe
     etc/<config-file>.conf *or* etc/dbus-1/<config-file>.conf
     (the former above is what dbus4win uses, the latter above is
      what a "normal" Unix-style "make install" uses)

   build-root/
     bin/dbus-daemon[d].exe
     bus/<config-file>.conf
 */
dbus_bool_t
_dbus_get_config_file_name(DBusString *config_file, char *s)
{
    char path[MAX_PATH*2];
    int path_size = sizeof(path);

    if (!_dbus_get_install_root(path, path_size))
        return FALSE;

    if(strlen(s) + 4 + strlen(path) > sizeof(path)-2)
        return FALSE;
    strcat(path, "etc\\");
    strcat(path, s);
    if (_dbus_file_exists(path))
    {
        // find path from executable
        if (!_dbus_string_append (config_file, path))
            return FALSE;
    }
    else
    {
        if (!_dbus_get_install_root(path, path_size))
            return FALSE;
        if(strlen(s) + 11 + strlen(path) > sizeof(path)-2)
            return FALSE;
        strcat(path, "etc\\dbus-1\\");
        strcat(path, s);

        if (_dbus_file_exists(path))
        {
            if (!_dbus_string_append (config_file, path))
                return FALSE;
        }
        else
        {
            if (!_dbus_get_install_root(path, path_size))
                return FALSE;

```



```

        if(strlen(s) + 4 + strlen(path) > sizeof(path)-2)
            return FALSE;
        strcat(path, "bus\\");
        strcat(path, s);

        if (_dbus_file_exists(path))
        {
            if (!_dbus_string_append (config_file, path))
                return FALSE;
        }
    }
    return TRUE;
}

/**
 * Append the absolute path of the system.conf file
 * (there is no system bus on Windows so this can just
 * return FALSE and print a warning or something)
 *
 * @param str the string to append to
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_append_system_config_file (DBusString *str)
{
    return _dbus_get_config_file_name(str, "system.conf");
}

/**
 * Append the absolute path of the session.conf file.
 *
 * @param str the string to append to
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_append_session_config_file (DBusString *str)
{
    return _dbus_get_config_file_name(str, "session.conf");
}

/* See comment in dbus-sysdeps-unix.c */
dbus_bool_t
_dbus_lookup_session_address (dbus_bool_t *supported,
                              DBusString *address,
                              DBusError *error)
{
    /* Probably fill this in with something based on COM? */
    *supported = FALSE;
    return TRUE;
}

```

```

/**
 * Appends the directory in which a keyring for the given credentials
 * should be stored.  The credentials should have either a Windows or
 * UNIX user in them.  The directory should be an absolute path.
 *
 * On UNIX the directory is ~/.dbus-keyrings while on Windows it
should probably
 * be something else, since the dotfile convention is not normal on
Windows.
 *
 * @param directory string to append directory to
 * @param credentials credentials the directory should be for
 *
 * @returns #FALSE on no memory
 */
dbus_bool_t
_dbus_append_keyring_directory_for_credentials (DBusString
*directory,
                                           DBusCredentials
*credentials)
{
    DBusString homedir;
    DBusString dotdir;
    const char *homepath;
    const char *homedrive;

    _dbus_assert (credentials != NULL);
    _dbus_assert (!_dbus_credentials_are_anonymous (credentials));

    if (!_dbus_string_init (&homedir))
        return FALSE;

    homedrive = _dbus_getenv("HOMEDRIVE");
    if (homedrive != NULL && *homedrive != '\\0')
        {
            _dbus_string_append(&homedir,homedrive);
        }

    homepath = _dbus_getenv("HOMEPATH");
    if (homepath != NULL && *homepath != '\\0')
        {
            _dbus_string_append(&homedir,homepath);
        }

#ifdef DBUS_BUILD_TESTS
    {
        const char *override;

        override = _dbus_getenv ("DBUS_TEST_HOMEDIR");
        if (override != NULL && *override != '\\0')
            {
                _dbus_string_set_length (&homedir, 0);
            }
    }
#endif
}

```

```

        if (!_dbus_string_append (&homedir, override))
            goto failed;

        _dbus_verbose ("Using fake homedir for testing: %s\n",
            _dbus_string_get_const_data (&homedir));
    }
else
    {
        static dbus_bool_t already_warned = FALSE;
        if (!already_warned)
            {
                _dbus_warn ("Using your real home directory for testing,
set DBUS_TEST_HOMEDIR to avoid\n");
                already_warned = TRUE;
            }
    }
}
#endif

#ifdef DBUS_WINCE
    /* It's not possible to create a .something directory in Windows CE
    using the file explorer. */
#define KEYRING_DIR "dbus-keyrings"
#else
#define KEYRING_DIR ".dbus-keyrings"
#endif

    _dbus_string_init_const (&dotdir, KEYRING_DIR);
    if (!_dbus_concat_dir_and_file (&homedir,
        &dotdir))

        goto failed;

    if (!_dbus_string_copy (&homedir, 0,
        directory, _dbus_string_get_length
(directory))) {
        goto failed;
    }

    _dbus_string_free (&homedir);
    return TRUE;

failed:
    _dbus_string_free (&homedir);
    return FALSE;
}

/** Checks if a file exists
 *
 * @param file full path to the file
 * @returns #TRUE if file exists
 */
dbus_bool_t

```

```

_dbus_file_exists (const char *file)
{
    DWORD attributes = GetFileAttributesA (file);

    if (attributes != INVALID_FILE_ATTRIBUTES && GetLastError() !=
ERROR_PATH_NOT_FOUND)
        return TRUE;
    else
        return FALSE;
}

/**
 * A wrapper around strerror() because some platforms
 * may be lame and not have strerror().
 *
 * @param error_number errno.
 * @returns error description.
 */
const char*
_dbus_strerror (int error_number)
{
#ifdef DBUS_WINCE
    // TODO
    return "unknown";
#else
    const char *msg;

    switch (error_number)
    {
        case WSAEINTR:
            return "Interrupted function call";
        case WSAEACCES:
            return "Permission denied";
        case WSAEFAULT:
            return "Bad address";
        case WSAEINVAL:
            return "Invalid argument";
        case WSAEMFILE:
            return "Too many open files";
        case WSAEWOULDBLOCK:
            return "Resource temporarily unavailable";
        case WSAEINPROGRESS:
            return "Operation now in progress";
        case WSAEALREADY:
            return "Operation already in progress";
        case WSAENOTSOCK:
            return "Socket operation on nonsocket";
        case WSAEDESTADDRREQ:
            return "Destination address required";
        case WSAEMSGSIZE:
            return "Message too long";
        case WSAEPROTOTYPE:

```

```
    return "Protocol wrong type for socket";
case WSAENOPROTOOPT:
    return "Bad protocol option";
case WSAEPROTONOSUPPORT:
    return "Protocol not supported";
case WSAESOCKTNOSUPPORT:
    return "Socket type not supported";
case WSAEOPNOTSUPP:
    return "Operation not supported";
case WSAEPFNOSUPPORT:
    return "Protocol family not supported";
case WSAEAFNOSUPPORT:
    return "Address family not supported by protocol family";
case WSAEADDRINUSE:
    return "Address already in use";
case WSAEADDRNOTAVAIL:
    return "Cannot assign requested address";
case WSAENETDOWN:
    return "Network is down";
case WSAENETUNREACH:
    return "Network is unreachable";
case WSAENETRESET:
    return "Network dropped connection on reset";
case WSAECONNABORTED:
    return "Software caused connection abort";
case WSAECONNRESET:
    return "Connection reset by peer";
case WSAENOBUFS:
    return "No buffer space available";
case WSAEISCONN:
    return "Socket is already connected";
case WSAENOTCONN:
    return "Socket is not connected";
case WSAESHUTDOWN:
    return "Cannot send after socket shutdown";
case WSAETIMEDOUT:
    return "Connection timed out";
case WSAECONNREFUSED:
    return "Connection refused";
case WSAEHOSTDOWN:
    return "Host is down";
case WSAEHOSTUNREACH:
    return "No route to host";
case WSAEPROCLIM:
    return "Too many processes";
case WSAEDISCON:
    return "Graceful shutdown in progress";
case WSATYPE_NOT_FOUND:
    return "Class type not found";
case WSAHOST_NOT_FOUND:
    return "Host not found";
case WSATRY_AGAIN:
```

```

    return "Nonauthoritative host not found";
case WSANO_RECOVERY:
    return "This is a nonrecoverable error";
case WSANO_DATA:
    return "Valid name, no data record of requested type";
case WSA_INVALID_HANDLE:
    return "Specified event object handle is invalid";
case WSA_INVALID_PARAMETER:
    return "One or more parameters are invalid";
case WSA_IO_INCOMPLETE:
    return "Overlapped I/O event object not in signaled state";
case WSA_IO_PENDING:
    return "Overlapped operations will complete later";
case WSA_NOT_ENOUGH_MEMORY:
    return "Insufficient memory available";
case WSA_OPERATION_ABORTED:
    return "Overlapped operation aborted";
#ifdef WSAINVALIDPROCTABLE

    case WSAINVALIDPROCTABLE:
        return "Invalid procedure table from service provider";
#endif
#ifdef WSAINVALIDPROVIDER

    case WSAINVALIDPROVIDER:
        return "Invalid service provider version number";
#endif
#ifdef WSAPROVIDERFAILEDINIT

    case WSAPROVIDERFAILEDINIT:
        return "Unable to initialize a service provider";
#endif

    case WSASYSCALLFAILURE:
        return "System call failure";
    }
msg = strerror (error_number);
if (msg == NULL)
    msg = "unknown";

    return msg;
#endif //DBUS_WINCE
}

/**
 * Assigns an error name and message corresponding to a Win32 error
 * code to a DBusError. Does nothing if error is #NULL.
 *
 * @param error the error.
 * @param code the Win32 error code
 */
void
```

```

_dbus_win_set_error_from_win_error (DBusError *error,
                                   int         code)
{
    char *msg;

    /* As we want the English message, use the A API */
    FormatMessageA (FORMAT_MESSAGE_ALLOCATE_BUFFER |
                  FORMAT_MESSAGE_IGNORE_INSERTS |
                  FORMAT_MESSAGE_FROM_SYSTEM,
                  NULL, code, MAKELANGID (LANG_ENGLISH,
                  SUBLANG_ENGLISH_US),
                  (LPSTR) &msg, 0, NULL);

    if (msg)
    {
        char *msg_copy;

        msg_copy = dbus_malloc (strlen (msg));
        strcpy (msg_copy, msg);
        LocalFree (msg);

        dbus_set_error (error, "win32.error", "%s", msg_copy);
    }
    else
        dbus_set_error (error, "win32.error", "Unknown error code %d or
FormatMessage failed", code);
}

void
_dbus_win_warn_win_error (const char *message,
                          int         code)
{
    DBusError error;

    dbus_error_init (&error);
    _dbus_win_set_error_from_win_error (&error, code);
    _dbus_warn ("%s: %s\n", message, error.message);
    dbus_error_free (&error);
}

/**
 * Removes a directory; Directory must be empty
 *
 * @param filename directory filename
 * @param error initialized error object
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_delete_directory (const DBusString *filename,
                       DBusError       *error)
{
    const char *filename_c;

```

```

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    filename_c = _dbus_string_get_const_data (filename);

    if (RemoveDirectoryA (filename_c) == 0)
    {
        char *emsg = _dbus_win_error_string (GetLastError ());
        dbus_set_error (error, _dbus_win_error_from_last_error (),
            "Failed to remove directory %s: %s",
            filename_c, emsg);
        _dbus_win_free_error_string (emsg);
        return FALSE;
    }

    return TRUE;
}

/**
 * Checks whether the filename is an absolute path
 *
 * @param filename the filename
 * @returns #TRUE if an absolute path
 */
dbus_bool_t
_dbus_path_is_absolute (const DBusString *filename)
{
    if (_dbus_string_get_length (filename) > 0)
        return _dbus_string_get_byte (filename, 1) == ':'
            || _dbus_string_get_byte (filename, 0) == '\\\
            || _dbus_string_get_byte (filename, 0) == '/';
    else
        return FALSE;
}

dbus_bool_t
_dbus_check_setuid (void)
{
    return FALSE;
}

/** @} end of sysdeps-win */
/* tests in dbus-sysdeps-util.c */

```

File = dbus-sysdeps-win.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps.c Wrappers around system/libc features (internal to D-
BUS implementation)
*

```



```
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02110-1301 USA
*
*/
```

```
#ifndef DBUS_SYSDEPS_WIN_H
#define DBUS_SYSDEPS_WIN_H

extern void *_dbus_win_get_dll_hmodule (void);
#define _WINSOCKAPI_

#include "dbus-hash.h"
#include "dbus-string.h"
#include <ctype.h>
#include <malloc.h>
#include <windows.h>
#undef interface

#define DBUS_CONSOLE_DIR "/var/run/console/"

void _dbus_win_set_errno (int err);
const char* _dbus_win_error_from_last_error (void);

void _dbus_win_startup_winsock (void);
void _dbus_win_warn_win_error (const char *message,
                               int code);

char *_dbus_win_error_string (int error_number);
void _dbus_win_free_error_string (char *string);

extern const char* _dbus_lm_strerror (int error_number);
```

```

dbus_bool_t _dbus_win_account_to_sid (const wchar_t *waccount,
                                     void          **ppsid,
                                     DBusError      *error);

dbus_bool_t
_dbus_win32_sid_to_name_and_domain (dbus_uid_t  uid,
                                    wchar_t     **wname,
                                    wchar_t     **wdomain,
                                    DBusError   *error);

/* Don't define DBUS_CONSOLE_DIR on Win32 */

wchar_t     *_dbus_win_utf8_to_utf16 (const char  *str,
                                       DBusError  *error);
char        *_dbus_win_utf16_to_utf8 (const wchar_t *str,
                                       DBusError  *error);

void         _dbus_win_set_error_from_win_error (DBusError *error, int
code);

dbus_bool_t
_dbus_win_sid_to_name_and_domain (dbus_uid_t uid,
                                   wchar_t   **wname,
                                   wchar_t   **wdomain,
                                   DBusError *error);

dbus_bool_t _dbus_file_exists (const char *filename);

dbus_bool_t _dbus_get_config_file_name (DBusString *config_file,
                                       char *s);

dbus_bool_t _dbus_get_install_root (char *prefix, int len);

#endif

/** @} end of sysdeps-win.h */

File = dbus-sysdeps-wince-glue.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps-wince-glue.c Wrappers for Windows CE around
system/libc features (internal to D-BUS implementation)
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```

```

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02110-1301 USA
*
*/

#include <config.h>
#include "dbus-internals.h"
#include "dbus-sysdeps.h"
#include "dbus-sysdeps-win.h"

#include <windows.h>
/* Including shlobj.h creates trouble on some compilers. Just chicken
   out here by defining just what we need. */
#ifndef CSIDL_PERSONAL
#define CSIDL_PERSONAL 5
#endif

/* Copy SRC to DEST, returning the address of the terminating '\0' in
DEST. */
static char *
stpcpy (char *dest, const char *src)
{
    char *d = dest;
    const char *s = src;

    do
        *d++ = *s;
    while (*s++ != '\0');

    return d - 1;
}

```

```

/* This is special cased, because we must avoid using many dbus
   functions (such as memory allocations): Those functions may in turn
   cause verbose output and check the flag! */
static char *
get_verbose_setting()
{
    const wchar_t dir[] = L"Software\\freedesktop\\DBus";
    const wchar_t name[] = L"Verbose";
    HKEY root_key;
    HKEY key_handle;
    DWORD nbytes;
    DWORD n1;
    DWORD type;
    wchar_t *result_w = NULL;
    char *result;
    int len;

    root_key = HKEY_LOCAL_MACHINE;
    if (RegOpenKeyExW (root_key, dir, 0, KEY_READ, &key_handle))
        return NULL;

    nbytes = 1;
    if (RegQueryValueExW (key_handle, name, 0, NULL, NULL, &nbytes))
    {
        RegCloseKey (key_handle);
        return NULL;
    }
    /* Round up to multiple of wchar_t, convert to number of wchar_t's,
    and add 1. */
    n1 = ((nbytes + sizeof(wchar_t) - 1) / sizeof (wchar_t)) + 1;
    result_w = malloc (n1 * sizeof (wchar_t));
    if (!result_w)
    {
        RegCloseKey (key_handle);
        return NULL;
    }
    if (RegQueryValueExW (key_handle, name, 0, &type, (LPBYTE) result_w,
    &nbytes))
    {
        RegCloseKey (key_handle);
        free (result_w);
        return NULL;
    }
    RegCloseKey (key_handle);
    result_w[n1 - 1] = 0; /* Make sure it is really a string. */

    /* NOTE: REG_MULTI_SZ and REG_EXPAND_SZ not supported, because they
    are not needed in this module. */
    if (type != REG_SZ)
    {
        free (result_w);
    }
}

```

```

        return NULL;
    }

    len = WideCharToMultiByte (CP_UTF8, 0, result_w, -1, NULL, 0, NULL,
NULL);
    if (len < 0)
    {
        free (result_w);
        return NULL;
    }

    result = malloc (len + 1);
    if (!result)
    {
        free (result_w);
        return NULL;
    }

    len = WideCharToMultiByte (CP_UTF8, 0, result_w, -1, result, len,
NULL, NULL);
    free (result_w);
    if (len < 0)
    {
        free (result);
        return NULL;
    }
    return result;
}

```

/* Return a string from the W32 Registry or NULL in case of error.
 Caller must release the return value. A NULL for root is an alias
 for HKEY_CURRENT_USER, HKEY_LOCAL_MACHINE in turn. */

```

static char *
read_w32_registry_string (const char *root, const char *dir, const
char *name)

```

```

{
    HKEY root_key, key_handle;
    DWORD n1, nbytes, type;
    char *result = NULL;

    if ( !root )
        root_key = HKEY_CURRENT_USER;
    else if ( !strcmp( root, "HKEY_CLASSES_ROOT" ) )
        root_key = HKEY_CLASSES_ROOT;
    else if ( !strcmp( root, "HKEY_CURRENT_USER" ) )
        root_key = HKEY_CURRENT_USER;
    else if ( !strcmp( root, "HKEY_LOCAL_MACHINE" ) )
        root_key = HKEY_LOCAL_MACHINE;
    else if ( !strcmp( root, "HKEY_USERS" ) )
        root_key = HKEY_USERS;
    else

```

```

return NULL;

if (RegOpenKeyExA (root_key, dir, 0, KEY_READ, &key_handle))
{
    if (root)
        return NULL; /* no need for a RegClose, so return direct */
    /* It seems to be common practise to fall back to HKLM. */
    if (RegOpenKeyExA (HKEY_LOCAL_MACHINE, dir, 0, KEY_READ,
&key_handle))
        return NULL; /* still no need for a RegClose, so return direct
*/
}

nbytes = 1;
if (RegQueryValueExA (key_handle, name, 0, NULL, NULL, &nbytes))
{
    if (root)
        goto out;
    /* Try to fallback to HKLM also for a missing value. */
    RegCloseKey (key_handle);
    if (RegOpenKeyExA (HKEY_LOCAL_MACHINE, dir, 0, KEY_READ,
&key_handle))
        return NULL; /* Nope. */
    if (RegQueryValueExA (key_handle, name, 0, NULL, NULL, &nbytes))
        goto out;
}
n1 = nbytes + 1;
result = malloc (n1);
if (!result)
    goto out;
if (RegQueryValueExA (key_handle, name, 0, &type, result, &n1))
{
    free(result);
    result = NULL;
    goto out;
}
result[nbytes] = 0; /* Make sure it is really a string. */

out:
RegCloseKey (key_handle);
return result;
}

static char *
find_inst_dir ()
{
    return read_w32_registry_string ("HKEY_LOCAL_MACHINE",
        "Software\\freedesktop\\DBus",
        "Install Directory");
}

```

```

static char *
find_env_in_registry (const char *name)
{
    return read_w32_registry_string ("HKEY_LOCAL_MACHINE",
                                     "Software\\freedesktop\\DBus",
                                     name);
}

```

```

static char *
find_program_in_inst_dir (const char *name)
{
    char *result = NULL;
    char *tmp;

    tmp = find_inst_dir ();
    if (!tmp)
        return NULL;

    result = malloc (strlen (tmp) + 5 + strlen (name) + 1);
    if (!result)
    {
        free (tmp);
        return NULL;
    }

    strcpy (strcpy (strcpy (result, tmp), "\\bin\\"), name);
    free (tmp);

    return result;
}

```

```

static char *
find_inst_subdir (const char *name)
{
    char *result = NULL;
    char *tmp;

    tmp = find_inst_dir ();
    if (!tmp)
        return NULL;

    result = malloc (strlen (tmp) + 1 + strlen (name) + 1);
    if (!result)
    {
        free (tmp);
        return NULL;
    }

    strcpy (strcpy (strcpy (result, tmp), "\\"), name);
}

```

```

    free (tmp);

    return result;
}

static char *
find_my_documents_folder ()
{
    /* One for safety, just in case. */
    char dir[MAX_PATH + 1];
    char *result;

    dir[0] = '\0';
    /* May return false even if successful. */
    SHGetSpecialFolderPathA (0, dir, CSIDL_PERSONAL, 0);
    if (dir[0] == '\0')
        return NULL;

    result = malloc (strlen (dir) + 1);
    if (!result)
        return NULL;
    strcpy (result, dir);
    return result;
}

#define MAX_ENV 30

char *environ[MAX_ENV + 1];

char *
getenv (const char *name)
{
    static char *past_result;
    char **envp;
    int idx;

    if (past_result)
    {
        free (past_result);
        past_result = NULL;
    }

    if (! strcmp (name, "DBUS_VERBOSE"))
        return past_result = get_verbose_setting ();
    else if (! strcmp (name, "HOMEPATH"))
        return past_result = find_my_documents_folder ();
    else if (! strcmp (name, "DBUS_DATADIR"))
        return past_result = find_inst_subdir ("share");

    for (envp = environ; *envp != 0; envp++)

```



```

{
    const char *varp = name;
    char *ep = *envp;
    int same_name = 0;

    while (*varp == *ep && *varp != '\0')
    {
        ++ep;
        ++varp;
    };

    if (*varp == '\0' && *ep == '=')
        return ep + 1;
    }

return NULL;
}

```

```

int
putenv (char *str)
{
    char **envp;
    int idx;
    for (envp = environ; *envp != 0; envp++)
    {
        char *varp = str;
        char *ep = *envp;
        int same_name = 0;

        while (*varp == *ep && *varp != '\0')
        {
            if (*varp == '=')
                same_name = 1;
            ++ep;
            ++varp;
        };

        if (*varp == *ep && *varp == '\0')
            return 0;
        if (same_name)
        {
            *envp = str;
            return 0;
        }
    }

    idx = envp - environ;
    if (idx > MAX_ENV)
    {
        _dbus_win_set_errno (ENOMEM);
        return -1;
    }
}

```

```

    }

    environ[idx] = str;
    return 0;
}

clock_t
clock (void)
{
    return GetTickCount ();
}

void
abort (void)
{
    /* This is what windows does. */
    exit (3);
}

void
GetSystemTimeAsFileTime (LPFILETIME ftp)
{
    SYSTEMTIME st;
    GetSystemTime (&st);
    SystemTimeToFileTime (&st, ftp);
}

unsigned char*
_mbsrchr (const unsigned char* str, unsigned int ch)
{
    /* FIXME. This is not multi-byte safe. */
    return strrchr (str, ch);
}

HANDLE OpenFileMappingA(DWORD dwDesiredAccess,
                        BOOL bInheritHandle,
                        LPCSTR lpName)
{
    DWORD flProtect = 0;
    HANDLE hMapping;

    if (dwDesiredAccess & FILE_MAP_READ)
        flProtect |= PAGE_READONLY;

    if (dwDesiredAccess & FILE_MAP_WRITE)
        flProtect |= PAGE_READWRITE;
}

```

```

SetLastError (0);
hMapping = CreateFileMappingA(INVALID_HANDLE_VALUE,
                             NULL, flProtect, 0, 0, lpName);
if (hMapping != INVALID_HANDLE_VALUE)
{
    /* Just in case Windows CE changes its behaviour, we check for
       the right error value here.  */
    if (GetLastError () != ERROR_ALREADY_EXISTS)
    {
        CloseHandle(hMapping);
        hMapping = INVALID_HANDLE_VALUE;
    }
}
return hMapping;
}

```

```

BOOL
MoveFileExA (LPCSTR lpExistingFileName, LPCSTR lpNewFileName, DWORD
dwFlags)
{
    _dbus_assert (dwFlags == MOVEFILE_REPLACE_EXISTING);

    if (_dbus_file_exists (lpNewFileName))
    {
        BOOL result = DeleteFileA (lpNewFileName);
        if (result == 0)
            return FALSE;
    }
    return MoveFileA (lpExistingFileName, lpNewFileName);
}

```

```

BOOL
SetHandleInformation (HANDLE hObject, DWORD dwMask, DWORD dwFlags)
{
    _dbus_assert (dwMask == (HANDLE_FLAG_INHERIT |
HANDLE_FLAG_PROTECT_FROM_CLOSE));
    _dbus_assert (dwFlags == 0);

    /* Not supported on Windows CE, and actually the default.  So just
       return overwhelming success.  */
    return 1;
}

```

```

DWORD
SearchPathA (LPCSTR lpPath, LPCSTR lpFileName, LPCSTR lpExtension,
             DWORD nBufferLength, LPSTR lpBuffer, LPSTR* lpFilePart)
{
    char *filename;
    char *filepart;
}

```

```

int filename_len;

_dbus_assert (lpPath == NULL);
_dbus_assert (lpExtension == NULL);

filename = find_program_in_inst_dir (lpFileName);
if (!filename)
{
    SetLastError (ERROR_FILE_NOT_FOUND);
    return 0;
}

filename_len = strlen (filename) + 1;
if (filename_len > nBufferLength)
{
    free (filename);
    return filename_len;
}

strcpy (lpBuffer, filename);
free (filename);

filepart = _mbsrchr (lpBuffer, '\\');
if (!filepart)
    filepart = lpBuffer;
*lpFilePart = filepart;

return filename_len - 1;
}

/** Gets our SID
 * @param points to sid buffer, need to be freed with LocalFree()
 * @returns process sid
 */
dbus_bool_t
_dbus_getsid(char **sid)
{
    /* There is nothing like this on Windows CE, so we fake it. */
    static const char asid[] = "S-1-5-21-515967899-920026266-1708537768-1000";
    char *buf = LocalAlloc (LMEM_FIXED, sizeof (asid));
    if (!buf)
    {
        _dbus_win_warn_win_error ("LocalAlloc failed", GetLastError ());
        return FALSE;
    }

    memcpy (buf, asid, sizeof (asid));
    *sid = buf;
    return TRUE;
}

```

```

BOOL
LookupAccountNameW (LPCWSTR lpSystemName, LPCWSTR lpAccountName, PSID
Sid, PDWORD cbSid,
                    LPWSTR ReferencedDomainName, PDWORD
cchReferencedDomainName, PSID_NAME_USE peUse)
{
    /* Currently not needed. */
    return FALSE;
}

```

```

BOOL
IsValidSid (PSID psid)
{
    /* Currently not needed. */
    return FALSE;
}

```

```

HANDLE
CreateFileA (LPCSTR lpFileName, DWORD dwDesiredAccess, DWORD
dwSharedMode,
             LPSECURITY_ATTRIBUTES lpSecurityAttributes,
             DWORD dwCreationDisposition, DWORD dwFlagsAndAttributes,
             HANDLE hTemplateFile)
{
    wchar_t *filename;
    HANDLE result;
    int err;

    filename = _dbus_win_utf8_to_utf16 (lpFileName, NULL);
    if (!filename)
        return INVALID_HANDLE_VALUE;

    result = CreateFileW (filename, dwDesiredAccess, dwSharedMode,
                        lpSecurityAttributes, dwCreationDisposition,
                        dwFlagsAndAttributes, hTemplateFile);

    err = GetLastError ();
    dbus_free (filename);
    SetLastError (err);
    return result;
}

```

```

BOOL
DeleteFileA (LPCSTR lpFileName)
{
    wchar_t *filename;
    BOOL result;
}

```

```

int err;

filename = _dbus_win_utf8_to_utf16 (lpFileName, NULL);
if (!filename)
    return FALSE;

result = DeleteFileW (filename);

err = GetLastError ();
dbus_free (filename);
SetLastError (err);
return result;
}

BOOL
MoveFileA (LPCSTR lpExistingFileName, LPCSTR lpNewFileName)
{
    wchar_t *existing_filename;
    wchar_t *new_filename;
    BOOL result;
    int err;

    existing_filename = _dbus_win_utf8_to_utf16 (lpExistingFileName,
NULL);
    if (! existing_filename)
        return FALSE;

    new_filename = _dbus_win_utf8_to_utf16 (lpNewFileName, NULL);
    if (! new_filename)
        {
            dbus_free (existing_filename);
            return FALSE;
        }

    result = MoveFileW (existing_filename, new_filename);

    err = GetLastError ();
    dbus_free (existing_filename);
    dbus_free (new_filename);
    SetLastError (err);
    return result;
}

DWORD
GetFileAttributesA(LPCSTR lpFileName)
{
    wchar_t *filename;
    DWORD result;
    int err;

```

```

filename = _dbus_win_utf8_to_utf16 (lpFileName, NULL);
if (!filename)
    return INVALID_FILE_ATTRIBUTES;

result = GetFileAttributesW (filename);

err = GetLastError ();
dbus_free (filename);
SetLastError (err);
return result;
}

BOOL
GetFileAttributesExA (LPCSTR lpFileName, GET_FILEEX_INFO_LEVELS
fInfoLevelId,
                    PVOID lpFileInformation)
{
    wchar_t *filename;
    DWORD result;
    int err;

    filename = _dbus_win_utf8_to_utf16 (lpFileName, NULL);
    if (!filename)
        return INVALID_FILE_ATTRIBUTES;

    result = GetFileAttributesExW (filename, fInfoLevelId,
lpFileInformation);

    err = GetLastError ();
    dbus_free (filename);
    SetLastError (err);
    return result;
}

HANDLE
CreateFileMappingA (HANDLE hFile, LPSECURITY_ATTRIBUTES lpAttributes,
                    DWORD flProtect, DWORD dwMaximumSizeHigh,
                    DWORD dwMaximumSizeLow, LPCSTR lpName)
{
    wchar_t *name;
    HANDLE result;
    int err;

    if (lpName)
    {
        name = _dbus_win_utf8_to_utf16 (lpName, NULL);
        if (!name)
            return INVALID_HANDLE_VALUE;
    }
    else

```

```

    name = NULL;

    result = CreateFileMappingW (hFile, lpAttributes, flProtect,
                                dwMaximumSizeHigh, dwMaximumSizeLow,
                                name);

    err = GetLastError ();
    dbus_free (name);
    SetLastError (err);
    return result;
}

```

```

BOOL
CreateDirectoryA (LPCSTR lpPathName, LPSECURITY_ATTRIBUTES
lpSecurityAttributes)
{
    wchar_t *pathname;
    BOOL result;
    int err;

    pathname = _dbus_win_utf8_to_utf16 (lpPathName, NULL);
    if (!pathname)
        return FALSE;

    result = CreateDirectoryW (pathname, lpSecurityAttributes);

    err = GetLastError ();
    dbus_free (pathname);
    SetLastError (err);
    return result;
}

```

```

BOOL
RemoveDirectoryA (LPCSTR lpPathName)
{
    wchar_t *pathname;
    BOOL result;
    int err;

    pathname = _dbus_win_utf8_to_utf16 (lpPathName, NULL);
    if (!pathname)
        return FALSE;

    result = RemoveDirectoryW (pathname);

    err = GetLastError ();
    dbus_free (pathname);
    SetLastError (err);
    return result;
}

```



```

static BOOL
convert_find_data (LPWIN32_FIND_DATAW fdw, LPWIN32_FIND_DATAA fda)
{
    char *filename;
    int len;

    fda->dwFileAttributes = fdw->dwFileAttributes;
    fda->ftCreationTime = fdw->ftCreationTime;
    fda->ftLastAccessTime = fdw->ftLastAccessTime;
    fda->ftLastWriteTime = fdw->ftLastWriteTime;
    fda->nFileSizeHigh = fdw->nFileSizeHigh;
    fda->nFileSizeLow = fdw->nFileSizeLow;

    filename = _dbus_win_utf16_to_utf8 (fdw->cFileName, NULL);
    if (!filename)
        return FALSE;

    len = sizeof (fda->cFileName);
    strncpy (fda->cFileName, filename, len);
    fda->cFileName[len - 1] = '\\0';

    return TRUE;
}

```

```

HANDLE
FindFirstFileA (LPCSTR lpFileName, LPWIN32_FIND_DATAA lpFindFileData)
{
    wchar_t *pathname;
    WIN32_FIND_DATAW find_file_data;
    HANDLE result;
    int err;

    pathname = _dbus_win_utf8_to_utf16 (lpFileName, NULL);
    if (!pathname)
        return INVALID_HANDLE_VALUE;

    result = FindFirstFileW (pathname, &find_file_data);
    if (result != INVALID_HANDLE_VALUE)
    {
        BOOL res = convert_find_data (&find_file_data, lpFindFileData);
        if (!res)
        {
            err = GetLastError ();
            FindClose (result);
            SetLastError (err);
            result = INVALID_HANDLE_VALUE;
        }
    }
}

```

```
    err = GetLastError ();
    dbus_free (pathname);
    SetLastError (err);
    return result;
}
```

```
BOOL
FindNextFileA (HANDLE hFindFile, LPWIN32_FIND_DATAA lpFindFileData)
{
    WIN32_FIND_DATAW find_file_data;
    BOOL result;
    int err;

    result = FindNextFileW (hFindFile, &find_file_data);
    if (result)
        result = convert_find_data (&find_file_data, lpFindFileData);

    return result;
}
```

```
HANDLE
CreateMutexA (LPSECURITY_ATTRIBUTES lpMutexAttributes, BOOL
bInitialOwner,
             LPCSTR lpName)
{
    wchar_t *name;
    HANDLE result;
    int err;

    if (lpName)
    {
        name = _dbus_win_utf8_to_utf16 (lpName, NULL);
        if (!name)
            return INVALID_HANDLE_VALUE;
    }
    else
        name = NULL;

    result = CreateMutexW (lpMutexAttributes, bInitialOwner, name);

    err = GetLastError ();
    dbus_free (name);
    SetLastError (err);
    return result;
}
```

```
BOOL
CreateProcessA (LPCSTR pszImageName, LPSTR pszCmdLine,
               LPSECURITY_ATTRIBUTES psaProcess,
```

```

        LPSECURITY_ATTRIBUTES psaThread, BOOL fInheritHandles,
        DWORD fdwCreate, PVOID pvEnvironment, LPCSTR
pszCurDir,
        LPSTARTUPINFOA psiStartInfo,
        LPPROCESS_INFORMATION pProcInfo)
{
    wchar_t *image_name = NULL;
    wchar_t *cmd_line = NULL;
    BOOL result;
    int err;

    _dbus_assert (psaProcess == NULL);
    _dbus_assert (psaThread == NULL);
    _dbus_assert (fInheritHandles == FALSE);
    _dbus_assert (pvEnvironment == NULL);
    _dbus_assert (pszCurDir == NULL);
    /* psiStartInfo is generally not NULL. */

    if (pszImageName)
    {
        image_name = _dbus_win_utf8_to_utf16 (pszImageName, NULL);
        if (!image_name)
            return 0;
    }
    if (pszCmdLine)
    {
        cmd_line = _dbus_win_utf8_to_utf16 (pszCmdLine, NULL);
        if (!cmd_line)
        {
            if (image_name)
                dbus_free (image_name);
            return 0;
        }
    }

    result = CreateProcessW (image_name, cmd_line, NULL, NULL, FALSE,
        fdwCreate, NULL, NULL, NULL, pProcInfo);

    err = GetLastError ();
    dbus_free (image_name);
    dbus_free (cmd_line);
    SetLastError (err);
    return result;
}

LONG
RegOpenKeyExA (HKEY hKey, LPCSTR lpSubKey, DWORD ulOptions,
    REGSAM samDesired, PHKEY phkResult)
{
    wchar_t *subkey;
    LONG result;

```

```

int err;

if (lpSubKey)
{
    subkey = _dbus_win_utf8_to_utf16 (lpSubKey, NULL);
    if (!subkey)
        return 0;
}
else
    subkey = NULL;

result = RegOpenKeyEx (hKey, subkey, ulOptions, samDesired,
phkResult);

err = GetLastError ();
dbus_free (subkey);
SetLastError (err);
return result;
}

LONG
RegQueryValueExA (HKEY hKey, LPCSTR lpValueName, LPDWORD lpReserved,
                  LPDWORD lpType, LPBYTE lpData, LPDWORD lpcbData)
{
    wchar_t *name;
    LONG err;
    BYTE *data;
    DWORD data_len;
    DWORD type;

    if (lpValueName)
    {
        name = _dbus_win_utf8_to_utf16 (lpValueName, NULL);
        if (!name)
            return GetLastError ();
    }
    else
        name = NULL;

    data_len = 0;
    err = RegQueryValueExW (hKey, name, lpReserved, lpType, NULL,
&data_len);
    if (err || !lpcbData)
    {
        dbus_free (name);
        return err;
    }

    data = malloc (data_len + sizeof (wchar_t));
    if (!data)
    {

```

```

    dbus_free (name);
    return ERROR_NOT_ENOUGH_MEMORY;
}

err = RegQueryValueExW (hKey, name, lpReserved, &type, data,
&data_len);
if (lpType)
    *lpType = type;
dbus_free (name);
/* If err is ERROR_MORE_DATA, there probably was a race condition.
   We can punt this to the caller just as well. */
if (err)
{
    free (data);
    return err;
}

/* NOTE: REG_MULTI_SZ and REG_EXPAND_SZ not supported, because they
   are not needed in this module. */
if (type == REG_SZ)
{
    char *data_c;
    int data_c_len;

    /* This is valid since we allocated one more above. */
    data[data_len] = '\\0';
    data[data_len + 1] = '\\0';

    /* The cast is valid because malloc guarantees alignment of
       basic types. */
    data_c = _dbus_win_utf16_to_utf8 ((wchar_t*) data, NULL);
    if (!data_c)
    {
        free (data);
        return GetLastError();
    }

    data_c_len = strlen (data_c) + 1;
    _dbus_assert (data_c_len <= data_len + sizeof (wchar_t));
    memcpy (data, data_c, data_c_len);
    data_len = data_c_len;
    dbus_free (data_c);
}

/* DATA and DATA_LEN now contain the result. */
if (lpData)
{
    if (data_len > *lpcbData)
        err = ERROR_MORE_DATA;
    else
        memcpy (lpData, data, data_len);
}

```

```

    free (data);
    *lpcbData = data_len;
    return err;
}

DWORD
FormatMessageA (DWORD dwFlags, PCVOID lpSource, DWORD dwMessageId,
                DWORD dwLanguageId, LPSTR lpBuffer, DWORD nSize,
                va_list* Arguments)
{
    LPWSTR buffer_w = NULL;
    LPSTR buffer_c;
    DWORD len;
    char *buffer_new;
    DWORD buffer_new_len;
    BOOL buffer_w_free;

    len = FormatMessageW (dwFlags | FORMAT_MESSAGE_ALLOCATE_BUFFER,
                        lpSource, dwMessageId, dwLanguageId,
                        (LPWSTR) &buffer_w, 0, Arguments);

    if (len == 0)
        return 0;

    buffer_c = _dbus_win_utf16_to_utf8 (buffer_w, NULL);
    if (! buffer_c)
    {
        LocalFree (buffer_w);
        return 0;
    }

    if (dwFlags & FORMAT_MESSAGE_ALLOCATE_BUFFER)
    {
        /* We need to return a buffer that's freeable with LocalFree.
        */
        buffer_new = (char *) buffer_w;
        buffer_new_len = sizeof (wchar_t) * (len + 1);
        buffer_w_free = FALSE;
        /* Avoid alignment issue by using memcpy. */
        memcpy (lpBuffer, &buffer_new, sizeof (buffer_new));
    }
    else
    {
        buffer_new = lpBuffer;
        buffer_new_len = nSize;
        buffer_w_free = TRUE;
    }

    strncpy (buffer_new, buffer_c, buffer_new_len);
    dbus_free (buffer_c);
    buffer_new[buffer_new_len - 1] = '\0';
    if (buffer_w_free)

```

```

    LocalFree (buffer_w);

    /* strlen is correct (not _mbstrlen), because we want storage and
       not string length. */
    return strlen (buffer_new);
}

DWORD
GetModuleFileNameA (HINSTANCE hModule, LPSTR lpFilename, DWORD nSize)
{
    wchar_t *filename_w;
    char *filename_c;
    DWORD len;

    if (nSize == 0)
    {
        /* Windows XP/2000. */
        SetLastError (0);
        return 0;
    }

    filename_w = malloc (sizeof (wchar_t) * nSize);
    if (! filename_w)
        return 0;

    len = GetModuleFileNameW (hModule, filename_w, nSize);
    if (len == 0)
    {
        /* Note: If we fail with ERROR_INSUFFICIENT_BUFFER, this is
           still
           (approximately) correct. */
        free (filename_w);
        return 0;
    }

    filename_w[nSize - 1] = '\\0';
    filename_c = _dbus_win_utf16_to_utf8 (filename_w, NULL);
    free (filename_w);
    if (! filename_c)
        return 0;

    strncpy (lpFilename, filename_c, nSize);
    dbus_free (filename_c);
    lpFilename[nSize - 1] = '\\0';
    /* strlen is correct (not _mbstrlen), because we want storage and
       not string length. */
    return strlen (lpFilename);
}

```

DWORD

```

GetTempPathA (DWORD nBufferLength, LPSTR lpBuffer)
{
    wchar_t dummy[1];
    DWORD len;

    len = GetTempPathW (0, dummy);
    if (len == 0)
        return 0;

    _dbus_assert (len <= MAX_PATH);

    /* Better be safe than sorry.  MSDN doesn't say if len is with or
       without terminating 0.  */
    len++;

    {
        wchar_t *buffer_w;
        DWORD len_w;
        char *buffer_c;
        DWORD len_c;

        buffer_w = malloc (sizeof (wchar_t) * len);
        if (! buffer_w)
            return 0;

        len_w = GetTempPathW (len, buffer_w);
        /* Give up if we still can't get at it.  */
        if (len_w == 0 || len_w >= len)
        {
            free (buffer_w);
            return 0;
        }

        /* Better be really safe.  */
        buffer_w[len_w] = '\\0';

        buffer_c = _dbus_win_utf16_to_utf8 (buffer_w, NULL);
        free (buffer_w);
        if (! buffer_c)
            return 0;

        /* strlen is correct (not _mbstrlen), because we want storage and
           not string length.  */
        len_c = strlen (buffer_c) + 1;
        if (len_c > nBufferLength)
            return len_c;

        strcpy (lpBuffer, buffer_c);
        dbus_free (buffer_c);
        return len_c - 1;
    }
}

```



```

BOOL
SHGetSpecialFolderPathA (HWND hwndOwner, LPSTR lpszPath, int nFolder,
                        BOOL fCreate)
{
    wchar_t path[MAX_PATH];
    char *path_c;
    BOOL result;

    path[0] = (wchar_t) 0;
    result = SHGetSpecialFolderPathW (hwndOwner, path, nFolder,
fCreate);
    /* Note: May return false even if succeeds. */

    path[MAX_PATH - 1] = (wchar_t) 0;
    path_c = _dbus_win_utf16_to_utf8 (path, NULL);
    if (! path_c)
        return 0;

    strncpy (lpszPath, path_c, MAX_PATH);
    dbus_free (path_c);
    lpszPath[MAX_PATH - 1] = '\\0';
    return result;
}

```

```

void
OutputDebugStringA (LPCSTR lpOutputString)
{
    wchar_t *str;
    HANDLE result;
    int err;

    str = _dbus_win_utf8_to_utf16 (lpOutputString, NULL);
    if (!str)
        return;

    OutputDebugStringW (str);

    err = GetLastError ();
    dbus_free (str);
    SetLastError (err);
}

```

File = dbus-sysdeps-wince-glue.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps-wince-glue.h Emulation of system/libc features for
Windows CE (internal to D-Bus implementation)

```

```

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02110-1301 USA
*
*/

#ifndef DBUS_SYSDEPS_WINCE_GLUE_H
#define DBUS_SYSDEPS_WINCE_GLUE_H

#include <time.h>
#include <stdarg.h>

/* For getaddrinfo, configure/cmake defined _WIN32_WCE to something >=
0x0401. */
#include <windows.h>
#undef interface

DBUS_BEGIN_DECLS

/* shlobj.h declares these only for _WIN32_IE that we don't want to
define.
In any case, with mingw32ce we only get a SHGetSpecialFolderPath.
*/
#define SHGetSpecialFolderPathW SHGetSpecialFolderPath
BOOL WINAPI SHGetSpecialFolderPathA(HWND, LPSTR, int, BOOL);
BOOL WINAPI SHGetSpecialFolderPathW(HWND, LPWSTR, int, BOOL);

#ifndef TLS_OUT_OF_INDEXES
#define TLS_OUT_OF_INDEXES 0xffffffff
#endif

/* Seriously. Windows CE does not have errno. Don't you hate it when

```

```

    that happens? */
#define errno ((int)GetLastError ())

#define ENOENT          ERROR_FILE_NOT_FOUND
#define EMFILE         ERROR_TOO_MANY_OPEN_FILES
#define EACCES         ERROR_ACCESS_DENIED
#define EBADF          ERROR_INVALID_HANDLE
#define ENOMEM         ERROR_NOT_ENOUGH_MEMORY
#define EXDEV          ERROR_NOT_SAME_DEVICE
#define ENFILE         ERROR_NO_MORE_FILES
#define EROFS          ERROR_WRITE_PROTECT
#define ENOLCK         ERROR_SHARING_BUFFER_EXCEEDED
#define ENOSYS         ERROR_NOT_SUPPORTED
#define EEXIST         ERROR_FILE_EXISTS
#define EPERM          ERROR_CANNOT_MAKE
#define EINVAL         ERROR_INVALID_PARAMETER
#define EINTR          ERROR_INVALID_AT_INTERRUPT_TIME
#define EPIPE          ERROR_BROKEN_PIPE
#define ENOSPC         ERROR_DISK_FULL
#define ENOTEMPTY      ERROR_DIR_NOT_EMPTY
#define EBUSY          ERROR_BUSY
#define ENAMETOOLONG   ERROR_FILENAME_EXCED_RANGE
#define EAGAIN         ERROR_MORE_DATA
#define ENOTDIR        ERROR_DIRECTORY
#define ERANGE         ERROR_ARITHMETIC_OVERFLOW
#define ENXIO          ERROR_FILE_INVALID
#define EFAULT         ERROR_PROCESS_ABORTED
#define EIO            ERROR_IO_DEVICE
#define EDEADLOCK      ERROR_POSSIBLE_DEADLOCK
#define ENODEV         ERROR_BAD_DEVICE

/* Windows CE is missing more stuff that is pretty standard. */

#define strdup _strdup
#define stricmp _stricmp
#define strnicmp _strnicmp

#define environ _dbus_wince_environ
extern char *environ[];

#define getenv _dbus_wince_getenv
char *getenv (const char *name);

#define putenv _dbus_wince_putenv
int putenv (char *str);

#define clock _dbus_wince_clock
clock_t clock (void);

#define abort _dbus_wince_abort
void abort (void);

```

```

#define _S_IFMT          0170000      /* file type mask */
#define _S_IFDIR        0040000      /* directory */
#define _S_IFCHR        0020000      /* character special */
#define _S_IFIFO        0010000      /* pipe */
#define _S_IFREG        0100000      /* regular */
#define _S_IREAD        0000400      /* read permission, owner */
#define _S_IWRITE       0000200      /* write permission, owner */
#define _S_IEXEC        0000100      /* execute/search permission,
owner */

```

```

#ifndef __OFF_T_DEFINED
typedef long off_t;
#define __OFF_T_DEFINED
#endif
#ifndef _INTPTR_T_DEFINED
typedef int intptr_t;
#define _INTPTR_T_DEFINED
#endif
#ifndef _UINTPTR_T_DEFINED
typedef unsigned int uintptr_t;
#define _UINTPTR_T_DEFINED
#endif

```

```

#ifndef _MAX_FNAME
#define _MAX_FNAME 256
#endif

```

```

#ifndef _IOFBF
#define _IOFBF 0
#endif
#ifndef _IOLBF
#define _IOLBF 1
#endif
#ifndef _IONBF
#define _IONBF 2
#endif

```

```

/* Windows CE is missing some Windows functions that we want. */

```

```

#define GetSystemTimeAsFileTime _dbus_wince_GetSystemTimeAsFileTime
void GetSystemTimeAsFileTime (LPFILETIME ftp);

```

```

#define _mbsrchr _dbus_wince_mbsrchr
unsigned char* _mbsrchr (const unsigned char*, unsigned int);

```

```

#define OpenFileMappingA _dbus_wince_OpenFileMappingA
HANDLE OpenFileMappingA(DWORD, BOOL, LPCSTR);

```

```

#define MoveFileExA _dbus_wince_MoveFileExA
BOOL MoveFileExA(LPCSTR, LPCSTR, DWORD);
#ifndef MOVEFILE_REPLACE_EXISTING

```

```

#define MOVEFILE_REPLACE_EXISTING 0x00000001
#endif

#define SetHandleInformation _dbus_wince_SetHandleInformation
BOOL SetHandleInformation(HANDLE, DWORD, DWORD);
#ifndef HANDLE_FLAG_INHERIT
#define HANDLE_FLAG_INHERIT 0x01
#endif
#ifndef HANDLE_FLAG_PROTECT
#define HANDLE_FLAG_PROTECT_FROM_CLOSE 0x02
#endif

#define SearchPathA _dbus_wince_SearchPathA
DWORD SearchPathA(LPCSTR, LPCSTR, LPCSTR, DWORD, LPSTR, LPSTR*);

/* Instead of emulating all functions needed for this, we replace the
   whole thing. */
dbus_bool_t _dbus_getsid(char **sid);

#define LookupAccountNameW _dbus_wince_LookupAccountNameW
BOOL
LookupAccountNameW(LPCWSTR, LPCWSTR, PSID, PDWORD, LPWSTR, PDWORD, PSID_NAME
_USE);

#define IsValidSid _dbus_wince_IsValidSid
BOOL IsValidSid(PSID);

/* Windows CE does only have the UNICODE interfaces (FooW), but we
   want to use the ASCII interfaces (FooA). We implement them
   here. */

#define CreateFileA _dbus_wince_CreateFileA
HANDLE
CreateFileA(LPCSTR, DWORD, DWORD, LPSECURITY_ATTRIBUTES, DWORD, DWORD, HANDLE);

#define DeleteFileA _dbus_wince_DeleteFileA
BOOL DeleteFileA(LPCSTR);

#define GetFileAttributesA _dbus_wince_GetFileAttributesA
DWORD GetFileAttributesA(LPCSTR);

#define GetFileAttributesExA _dbus_wince_GetFileAttributesExA
BOOL GetFileAttributesExA(LPCSTR, GET_FILEEX_INFO_LEVELS, PVOID);

#define CreateFileMappingA _dbus_wince_CreateFileMappingA
HANDLE
CreateFileMappingA(HANDLE, LPSECURITY_ATTRIBUTES, DWORD, DWORD, DWORD, LPCSTR);

```

```

#define CreateDirectoryA _dbus_wince_CreateDirectoryA
BOOL CreateDirectoryA(LPCSTR,LPSECURITY_ATTRIBUTES);

#define RemoveDirectoryA _dbus_wince_RemoveDirectoryA
BOOL RemoveDirectoryA(LPCSTR);

#define FindFirstFileA _dbus_wince_FindFirstFileA
HANDLE FindFirstFileA(LPCSTR,LPWIN32_FIND_DATAA);

#define FindNextFileA _dbus_wince_FindNextFileA
BOOL FindNextFileA(HANDLE,LPWIN32_FIND_DATAA);

#define CreateMutexA _dbus_wince_CreateMutexA
HANDLE CreateMutexA(LPSECURITY_ATTRIBUTES,BOOL,LPCSTR);

#define CreateProcessA _dbus_wince_CreateProcessA
BOOL
CreateProcessA(LPCSTR,LPSTR,LPSECURITY_ATTRIBUTES,LPSECURITY_ATTRIBUTE
S,BOOL,DWORD,PVOID,LPCSTR,LPSTARTUPINFOA,LPPROCESS_INFORMATION);
#ifndef CREATE_NO_WINDOW
#define CREATE_NO_WINDOW 0x08000000
#endif

#define RegOpenKeyExA _dbus_wince_RegOpenKeyExA
LONG RegOpenKeyExA(HKEY,LPCSTR,DWORD,REGSAM,PHKEY);

#define RegQueryValueExA _dbus_wince_RegQueryValueExA
LONG WINAPI
RegQueryValueExA(HKEY,LPCSTR,LPDWORD,LPDWORD,LPBYTE,LPDWORD);

#define FormatMessageA _dbus_wince_FormatMessageA
DWORD FormatMessageA(DWORD,PCVOID,DWORD,DWORD,LPSTR,DWORD,va_list*);

#define GetModuleFileNameA _dbus_wince_GetModuleFileNameA
DWORD GetModuleFileNameA(HINSTANCE,LPSTR,DWORD);

#define GetTempPathA _dbus_wince_GetTempPathA
DWORD GetTempPathA(DWORD,LPSTR);

#define SHGetSpecialFolderPathA _dbus_wince_SHGetSpecialFolderPathA
BOOL SHGetSpecialFolderPathA(HWND,LPSTR,int,BOOL);

#define OutputDebugStringA _dbus_wince_OutputDebugStringA
void OutputDebugStringA(LPCSTR);

DBUS_END_DECLS

#endif /* DBUS_SYSDEPS_WINCE_GLUE_H */

```

File = dbus-sysdeps.c

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps.c Wrappers around system/libc features shared between
UNIX and Windows (internal to D-Bus implementation)
```

```
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02110-1301 USA
*
*/
```

```
#include <config.h>
#include "dbus-internals.h"
#include "dbus-sysdeps.h"
#include "dbus-threads.h"
#include "dbus-protocol.h"
#include "dbus-string.h"
#include "dbus-list.h"
```

```
/* NOTE: If you include any unix/windows-specific headers here, you
are probably doing something
* wrong and should be putting some code in dbus-sysdeps-unix.c or
dbus-sysdeps-win.c.
```

```
*
* These are the standard ANSI C headers...
*/
```

```
#if HAVE_LOCALE_H
#include <locale.h>
#endif
#include <stdlib.h>
```

```

#include <string.h>
#include <stdio.h>

#ifdef HAVE_ERRNO_H
#include <errno.h>
#endif

_DBUS_DEFINE_GLOBAL_LOCK (win_fds);
_DBUS_DEFINE_GLOBAL_LOCK (sid_atom_cache);
_DBUS_DEFINE_GLOBAL_LOCK (system_users);

#ifdef DBUS_WIN
#include <stdlib.h>
#elif (defined __APPLE__)
#include <crt_externs.h>
#define environ (*_NSGetEnviron())
#else
extern char **environ;
#endif

/**
 * @defgroup DBusSysdeps Internal system-dependent API
 * @ingroup DBusInternals
 * @brief Internal system-dependent API available on UNIX and Windows
 *
 * The system-dependent API has a dual purpose. First, it encapsulates
 * all usage of operating system APIs for ease of auditing and to
 * avoid cluttering the rest of the code with bizarre OS quirks and
 * headers. Second, it abstracts different operating system APIs for
 * portability.
 *
 * @{
 */

/**
 * Aborts the program with SIGABRT (dumping core).
 */
void
_dbus_abort (void)
{
    const char *s;

    _dbus_print_backtrace ();

    s = _dbus_getenv ("DBUS_BLOCK_ON_ABORT");
    if (s && *s)
    {
        /* don't use _dbus_warn here since it can _dbus_abort() */
        fprintf (stderr, " Process %lu sleeping for gdb attach\n",
_dbus_pid_for_log ());
        _dbus_sleep_milliseconds (1000 * 180);
    }
}

```



```

    abort ();
    _dbus_exit (1); /* in case someone manages to ignore SIGABRT ? */
}

/**
 * Wrapper for setenv(). If the value is #NULL, unsets
 * the environment variable.
 *
 * There is an unfixable memleak in that it is unsafe to
 * free memory malloced for use with setenv. This is because
 * we can not rely on internal implementation details of
 * the underlying libc library.
 *
 * @param varname name of environment variable
 * @param value value of environment variable
 * @returns #TRUE on success.
 */
dbus_bool_t
_dbus_setenv (const char *varname,
              const char *value)
{
    _dbus_assert (varname != NULL);

    if (value == NULL)
    {
#ifdef HAVE_UNSETENV
        unsetenv (varname);
        return TRUE;
#else
        char *putenv_value;
        size_t len;

        len = strlen (varname);

        /* Use system malloc to avoid memleaks that dbus_malloc
         * will get upset about.
         */

        putenv_value = malloc (len + 2);
        if (putenv_value == NULL)
            return FALSE;

        strcpy (putenv_value, varname);
#ifdef DBUS_WIN
        strcat (putenv_value, "=");
#endif
        return (putenv (putenv_value) == 0);
#endif
    }
    else

```

```

    {
#ifdef HAVE_SETENV
    return (setenv (varname, value, TRUE) == 0);
#else
    char *putenv_value;
    size_t len;
    size_t varname_len;
    size_t value_len;

    varname_len = strlen (varname);
    value_len = strlen (value);

    len = varname_len + value_len + 1 /* '=' */ ;

    /* Use system malloc to avoid memleaks that dbus_malloc
     * will get upset about.
     */

    putenv_value = malloc (len + 1);
    if (putenv_value == NULL)
        return FALSE;

    strcpy (putenv_value, varname);
    strcpy (putenv_value + varname_len, "=");
    strcpy (putenv_value + varname_len + 1, value);

    return (putenv (putenv_value) == 0);
#endif
    }
}

/**
 * Wrapper for getenv().
 *
 * @param varname name of environment variable
 * @returns value of environment variable or #NULL if unset
 */
const char*
_dbus_getenv (const char *varname)
{
    /* Don't respect any environment variables if the current process is
     * setuid. This is the equivalent of glibc's __secure_getenv().
     */
    if (_dbus_check_setuid ())
        return NULL;
    return getenv (varname);
}

/**
 * Wrapper for clearenv().
 *
 * @returns #TRUE on success.
 */

```

```

*/
dbus_bool_t
_dbus_clearenv (void)
{
    dbus_bool_t rc = TRUE;

#ifdef HAVE_CLEARENV
    if (clearenv () != 0)
        rc = FALSE;
#else

    if (environ != NULL)
        environ[0] = NULL;
#endif

    return rc;
}

/**
 * Split paths into a list of char strings
 *
 * @param dirs string with pathes
 * @param suffix string concated to each path in dirs
 * @param dir_list contains a list of splitted pathes
 * return #TRUE is pathes could be splitted, #FALSE in oom case
 */
dbus_bool_t
_dbus_split_paths_and_append (DBusString *dirs,
                              const char *suffix,
                              DBusList **dir_list)
{
    int start;
    int i;
    int len;
    char *cpath;
    DBusString file_suffix;

    start = 0;
    i = 0;

    _dbus_string_init_const (&file_suffix, suffix);

    len = _dbus_string_get_length (dirs);

    while (_dbus_string_find (dirs, start, _DBUS_PATH_SEPARATOR, &i))
    {
        DBusString path;

        if (!_dbus_string_init (&path))
            goto oom;

        if (!_dbus_string_copy_len (dirs,

```

```

                                start,
                                i - start,
                                &path,
                                0)
        {
            _dbus_string_free (&path);
            goto oom;
        }

        _dbus_string_chop_white (&path);

        /* check for an empty path */
        if (_dbus_string_get_length (&path) == 0)
            goto next;

        if (!_dbus_concat_dir_and_file (&path,
                                        &file_suffix))
        {
            _dbus_string_free (&path);
            goto oom;
        }

        if (!_dbus_string_copy_data(&path, &cpath))
        {
            _dbus_string_free (&path);
            goto oom;
        }

        if (!_dbus_list_append (dir_list, cpath))
        {
            _dbus_string_free (&path);
            dbus_free (cpath);
            goto oom;
        }

        next:
            _dbus_string_free (&path);
            start = i + 1;
    }

    if (start != len)
    {
        DBusString path;

        if (!_dbus_string_init (&path))
            goto oom;

        if (!_dbus_string_copy_len (dirs,
                                    start,
                                    len - start,
                                    &path,
                                    0))
    }

```

```

        {
            _dbus_string_free (&path);
            goto oom;
        }

        if (!_dbus_concat_dir_and_file (&path,
                                        &file_suffix))
        {
            _dbus_string_free (&path);
            goto oom;
        }

        if (!_dbus_string_copy_data(&path, &cpath))
        {
            _dbus_string_free (&path);
            goto oom;
        }

        if (!_dbus_list_append (dir_list, cpath))
        {
            _dbus_string_free (&path);
            dbus_free (cpath);
            goto oom;
        }

        _dbus_string_free (&path);
    }

    return TRUE;

oom:
    _dbus_list_foreach (dir_list, (DBusForeachFunction)dbus_free, NULL);
    _dbus_list_clear (dir_list);
    return FALSE;
}

/** @} */

/**
 * @addtogroup DBusString
 *
 * @{}
 */
/**
 * Appends an integer to a DBusString.
 *
 * @param str the string
 * @param value the integer value
 * @returns #FALSE if not enough memory or other failure.
 */
dbus_bool_t
_dbus_string_append_int (DBusString *str,

```

```

                                long        value)
{
    /* this calculation is from comp.lang.c faq */
#define MAX_LONG_LEN ((sizeof (long) * 8 + 2) / 3 + 1) /* +1 for '-'
*/
    int orig_len;
    int i;
    char *buf;

    orig_len = _dbus_string_get_length (str);

    if (!_dbus_string_lengthen (str, MAX_LONG_LEN))
        return FALSE;

    buf = _dbus_string_get_data_len (str, orig_len, MAX_LONG_LEN);

    snprintf (buf, MAX_LONG_LEN, "%ld", value);

    i = 0;
    while (*buf)
        {
            ++buf;
            ++i;
        }

    _dbus_string_shorten (str, MAX_LONG_LEN - i);

    return TRUE;
}

/**
 * Appends an unsigned integer to a DBusString.
 *
 * @param str the string
 * @param value the integer value
 * @returns #FALSE if not enough memory or other failure.
 */
dbus_bool_t
_dbus_string_append_uint (DBusString *str,
                          unsigned long value)
{
    /* this is wrong, but definitely on the high side. */
#define MAX_ULONGLONG_LEN (MAX_LONG_LEN * 2)
    int orig_len;
    int i;
    char *buf;

    orig_len = _dbus_string_get_length (str);

    if (!_dbus_string_lengthen (str, MAX_ULONGLONG_LEN))
        return FALSE;

```

```

buf = _dbus_string_get_data_len (str, orig_len, MAX_ULONGLONG_LEN);

snprintf (buf, MAX_ULONGLONG_LEN, "%lu", value);

i = 0;
while (*buf)
  {
    ++buf;
    ++i;
  }

_dbus_string_shorten (str, MAX_ULONGLONG_LEN - i);

return TRUE;
}

/**
 * Parses an integer contained in a DBusString. Either return
parameter
 * may be #NULL if you aren't interested in it. The integer is parsed
 * and stored in value_return. Return parameters are not initialized
 * if the function returns #FALSE.
 *
 * @param str the string
 * @param start the byte index of the start of the integer
 * @param value_return return location of the integer value or #NULL
 * @param end_return return location of the end of the integer, or
#NULL
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_string_parse_int (const DBusString *str,
                       int start,
                       long value_return,
                       int end_return)
{
  long v;
  const char *p;
  char *end;

  p = _dbus_string_get_const_data_len (str, start,
                                       _dbus_string_get_length (str) -
start);

  end = NULL;
  _dbus_set_errno_to_zero ();
  v = strtol (p, &end, 0);
  if (end == NULL || end == p || errno != 0)
    return FALSE;

  if (value_return)
    *value_return = v;

```

```

    if (end_return)
        *end_return = start + (end - p);

    return TRUE;
}

/**
 * Parses an unsigned integer contained in a DBusString. Either return
 * parameter may be #NULL if you aren't interested in it. The integer
 * is parsed and stored in value_return. Return parameters are not
 * initialized if the function returns #FALSE.
 *
 * @param str the string
 * @param start the byte index of the start of the integer
 * @param value_return return location of the integer value or #NULL
 * @param end_return return location of the end of the integer, or
#NULL
 * @returns #TRUE on success
 */
dbus_bool_t
_dbus_string_parse_uint (const DBusString *str,
                        int start,
                        unsigned long *value_return,
                        int *end_return)
{
    unsigned long v;
    const char *p;
    char *end;

    p = _dbus_string_get_const_data_len (str, start,
                                         _dbus_string_get_length (str) -
start);

    end = NULL;
    _dbus_set_errno_to_zero ();
    v = strtoul (p, &end, 0);
    if (end == NULL || end == p || errno != 0)
        return FALSE;

    if (value_return)
        *value_return = v;
    if (end_return)
        *end_return = start + (end - p);

    return TRUE;
}

/** @} */ /* DBusString group */

/**
 * @addtogroup DBusInternalsUtils
 * @{

```



```

*/

void
_dbus_generate_pseudorandom_bytes_buffer (char *buffer,
                                           int   n_bytes)
{
    long tv_usec;
    int i;

    /* fall back to pseudorandom */
    _dbus_verbose ("Falling back to pseudorandom for %d bytes\n",
                  n_bytes);

    _dbus_get_real_time (NULL, &tv_usec);
    srand (tv_usec);

    i = 0;
    while (i < n_bytes)
    {
        double r;
        unsigned int b;

        r = rand ();
        b = (r / (double) RAND_MAX) * 255.0;

        buffer[i] = b;

        ++i;
    }
}

/**
 * Fills n_bytes of the given buffer with random bytes.
 *
 * @param buffer an allocated buffer
 * @param n_bytes the number of bytes in buffer to write to
 */
void
_dbus_generate_random_bytes_buffer (char *buffer,
                                    int   n_bytes)
{
    DBusString str;

    if (!_dbus_string_init (&str))
    {
        _dbus_generate_pseudorandom_bytes_buffer (buffer, n_bytes);
        return;
    }

    if (!_dbus_generate_random_bytes (&str, n_bytes))
    {
        _dbus_string_free (&str);
    }
}

```

```

        _dbus_generate_pseudorandom_bytes_buffer (buffer, n_bytes);
    return;
}

_dbus_string_copy_to_buffer (&str, buffer, n_bytes);

_dbus_string_free (&str);
}

/**
 * Generates the given number of random bytes, where the bytes are
 * chosen from the alphanumeric ASCII subset.
 *
 * @param str the string
 * @param n_bytes the number of random ASCII bytes to append to string
 * @returns #TRUE on success, #FALSE if no memory or other failure
 */
dbus_bool_t
_dbus_generate_random_ascii (DBusString *str,
                             int n_bytes)
{
    static const char letters[] =
        "ABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789abcdefghijklmnopqrstuvwxyz";
    int i;
    int len;

    if (!_dbus_generate_random_bytes (str, n_bytes))
        return FALSE;

    len = _dbus_string_get_length (str);
    i = len - n_bytes;
    while (i < len)
    {
        _dbus_string_set_byte (str, i,
                               letters[_dbus_string_get_byte (str, i) %
                               (sizeof (letters) - 1)]);

        ++i;
    }

    _dbus_assert (_dbus_string_validate_ascii (str, len - n_bytes,
                                               n_bytes));

    return TRUE;
}

/**
 * Converts a UNIX errno, or Windows errno or WinSock error value into
 * a #DBusError name.
 *
 * @todo should cover more errnos, specifically those
 * from open().

```

```

*
* @param error_number the errno.
* @returns an error name
*/
const char*
_dbus_error_from_errno (int error_number)
{
    switch (error_number)
    {
        case 0:
            return DBUS_ERROR_FAILED;

#ifdef EPROTONOSUPPORT
        case EPROTONOSUPPORT:
            return DBUS_ERROR_NOT_SUPPORTED;
#elif defined(WSAEPROTONOSUPPORT)
        case WSAEPROTONOSUPPORT:
            return DBUS_ERROR_NOT_SUPPORTED;
#endif
#ifdef EAFNOSUPPORT
        case EAFNOSUPPORT:
            return DBUS_ERROR_NOT_SUPPORTED;
#elif defined(WSAEAFNOSUPPORT)
        case WSAEAFNOSUPPORT:
            return DBUS_ERROR_NOT_SUPPORTED;
#endif
#ifdef ENFILE
        case ENFILE:
            return DBUS_ERROR_LIMITS_EXCEEDED; /* kernel out of memory */
#endif
#ifdef EMFILE
        case EMFILE:
            return DBUS_ERROR_LIMITS_EXCEEDED;
#endif
#ifdef EACCES
        case EACCES:
            return DBUS_ERROR_ACCESS_DENIED;
#endif
#ifdef EPERM
        case EPERM:
            return DBUS_ERROR_ACCESS_DENIED;
#endif
#ifdef ENOBUFS
        case ENOBUFS:
            return DBUS_ERROR_NO_MEMORY;
#endif
#ifdef ENOMEM
        case ENOMEM:
            return DBUS_ERROR_NO_MEMORY;
#endif
#ifdef ECONNREFUSED
        case ECONNREFUSED:

```

```

        return DBUS_ERROR_NO_SERVER;
#elif defined(WSAECONNREFUSED)
    case WSAECONNREFUSED:
        return DBUS_ERROR_NO_SERVER;
#endif
#ifdef ETIMEDOUT
    case ETIMEDOUT:
        return DBUS_ERROR_TIMEOUT;
#elif defined(WSAETIMEDOUT)
    case WSAETIMEDOUT:
        return DBUS_ERROR_TIMEOUT;
#endif
#ifdef ENETUNREACH
    case ENETUNREACH:
        return DBUS_ERROR_NO_NETWORK;
#elif defined(WSAENETUNREACH)
    case WSAENETUNREACH:
        return DBUS_ERROR_NO_NETWORK;
#endif
#ifdef EADDRINUSE
    case EADDRINUSE:
        return DBUS_ERROR_ADDRESS_IN_USE;
#elif defined(WSAEADDRINUSE)
    case WSAEADDRINUSE:
        return DBUS_ERROR_ADDRESS_IN_USE;
#endif
#ifdef EEXIST
    case EEXIST:
        return DBUS_ERROR_FILE_EXISTS;
#endif
#ifdef ENOENT
    case ENOENT:
        return DBUS_ERROR_FILE_NOT_FOUND;
#endif
    }

    return DBUS_ERROR_FAILED;
}

/**
 * Converts the current system errno value into a #DBusError name.
 *
 * @returns an error name
 */
const char*
_dbus_error_from_system_errno (void)
{
    return _dbus_error_from_errno (errno);
}

/**
 * Assign 0 to the global errno variable

```

```

*/
void
_dbus_set_errno_to_zero (void)
{
#ifdef DBUS_WINCE
    SetLastError (0);
#else
    errno = 0;
#endif
}

/**
 * See if errno is set
 * @returns #TRUE if errno is not 0
 */
dbus_bool_t
_dbus_get_is_errno_nonzero (void)
{
    return errno != 0;
}

/**
 * See if errno is ENOMEM
 * @returns #TRUE if errno == ENOMEM
 */
dbus_bool_t
_dbus_get_is_errno_enomem (void)
{
    return errno == ENOMEM;
}

/**
 * See if errno is EINTR
 * @returns #TRUE if errno == EINTR
 */
dbus_bool_t
_dbus_get_is_errno_eintr (void)
{
    return errno == EINTR;
}

/**
 * See if errno is EPIPE
 * @returns #TRUE if errno == EPIPE
 */
dbus_bool_t
_dbus_get_is_errno_epipe (void)
{
    return errno == EPIPE;
}

/**

```

```

* Get error message from errno
* @returns _dbus_strerror(errno)
*/
const char*
_dbus_strerror_from_errno (void)
{
    return _dbus_strerror (errno);
}

/** @} end of sysdeps */

/* tests in dbus-sysdeps-util.c */

```

File = dbus-sysdeps.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-sysdeps.h Wrappers around system/libc features (internal to D-
Bus implementation)
*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#ifndef DBUS_SYSDEPS_H
#define DBUS_SYSDEPS_H

#include "config.h"

#ifdef HAVE_STDINT_H
#include <stdint.h>

```

```

#endif

#ifdef HAVE_INTTYPES_H
#include <inttypes.h>
#endif

#include <dbus/dbus-errors.h>
#include <dbus/dbus-file.h>
#include <dbus/dbus-string.h>

/* this is perhaps bogus, but strcmp() etc. are faster if we use the
 * stuff straight out of string.h, so have this here for now.
 */
#include <string.h>
#include <stdarg.h>

/* AIX sys/poll.h does #define events requevents, and other
 * wonderousness, so must include sys/poll before declaring
 * DBusPollFD
 */
#ifdef HAVE_POLL
#include <sys/poll.h>
#endif

#ifdef DBUS_WINCE
/* Windows CE lacks some system functions (such as errno and clock).
 * We bring them in here. */
#include "dbus-sysdeps-wince-glue.h"
#endif

DBUS_BEGIN_DECLS

#ifdef DBUS_WIN
#define _DBUS_PATH_SEPARATOR ";"
#else
#define _DBUS_PATH_SEPARATOR ":"
#endif

/* Forward declarations */

/** An opaque list type */
typedef struct DBusList DBusList;

/** Object that contains a list of credentials such as UNIX or Windows
user ID */
typedef struct DBusCredentials DBusCredentials;

/** A wrapper around a pipe descriptor or handle */
typedef struct DBusPipe DBusPipe;

/**

```

```

* @addtogroup DBusSysdeps
*
* @{
*/

void _dbus_abort (void) _DBUS_GNUC_NORETURN;

dbus_bool_t _dbus_check_setuid (void);
const char* _dbus_getenv (const char *varname);
dbus_bool_t _dbus_setenv (const char *varname,
                        const char *value);
dbus_bool_t _dbus_clearenv (void);
char ** _dbus_get_environment (void);

/** A process ID */
typedef unsigned long dbus_pid_t;
/** A user ID */
typedef unsigned long dbus_uid_t;
/** A group ID */
typedef unsigned long dbus_gid_t;

/** an invalid PID used to represent an uninitialized dbus_pid_t field
*/
#define DBUS_PID_UNSET ((dbus_pid_t) -1)
/** an invalid UID used to represent an uninitialized dbus_uid_t field
*/
#define DBUS_UID_UNSET ((dbus_uid_t) -1)
/** an invalid GID used to represent an uninitialized dbus_gid_t field
*/
#define DBUS_GID_UNSET ((dbus_gid_t) -1)

/** an appropriate printf format for dbus_pid_t */
#define DBUS_PID_FORMAT "%lu"
/** an appropriate printf format for dbus_uid_t */
#define DBUS_UID_FORMAT "%lu"
/** an appropriate printf format for dbus_gid_t */
#define DBUS_GID_FORMAT "%lu"

/**
* Socket interface
*
* @todo Use for the file descriptors a struct
*       - struct DBusSocket{ int d; }; -
*       instead of int to get type-safety which
*       will be checked by the compiler.
*/

dbus_bool_t _dbus_close_socket (int fd,
                               DBusError *error);
int _dbus_read_socket (int fd,

```



```

int _dbus_accept (int listen_fd);

dbus_bool_t _dbus_read_credentials_socket (int
client_fd,
DBusCredentials
*credentials,
DBusError *error);
dbus_bool_t _dbus_send_credentials_socket (int server_fd,
DBusError *error);

dbus_bool_t _dbus_credentials_add_from_user
(DBusCredentials *credentials,
const
DBusString *username);
dbus_bool_t _dbus_credentials_add_from_current_process
(DBusCredentials *credentials);
dbus_bool_t _dbus_append_user_from_current_process (DBusString
*str);

dbus_bool_t _dbus_parse_unix_user_from_config (const DBusString
*username,
dbus_uid_t
*uid_p);
dbus_bool_t _dbus_parse_unix_group_from_config (const DBusString
*groupname,
dbus_gid_t
*gid_p);
dbus_bool_t _dbus_unix_groups_from_uid (dbus_uid_t
uid,
dbus_gid_t
**group_ids,
int
*n_group_ids);
dbus_bool_t _dbus_unix_user_is_at_console (dbus_uid_t
uid,
DBusError
*error);
dbus_bool_t _dbus_unix_user_is_process_owner (dbus_uid_t
uid);
dbus_bool_t _dbus_windows_user_is_process_owner (const char
*windows_sid);

dbus_bool_t _dbus_append_keyring_directory_for_credentials (DBusString
*directory,
DBusCredentials *credentials);

dbus_bool_t _dbus_daemon_is_session_bus_address_published (const char
*scope);

```

```

dbus_bool_t _dbus_daemon_publish_session_bus_address (const char*
address, const char* shm_name);

void _dbus_daemon_unpublish_session_bus_address (void);

dbus_bool_t _dbus_socket_can_pass_unix_fd(int fd);

/** Opaque type representing an atomically-modifiable integer
 * that can be used from multiple threads.
 */
typedef struct DBusAtomic DBusAtomic;

/**
 * An atomic integer safe to increment or decrement from multiple
 threads.
 */
struct DBusAtomic
{
#ifdef DBUS_WIN
    volatile long value; /**< Value of the atomic integer. */
#else
    volatile dbus_int32_t value; /**< Value of the atomic integer. */
#endif
};

/* The value we get from autofoo is in the form of a cpp expression;
 * convert that to a conventional defined/undef switch. (We can't get
 * the conventional defined/undef because of multiarch builds only
 running
 * ./configure once, on Darwin.) */
#ifdef DBUS_HAVE_ATOMIC_INT_COND
#define DBUS_HAVE_ATOMIC_INT 1
#else
#undef DBUS_HAVE_ATOMIC_INT
#endif

dbus_int32_t _dbus_atomic_inc (DBusAtomic *atomic);
dbus_int32_t _dbus_atomic_dec (DBusAtomic *atomic);
dbus_int32_t _dbus_atomic_get (DBusAtomic *atomic);

/* AIX uses different values for poll */

#ifdef _AIX
/** There is data to read */
#define _DBUS_POLLIN 0x0001
/** There is urgent data to read */
#define _DBUS_POLLPRI 0x0004
/** Writing now will not block */
#define _DBUS_POLLOUT 0x0002
/** Error condition */
#define _DBUS_POLLERR 0x4000

```

```

/** Hung up */
#define _DBUS_POLLHUP      0x2000
/** Invalid request: fd not open */
#define _DBUS_POLLNVAL    0x8000
#elif defined(__HAIKU__)
/** There is data to read */
#define _DBUS_POLLIN      0x0001
/** Writing now will not block */
#define _DBUS_POLLOUT     0x0002
/** Error condition */
#define _DBUS_POLLERR     0x0004
/** There is urgent data to read */
#define _DBUS_POLLPRI     0x0020
/** Hung up */
#define _DBUS_POLLHUP     0x0080
/** Invalid request: fd not open */
#define _DBUS_POLLNVAL    0x1000
#else
/** There is data to read */
#define _DBUS_POLLIN      0x0001
/** There is urgent data to read */
#define _DBUS_POLLPRI     0x0002
/** Writing now will not block */
#define _DBUS_POLLOUT     0x0004
/** Error condition */
#define _DBUS_POLLERR     0x0008
/** Hung up */
#define _DBUS_POLLHUP     0x0010
/** Invalid request: fd not open */
#define _DBUS_POLLNVAL    0x0020
#endif

/**
 * A portable struct pollfd wrapper.
 */
typedef struct
{
    int fd;                /**< File descriptor */
    short events;          /**< Events to poll for */
    short revents;         /**< Events that occurred */
} DBusPollFD;

int _dbus_poll (DBusPollFD *fds,
                int          n_fds,
                int          timeout_milliseconds);

void _dbus_sleep_milliseconds (int milliseconds);

void _dbus_get_monotonic_time (long *tv_sec,
                               long *tv_usec);

void _dbus_get_real_time (long *tv_sec,

```

```

        long *tv_usec);

/**
 * directory interface
 */
dbus_bool_t _dbus_create_directory (const DBusString
*filename,
                                DBusError
*error);
dbus_bool_t _dbus_delete_directory (const DBusString
*filename,
                                DBusError
                                *error);

dbus_bool_t _dbus_concat_dir_and_file (DBusString
                                *dir,
                                const DBusString
*next_component);
dbus_bool_t _dbus_string_get_dirname (const DBusString *filename,
                                DBusString
                                *dirname);
dbus_bool_t _dbus_path_is_absolute (const DBusString *filename);

dbus_bool_t _dbus_get_standard_session_servicedirs (DBusList **dirs);
dbus_bool_t _dbus_get_standard_system_servicedirs (DBusList **dirs);

dbus_bool_t _dbus_append_system_config_file (DBusString *str);
dbus_bool_t _dbus_append_session_config_file (DBusString *str);

/** Opaque type for reading a directory listing */
typedef struct DBusDirIter DBusDirIter;

DBusDirIter* _dbus_directory_open (const DBusString
*filename,
                                DBusError
                                *error);
dbus_bool_t _dbus_directory_get_next_file (DBusDirIter
                                *iter,
                                DBusString
*filename,
                                DBusError
                                *error);
void _dbus_directory_close (DBusDirIter
                                *iter);

dbus_bool_t _dbus_check_dir_is_private_to_user (DBusString *dir,
                                DBusError *error);

void _dbus_fd_set_close_on_exec (intptr_t fd);

const char* _dbus_get_tmpdir (void);

/**
 * Random numbers
 */
void _dbus_generate_pseudorandom_bytes_buffer (char *buffer,
                                int
                                n_bytes);
void _dbus_generate_random_bytes_buffer (char
                                *buffer,
                                int
                                n_bytes);

```



```

                                DBusError      *error,
                                dbus_bool_t     keep_umask);

dbus_bool_t _dbus_verify_daemon_user (const char *user);
dbus_bool_t _dbus_change_to_daemon_user (const char *user,
                                         DBusError *error);

dbus_bool_t _dbus_write_pid_to_file_and_pipe (const DBusString
*pidfile,
                                             DBusPipe
*print_pid_pipe,
                                             dbus_pid_t
pid_to_write,
                                             DBusError
*error);

dbus_bool_t _dbus_command_for_pid (unsigned long pid,
                                   DBusString *str,
                                   int max_len,
                                   DBusError *error);

/** A UNIX signal handler */
typedef void (* DBusSignalHandler) (int sig);

void _dbus_set_signal_handler (int sig,
                              DBusSignalHandler handler);

dbus_bool_t _dbus_user_at_console (const char *username,
                                   DBusError *error);

void _dbus_init_system_log (void);

typedef enum {
    DBUS_SYSTEM_LOG_INFO,
    DBUS_SYSTEM_LOG_SECURITY,
    DBUS_SYSTEM_LOG_FATAL
} DBusSystemLogSeverity;

void _dbus_system_log (DBusSystemLogSeverity severity, const char
*msg, ...) _DBUS_GNUC_PRINTF (2, 3);
void _dbus_system_logv (DBusSystemLogSeverity severity, const char
*msg, va_list args);

/* Define DBUS_VA_COPY() to do the right thing for copying va_list
variables.
 * config.h may have already defined DBUS_VA_COPY as va_copy or
__va_copy.
 */
#if !defined (DBUS_VA_COPY)
# if defined (__GNUC__) && defined (__PPC__) && (defined (__CALL_SYSV)
|| defined (__WIN32))
#   define DBUS_VA_COPY(ap1, ap2)    (*(ap1) = *(ap2))

```

```

# elif defined (DBUS_VA_COPY_AS_ARRAY)
#   define DBUS_VA_COPY(ap1, ap2)    memcpy ((ap1), (ap2), sizeof
(va_list))
# else /* va_list is a pointer */
#   define DBUS_VA_COPY(ap1, ap2)    ((ap1) = (ap2))
# endif /* va_list is a pointer */
#endif /* !DBUS_VA_COPY */

/**
 * Casts a primitive C type to a byte array and then indexes
 * a particular byte of the array.
 */
#define _DBUS_BYTE_OF_PRIMITIVE(p, i) \
    (((const char*)&(p))[i])
/** On x86 there is an 80-bit FPU, and if you do "a == b" it may have
a
 * or b in an 80-bit register, thus failing to compare the two 64-bit
 * doubles for bitwise equality. So this macro compares the two
doubles
 * bitwise.
 */
#define _DBUS_DOUBLES_BITWISE_EQUAL(a, b)
\
    (_DBUS_BYTE_OF_PRIMITIVE (a, 0) == _DBUS_BYTE_OF_PRIMITIVE (b, 0)
&&
    \
    _DBUS_BYTE_OF_PRIMITIVE (a, 1) == _DBUS_BYTE_OF_PRIMITIVE (b, 1)
&&
    \
    _DBUS_BYTE_OF_PRIMITIVE (a, 2) == _DBUS_BYTE_OF_PRIMITIVE (b, 2)
&&
    \
    _DBUS_BYTE_OF_PRIMITIVE (a, 3) == _DBUS_BYTE_OF_PRIMITIVE (b, 3)
&&
    \
    _DBUS_BYTE_OF_PRIMITIVE (a, 4) == _DBUS_BYTE_OF_PRIMITIVE (b, 4)
&&
    \
    _DBUS_BYTE_OF_PRIMITIVE (a, 5) == _DBUS_BYTE_OF_PRIMITIVE (b, 5)
&&
    \
    _DBUS_BYTE_OF_PRIMITIVE (a, 6) == _DBUS_BYTE_OF_PRIMITIVE (b, 6)
&&
    \
    _DBUS_BYTE_OF_PRIMITIVE (a, 7) == _DBUS_BYTE_OF_PRIMITIVE (b,
7))

dbus_bool_t _dbus_get_autolaunch_address (const char *scope,
                                         DBusString *address,
                                         DBusError *error);

dbus_bool_t _dbus_lookup_session_address (dbus_bool_t *supported,
                                         DBusString *address,
                                         DBusError *error);

/** Type representing a universally unique ID
 * @todo rename to UUID instead of GUID
 */

```



```

typedef union DBusGUID DBusGUID;

dbus_bool_t _dbus_read_local_machine_uuid (DBusGUID
*machine_id,
                                           dbus_bool_t
create_if_not_found,
                                           DBusError *error);

/**
 * Initialize threads as in dbus_threads_init_default(), appropriately
 * for the platform.
 * @returns #FALSE if no memory
 */
dbus_bool_t _dbus_threads_init_platform_specific (void);

dbus_bool_t _dbus_split_paths_and_append (DBusString *dirs,
                                           const char *suffix,
                                           DBusList **dir_list);

unsigned long _dbus_pid_for_log (void);

/* FIXME move back to dbus-sysdeps-unix.h probably -
 * the PID file handling just needs a little more abstraction
 * in the bus daemon first.
 */
dbus_pid_t _dbus_getpid (void);

dbus_bool_t _dbus_change_to_daemon_user (const char *user,
                                           DBusError *error);

void _dbus_flush_caches (void);

void _dbus_request_file_descriptor_limit (unsigned int limit);

/*
 * replaces the term DBUS_PREFIX in configure_time_path by the
 * current dbus installation directory. On unix this function is a
noop
 *
 * @param configure_time_path
 * @return real path
 */
const char *
_dbus_replace_install_prefix (const char *configure_time_path);

/** @} */

DBUS_END_DECLS

#ifdef DBUS_WIN
#include "dbus-sysdeps-win.h"

```

```

#endif

#endif /* DBUS_SYSDEPS_H */

File = dbus-test-main.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-test.c  Program to run all tests
 *
 * Copyright (C) 2002  Red Hat Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify
 * it under the terms of the GNU General Public License as published
by
 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301  USA
 */

#include <config.h>
#include "dbus-types.h"
#include "dbus-test.h"
#include <stdio.h>
#include <stdlib.h>
#if HAVE_LOCALE_H
#include <locale.h>
#endif

int
main (int  argc,
      char **argv)
{
    const char *test_data_dir;
    const char *specific_test;

#if HAVE_SETLOCALE

```

```

    setlocale(LC_ALL, "");
#endif

    if (argc > 1)
        test_data_dir = argv[1];
    else
        test_data_dir = NULL;

    if (argc > 2)
        specific_test = argv[2];
    else
        specific_test = NULL;

    dbus_internal_do_not_use_run_tests (test_data_dir, specific_test);

    return 0;
}

```

File = dbus-test-plan.html

```

<html><head><meta http-equiv="Content-Type" content="text/html;
charset=ISO-8859-1"><title>D-Bus Test Plan</title><meta
name="generator" content="DocBook XSL Stylesheets
V1.76.1"></head><body bgcolor="white" text="black" link="#0000FF"
vlink="#840084" alink="#0000FF"><div class="article" title="D-Bus Test
Plan"><div class="titlepage"><div><div><h2 class="title"><a
name="index"></a>D-Bus Test Plan</h2></div><div><div
class="authorgroup"><div class="author"><h3 class="author"><span
class="firstname">Anders</span> <span
class="surname">Carlsson</span></h3><div class="affiliation"><span
class="orgname">CodeFactory AB<br></span><div class="address"><p><code
class="email">&lt;<a class="email"
href="mailto:andersca@codefactory.se">andersca@codefactory.se</a>&gt;<
/code></p></div></div></div></div></div><hr></div><div
class="toc"><p><b>Table of Contents</b></p><dl><dt><span
class="sect1"><a
href="#introduction">Introduction</a></span></dt><dd><dl><dt><span
class="sect2"><a href="#importance-of-testing">The importance of
testing</a></span></dt></dl></dd><dt><span class="sect1"><a
href="#client-library">Testing the D-Bus client
library</a></span></dt><dd><dl><dt><span class="sect2"><a href="#data-
structures">Data Structures</a></span></dt><dt><span class="sect2"><a
href="#message-loader">Message loader</a></span></dt><dt><span
class="sect2"><a
href="#authentication">Authentication</a></span></dt></dl></dd><dt><sp
an class="sect1"><a href="#daemon">Testing the D-Bus bus
daemon</a></span></dt><dd><dl><dt><span class="sect2"><a href="#debug-
transport">The debug transport</a></span></dt><dt><span
class="sect2"><a href="#bus-test">The bus-test
program</a></span></dt></dl></dd><dt><span class="sect1"><a

```

```
href="#other-tests">Other tests</a></span></dt><dd><dl><dt><span
class="sect2"><a href="#oom-robustness">Out-Of-Memory
robustness</a></span></dt><dt><span class="sect2"><a href="#leaks-and-
other-stuff">Memory leaks and code
robustness</a></span></dt></dl></dd></dl></div><div class="sect1"
title="Introduction"><div class="titlepage"><div><div><h2
class="title" style="clear: both"><a
name="introduction"></a>Introduction</h2></div></div></div><p>
    This document tries to explain the details of the test plan for
D-Bus
    </p><div class="sect2" title="The importance of testing"><div
class="titlepage"><div><div><h3 class="title"><a name="importance-of-
testing"></a>The importance of testing</h3></div></div></div><p>
    As with any big library or program, testing is important. It
    can help find bugs and regressions and make the code better
    overall.
    </p><p>
    D-Bus is a large and complex piece of software (about 25,000
    lines of code for the client library, and 2,500 lines of code
    for the bus daemon) and it's therefore important to try to
make sure
    that all parts of the software is functioning correctly.
    </p><p>
    D-Bus can be built with support for testing by passing
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    is recommended that production systems build without testing
    since that reduces the D-Bus client library size.
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style="clear: both"><a name="client-library"></a>Testing the D-Bus
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    The tests for the client library consist of the dbus-test
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    fixed, a test is added to make sure that the bug won't occur
again.
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class="titlepage"><div><div><h3 class="title"><a name="data-
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    The D-Bus client library consists of some data structures that
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    The message loader is the part of D-Bus that takes messages in
    raw character form and parses them, turning them into
DBusMessages.
    </p><p>
    This is one of the parts of D-Bus that
```

must be absolutely bug-free and

robust. The message loader should be able to handle invalid and incomplete messages without crashing. Not doing so is a serious issue and can easily result in D-Bus being exploitable to DoS attacks.

</p><p>

To solve these problems, there is a testing feature called the Message Builder. The message builder can take a serialized message in string-form and convert it into a raw character string which can then be loaded by the message loader.

</p><div class="figure"><p class="title">Figure 1. Example of a message in string form</p><div class="figure-contents"><pre class="programlisting">
Standard org.freedesktop.DBus.Hello message

```
VALID_HEADER  
FIELD_NAME name  
TYPE STRING  
STRING 'org.freedesktop.DBus.Hello'  
FIELD_NAME srvc  
TYPE STRING  
STRING 'org.freedesktop.DBus'  
ALIGN 8  
END_LENGTH Header  
START_LENGTH Body  
END_LENGTH Body
```

</pre></div></div><br class="figure-break"><p>

The file format of messages in string form is documented in the D-Bus Reference Manual.

</p><p>

The message test part of dbus-test is using the message builder to build different kinds of messages, both valid, invalid, and invalid ones, to make sure that the loader won't crash or leak memory of any of those, and that the loader knows if a message is valid or not.

</p><p>

There is also a test program called `break-loader` that loads a message

in

string-form into raw character form using the message builder. It then randomly changes the message, it can for example replace single bytes of data or modify the length of the message. This is to simulate network errors. The break-loader program saves all the messages leading to errors so it can easily be run for a long period of time.

</p></div><div class="sect2" title="Authentication"><div class="titlepage"><div><div><h3 class="title">Authentication</h3></div></div></div><p>

For testing authentication, there is a testing feature that can read authentication sequences from a file and play them back to a dummy server and client to make sure that

authentication is working according to the specification.

[Figure 2. Example of an authentication script](#)

```

## this tests a successful auth of type EXTERNAL

SERVER
SEND 'AUTH EXTERNAL USERNAME_HEX'
EXPECT_COMMAND OK
EXPECT_STATE WAITING_FOR_INPUT
SEND 'BEGIN'
EXPECT_STATE AUTHENTICATED

```

Testing the D-Bus bus daemon

Testing the D-Bus bus daemon

Since the D-Bus bus daemon is using the D-Bus client library it will benefit from all tests done on the client library, but there is still the issue of testing client-server communication. This is more complicated since it it may require another process running.

The debug transport

The debug transport

In D-Bus, a **transport** is a class that handles sending and receiving raw data over a certain medium. The transport that is used most in D-Bus is the UNIX transport with sends and recevies data over a UNIX socket. A transport that tunnels data through X11 client messages is also under development.

The D-Bus debug transport is a specialized transport that works in-process. This means that a client and server that exists in the same process can talk to eachother without using a socket.

The bus-test program

The bus-test program is a program that is used to test various parts of the D-Bus bus daemon; robustness and that it conforms to the specifications.

The test program has the necessary code from the bus daemon linked in, and it uses the debug transport for communication. This means that the bus daemon code can be tested without the real bus actually running, which makes testing easier.

The bus-test program should test all major features of the

```

    bus, such as service registration, notification when things
    occurs and message matching.
  </p></div></div><div class="sect1" title="Other tests"><div
class="titlepage"><div><div><h2 class="title" style="clear: both"><a
name="other-tests"></a>Other tests</h2></div></div></div><div
class="sect2" title="Out-Of-Memory robustness"><div
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    Since D-Bus should be able to be used in embedded devices, and
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    low-memory situations without exiting or crashing.
  </p><p>
    In practice, this means that both the client and server code
    must be able to handle dbus_malloc returning NULL.
  </p><p>
    To test this, two environment variables
    exist. <code class="literal">DBUS_MALLOC_FAIL_NTH</code> will
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  </p></div><div class="sect2" title="Memory leaks and code
robustness"><div class="titlepage"><div><div><h3 class="title"><a
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  </p><p>
    Luckily there exists good tools for catching such errors. One
    free good tool is <a class="ulink" href="http://devel-
home.kde.org/~sewardj/" target="_top">Valgrind</a>, which runs the
    program in a
    virtual CPU which makes catching errors easy. All test
    programs can be run under Valgrind,
  </p></div></div></div></body></html>

```

File = dbus-test-plan.xml

```

<?xml version="1.0" standalone="no"?>
<!DOCTYPE article PUBLIC "-//OASIS//DTD DocBook XML V4.1.2//EN"
"http://www.oasis-open.org/docbook/xml/4.1.2/docbookx.dtd"
[
]>

<article id="index">
  <articleinfo>
    <title>D-Bus Test Plan</title>

```

```

<date>14 February 2003</date>
<authorgroup>
  <author>
    <firstname>Anders</firstname>
    <surname>Carlsson</surname>
    <affiliation>
      <orgname>CodeFactory AB</orgname>
      <address><email>andersca@codefactory.se</email></address>
    </affiliation>
  </author>
</authorgroup>
</articleinfo>
<sect1 id="introduction">
  <title>Introduction</title>
  <para>
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D-Bus
  </para>
  <sect2 id="importance-of-testing">
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    <para>
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      overall.
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    <para>
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  </sect2>
</sect1>
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  </para>
  <sect2 id="data-structures">
    <title>Data Structures</title>
    <para>

```


The D-Bus client library consists of some data structures that are used internally; a linked list class, a hashtable class and a string class. All aspects of those are tested by dbus-test.

</para>

</sect2>

<sect2 id="message-loader">

<title>Message loader</title>

<para>

The message loader is the part of D-Bus that takes messages in raw character form and parses them, turning them into DBusMessages.

</para>

<para>

This is one of the parts of D-Bus that **must** be absolutely bug-free and robust. The message loader should be able to handle invalid and incomplete messages without crashing. Not doing so is a serious issue and can easily result in D-Bus being exploitable to DoS attacks.

</para>

<para>

To solve these problems, there is a testing feature called the Message Builder. The message builder can take a serialized message in string-form and convert it into a raw character string which can then be loaded by the message loader.

</para>

<figure>

<title>Example of a message in string form</title>

<programlisting>

```
# Standard org.freedesktop.DBus.Hello message

VALID_HEADER
FIELD_NAME name
TYPE STRING
STRING 'org.freedesktop.DBus.Hello'
FIELD_NAME srvc
TYPE STRING
STRING 'org.freedesktop.DBus'
ALIGN 8
END_LENGTH Header
START_LENGTH Body
END_LENGTH Body
```

</programlisting>

</figure>

<para>

The file format of messages in string form is documented in the D-Bus Reference Manual.

</para>

<para>

The message test part of dbus-test is using the message builder to build different kinds of messages, both valid, invalid, and invalid ones, to make sure that the loader won't

```

    crash or leak memory of any of those, and that the loader
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</para>
<para>
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</sect2>
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    <para>
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    </para>
    <figure>
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    <programlisting>
        ## this tests a successful auth of type EXTERNAL

        SERVER
        SEND 'AUTH EXTERNAL USERNAME_HEX'
        EXPECT_COMMAND OK
        EXPECT_STATE WAITING_FOR_INPUT
        SEND 'BEGIN'
        EXPECT_STATE AUTHENTICATED
    </programlisting>
    </figure>
</sect2>
</sect1>
<sect1 id="daemon">
    <title>Testing the D-Bus bus daemon</title>
    <para>
        Since the D-Bus bus daemon is using the D-Bus client library it
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        This is more complicated since it it may require another process
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    </para>
    <sect2 id="debug-transport">
        <title>The debug transport</title>
        <para>
            In D-Bus, a <emphasis>transport</emphasis> is a class that
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            medium. The transport that is used most in D-Bus is the UNIX

```

```
transport with sends and recevies data over a UNIX socket. A
transport that tunnels data through X11 client messages is
also under development.
</para>
<para>
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</para>
</sect2>
<sect2 id="bus-test">
    <title>The bus-test program</title>
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    </para>
    <para>
        The test program has the necessary code from the bus daemon
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        communication. This means that the bus daemon code can be
        tested without the real bus actually running, which makes
        testing easier.
    </para>
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        The bus-test program should test all major features of the
        bus, such as service registration, notification when things
        occurs and message matching.
    </para>
</sect2>
</sect1>
<sect1 id="other-tests">
    <title>Other tests</title>

    <sect2 id="oom-robustness">
        <title>Out-Of-Memory robustness</title>
        <para>
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            must be able to handle dbus_malloc returning NULL.
        </para>
        <para>
            To test this, two environment variables
            exist. <literal>DBUS_MALLOC_FAIL_NTH</literal> will make every
            nth call to dbus_malloc return NULL, and
            <literal>DBUS_MALLOC_FAIL_GREATER_THAN</literal> will make any
            dbus_malloc call with a request for more than the specified
```

```

    number of bytes fail.
  </para>
</sect2>

<sect2 id="leaks-and-other-stuff">
  <title>Memory leaks and code robustness</title>
  <para>
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    for, for example things like memory leaks and out-of-bounds
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    home.kde.org/~sewardj/">Valgrind</ulink>, which runs the program in a
    virtual CPU which makes catching errors easy. All test
    programs can be run under Valgrind,
  </para>
</sect2>
</sect1>
</article>

```

```

File = dbus-test-runner

#!/bin/sh

set -e

dir="$1"
shift

if ! test -d "$dir"; then
  echo "Usage: dbus-test-runner directory [executable...]"
  exit 0
fi

passed=0
failed=0
skipped=0

for prog in "$@"; do
  e=0
  "$dir/$prog" || e=$?
  case $e in
    (0)
      echo "PASS: $prog"
      passed=`expr $passed + 1`
      ;;
    (77)
      echo "SKIP: $prog"

```

```

        skipped=`expr $skipped + 1`
        ;;
    (*)
        echo "FAIL: $prog"
        failed=`expr $failed + 1`
        ;;
    esac
done

if test $failed = 0; then
    # avoid saying "FAIL", to make it easy to grep results!
    echo "PASSED $passed / SKIPPED $skipped"
    exit 0
else
    echo "PASSED $passed / FAILED $failed / SKIPPED $skipped"
    exit 1
fi

```

File = dbus-test.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-test.c  Program to run all tests
 *
 * Copyright (C) 2002, 2003, 2004, 2005  Red Hat Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify
 * it under the terms of the GNU General Public License as published
by
 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301  USA
 *
 */

#include <config.h>
#include "dbus-test.h"
#include "dbus-sysdeps.h"
#include "dbus-internals.h"

```

```

#include <stdio.h>
#include <stdlib.h>

#ifdef DBUS_BUILD_TESTS
static void
die (const char *failure)
{
    fprintf (stderr, "Unit test failed: %s\n", failure);
    exit (1);
}

static void
check_memleaks (void)
{
    dbus_shutdown ();

    printf ("%s: checking for memleaks\n", "dbus-test");
    if (_dbus_get_malloc_blocks_outstanding () != 0)
    {
        _dbus_warn ("%d dbus_malloc blocks were not freed\n",
                    _dbus_get_malloc_blocks_outstanding ());
        die ("memleaks");
    }
}

typedef dbus_bool_t (*TestFunc) (void);
typedef dbus_bool_t (*TestDataFunc) (const char *data);

static void
run_test (const char          *test_name,
          const char          *specific_test,
          TestFunc            test)
{
    if (!specific_test || strcmp (specific_test, test_name) == 0)
    {
        printf ("%s: running %s tests\n", "dbus-test", test_name);
        if (!test ())
            die (test_name);

        check_memleaks ();
    }
}

static void
run_data_test (const char          *test_name,
               const char          *specific_test,
               TestDataFunc        test,
               const char          *test_data_dir)
{
    if (!specific_test || strcmp (specific_test, test_name) == 0)
    {
        printf ("%s: running %s tests\n", "dbus-test", test_name);

```

```

        if (!test (test_data_dir))
            die (test_name);

        check_memleaks ();
    }
}

#endif /* DBUS_BUILD_TESTS */

/**
 * An exported symbol to be run in order to execute
 * unit tests. Should not be used by
 * any app other than our test app, this symbol
 * won't exist in some builds of the library.
 * (with --enable-tests=no)
 *
 * @param test_data_dir the directory with test data (test/data
normally)
 */
void
dbus_internal_do_not_use_run_tests (const char *test_data_dir, const
char *specific_test)
{
#ifdef DBUS_BUILD_TESTS
    if (!_dbus_threads_init_debug ())
        die ("debug threads init");

    if (test_data_dir == NULL)
        test_data_dir = _dbus_getenv ("DBUS_TEST_DATA");

    if (test_data_dir != NULL)
        printf ("Test data in %s\n", test_data_dir);
    else
        printf ("No test data!\n");

    run_test ("string", specific_test, _dbus_string_test);

    run_test ("sysdeps", specific_test, _dbus_sysdeps_test);

    run_test ("data-slot", specific_test, _dbus_data_slot_test);

    run_test ("misc", specific_test, _dbus_misc_test);

    run_test ("address", specific_test, _dbus_address_test);

    run_test ("server", specific_test, _dbus_server_test);

    run_test ("object-tree", specific_test, _dbus_object_tree_test);

    run_test ("signature", specific_test, _dbus_signature_test);

    run_test ("marshalling", specific_test, _dbus_marshall_test);

```

```

    run_test ("marshal-recursive", specific_test,
_dbus_marshal_recursive_test);

    run_test ("byteswap", specific_test, _dbus_marshal_byteswap_test);

    run_test ("memory", specific_test, _dbus_memory_test);

#if 1
    run_test ("mem-pool", specific_test, _dbus_mem_pool_test);
#endif

    run_test ("list", specific_test, _dbus_list_test);

    run_test ("marshal-validate", specific_test,
_dbus_marshal_validate_test);

    run_data_test ("message", specific_test, _dbus_message_test,
test_data_dir);

    run_test ("hash", specific_test, _dbus_hash_test);

#if !defined(DBUS_WINCE)
    run_data_test ("spawn", specific_test, _dbus_spawn_test,
test_data_dir);
#endif

    run_data_test ("credentials", specific_test, _dbus_credentials_test,
test_data_dir);

#ifdef DBUS_UNIX
    run_data_test ("userdb", specific_test, _dbus_userdb_test,
test_data_dir);

    run_test ("transport-unix", specific_test,
_dbus_transport_unix_test);
#endif

    run_test ("keyring", specific_test, _dbus_keyring_test);

    run_data_test ("sha", specific_test, _dbus_sha_test, test_data_dir);

    run_data_test ("auth", specific_test, _dbus_auth_test,
test_data_dir);

    printf ("%s: completed successfully\n", "dbus-test");
#else
    printf ("Not compiled with unit tests, not running any\n");
#endif
}

```



```

File = dbus-test.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-test.h  Declarations of test functions.
 *
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301  USA
 */

#ifndef DBUS_TEST_H
#define DBUS_TEST_H

#include <dbus/dbus-types.h>
#include <dbus/dbus-string.h>
#include <dbus/dbus-marshal-validate.h>

dbus_bool_t _dbus_hash_test      (void);
dbus_bool_t _dbus_list_test     (void);
dbus_bool_t _dbus_marshal_test  (void);
dbus_bool_t _dbus_marshal_recursive_test (void);
dbus_bool_t _dbus_marshal_byteswap_test (void);
dbus_bool_t _dbus_marshal_validate_test (void);
dbus_bool_t _dbus_misc_test     (void);
dbus_bool_t _dbus_signature_test (void);
dbus_bool_t _dbus_mem_pool_test (void);
dbus_bool_t _dbus_string_test   (void);
dbus_bool_t _dbus_address_test  (void);
dbus_bool_t _dbus_server_test   (void);
dbus_bool_t _dbus_message_test  (const char *test_data_dir);
dbus_bool_t _dbus_auth_test     (const char *test_data_dir);
dbus_bool_t _dbus_sha_test      (const char *test_data_dir);

```



```
#endif /* DBUS_TEST_H */
```

```
File = dbus-threads-internal.h
```

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-threads-internal.h D-Bus thread primitives
 *
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
#ifdef DBUS_THREADS_INTERNAL_H
#define DBUS_THREADS_INTERNAL_H

#include <dbus/dbus-macros.h>
#include <dbus/dbus-types.h>
#include <dbus/dbus-threads.h>

/**
 * @addtogroup DBusThreadsInternals
 * @{
 */

/**
 * A mutex which is recursive if possible, else non-recursive.
 * This is typically recursive, but that cannot be relied upon.
 */
typedef struct DBusRMutex DBusRMutex;

/**
 * A mutex suitable for use with condition variables.
 * This is typically non-recursive.
 */
```

```

 */
typedef struct DBusCMutex DBusCMutex;

/** @} */

DBUS_BEGIN_DECLS

void      _dbus_rmutex_lock          (DBusRMutex
 *mutex);
void      _dbus_rmutex_unlock        (DBusRMutex
 *mutex);
void      _dbus_rmutex_new_at_location (DBusRMutex
 **location_p);
void      _dbus_rmutex_free_at_location (DBusRMutex
 **location_p);

void      _dbus_cmutex_lock          (DBusCMutex
 *mutex);
void      _dbus_cmutex_unlock        (DBusCMutex
 *mutex);
void      _dbus_cmutex_new_at_location (DBusCMutex
 **location_p);
void      _dbus_cmutex_free_at_location (DBusCMutex
 **location_p);

DBusCondVar* _dbus_condvar_new      (void);
void          _dbus_condvar_free    (DBusCondVar
 *cond);
void          _dbus_condvar_wait    (DBusCondVar      *cond,
 DBusCMutex
 *mutex);
dbus_bool_t  _dbus_condvar_wait_timeout (DBusCondVar      *cond,
 DBusCMutex
 *mutex,
 int
 timeout_milliseconds);
void          _dbus_condvar_wake_one (DBusCondVar
 *cond);
void          _dbus_condvar_new_at_location (DBusCondVar
 **location_p);
void          _dbus_condvar_free_at_location (DBusCondVar
 **location_p);

/* Private to threading implementations and dbus-threads.c */

DBusRMutex  *_dbus_platform_rmutex_new (void);
void          _dbus_platform_rmutex_free (DBusRMutex
 *mutex);
void          _dbus_platform_rmutex_lock (DBusRMutex
 *mutex);
void          _dbus_platform_rmutex_unlock (DBusRMutex
 *mutex);

```

```

DBusCMutex  *_dbus_platform_mutex_new      (void);
void        _dbus_platform_mutex_free     (DBusCMutex
*mutex);
void        _dbus_platform_mutex_lock     (DBusCMutex
*mutex);
void        _dbus_platform_mutex_unlock   (DBusCMutex
*mutex);

DBusCondVar* _dbus_platform_condvar_new    (void);
void        _dbus_platform_condvar_free    (DBusCondVar
*cond);
void        _dbus_platform_condvar_wait    (DBusCondVar      *cond,
DBusCMutex
*mutex);
dbus_bool_t _dbus_platform_condvar_wait_timeout (DBusCondVar  *cond,
DBusCMutex
*mutex,
int
timeout_milliseconds);
void        _dbus_platform_condvar_wake_one (DBusCondVar
*cond);

```

```

DBUS_END_DECLS

```

```

#endif /* DBUS_THREADS_INTERNAL_H */

```

```

File = dbus-threads.c

```

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-threads.h  D-Bus threads handling
 *
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```

```

* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
#include <config.h>
#include "dbus-threads.h"
#include "dbus-internals.h"
#include "dbus-threads-internal.h"
#include "dbus-list.h"

static int thread_init_generation = 0;

static DBusList *uninitialized_rmutex_list = NULL;
static DBusList *uninitialized_cmutex_list = NULL;
static DBusList *uninitialized_condvar_list = NULL;

/** This is used for the no-op default mutex pointer, just to be
distinct from #NULL */
#define _DBUS_DUMMY_MUTEX ((DBusMutex*)0xABCDEF)
#define _DBUS_DUMMY_RMUTEX ((DBusRMutex *) _DBUS_DUMMY_MUTEX)
#define _DBUS_DUMMY_CMUTEX ((DBusCMutex *) _DBUS_DUMMY_MUTEX)

/** This is used for the no-op default mutex pointer, just to be
distinct from #NULL */
#define _DBUS_DUMMY_CONDVAR ((DBusCondVar*)0xABCDEF2)

/**
 * @defgroup DBusThreadsInternals Thread functions
 * @ingroup DBusInternals
 * @brief _dbus_rmutex_lock(), etc.
 *
 * Functions and macros related to threads and thread locks.
 *
 * @{
 */

/**
 * Creates a new mutex
 * or creates a no-op mutex if threads are not initialized.
 * May return #NULL even if threads are initialized, indicating
 * out-of-memory.
 *
 * If possible, the mutex returned by this function is recursive, to
 * avoid deadlocks. However, that cannot be relied on.
 *
 * The extra level of indirection given by allocating a pointer
 * to point to the mutex location allows the threading
 * module to swap out dummy mutexes for a real mutex so libraries
 * can initialize threads even after the D-Bus API has been used.
 *
 * @param location_p the location of the new mutex, can return #NULL
on OOM

```

```

*/
void
_dbus_rmutex_new_at_location (DBusRMutex **location_p)
{
    _dbus_assert (location_p != NULL);

    if (thread_init_generation == _dbus_current_generation)
    {
        *location_p = _dbus_platform_rmutex_new ();
    }
    else
    {
        *location_p = _DBUS_DUMMY_RMUTEX;

        if (!_dbus_list_append (&uninitialized_rmutex_list, location_p))
            *location_p = NULL;
    }
}

/**
 * Creates a new mutex
 * or creates a no-op mutex if threads are not initialized.
 * May return #NULL even if threads are initialized, indicating
 * out-of-memory.
 *
 * The returned mutex is suitable for use with condition variables.
 *
 * The extra level of indirection given by allocating a pointer
 * to point to the mutex location allows the threading
 * module to swap out dummy mutexes for a real mutex so libraries
 * can initialize threads even after the D-Bus API has been used.
 *
 * @param location_p the location of the new mutex, can return #NULL
on OOM
 */
void
_dbus_cmutex_new_at_location (DBusCMutex **location_p)
{
    _dbus_assert (location_p != NULL);

    if (thread_init_generation == _dbus_current_generation)
    {
        *location_p = _dbus_platform_cmutex_new ();
    }
    else
    {
        *location_p = _DBUS_DUMMY_CMUTEX;

        if (!_dbus_list_append (&uninitialized_cmutex_list, location_p))
            *location_p = NULL;
    }
}

```

```

/**
 * Frees a DBusRMutex or removes it from the uninitialized mutex list;
 * does nothing if passed a #NULL pointer.
 */
void
_dbus_rmutex_free_at_location (DBusRMutex **location_p)
{
    if (location_p == NULL)
        return;

    if (thread_init_generation == _dbus_current_generation)
    {
        if (*location_p != NULL)
            _dbus_platform_rmutex_free (*location_p);
    }
    else
    {
        _dbus_assert (*location_p == NULL || *location_p ==
            _DBUS_DUMMY_RMUTEX);

        _dbus_list_remove (&uninitialized_rmutex_list, location_p);
    }
}

/**
 * Frees a DBusCMutex and removes it from the
 * uninitialized mutex list;
 * does nothing if passed a #NULL pointer.
 */
void
_dbus_cmutex_free_at_location (DBusCMutex **location_p)
{
    if (location_p == NULL)
        return;

    if (thread_init_generation == _dbus_current_generation)
    {
        if (*location_p != NULL)
            _dbus_platform_cmutex_free (*location_p);
    }
    else
    {
        _dbus_assert (*location_p == NULL || *location_p ==
            _DBUS_DUMMY_CMUTEX);

        _dbus_list_remove (&uninitialized_cmutex_list, location_p);
    }
}

/**
 * Locks a mutex. Does nothing if passed a #NULL pointer.

```



```

* Locks may be recursive if threading implementation initialized
* recursive locks.
*/
void
_dbus_rmutex_lock (DBusRMutex *mutex)
{
    if (mutex && thread_init_generation == _dbus_current_generation)
        _dbus_platform_rmutex_lock (mutex);
}

/**
* Locks a mutex. Does nothing if passed a #NULL pointer.
* Locks may be recursive if threading implementation initialized
* recursive locks.
*/
void
_dbus_cmutex_lock (DBusCMutex *mutex)
{
    if (mutex && thread_init_generation == _dbus_current_generation)
        _dbus_platform_cmutex_lock (mutex);
}

/**
* Unlocks a mutex. Does nothing if passed a #NULL pointer.
*
* @returns #TRUE on success
*/
void
_dbus_rmutex_unlock (DBusRMutex *mutex)
{
    if (mutex && thread_init_generation == _dbus_current_generation)
        _dbus_platform_rmutex_unlock (mutex);
}

/**
* Unlocks a mutex. Does nothing if passed a #NULL pointer.
*
* @returns #TRUE on success
*/
void
_dbus_cmutex_unlock (DBusCMutex *mutex)
{
    if (mutex && thread_init_generation == _dbus_current_generation)
        _dbus_platform_cmutex_unlock (mutex);
}

/**
* Creates a new condition variable using the function supplied
* to dbus_threads_init(), or creates a no-op condition variable
* if threads are not initialized. May return #NULL even if
* threads are initialized, indicating out-of-memory.
*

```

```

    * @returns new mutex or #NULL
    */
DBusCondVar *
_dbus_condvar_new (void)
{
    if (thread_init_generation == _dbus_current_generation)
        return _dbus_platform_condvar_new ();
    else
        return _DBUS_DUMMY_CONDVAR;
}

/**
 * This does the same thing as _dbus_condvar_new.  It however
 * gives another level of indirection by allocating a pointer
 * to point to the condvar location.  This allows the threading
 * module to swap out dummy condvars for a real condvar so libraries
 * can initialize threads even after the D-Bus API has been used.
 *
 * @returns the location of a new condvar or #NULL on OOM
 */

void
_dbus_condvar_new_at_location (DBusCondVar **location_p)
{
    _dbus_assert (location_p != NULL);

    if (thread_init_generation == _dbus_current_generation)
        {
            *location_p = _dbus_condvar_new();
        }
    else
        {
            *location_p = _DBUS_DUMMY_CONDVAR;

            if (!_dbus_list_append (&uninitialized_condvar_list,
location_p))
                *location_p = NULL;
        }
}

/**
 * Frees a conditional variable created with dbus_condvar_new(); does
 * nothing if passed a #NULL pointer.
 */
void
_dbus_condvar_free (DBusCondVar *cond)
{
    if (cond && thread_init_generation == _dbus_current_generation)
        _dbus_platform_condvar_free (cond);
}

```

```

/**
 * Frees a conditional variable and removes it from the
 * uninitialized_condvar_list;
 * does nothing if passed a #NULL pointer.
 */
void
_dbus_condvar_free_at_location (DBusCondVar **location_p)
{
    if (location_p == NULL)
        return;

    if (thread_init_generation == _dbus_current_generation)
    {
        if (*location_p != NULL)
            _dbus_platform_condvar_free (*location_p);
    }
    else
    {
        _dbus_assert (*location_p == NULL || *location_p ==
            _DBUS_DUMMY_CONDVAR);

        _dbus_list_remove (&uninitialized_condvar_list, location_p);
    }
}

/**
 * Atomically unlocks the mutex and waits for the conditions
 * variable to be signalled. Locks the mutex again before
 * returning.
 * Does nothing if passed a #NULL pointer.
 */
void
_dbus_condvar_wait (DBusCondVar *cond,
                   DBusCMutex *mutex)
{
    if (cond && mutex && thread_init_generation ==
        _dbus_current_generation)
        _dbus_platform_condvar_wait (cond, mutex);
}

/**
 * Atomically unlocks the mutex and waits for the conditions variable
 * to be signalled, or for a timeout. Locks the mutex again before
 * returning. Does nothing if passed a #NULL pointer. Return value
 * is #FALSE if we timed out, #TRUE otherwise.
 *
 * @param cond the condition variable
 * @param mutex the mutex
 * @param timeout_milliseconds the maximum time to wait
 * @returns #FALSE if the timeout occurred, #TRUE if not
 */

```

```

dbus_bool_t
_dbus_condvar_wait_timeout (DBusCondVar          *cond,
                           DBusCMutex          *mutex,
                           int
timeout_milliseconds)
{
    if (cond && mutex && thread_init_generation ==
_dbus_current_generation)
        return _dbus_platform_condvar_wait_timeout (cond, mutex,
                                                    timeout_milliseconds);
    else
        return TRUE;
}

/**
 * If there are threads waiting on the condition variable, wake
 * up exactly one.
 * Does nothing if passed a #NULL pointer.
 */
void
_dbus_condvar_wake_one (DBusCondVar *cond)
{
    if (cond && thread_init_generation == _dbus_current_generation)
        _dbus_platform_condvar_wake_one (cond);
}

static void
shutdown_global_locks (void *data)
{
    DBusRMutex ***locks = data;
    int i;

    i = 0;
    while (i < _DBUS_N_GLOBAL_LOCKS)
    {
        if (*(locks[i]) != NULL)
            _dbus_platform_rmutex_free (*(locks[i]));

        *(locks[i]) = NULL;
        ++i;
    }

    dbus_free (locks);
}

static void
shutdown_uninitialized_locks (void *data)
{
    _dbus_list_clear (&uninitialized_rmutex_list);
    _dbus_list_clear (&uninitialized_cmutex_list);
    _dbus_list_clear (&uninitialized_condvar_list);
}

```

```

static dbus_bool_t
init_uninitialized_locks (void)
{
    DBusList *link;

    _dbus_assert (thread_init_generation != _dbus_current_generation);

    link = uninitialized_rmutex_list;
    while (link != NULL)
    {
        DBusRMutex **mp;

        mp = link->data;
        _dbus_assert (*mp == _DBUS_DUMMY_RMUTEX);

        *mp = _dbus_platform_rmutex_new ();
        if (*mp == NULL)
            goto fail_mutex;

        link = _dbus_list_get_next_link (&uninitialized_rmutex_list,
link);
    }

    link = uninitialized_cmutex_list;
    while (link != NULL)
    {
        DBusCMutex **mp;

        mp = link->data;
        _dbus_assert (*mp == _DBUS_DUMMY_CMUTEX);

        *mp = _dbus_platform_cmutex_new ();
        if (*mp == NULL)
            goto fail_mutex;

        link = _dbus_list_get_next_link (&uninitialized_cmutex_list,
link);
    }

    link = uninitialized_condvar_list;
    while (link != NULL)
    {
        DBusCondVar **cp;

        cp = (DBusCondVar **)link->data;
        _dbus_assert (*cp == _DBUS_DUMMY_CONDVAR);

        *cp = _dbus_platform_condvar_new ();
        if (*cp == NULL)
            goto fail_condvar;
    }
}

```

```

        link = _dbus_list_get_next_link (&uninitialized_condvar_list,
link);
    }

    _dbus_list_clear (&uninitialized_rmutex_list);
    _dbus_list_clear (&uninitialized_cmutex_list);
    _dbus_list_clear (&uninitialized_condvar_list);

    if (!_dbus_register_shutdown_func (shutdown_uninitialized_locks,
                                     NULL))
        goto fail_condvar;

    return TRUE;

fail_condvar:
    link = uninitialized_condvar_list;
    while (link != NULL)
    {
        DBusCondVar **cp;

        cp = link->data;

        if (*cp != _DBUS_DUMMY_CONDVAR && *cp != NULL)
            _dbus_platform_condvar_free (*cp);

        *cp = _DBUS_DUMMY_CONDVAR;

        link = _dbus_list_get_next_link (&uninitialized_condvar_list,
link);
    }

fail_mutex:
    link = uninitialized_rmutex_list;
    while (link != NULL)
    {
        DBusRMutex **mp;

        mp = link->data;

        if (*mp != _DBUS_DUMMY_RMUTEX && *mp != NULL)
            _dbus_platform_rmutex_free (*mp);

        *mp = _DBUS_DUMMY_RMUTEX;

        link = _dbus_list_get_next_link (&uninitialized_rmutex_list,
link);
    }

    link = uninitialized_cmutex_list;
    while (link != NULL)
    {
        DBusCMutex **mp;

```

```

    mp = link->data;

    if (*mp != _DBUS_DUMMY_CMUTEX && *mp != NULL)
        _dbus_platform_cmutex_free (*mp);

    *mp = _DBUS_DUMMY_CMUTEX;

    link = _dbus_list_get_next_link (&uninitialized_cmutex_list,
link);
    }

    return FALSE;
}

static dbus_bool_t
init_locks (void)
{
    int i;
    DBusRMutex ***dynamic_global_locks;
    DBusRMutex **global_locks[] = {
#define LOCK_ADDR(name) (&_dbus_lock_##name)
        LOCK_ADDR (win_fds),
        LOCK_ADDR (sid_atom_cache),
        LOCK_ADDR (list),
        LOCK_ADDR (connection_slots),
        LOCK_ADDR (pending_call_slots),
        LOCK_ADDR (server_slots),
        LOCK_ADDR (message_slots),
#ifdef !DBUS_USE_SYNC
        LOCK_ADDR (atomic),
#endif
        LOCK_ADDR (bus),
        LOCK_ADDR (bus_datas),
        LOCK_ADDR (shutdown_funcs),
        LOCK_ADDR (system_users),
        LOCK_ADDR (message_cache),
        LOCK_ADDR (shared_connections),
        LOCK_ADDR (machine_uuid)
#undef LOCK_ADDR
    };

    _dbus_assert (_DBUS_N_ELEMENTS (global_locks) ==
        _DBUS_N_GLOBAL_LOCKS);

    i = 0;

    dynamic_global_locks = dbus_new (DBusRMutex**,
        _DBUS_N_GLOBAL_LOCKS);
    if (dynamic_global_locks == NULL)
        goto failed;

```

```

while (i < _DBUS_N_ELEMENTS (global_locks))
{
    *global_locks[i] = _dbus_platform_mutex_new ();

    if (*global_locks[i] == NULL)
        goto failed;

    dynamic_global_locks[i] = global_locks[i];

    ++i;
}

if (!_dbus_register_shutdown_func (shutdown_global_locks,
                                   dynamic_global_locks))
    goto failed;

if (!init_uninitialized_locks ())
    goto failed;

return TRUE;

failed:
dbus_free (dynamic_global_locks);

for (i = i - 1; i >= 0; i--)
{
    _dbus_platform_mutex_free (*global_locks[i]);
    *global_locks[i] = NULL;
}
return FALSE;
}

/** @} */ /* end of internals */

/**
 * @defgroup DBusThreads Thread functions
 * @ingroup DBus
 * @brief dbus_threads_init() and dbus_threads_init_default()
 *
 * Functions and macros related to threads and thread locks.
 *
 * If threads are initialized, the D-Bus library has locks on all
 * global data structures. In addition, each #DBusConnection has a
 * lock, so only one thread at a time can touch the connection. (See
 * @ref DBusConnection for more on connection locking.)
 *
 * Most other objects, however, do not have locks - they can only be
 * used from a single thread at a time, unless you lock them yourself.
 * For example, a #DBusMessage can't be modified from two threads
 * at once.
 *
 * @{

```



```

 */

/**
 * Initializes threads, like dbus_threads_init_default().
 * This version previously allowed user-specified threading
 * primitives, but since D-Bus 1.6 it ignores them and behaves
 * exactly like dbus_threads_init_default().
 *
 * @param functions ignored, formerly functions for using threads
 * @returns #TRUE on success, #FALSE if no memory
 */
dbus_bool_t
dbus_threads_init (const DBusThreadFunctions *functions)
{
    if (thread_init_generation == _dbus_current_generation)
        return TRUE;

    if (!init_locks ())
        return FALSE;

    thread_init_generation = _dbus_current_generation;

    return TRUE;
}

/* Default thread implementation */

/**
 * Initializes threads. If this function is not called, the D-Bus
 * library will not lock any data structures. If it is called, D-Bus
 * will do locking, at some cost in efficiency. Note that this
 * function must be called BEFORE the second thread is started.
 *
 * It's safe to call dbus_threads_init_default() as many times as you
 * want, but only the first time will have an effect.
 *
 * dbus_shutdown() reverses the effects of this function when it
 * resets all global state in libdbus.
 *
 * @returns #TRUE on success, #FALSE if not enough memory
 */
dbus_bool_t
dbus_threads_init_default (void)
{
    return _dbus_threads_init_platform_specific ();
}

/** @} */

```

```

#ifdef DBUS_BUILD_TESTS

dbus_bool_t
_dbus_threads_init_debug (void)
{
    return _dbus_threads_init_platform_specific();
}

#endif /* DBUS_BUILD_TESTS */

File = dbus-threads.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-threads.h D-Bus threads handling
 *
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
#ifdef !defined (DBUS_INSIDE_DBUS_H) && !defined (DBUS_COMPILATION)
#error "Only <dbus/dbus.h> can be included directly, this file may
disappear or change contents."
#endif

#ifdef !DBUS_THREADS_H
#define DBUS_THREADS_H

#include <dbus/dbus-macros.h>
#include <dbus/dbus-types.h>

DBUS_BEGIN_DECLS

```

```

/**
 * @addtogroup DBusThreads
 * @{
 */

/** An opaque mutex type provided by the #DBusThreadFunctions
implementation installed by dbus_threads_init(). */
typedef struct DBusMutex DBusMutex;
/** An opaque condition variable type provided by the
#DBusThreadFunctions implementation installed by dbus_threads_init().
*/
typedef struct DBusCondVar DBusCondVar;

/** Deprecated, provide DBusRecursiveMutexNewFunction instead. */
typedef DBusMutex* (* DBusMutexNewFunction) (void);
/** Deprecated, provide DBusRecursiveMutexFreeFunction instead. */
typedef void (* DBusMutexFreeFunction) (DBusMutex *mutex);
/** Deprecated, provide DBusRecursiveMutexLockFunction instead. Return
value is lock success, but gets ignored in practice. */
typedef dbus_bool_t (* DBusMutexLockFunction) (DBusMutex *mutex);
/** Deprecated, provide DBusRecursiveMutexUnlockFunction instead.
Return value is unlock success, but gets ignored in practice. */
typedef dbus_bool_t (* DBusMutexUnlockFunction) (DBusMutex *mutex);

/** Creates a new recursively-lockable mutex, or returns #NULL if not
 * enough memory. Can only fail due to lack of memory. Found in
 * #DBusThreadFunctions. Do not just use PTHREAD_MUTEX_RECURSIVE for
 * this, because it does not save/restore the recursion count when
 * waiting on a condition. libdbus requires the Java-style behavior
 * where the mutex is fully unlocked to wait on a condition.
 */
typedef DBusMutex* (* DBusRecursiveMutexNewFunction) (void);
/** Frees a recursively-lockable mutex. Found in
#DBusThreadFunctions.
 */
typedef void (* DBusRecursiveMutexFreeFunction) (DBusMutex
*mutex);
/** Locks a recursively-lockable mutex. Found in
#DBusThreadFunctions.
 * Can only fail due to lack of memory.
 */
typedef void (* DBusRecursiveMutexLockFunction) (DBusMutex
*mutex);
/** Unlocks a recursively-lockable mutex. Found in
#DBusThreadFunctions.
 * Can only fail due to lack of memory.
 */
typedef void (* DBusRecursiveMutexUnlockFunction) (DBusMutex
*mutex);

/** Creates a new condition variable. Found in #DBusThreadFunctions.
 * Can only fail (returning #NULL) due to lack of memory.

```

```

*/
typedef DBusCondVar* (* DBusCondVarNewFunction) (void);
/** Frees a condition variable. Found in #DBusThreadFunctions.
*/
typedef void (* DBusCondVarFreeFunction) (DBusCondVar
*cond);

/** Waits on a condition variable. Found in
* #DBusThreadFunctions. Must work with either a recursive or
* nonrecursive mutex, whichever the thread implementation
* provides. Note that PTHREAD_MUTEX_RECURSIVE does not work with
* condition variables (does not save/restore the recursion count) so
* don't try using simply pthread_cond_wait() and a
* PTHREAD_MUTEX_RECURSIVE to implement this, it won't work right.
*
* Has no error conditions. Must succeed if it returns.
*/
typedef void (* DBusCondVarWaitFunction) (DBusCondVar
*cond,
DBusMutex *mutex);

/** Waits on a condition variable with a timeout. Found in
* #DBusThreadFunctions. Returns #TRUE if the wait did not
* time out, and #FALSE if it did.
*
* Has no error conditions. Must succeed if it returns.
*/
typedef dbus_bool_t (* DBusCondVarWaitTimeoutFunction) (DBusCondVar
*cond,
DBusMutex *mutex,
int
timeout_milliseconds);
/** Wakes one waiting thread on a condition variable. Found in
#DBusThreadFunctions.
*
* Has no error conditions. Must succeed if it returns.
*/
typedef void (* DBusCondVarWakeOneFunction) (DBusCondVar
*cond);

/** Wakes all waiting threads on a condition variable. Found in
#DBusThreadFunctions.
*
* Has no error conditions. Must succeed if it returns.
*/
typedef void (* DBusCondVarWakeAllFunction) (DBusCondVar
*cond);

/**
* Flags indicating which functions are present in
#DBusThreadFunctions. Used to allow

```

```

* the library to detect older callers of dbus_threads_init() if new
possible functions
* are added to #DBusThreadFunctions.
*/
typedef enum
{
    DBUS_THREAD_FUNCTIONS_MUTEX_NEW_MASK          = 1 << 0,
    DBUS_THREAD_FUNCTIONS_MUTEX_FREE_MASK         = 1 << 1,
    DBUS_THREAD_FUNCTIONS_MUTEX_LOCK_MASK         = 1 << 2,
    DBUS_THREAD_FUNCTIONS_MUTEX_UNLOCK_MASK       = 1 << 3,
    DBUS_THREAD_FUNCTIONS_CONDVAR_NEW_MASK        = 1 << 4,
    DBUS_THREAD_FUNCTIONS_CONDVAR_FREE_MASK       = 1 << 5,
    DBUS_THREAD_FUNCTIONS_CONDVAR_WAIT_MASK       = 1 << 6,
    DBUS_THREAD_FUNCTIONS_CONDVAR_WAIT_TIMEOUT_MASK = 1 << 7,
    DBUS_THREAD_FUNCTIONS_CONDVAR_WAKE_ONE_MASK   = 1 << 8,
    DBUS_THREAD_FUNCTIONS_CONDVAR_WAKE_ALL_MASK   = 1 << 9,
    DBUS_THREAD_FUNCTIONS_RECURSIVE_MUTEX_NEW_MASK = 1 << 10,
    DBUS_THREAD_FUNCTIONS_RECURSIVE_MUTEX_FREE_MASK = 1 << 11,
    DBUS_THREAD_FUNCTIONS_RECURSIVE_MUTEX_LOCK_MASK = 1 << 12,
    DBUS_THREAD_FUNCTIONS_RECURSIVE_MUTEX_UNLOCK_MASK = 1 << 13,
    DBUS_THREAD_FUNCTIONS_ALL_MASK                = (1 << 14) - 1
} DBusThreadFunctionsMask;

/**
 * Functions that must be implemented to make the D-Bus library
 * thread-aware.
 *
 * If you supply both recursive and non-recursive mutexes,
 * libdbus will use the non-recursive version for condition variables,
 * and the recursive version in other contexts.
 *
 * The condition variable functions have to work with nonrecursive
 * mutexes if you provide those, or with recursive mutexes if you
 * don't.
 */
typedef struct
{
    unsigned int mask; /**< Mask indicating which functions are present.
*/

    DBusMutexNewFunction mutex_new; /**< Function to create a mutex;
optional and deprecated. */
    DBusMutexFreeFunction mutex_free; /**< Function to free a mutex;
optional and deprecated. */
    DBusMutexLockFunction mutex_lock; /**< Function to lock a mutex;
optional and deprecated. */
    DBusMutexUnlockFunction mutex_unlock; /**< Function to unlock a
mutex; optional and deprecated. */

    DBusCondVarNewFunction condvar_new; /**< Function to create a
condition variable */

```

```

    DBusCondVarFreeFunction condvar_free; /**< Function to free a
condition variable */
    DBusCondVarWaitFunction condvar_wait; /**< Function to wait on a
condition */
    DBusCondVarWaitTimeoutFunction condvar_wait_timeout; /**< Function
to wait on a condition with a timeout */
    DBusCondVarWakeOneFunction condvar_wake_one; /**< Function to wake
one thread waiting on the condition */
    DBusCondVarWakeAllFunction condvar_wake_all; /**< Function to wake
all threads waiting on the condition */

    DBusRecursiveMutexNewFunction recursive_mutex_new; /**< Function to
create a recursive mutex */
    DBusRecursiveMutexFreeFunction recursive_mutex_free; /**< Function
to free a recursive mutex */
    DBusRecursiveMutexLockFunction recursive_mutex_lock; /**< Function
to lock a recursive mutex */
    DBusRecursiveMutexUnlockFunction recursive_mutex_unlock; /**<
Function to unlock a recursive mutex */

    void (* padding1) (void); /**< Reserved for future expansion */
    void (* padding2) (void); /**< Reserved for future expansion */
    void (* padding3) (void); /**< Reserved for future expansion */
    void (* padding4) (void); /**< Reserved for future expansion */

} DBusThreadFunctions;

DBUS_EXPORT
dbus_bool_t  dbus_threads_init          (const DBusThreadFunctions
*functions);
DBUS_EXPORT
dbus_bool_t  dbus_threads_init_default (void);

/** @} */

DBUS_END_DECLS

#endif /* DBUS_THREADS_H */

```

File = dbus-timeout.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-timeout.c DBusTimeout implementation
*
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```

```

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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

```

```

#include <config.h>
#include "dbus-internals.h"
#include "dbus-timeout.h"
#include "dbus-list.h"

```

```

/**
 * @defgroup DBusTimeoutInternals DBusTimeout implementation details
 * @ingroup DBusInternals
 * @brief implementation details for DBusTimeout
 *
 * @{
 */

/**
 * Internals of DBusTimeout
 */
struct DBusTimeout
{
    int refcount;                /**< Reference count */
    int interval;                /**< Timeout interval
in milliseconds. */

    DBusTimeoutHandler handler;  /**< Timeout handler.
*/
    void *handler_data;          /**< Timeout handler
data. */
    DBusFreeFunction free_handler_data_function; /**< Free the timeout
handler data. */

    void *data;                  /**< Application data. */
    DBusFreeFunction free_data_function;        /**< Free the
application data. */
    unsigned int enabled : 1;    /**< True if timeout is
active. */
};

```

```

/**
 * Creates a new DBusTimeout, enabled by default.
 * @param interval the timeout interval in milliseconds.
 * @param handler function to call when the timeout occurs.
 * @param data data to pass to the handler
 * @param free_data_function function to be called to free the data.
 * @returns the new DBusTimeout object,
 */
DBusTimeout*
_dbus_timeout_new (int          interval,
                  DBusTimeoutHandler handler,
                  void          *data,
                  DBusFreeFunction free_data_function)
{
    DBusTimeout *timeout;

    timeout = dbus_new0 (DBusTimeout, 1);
    if (timeout == NULL)
        return NULL;

    timeout->refcount = 1;
    timeout->interval = interval;

    timeout->handler = handler;
    timeout->handler_data = data;
    timeout->free_handler_data_function = free_data_function;

    timeout->enabled = TRUE;

    return timeout;
}

/**
 * Increments the reference count of a DBusTimeout object.
 *
 * @param timeout the timeout object.
 * @returns the timeout object.
 */
DBusTimeout *
_dbus_timeout_ref (DBusTimeout *timeout)
{
    timeout->refcount += 1;

    return timeout;
}

/**
 * Decrements the reference count of a DBusTimeout object
 * and finalizes the object if the count reaches zero.
 *
 * @param timeout the timeout object.

```



```

*/
void
_dbus_timeout_unref (DBusTimeout *timeout)
{
    _dbus_assert (timeout != NULL);
    _dbus_assert (timeout->refcount > 0);

    timeout->refcount -= 1;
    if (timeout->refcount == 0)
    {
        dbus_timeout_set_data (timeout, NULL, NULL); /* call
free_data_function */

        if (timeout->free_handler_data_function)
            (* timeout->free_handler_data_function) (timeout->handler_data);

        dbus_free (timeout);
    }
}

/**
 * Changes the timeout interval. Note that you have to disable and
 * re-enable the timeout using the timeout toggle function
 * (_dbus_connection_toggle_timeout_unlocked() etc.) to notify the
 * application of this change.
 *
 * @param timeout the timeout
 * @param interval the new interval
 */
void
_dbus_timeout_set_interval (DBusTimeout *timeout,
                           int          interval)
{
    _dbus_assert (interval >= 0);

    timeout->interval = interval;
}

/**
 * Changes the timeout's enabled-ness. Note that you should use
 * _dbus_connection_toggle_timeout_unlocked() etc. instead, if
 * the timeout is passed out to an application main loop.
 * i.e. you can't use this function in the D-Bus library, it's
 * only used in the message bus daemon implementation.
 *
 * @param timeout the timeout
 * @param enabled #TRUE if timeout should be enabled.
 */
void
_dbus_timeout_set_enabled (DBusTimeout *timeout,
                          dbus_bool_t  enabled)
{

```

```

    timeout->enabled = enabled != FALSE;
}

/**
 * @typedef DBusTimeoutList
 *
 * Opaque data type representing a list of timeouts
 * and a set of DBusAddTimeoutFunction/DBusRemoveTimeoutFunction.
 * Automatically handles removing/re-adding timeouts
 * when the DBusAddTimeoutFunction is updated or changed.
 * Holds a reference count to each timeout.
 */

/**
 * DBusTimeoutList implementation details. All fields
 * are private.
 */
struct DBusTimeoutList
{
    DBusList *timeouts; /**< Timeout objects. */

    DBusAddTimeoutFunction add_timeout_function; /**< Callback for
adding a timeout. */
    DBusRemoveTimeoutFunction remove_timeout_function; /**< Callback for
removing a timeout. */
    DBusTimeoutToggledFunction timeout_toggled_function; /**< Callback
when timeout is enabled/disabled or changes interval */
    void *timeout_data; /**< Data for
timeout callbacks */
    DBusFreeFunction timeout_free_data_function; /**< Free
function for timeout callback data */
};

/**
 * Creates a new timeout list. Returns #NULL if insufficient
 * memory exists.
 *
 * @returns the new timeout list, or #NULL on failure.
 */
DBusTimeoutList*
_dbus_timeout_list_new (void)
{
    DBusTimeoutList *timeout_list;

    timeout_list = dbus_new0 (DBusTimeoutList, 1);
    if (timeout_list == NULL)
        return NULL;

    return timeout_list;
}

```

```

}

/**
 * Frees a DBusTimeoutList.
 *
 * @param timeout_list the timeout list.
 */
void
_dbus_timeout_list_free (DBusTimeoutList *timeout_list)
{
    /* free timeout_data and remove timeouts as a side effect */
    _dbus_timeout_list_set_functions (timeout_list,
                                      NULL, NULL, NULL, NULL, NULL);

    _dbus_list_foreach (&timeout_list->timeouts,
                       (DBusForeachFunction) _dbus_timeout_unref,
                       NULL);
    _dbus_list_clear (&timeout_list->timeouts);

    dbus_free (timeout_list);
}

/**
 * Sets the timeout functions. This function is the "backend"
 * for dbus_connection_set_timeout_functions().
 *
 * @param timeout_list the timeout list
 * @param add_function the add timeout function.
 * @param remove_function the remove timeout function.
 * @param toggled_function toggle notify function, or #NULL
 * @param data the data for those functions.
 * @param free_data_function the function to free the data.
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_timeout_list_set_functions (DBusTimeoutList
*timeout_list,
                                DBusAddTimeoutFunction    add_function,
                                DBusRemoveTimeoutFunction  remove_function,
                                DBusTimeoutToggledFunction
toggled_function,
                                void                      *data,
                                DBusFreeFunction           free_data_function)
{
    /* Add timeouts with the new function, failing on OOM */
    if (add_function != NULL)
    {
        DBusList *link;

        link = _dbus_list_get_first_link (&timeout_list->timeouts);
        while (link != NULL)

```

```

        {
            DBusList *next = _dbus_list_get_next_link (&timeout_list-
>timeouts,
                                                    link);

            if (!(* add_function) (link->data, data))
            {
                /* remove it all again and return FALSE */
                DBusList *link2;

                link2 = _dbus_list_get_first_link (&timeout_list-
>timeouts);
                while (link2 != link)
                {
                    DBusList *next = _dbus_list_get_next_link
(&timeout_list->timeouts,
                                                    link2);

                    (* remove_function) (link2->data, data);

                    link2 = next;
                }

                return FALSE;
            }

            link = next;
        }

    /* Remove all current timeouts from previous timeout handlers */
    if (timeout_list->remove_timeout_function != NULL)
    {
        _dbus_list_foreach (&timeout_list->timeouts,
            (DBusForeachFunction) timeout_list-
>remove_timeout_function,
            timeout_list->timeout_data);
    }

    if (timeout_list->timeout_free_data_function != NULL)
        (* timeout_list->timeout_free_data_function) (timeout_list-
>timeout_data);

    timeout_list->add_timeout_function = add_function;
    timeout_list->remove_timeout_function = remove_function;
    timeout_list->timeout_toggled_function = toggled_function;
    timeout_list->timeout_data = data;
    timeout_list->timeout_free_data_function = free_data_function;

    return TRUE;
}

```

```

/**
 * Adds a new timeout to the timeout list, invoking the
 * application DbusAddTimeoutFunction if appropriate.
 *
 * @param timeout_list the timeout list.
 * @param timeout the timeout to add.
 * @returns #TRUE on success, #FALSE If no memory.
 */
dbus_bool_t
_dbus_timeout_list_add_timeout (DBusTimeoutList *timeout_list,
                               DBusTimeout      *timeout)
{
    if (!_dbus_list_append (&timeout_list->timeouts, timeout))
        return FALSE;

    _dbus_timeout_ref (timeout);

    if (timeout_list->add_timeout_function != NULL)
    {
        if ((* timeout_list->add_timeout_function) (timeout,
                                                    timeout_list->
>timeout_data))
        {
            _dbus_list_remove_last (&timeout_list->timeouts, timeout);
            _dbus_timeout_unref (timeout);
            return FALSE;
        }
    }

    return TRUE;
}

/**
 * Removes a timeout from the timeout list, invoking the
 * application's DbusRemoveTimeoutFunction if appropriate.
 *
 * @param timeout_list the timeout list.
 * @param timeout the timeout to remove.
 */
void
_dbus_timeout_list_remove_timeout (DBusTimeoutList *timeout_list,
                                   DBusTimeout      *timeout)
{
    if (!_dbus_list_remove (&timeout_list->timeouts, timeout))
        _dbus_assert_not_reached ("Nonexistent timeout was removed");

    if (timeout_list->remove_timeout_function != NULL)
        (* timeout_list->remove_timeout_function) (timeout,
                                                    timeout_list->
>timeout_data);

    _dbus_timeout_unref (timeout);
}

```

```

}

/**
 * Sets a timeout to the given enabled state, invoking the
 * application's DBusTimeoutToggledFunction if appropriate.
 *
 * @param timeout_list the timeout list.
 * @param timeout the timeout to toggle.
 * @param enabled #TRUE to enable
 */
void
_dbus_timeout_list_toggle_timeout (DBusTimeoutList
*timeout_list,
                                DBusTimeout
                                dbus_bool_t
                                *timeout,
                                enabled)
{
    enabled = !enabled;

    if (enabled == timeout->enabled)
        return;

    timeout->enabled = enabled;

    if (timeout_list->timeout_toggled_function != NULL)
        (* timeout_list->timeout_toggled_function) (timeout,
                                                    timeout_list-
>timeout_data);
}

/** @} */

/**
 * @defgroup DBusTimeout DBusTimeout
 * @ingroup DBus
 * @brief Object representing a timeout
 *
 * Types and functions related to DBusTimeout. A timeout
 * represents a timeout that the main loop needs to monitor,
 * as in Qt's QTimer or GLib's g_timeout_add().
 *
 * Use dbus_connection_set_timeout_functions() or
dbus_server_set_timeout_functions()
 * to be notified when libdbus needs to add or remove timeouts.
 *
 * @{
 */

/**
 * @typedef DBusTimeout
 *
 * Opaque object representing a timeout.

```

```

 */

/**
 * Gets the timeout interval. The dbus_timeout_handle()
 * should be called each time this interval elapses,
 * starting after it elapses once.
 *
 * The interval may change during the life of the
 * timeout; if so, the timeout will be disabled and
 * re-enabled (calling the "timeout toggled function")
 * to notify you of the change.
 *
 * @param timeout the DBusTimeout object.
 * @returns the interval in milliseconds.
 */
int
dbus_timeout_get_interval (DBusTimeout *timeout)
{
    return timeout->interval;
}

/**
 * Gets data previously set with dbus_timeout_set_data()
 * or #NULL if none.
 *
 * @param timeout the DBusTimeout object.
 * @returns previously-set data.
 */
void*
dbus_timeout_get_data (DBusTimeout *timeout)
{
    return timeout->data;
}

/**
 * Sets data which can be retrieved with dbus_timeout_get_data().
 * Intended for use by the DBusAddTimeoutFunction and
 * DBusRemoveTimeoutFunction to store their own data. For example
with
 * Qt you might store the QTimer for this timeout and with GLib
 * you might store a g_timeout_add result id.
 *
 * @param timeout the DBusTimeout object.
 * @param data the data.
 * @param free_data_function function to be called to free the data.
 */
void
dbus_timeout_set_data (DBusTimeout      *timeout,
                     void              *data,
                     DBusFreeFunction  free_data_function)
{
    if (timeout->free_data_function != NULL)

```

```

        (* timeout->free_data_function) (timeout->data);

    timeout->data = data;
    timeout->free_data_function = free_data_function;
}

/**
 * Calls the timeout handler for this timeout.
 * This function should be called when the timeout
 * occurs.
 *
 * If this function returns #FALSE, then there wasn't
 * enough memory to handle the timeout. Typically just
 * letting the timeout fire again next time it naturally
 * times out is an adequate response to that problem,
 * but you could try to do more if you wanted.
 *
 * @param timeout the DBusTimeout object.
 * @returns #FALSE if there wasn't enough memory
 */
dbus_bool_t
dbus_timeout_handle (DBusTimeout *timeout)
{
    return (* timeout->handler) (timeout->handler_data);
}

/**
 * Returns whether a timeout is enabled or not. If not
 * enabled, it should not be polled by the main loop.
 *
 * @param timeout the DBusTimeout object
 * @returns #TRUE if the timeout is enabled
 */
dbus_bool_t
dbus_timeout_get_enabled (DBusTimeout *timeout)
{
    return timeout->enabled;
}

/** @} end public API docs */

```

File = dbus-timeout.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-timeout.h DBusTimeout internal interfaces
 *
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```



```

DBusTimeoutList *_dbus_timeout_list_new          (void);
void             _dbus_timeout_list_free         (DBusTimeoutList
*timeout_list);
dbus_bool_t     _dbus_timeout_list_set_functions (DBusTimeoutList
*timeout_list,
                                     DBusAddTimeoutFunction
add_function,
                                     DBusRemoveTimeoutFunction
remove_function,
                                     DBusTimeoutToggledFunction toggled_function,
                                     void *data,
                                     DBusFreeFunction
free_data_function);
dbus_bool_t     _dbus_timeout_list_add_timeout   (DBusTimeoutList
*timeout_list,
                                     DBusTimeout
*timeout);
void            _dbus_timeout_list_remove_timeout (DBusTimeoutList
*timeout_list,
                                     DBusTimeout
*timeout);
void            _dbus_timeout_list_toggle_timeout (DBusTimeoutList
*timeout_list,
                                     DBusTimeout
*timeout,
                                     dbus_bool_t
enabled);

/** @} */

DBUS_END_DECLS

#endif /* DBUS_TIMEOUT_H */

```

File = dbus-transport-protected.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport-protected.h Used by subclasses of DBusTransport
object (internal to D-Bus implementation)
*
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02110-1301 USA
*
*/
#endif DBUS_TRANSPORT_PROTECTED_H
#define DBUS_TRANSPORT_PROTECTED_H

#include <dbus/dbus-internals.h>
#include <dbus/dbus-errors.h>
#include <dbus/dbus-transport.h>
#include <dbus/dbus-message-internal.h>
#include <dbus/dbus-auth.h>
#include <dbus/dbus-resources.h>

DBUS_BEGIN_DECLS

typedef struct DBusTransportVTable DBusTransportVTable;

/**
 * The virtual table that must be implemented to
 * create a new kind of transport.
 */
struct DBusTransportVTable
{
    void (* finalize) (DBusTransport *transport);
    /**< The finalize method must free the transport. */

    dbus_bool_t (* handle_watch) (DBusTransport *transport,
                                   DBusWatch *watch,
                                   unsigned int flags);
    /**< The handle_watch method handles reading/writing
     * data as indicated by the flags.
     */

    void (* disconnect) (DBusTransport *transport);
    /**< Disconnect this transport. */

    dbus_bool_t (* connection_set) (DBusTransport *transport);
    /**< Called when transport->connection has been filled in */

    void (* do_iteration) (DBusTransport *transport,
                           unsigned int flags,

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                                int
timeout_milliseconds);
/**< Called to do a single "iteration" (block on select/poll
 * followed by reading or writing data).
 */

void      (* live_messages_changed) (DBusTransport *transport);
/**< Outstanding messages counter changed */

dbus_bool_t (* get_socket_fd) (DBusTransport *transport,
                                int          *fd_p);
/**< Get socket file descriptor */
};

/**
 * Object representing a transport such as a socket.
 * A transport can shuttle messages from point A to point B,
 * and is the backend for a #DBusConnection.
 */
struct DBusTransport
{
    int refcount;                                /**< Reference count. */

    const DBusTransportVTable *vtable;          /**< Virtual methods for
this instance. */

    DBusConnection *connection;                /**< Connection owning
this transport. */

    DBusMessageLoader *loader;                 /**< Message-loading
buffer. */

    DBusAuth *auth;                            /**< Authentication
conversation */

    DBusCredentials *credentials;              /**< Credentials of
other end read from the socket */

    long max_live_messages_size;               /**< Max total size of
received messages. */
    long max_live_messages_unix_fds;          /**< Max total unix fds
of received messages. */

    DBusCounter *live_messages;               /**< Counter for
size/unix fds of all live messages. */

    char *address;                             /**< Address of the
server we are connecting to (#NULL for the server side of a transport)
 */

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    char *expected_guid;                /**< GUID we expect the
server to have, #NULL on server side or if we don't have an
expectation */

    DBusAllowUnixUserFunction unix_user_function; /**< Function for
checking whether a user is authorized. */
    void *unix_user_data;                /**< Data for
unix_user_function */

    DBusFreeFunction free_unix_user_data;    /**< Function to free
unix_user_data */

    DBusAllowWindowsUserFunction windows_user_function; /**< Function
for checking whether a user is authorized. */
    void *windows_user_data;            /**< Data for
windows_user_function */

    DBusFreeFunction free_windows_user_data;    /**< Function to
free windows_user_data */

    unsigned int disconnected : 1;        /**< #TRUE if we are
disconnected. */
    unsigned int authenticated : 1;      /**< Cache of auth
state; use _dbus_transport_get_is_authenticated() to query value */
    unsigned int send_credentials_pending : 1; /**< #TRUE if we need to
send credentials */
    unsigned int receive_credentials_pending : 1; /**< #TRUE if we need
to receive credentials */
    unsigned int is_server : 1;          /**< #TRUE if on the
server side */
    unsigned int unused_bytes_recovered : 1; /**< #TRUE if we've
recovered unused bytes from auth */
    unsigned int allow_anonymous : 1;    /**< #TRUE if an
anonymous client can connect */
};

dbus_bool_t _dbus_transport_init_base (DBusTransport
*transport,
                                     const DBusTransportVTable
*vtable,
                                     const DBusString
*server_guid,
                                     const DBusString
*address);
void _dbus_transport_finalize_base (DBusTransport
*transport);

typedef enum
{
    DBUS_TRANSPORT_OPEN_NOT_HANDLED,    /**< we aren't in charge of this
address type */

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    DBUS_TRANSPORT_OPEN_OK,          /**< we set up the listen */
    DBUS_TRANSPORT_OPEN_BAD_ADDRESS, /**< malformed address */
    DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT /**< well-formed address but
failed to set it up */
} DbusTransportOpenResult;

DBusTransportOpenResult _dbus_transport_open_platform_specific
(DBusAddressEntry *entry,

DBusTransport **transport_p,

DBusError *error);

#define DBUS_TRANSPORT_CAN_SEND_UNIX_FD(x) \
    _dbus_auth_get_unix_fd_negotiated((x)->auth)

DBUS_END_DECLS

#endif /* DBUS_TRANSPORT_PROTECTED_H */

File = dbus-transport-socket.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport-socket.c Socket subclasses of DbusTransport
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02110-1301 USA
*/

#include <config.h>
#include "dbus-internals.h"

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#include "dbus-connection-internal.h"
#include "dbus-nonce.h"
#include "dbus-transport-socket.h"
#include "dbus-transport-protected.h"
#include "dbus-watch.h"
#include "dbus-credentials.h"

/**
 * @defgroup DBusTransportSocket DBusTransport implementations for
 sockets
 * @ingroup DBusInternals
 * @brief Implementation details of DBusTransport on sockets
 *
 * @{
 */

/**
 * Opaque object representing a socket file descriptor transport.
 */
typedef struct DBusTransportSocket DBusTransportSocket;

/**
 * Implementation details of DBusTransportSocket. All members are
 private.
 */
struct DBusTransportSocket
{
    DBusTransport base;           /**< Parent instance */
    int fd;                       /**< File descriptor. */
    DBusWatch *read_watch;       /**< Watch for readability. */
    DBusWatch *write_watch;      /**< Watch for writability. */

    int max_bytes_read_per_iteration; /**< To avoid blocking too
 long. */
    int max_bytes_written_per_iteration; /**< To avoid blocking too
 long. */

    int message_bytes_written;    /**< Number of bytes of
 current
 have
 * outgoing message that
 * been written.
 */
    DBusString encoded_outgoing;  /**< Encoded version of
 current
 * outgoing message.
 */
    DBusString encoded_incoming;  /**< Encoded version of
 current
 * incoming data.
 */
};

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static void
free_watches (DBusTransport *transport)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;

    _dbus_verbose ("start\n");

    if (socket_transport->read_watch)
    {
        if (transport->connection)
            _dbus_connection_remove_watch_unlocked (transport->connection,
socket_transport-
>read_watch);
        _dbus_watch_invalidate (socket_transport->read_watch);
        _dbus_watch_unref (socket_transport->read_watch);
        socket_transport->read_watch = NULL;
    }

    if (socket_transport->write_watch)
    {
        if (transport->connection)
            _dbus_connection_remove_watch_unlocked (transport->connection,
socket_transport-
>write_watch);
        _dbus_watch_invalidate (socket_transport->write_watch);
        _dbus_watch_unref (socket_transport->write_watch);
        socket_transport->write_watch = NULL;
    }

    _dbus_verbose ("end\n");
}

static void
socket_finalize (DBusTransport *transport)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;

    _dbus_verbose ("\n");

    free_watches (transport);

    _dbus_string_free (&socket_transport->encoded_outgoing);
    _dbus_string_free (&socket_transport->encoded_incoming);

    _dbus_transport_finalize_base (transport);

    _dbus_assert (socket_transport->read_watch == NULL);
    _dbus_assert (socket_transport->write_watch == NULL);
}

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    dbus_free (transport);
}

static void
check_write_watch (DBusTransport *transport)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;
    dbus_bool_t needed;

    if (transport->connection == NULL)
        return;

    if (transport->disconnected)
    {
        _dbus_assert (socket_transport->write_watch == NULL);
        return;
    }

    _dbus_transport_ref (transport);

    if (_dbus_transport_get_is_authenticated (transport))
        needed = _dbus_connection_has_messages_to_send_unlocked
(transport->connection);
    else
    {
        if (transport->send_credentials_pending)
            needed = TRUE;
        else
        {
            DBusAuthState auth_state;

            auth_state = _dbus_auth_do_work (transport->auth);

            /* If we need memory we install the write watch just in
case,
            * if there's no need for it, it will get de-installed
            * next time we try reading.
            */
            if (auth_state == DBUS_AUTH_STATE_HAVE_BYTES_TO_SEND ||
                auth_state == DBUS_AUTH_STATE_WAITING_FOR_MEMORY)
                needed = TRUE;
            else
                needed = FALSE;
        }
    }

    _dbus_verbose ("check_write_watch(): needed = %d on connection %p
watch %p fd = %d outgoing messages exist %d\n",
                    needed, transport->connection, socket_transport-
>write_watch,
                    socket_transport->fd,

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        _dbus_connection_has_messages_to_send_unlocked
        (transport->connection));

        _dbus_connection_toggle_watch_unlocked (transport->connection,
        socket_transport-
>write_watch,
        needed);

        _dbus_transport_unref (transport);
    }

static void
check_read_watch (DBusTransport *transport)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;
    dbus_bool_t need_read_watch;

    _dbus_verbose ("fd = %d\n", socket_transport->fd);

    if (transport->connection == NULL)
        return;

    if (transport->disconnected)
    {
        _dbus_assert (socket_transport->read_watch == NULL);
        return;
    }

    _dbus_transport_ref (transport);

    if (_dbus_transport_get_is_authenticated (transport))
        need_read_watch =
            (_dbus_counter_get_size_value (transport->live_messages) <
transport->max_live_messages_size) &&
            (_dbus_counter_get_unix_fd_value (transport->live_messages) <
transport->max_live_messages_unix_fds);
    else
    {
        if (transport->receive_credentials_pending)
            need_read_watch = TRUE;
        else
        {
            /* The reason to disable need_read_watch when not
WAITING_FOR_INPUT
            * is to avoid spinning on the file descriptor when we're
waiting
            * to write or for some other part of the auth process
            */
            DBusAuthState auth_state;

            auth_state = _dbus_auth_do_work (transport->auth);

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        /* If we need memory we install the read watch just in case,
        * if there's no need for it, it will get de-installed
        * next time we try reading. If we're authenticated we
        * install it since we normally have it installed while
        * authenticated.
        */
        if (auth_state == DBUS_AUTH_STATE_WAITING_FOR_INPUT ||
            auth_state == DBUS_AUTH_STATE_WAITING_FOR_MEMORY ||
            auth_state == DBUS_AUTH_STATE_AUTHENTICATED)
            need_read_watch = TRUE;
        else
            need_read_watch = FALSE;
    }
}

_dbus_verbose (" setting read watch enabled = %d\n",
need_read_watch);
_dbus_connection_toggle_watch_unlocked (transport->connection,
socket_transport-
>read_watch,
need_read_watch);

_dbus_transport_unref (transport);
}

static void
do_io_error (DBusTransport *transport)
{
    _dbus_transport_ref (transport);
    _dbus_transport_disconnect (transport);
    _dbus_transport_unref (transport);
}

/* return value is whether we successfully read any new data. */
static dbus_bool_t
read_data_into_auth (DBusTransport *transport,
                    dbus_bool_t *oom)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;
    DBusString *buffer;
    int bytes_read;

    *oom = FALSE;

    _dbus_auth_get_buffer (transport->auth, &buffer);

    bytes_read = _dbus_read_socket (socket_transport->fd,
buffer, socket_transport-
>max_bytes_read_per_iteration);

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_dbus_auth_return_buffer (transport->auth, buffer,
                          bytes_read > 0 ? bytes_read : 0);

if (bytes_read > 0)
{
    _dbus_verbose (" read %d bytes in auth phase\n", bytes_read);

    return TRUE;
}
else if (bytes_read < 0)
{
    /* EINTR already handled for us */

    if (_dbus_get_is_errno_enomem ())
    {
        *oom = TRUE;
    }
    else if (_dbus_get_is_errno_eagain_or_ewouldblock ())
        ; /* do nothing, just return FALSE below */
    else
    {
        _dbus_verbose ("Error reading from remote app: %s\n",
                      _dbus_strerror_from_errno ());
        do_io_error (transport);
    }

    return FALSE;
}
else
{
    _dbus_assert (bytes_read == 0);

    _dbus_verbose ("Disconnected from remote app\n");
    do_io_error (transport);

    return FALSE;
}
}

/* Return value is whether we successfully wrote any bytes */
static dbus_bool_t
write_data_from_auth (DBusTransport *transport)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;
    int bytes_written;
    const DBusString *buffer;

    if (!_dbus_auth_get_bytes_to_send (transport->auth,
                                       &buffer))

        return FALSE;
}

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bytes_written = _dbus_write_socket (socket_transport->fd,
                                   buffer,
                                   0, _dbus_string_get_length
(buffer));

if (bytes_written > 0)
{
    _dbus_auth_bytes_sent (transport->auth, bytes_written);
    return TRUE;
}
else if (bytes_written < 0)
{
    /* EINTR already handled for us */

    if (_dbus_get_is_errno_eagain_or_ewouldblock ())
        ;
    else
    {
        _dbus_verbose ("Error writing to remote app: %s\n",
                      _dbus_strerror_from_errno ());
        do_io_error (transport);
    }
}

return FALSE;
}

/* FALSE on OOM */
static dbus_bool_t
exchange_credentials (DBusTransport *transport,
                    dbus_bool_t do_reading,
                    dbus_bool_t do_writing)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;
    DBusError error = DBUS_ERROR_INIT;

    _dbus_verbose ("exchange_credentials: do_reading = %d, do_writing =
%d\n",
                  do_reading, do_writing);

    if (do_writing && transport->send_credentials_pending)
    {
        if (_dbus_send_credentials_socket (socket_transport->fd,
                                          &error))
        {
            transport->send_credentials_pending = FALSE;
        }
        else
        {
            _dbus_verbose ("Failed to write credentials: %s\n",
error.message);

```

```

        dbus_error_free (&error);
        do_io_error (transport);
    }
}

if (do_reading && transport->receive_credentials_pending)
{
    /* FIXME this can fail due to IO error_or_OOM, broken
    * (somewhat tricky to fix since the OOM error can be set after
    * we already read the credentials byte, so basically we need to
    * separate reading the byte and storing it in the
    * transport->credentials). Does not really matter for now
    * because storing in credentials never actually fails on unix.
    */
    if (_dbus_read_credentials_socket (socket_transport->fd,
                                       transport->credentials,
                                       &error))
    {
        transport->receive_credentials_pending = FALSE;
    }
    else
    {
        _dbus_verbose ("Failed to read credentials %s\n",
error.message);
        dbus_error_free (&error);
        do_io_error (transport);
    }
}

if (!(transport->send_credentials_pending ||
      transport->receive_credentials_pending))
{
    if (!_dbus_auth_set_credentials (transport->auth,
                                    transport->credentials))
        return FALSE;
}

return TRUE;
}

static dbus_bool_t
do_authentication (DBusTransport *transport,
                  dbus_bool_t do_reading,
                  dbus_bool_t do_writing,
                  dbus_bool_t *auth_completed)
{
    dbus_bool_t oom;
    dbus_bool_t orig_auth_state;

    oom = FALSE;

    orig_auth_state = _dbus_transport_get_is_authenticated (transport);

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/* This is essential to avoid the check_write_watch() at the end,
 * we don't want to add a write watch in do_iteration before
 * we try writing and get EAGAIN
 */
if (orig_auth_state)
{
    if (auth_completed)
        *auth_completed = FALSE;
    return TRUE;
}

_dbus_transport_ref (transport);

while (!_dbus_transport_get_is_authenticated (transport) &&
       !_dbus_transport_get_is_connected (transport))
{
    if (!exchange_credentials (transport, do_reading, do_writing))
    {
        /* OOM */
        oom = TRUE;
        goto out;
    }

    if (transport->send_credentials_pending ||
        transport->receive_credentials_pending)
    {
        _dbus_verbose ("send_credentials_pending = %d
receive_credentials_pending = %d\n",
                      transport->send_credentials_pending,
                      transport->receive_credentials_pending);
        goto out;
    }
}

#define TRANSPORT_SIDE(t) ((t)->is_server ? "server" : "client")
switch (_dbus_auth_do_work (transport->auth))
{
case DBUS_AUTH_STATE_WAITING_FOR_INPUT:
    _dbus_verbose (" %s auth state: waiting for input\n",
                  TRANSPORT_SIDE (transport));
    if (!do_reading || !read_data_into_auth (transport, &oom))
        goto out;
    break;

case DBUS_AUTH_STATE_WAITING_FOR_MEMORY:
    _dbus_verbose (" %s auth state: waiting for memory\n",
                  TRANSPORT_SIDE (transport));
    oom = TRUE;
    goto out;
    break;

case DBUS_AUTH_STATE_HAVE_BYTES_TO_SEND:

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        _dbus_verbose (" %s auth state: bytes to send\n",
                      TRANSPORT_SIDE (transport));
        if (!do_writing || !write_data_from_auth (transport))
            goto out;
        break;

    case DBUS_AUTH_STATE_NEED_DISCONNECT:
        _dbus_verbose (" %s auth state: need to disconnect\n",
                      TRANSPORT_SIDE (transport));
        do_io_error (transport);
        break;

    case DBUS_AUTH_STATE_AUTHENTICATED:
        _dbus_verbose (" %s auth state: authenticated\n",
                      TRANSPORT_SIDE (transport));
        break;
    }
}

out:
    if (auth_completed)
        *auth_completed = (orig_auth_state !=
_dbus_transport_get_is_authenticated (transport));

    check_read_watch (transport);
    check_write_watch (transport);
    _dbus_transport_unref (transport);

    if (oom)
        return FALSE;
    else
        return TRUE;
}

/* returns false on oom */
static dbus_bool_t
do_writing (DBusTransport *transport)
{
    int total;
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;
    dbus_bool_t oom;

    /* No messages without authentication! */
    if (!_dbus_transport_get_is_authenticated (transport))
    {
        _dbus_verbose ("Not authenticated, not writing anything\n");
        return TRUE;
    }

    if (transport->disconnected)
    {

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        _dbus_verbose ("Not connected, not writing anything\n");
        return TRUE;
    }

#ifdef 1
    _dbus_verbose ("do_writing(), have_messages = %d, fd = %d\n",
        _dbus_connection_has_messages_to_send_unlocked
        (transport->connection),
        socket_transport->fd);
#endif

    oom = FALSE;
    total = 0;

    while (!transport->disconnected &&
        _dbus_connection_has_messages_to_send_unlocked (transport-
        >connection))
    {
        int bytes_written;
        DBusMessage *message;
        const DBusString *header;
        const DBusString *body;
        int header_len, body_len;
        int total_bytes_to_write;

        if (total > socket_transport->max_bytes_written_per_iteration)
        {
            _dbus_verbose ("%d bytes exceeds %d bytes written per
            iteration, returning\n",
                total, socket_transport-
                >max_bytes_written_per_iteration);
            goto out;
        }

        message = _dbus_connection_get_message_to_send (transport-
        >connection);
        _dbus_assert (message != NULL);
        dbus_message_lock (message);

#ifdef 0
        _dbus_verbose ("writing message %p\n", message);
#endif

        _dbus_message_get_network_data (message,
            &header, &body);

        header_len = _dbus_string_get_length (header);
        body_len = _dbus_string_get_length (body);

        if (_dbus_auth_needs_encoding (transport->auth))
        {
            /* Does fd passing even make sense with encoded data? */

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        _dbus_assert(!DBUS_TRANSPORT_CAN_SEND_UNIX_FD(transport));

        if (_dbus_string_get_length (&socket_transport-
>encoded_outgoing) == 0)
        {
            if (!_dbus_auth_encode_data (transport->auth,
                                        header, &socket_transport-
>encoded_outgoing))
            {
                oom = TRUE;
                goto out;
            }

            if (!_dbus_auth_encode_data (transport->auth,
                                        body, &socket_transport-
>encoded_outgoing))
            {
                _dbus_string_set_length (&socket_transport-
>encoded_outgoing, 0);
                oom = TRUE;
                goto out;
            }
        }

        total_bytes_to_write = _dbus_string_get_length
(&socket_transport->encoded_outgoing);

#ifdef 0
        _dbus_verbose ("encoded message is %d bytes\n",
                        total_bytes_to_write);
#endif

        bytes_written =
            _dbus_write_socket (socket_transport->fd,
                               &socket_transport->encoded_outgoing,
                               socket_transport-
>message_bytes_written,
                               total_bytes_to_write -
socket_transport->message_bytes_written);
    }
    else
    {
        total_bytes_to_write = header_len + body_len;

#ifdef 0
        _dbus_verbose ("message is %d bytes\n",
                        total_bytes_to_write);
#endif

#ifdef HAVE_UNIX_FD_PASSING
        if (socket_transport->message_bytes_written <= 0 &&
            DBUS_TRANSPORT_CAN_SEND_UNIX_FD(transport))

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        {
            /* Send the fds along with the first byte of the message
*/
            const int *unix_fds;
            unsigned n;

            _dbus_message_get_unix_fds(message, &unix_fds, &n);

            bytes_written =
                _dbus_write_socket_with_unix_fds_two
(socket_transport->fd,
                                                    header,
socket_transport->message_bytes_written,
                                                    header_len -
socket_transport->message_bytes_written,
                                                    body,
                                                    0, body_len,
                                                    unix_fds,
                                                    n);

            if (bytes_written > 0 && n > 0)
                _dbus_verbose("Wrote %i unix fds\n", n);
        }
    else
#endif
        {
            if (socket_transport->message_bytes_written <
header_len)
            {
                bytes_written =
                    _dbus_write_socket_two (socket_transport->fd,
header,
socket_transport->
>message_bytes_written,
header_len -
socket_transport->message_bytes_written,
body,
0, body_len);
            }
            else
            {
                bytes_written =
                    _dbus_write_socket (socket_transport->fd,
body,
(socket_transport->
>message_bytes_written - header_len),
body_len -
(socket_transport->
>message_bytes_written - header_len));
            }
        }
    }
}

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    }

    if (bytes_written < 0)
    {
        /* EINTR already handled for us */

        /* For some discussion of why we also ignore EPIPE here, see
         * http://lists.freedesktop.org/archives/dbus/2008-
        March/009526.html
         */

        if (_dbus_get_is_errno_eagain_or_ewouldblock () ||
            _dbus_get_is_errno_epipe ())
            goto out;
        else
        {
            _dbus_verbose ("Error writing to remote app: %s\n",
                           _dbus_strerror_from_errno ());
            do_io_error (transport);
            goto out;
        }
    }
    else
    {
        _dbus_verbose (" wrote %d bytes of %d\n", bytes_written,
                       total_bytes_to_write);

        total += bytes_written;
        socket_transport->message_bytes_written += bytes_written;

        _dbus_assert (socket_transport->message_bytes_written <=
                       total_bytes_to_write);

        if (socket_transport->message_bytes_written ==
            total_bytes_to_write)
        {
            socket_transport->message_bytes_written = 0;
            _dbus_string_set_length (&socket_transport-
>encoded_outgoing, 0);
            _dbus_string_compact (&socket_transport-
>encoded_outgoing, 2048);

            _dbus_connection_message_sent_unlocked (transport-
>connection,
                                                    message);
        }
    }
}

out:
    if (oom)
        return FALSE;

```

```

    else
        return TRUE;
}

/* returns false on out-of-memory */
static dbus_bool_t
do_reading (DBusTransport *transport)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;
    DBusString *buffer;
    int bytes_read;
    int total;
    dbus_bool_t oom;

    _dbus_verbose ("fd = %d\n", socket_transport->fd);

    /* No messages without authentication! */
    if (!_dbus_transport_get_is_authenticated (transport))
        return TRUE;

    oom = FALSE;

    total = 0;

again:

    /* See if we've exceeded max messages and need to disable reading */
    check_read_watch (transport);

    if (total > socket_transport->max_bytes_read_per_iteration)
    {
        _dbus_verbose ("%d bytes exceeds %d bytes read per iteration,
returning\n",
                        total, socket_transport-
>max_bytes_read_per_iteration);
        goto out;
    }

    _dbus_assert (socket_transport->read_watch != NULL ||
transport->disconnected);

    if (transport->disconnected)
        goto out;

    if (!dbus_watch_get_enabled (socket_transport->read_watch))
        return TRUE;

    if (_dbus_auth_needs_decoding (transport->auth))
    {
        /* Does fd passing even make sense with encoded data? */
        _dbus_assert (!DBUS_TRANSPORT_CAN_SEND_UNIX_FD(transport));

```

```

        if (_dbus_string_get_length (&socket_transport-
>encoded_incoming) > 0)
            bytes_read = _dbus_string_get_length (&socket_transport-
>encoded_incoming);
        else
            bytes_read = _dbus_read_socket (socket_transport->fd,
>encoded_incoming,
>max_bytes_read_per_iteration);

        _dbus_assert (_dbus_string_get_length (&socket_transport-
>encoded_incoming) ==
            bytes_read);

    if (bytes_read > 0)
    {
        int orig_len;

        _dbus_message_loader_get_buffer (transport->loader,
            &buffer);

        orig_len = _dbus_string_get_length (buffer);

        if (!_dbus_auth_decode_data (transport->auth,
>encoded_incoming,
            buffer))
        {
            _dbus_verbose ("Out of memory decoding incoming
data\n");
            _dbus_message_loader_return_buffer (transport->loader,
            buffer,
            _dbus_string_get_length
(buffer) - orig_len);

            oom = TRUE;
            goto out;
        }

        _dbus_message_loader_return_buffer (transport->loader,
            buffer,
            _dbus_string_get_length
(buffer) - orig_len);

        _dbus_string_set_length (&socket_transport-
>encoded_incoming, 0);
        _dbus_string_compact (&socket_transport->encoded_incoming,
2048);
    }
}

```

```

else
{
    _dbus_message_loader_get_buffer (transport->loader,
                                     &buffer);

#ifdef HAVE_UNIX_FD_PASSING
    if (DBUS_TRANSPORT_CAN_SEND_UNIX_FD(transport))
    {
        int *fds, n_fds;

        if (!_dbus_message_loader_get_unix_fds(transport->loader,
&fds, &n_fds))
        {
            _dbus_verbose ("Out of memory reading file
descriptors\n");
            _dbus_message_loader_return_buffer (transport->loader,
buffer, 0);
            oom = TRUE;
            goto out;
        }

        bytes_read =
_dbus_read_socket_with_unix_fds(socket_transport->fd,
                                buffer,
socket_transport->max_bytes_read_per_iteration,
                                fds, &n_fds);

        if (bytes_read >= 0 && n_fds > 0)
            _dbus_verbose("Read %i unix fds\n", n_fds);

        _dbus_message_loader_return_unix_fds(transport->loader, fds,
bytes_read < 0 ? 0 : n_fds);
    }
    else
#endif
    {
        bytes_read = _dbus_read_socket (socket_transport->fd,
buffer, socket_transport-
>max_bytes_read_per_iteration);
    }

    _dbus_message_loader_return_buffer (transport->loader,
buffer,
bytes_read < 0 ? 0 :
bytes_read);
}

if (bytes_read < 0)
{
    /* EINTR already handled for us */

```

```

if (_dbus_get_is_errno_enomem ())
{
    _dbus_verbose ("Out of memory in read()/do_reading()\n");
    oom = TRUE;
    goto out;
}
else if (_dbus_get_is_errno_eagain_or_ewouldblock ())
    goto out;
else
{
    _dbus_verbose ("Error reading from remote app: %s\n",
        _dbus_strerror_from_errno ());
    do_io_error (transport);
    goto out;
}
}
else if (bytes_read == 0)
{
    _dbus_verbose ("Disconnected from remote app\n");
    do_io_error (transport);
    goto out;
}
else
{
    _dbus_verbose (" read %d bytes\n", bytes_read);

    total += bytes_read;

    if (!_dbus_transport_queue_messages (transport))
    {
        oom = TRUE;
        _dbus_verbose (" out of memory when queueing messages we
just read in the transport\n");
        goto out;
    }

    /* Try reading more data until we get EAGAIN and return, or
    * exceed max bytes per iteration.  If in blocking mode of
    * course we'll block instead of returning.
    */
    goto again;
}

out:
if (oom)
    return FALSE;
else
    return TRUE;
}

static dbus_bool_t
unix_error_with_read_to_come (DBusTransport *itransport,

```



```

                DBusWatch      *watch,
                unsigned int    flags)
{
    DBusTransportSocket *transport = (DBusTransportSocket *) itransport;

    if (!(flags & DBUS_WATCH_HANGUP || flags & DBUS_WATCH_ERROR))
        return FALSE;

    /* If we have a read watch enabled ...
       we -might have data incoming ... => handle the HANGUP there */
    if (watch != transport->read_watch &&
        _dbus_watch_get_enabled (transport->read_watch))
        return FALSE;

    return TRUE;
}

static dbus_bool_t
socket_handle_watch (DBusTransport *transport,
                    DBusWatch      *watch,
                    unsigned int    flags)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;

    _dbus_assert (watch == socket_transport->read_watch ||
                  watch == socket_transport->write_watch);
    _dbus_assert (watch != NULL);

    /* If we hit an error here on a write watch, don't disconnect the
       transport yet because data can
       * still be in the buffer and do_reading may need several iteration
       to read
       * it all (because of its max_bytes_read_per_iteration limit).
       */
    if (!(flags & DBUS_WATCH_READABLE) && unix_error_with_read_to_come
        (transport, watch, flags))
    {
        _dbus_verbose ("Hang up or error on watch\n");
        _dbus_transport_disconnect (transport);
        return TRUE;
    }

    if (watch == socket_transport->read_watch &&
        (flags & DBUS_WATCH_READABLE))
    {
        dbus_bool_t auth_finished;
#ifdef 1
        _dbus_verbose ("handling read watch %p flags = %x\n",
                      watch, flags);
#endif
        if (!do_authentication (transport, TRUE, FALSE, &auth_finished))

```

```

    return FALSE;

/* We don't want to do a read immediately following
 * a successful authentication.  This is so we
 * have a chance to propagate the authentication
 * state further up.  Specifically, we need to
 * process any pending data from the auth object.
 */
if (!auth_finished)
{
    if (!do_reading (transport))
    {
        _dbus_verbose ("no memory to read\n");
        return FALSE;
    }
}
else
{
    _dbus_verbose ("Not reading anything since we just completed
the authentication\n");
}
}
else if (watch == socket_transport->write_watch &&
        (flags & DBUS_WATCH_WRITABLE))
{
#ifdef 1
    _dbus_verbose ("handling write watch, have_outgoing_messages =
%d\n",
                    _dbus_connection_has_messages_to_send_unlocked
(transport->connection));
#endif
    if (!do_authentication (transport, FALSE, TRUE, NULL))
        return FALSE;

    if (!do_writing (transport))
    {
        _dbus_verbose ("no memory to write\n");
        return FALSE;
    }

    /* See if we still need the write watch */
    check_write_watch (transport);
}
#ifdef DBUS_ENABLE_VERBOSE_MODE
else
{
    if (watch == socket_transport->read_watch)
        _dbus_verbose ("asked to handle read watch with non-read
condition 0x%x\n",
                        flags);
    else if (watch == socket_transport->write_watch)

```

```

        _dbus_verbose ("asked to handle write watch with non-write
condition 0x%x\n",
                    flags);
    else
        _dbus_verbose ("asked to handle watch %p on fd %d that we
don't recognize\n",
                    watch, dbus_watch_get_socket (watch));
    }
#endif /* DBUS_ENABLE_VERBOSE_MODE */

    return TRUE;
}

static void
socket_disconnect (DBusTransport *transport)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;

    _dbus_verbose ("\n");

    free_watches (transport);

    _dbus_close_socket (socket_transport->fd, NULL);
    socket_transport->fd = -1;
}

static dbus_bool_t
socket_connection_set (DBusTransport *transport)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;

    _dbus_watch_set_handler (socket_transport->write_watch,
                            _dbus_connection_handle_watch,
                            transport->connection, NULL);

    _dbus_watch_set_handler (socket_transport->read_watch,
                            _dbus_connection_handle_watch,
                            transport->connection, NULL);

    if (!_dbus_connection_add_watch_unlocked (transport->connection,
socket_transport-
>write_watch))
        return FALSE;

    if (!_dbus_connection_add_watch_unlocked (transport->connection,
socket_transport-
>read_watch))
    {
        _dbus_connection_remove_watch_unlocked (transport->connection,

```

socket_transport-

```
>write_watch);
    return FALSE;
}

check_read_watch (transport);
check_write_watch (transport);

return TRUE;
}

/**
 * @todo We need to have a way to wake up the select sleep if
 * a new iteration request comes in with a flag (read/write) that
 * we're not currently serving. Otherwise a call that just reads
 * could block a write call forever (if there are no incoming
 * messages).
 */
static void
socket_do_iteration (DBusTransport *transport,
                    unsigned int  flags,
                    int            timeout_milliseconds)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;
    DBusPollFD poll_fd;
    int poll_res;
    int poll_timeout;

    _dbus_verbose (" iteration flags = %s%s timeout = %d read_watch = %p
write_watch = %p fd = %d\n",
                  flags & DBUS_ITERATION_DO_READING ? "read" : "",
                  flags & DBUS_ITERATION_DO_WRITING ? "write" : "",
                  timeout_milliseconds,
                  socket_transport->read_watch,
                  socket_transport->write_watch,
                  socket_transport->fd);

    /* the passed in DO_READING/DO_WRITING flags indicate whether to
     * read/write messages, but regardless of those we may need to block
     * for reading/writing to do auth.  But if we do reading for auth,
     * we don't want to read any messages yet if not given DO_READING.
     */

    poll_fd.fd = socket_transport->fd;
    poll_fd.events = 0;

    if (_dbus_transport_get_is_authenticated (transport))
    {
        /* This is kind of a hack; if we have stuff to write, then try
         * to avoid the poll. This is probably about a 5% speedup on an
         * echo client/server.
         */
    }
}
```

```

    *
    * If both reading and writing were requested, we want to avoid
this
    * since it could have funky effects:
    *   - both ends spinning waiting for the other one to read
    *     data so they can finish writing
    *   - prioritizing all writing ahead of reading
    */
    if ((flags & DBUS_ITERATION_DO_WRITING) &&
        !(flags & (DBUS_ITERATION_DO_READING |
DBUS_ITERATION_BLOCK)) &&
        !transport->disconnected &&
        !_dbus_connection_has_messages_to_send_unlocked (transport-
>connection))
    {
        do_writing (transport);

        if (transport->disconnected ||
            !_dbus_connection_has_messages_to_send_unlocked
(transport->connection))
            goto out;
    }

    /* If we get here, we decided to do the poll() after all */
    _dbus_assert (socket_transport->read_watch);
    if (flags & DBUS_ITERATION_DO_READING)
        poll_fd.events |= _DBUS_POLLIN;

    _dbus_assert (socket_transport->write_watch);
    if (flags & DBUS_ITERATION_DO_WRITING)
        poll_fd.events |= _DBUS_POLLOUT;
}
else
{
    DBusAuthState auth_state;

    auth_state = _dbus_auth_do_work (transport->auth);

    if (transport->receive_credentials_pending ||
        auth_state == DBUS_AUTH_STATE_WAITING_FOR_INPUT)
        poll_fd.events |= _DBUS_POLLIN;

    if (transport->send_credentials_pending ||
        auth_state == DBUS_AUTH_STATE_HAVE_BYTES_TO_SEND)
        poll_fd.events |= _DBUS_POLLOUT;
}

if (poll_fd.events)
{
    if (flags & DBUS_ITERATION_BLOCK)
        poll_timeout = timeout_milliseconds;
    else

```

```

poll_timeout = 0;

/* For blocking selects we drop the connection lock here
 * to avoid blocking out connection access during a potentially
 * indefinite blocking call. The io path is still protected
 * by the io_path_cond condvar, so we won't reenter this.
 */
if (flags & DBUS_ITERATION_BLOCK)
{
    _dbus_verbose ("unlock pre poll\n");
    _dbus_connection_unlock (transport->connection);
}

again:
poll_res = _dbus_poll (&poll_fd, 1, poll_timeout);

if (poll_res < 0 && _dbus_get_is_errno_eintr ())
goto again;

if (flags & DBUS_ITERATION_BLOCK)
{
    _dbus_verbose ("lock post poll\n");
    _dbus_connection_lock (transport->connection);
}

if (poll_res >= 0)
{
    if (poll_res == 0)
        poll_fd.revents = 0; /* some concern that posix does not
guarantee this;
                                * valgrind flags it as an error.
though it probably
                                * is guaranteed on linux at least.
                                */

    if (poll_fd.revents & _DBUS_POLLERR)
        do_io_error (transport);
    else
    {
        dbus_bool_t need_read = (poll_fd.revents & _DBUS_POLLIN)
> 0;
        dbus_bool_t need_write = (poll_fd.revents &
_DBUS_POLLOUT) > 0;
        dbus_bool_t authentication_completed;

        _dbus_verbose ("in iteration, need_read=%d
need_write=%d\n",
                        need_read, need_write);
        do_authentication (transport, need_read, need_write,
&authentication_completed);

        /* See comment in socket_handle_watch. */

```

```

        if (authentication_completed)
            goto out;

        if (need_read && (flags & DBUS_ITERATION_DO_READING))
            do_reading (transport);
        if (need_write && (flags & DBUS_ITERATION_DO_WRITING))
            do_writing (transport);
    }
}
else
{
    _dbus_verbose ("Error from _dbus_poll(): %s\n",
                  _dbus_strerror_from_errno ());
}
}

out:
/* We need to install the write watch only if we did not
 * successfully write everything. Note we need to be careful that we
 * don't call check_write_watch *before* do_writing, since it's
 * inefficient to add the write watch, and we can avoid it most of
 * the time since we can write immediately.
 *
 * However, we MUST always call check_write_watch(); DbusConnection
code
 * relies on the fact that running an iteration will notice that
 * messages are pending.
 */
check_write_watch (transport);

_dbus_verbose (" ... leaving do_iteration()\n");
}

static void
socket_live_messages_changed (DBusTransport *transport)
{
    /* See if we should look for incoming messages again */
    check_read_watch (transport);
}

static dbus_bool_t
socket_get_socket_fd (DBusTransport *transport,
                     int *fd_p)
{
    DBusTransportSocket *socket_transport = (DBusTransportSocket*)
transport;

    *fd_p = socket_transport->fd;

    return TRUE;
}

```



```

                                const char    *family,
                                const char    *noncefile,
                                DBusError     *error)
{
    int fd;
    DBusTransport *transport;
    DBusString address;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (!_dbus_string_init (&address))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return NULL;
    }

    if (host == NULL)
        host = "localhost";

    if (!_dbus_string_append (&address, noncefile ? "nonce-tcp:" :
"tcp:"))
        goto error;

    if (!_dbus_string_append (&address, "host=") ||
        !_dbus_string_append (&address, host))
        goto error;

    if (!_dbus_string_append (&address, ",port=") ||
        !_dbus_string_append (&address, port))
        goto error;

    if (family != NULL &&
        (!_dbus_string_append (&address, ",family=") ||
         !_dbus_string_append (&address, family)))
        goto error;

    if (noncefile != NULL &&
        (!_dbus_string_append (&address, ",noncefile=") ||
         !_dbus_string_append (&address, noncefile)))
        goto error;

    fd = _dbus_connect_tcp_socket_with_nonce (host, port, family,
noncefile, error);
    if (fd < 0)
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        _dbus_string_free (&address);
        return NULL;
    }

    _dbus_verbose ("Successfully connected to tcp socket %s:%s\n",
                    host, port);

```

```

transport = _dbus_transport_new_for_socket (fd, NULL, &address);
_dbus_string_free (&address);
if (transport == NULL)
{
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
    _dbus_close_socket (fd, NULL);
    fd = -1;
}

return transport;

error:
    _dbus_string_free (&address);
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
    return NULL;
}

/**
 * Opens a TCP socket transport.
 *
 * @param entry the address entry to try opening as a tcp transport.
 * @param transport_p return location for the opened transport
 * @param error error to be set
 * @returns result of the attempt
 */
DBusTransportOpenResult
_dbus_transport_open_socket (DBusAddressEntry *entry,
                             DBusTransport **transport_p,
                             DBusError *error)
{
    const char *method;
    dbus_bool_t isTcp;
    dbus_bool_t isNonceTcp;

    method = dbus_address_entry_get_method (entry);
    _dbus_assert (method != NULL);

    isTcp = strcmp (method, "tcp") == 0;
    isNonceTcp = strcmp (method, "nonce-tcp") == 0;

    if (isTcp || isNonceTcp)
    {
        const char *host = dbus_address_entry_get_value (entry, "host");
        const char *port = dbus_address_entry_get_value (entry, "port");
        const char *family = dbus_address_entry_get_value (entry,
"family");
        const char *noncefile = dbus_address_entry_get_value (entry,
"noncefile");

        if ((isNonceTcp == TRUE) != (noncefile != NULL)) {
            _dbus_set_bad_address (error, method, "noncefile", NULL);

```

```

        return DBUS_TRANSPORT_OPEN_BAD_ADDRESS;
    }

    if (port == NULL)
    {
        _dbus_set_bad_address (error, method, "port", NULL);
        return DBUS_TRANSPORT_OPEN_BAD_ADDRESS;
    }

    *transport_p = _dbus_transport_new_for_tcp_socket (host, port,
family, noncefile, error);
    if (*transport_p == NULL)
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
    }
    else
    {
        _DBUS_ASSERT_ERROR_IS_CLEAR (error);
        return DBUS_TRANSPORT_OPEN_OK;
    }
}
else
{
    _DBUS_ASSERT_ERROR_IS_CLEAR (error);
    return DBUS_TRANSPORT_OPEN_NOT_HANDLED;
}
}

/** @} */

```

File = dbus-transport-socket.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport-socket.h Socket subclasses of DbusTransport
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```

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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301  USA
*
*/
#ifndef DBUS_TRANSPORT_SOCKET_H
#define DBUS_TRANSPORT_SOCKET_H

#include <dbus/dbus-transport-protected.h>

DBUS_BEGIN_DECLS

DBusTransport*          _dbus_transport_new_for_socket      (int
fd,                                                              const
DBusString  *server_guid,                                     const
DBusString  *address);
DBusTransport*          _dbus_transport_new_for_tcp_socket (const char
*host,                                                         const char
*port,                                                         const char
*family,                                                       const char
*noncefile,                                                   DBusError
*error);
DBusTransportOpenResult _dbus_transport_open_socket
(DBusAddressEntry *entry,
DBusTransport **transport_p,                                  DBusError
*error);

DBUS_END_DECLS

#endif /* DBUS_TRANSPORT_SOCKET_H */

File = dbus-transport-unix.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport-unix.c UNIX socket subclasses of DBusTransport
*

```

```
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02110-1301 USA
*
*/
```

```
#include <config.h>
```

```
#include <stdio.h>
```

```
#include "dbus-internals.h"
#include "dbus-connection-internal.h"
#include "dbus-transport-unix.h"
#include "dbus-transport-socket.h"
#include "dbus-transport-protected.h"
#include "dbus-watch.h"
#include "dbus-sysdeps-unix.h"
#include "dbus-test.h"
```

```
/**
 * @defgroup DBusTransportUnix DBusTransport implementations for UNIX
 * @ingroup DBusInternals
 * @brief Implementation details of DBusTransport on UNIX
 *
 * @{
 */
```

```
/**
 * Creates a new transport for the given Unix domain socket
 * path. This creates a client-side of a transport.
 *
 * @todo once we add a way to escape paths in a dbus
 * address, this function needs to do escaping.
 *
 * @param path the path to the domain socket.
```

```

* @param abstract #TRUE to use abstract socket namespace
* @param error address where an error can be returned.
* @returns a new transport, or #NULL on failure.
*/
DBusTransport*
_dbus_transport_new_for_domain_socket (const char      *path,
                                     dbus_bool_t      abstract,
                                     DBusError        *error)
{
    int fd;
    DBusTransport *transport;
    DBusString address;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (!_dbus_string_init (&address))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return NULL;
    }

    fd = -1;

    if ((abstract &&
         !_dbus_string_append (&address, "unix:abstract=")) ||
        (!abstract &&
         !_dbus_string_append (&address, "unix:path=")) ||
        !_dbus_string_append (&address, path))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto failed_0;
    }

    fd = _dbus_connect_unix_socket (path, abstract, error);
    if (fd < 0)
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        goto failed_0;
    }

    _dbus_verbose ("Successfully connected to unix socket %s\n",
                  path);

    transport = _dbus_transport_new_for_socket (fd, NULL, &address);
    if (transport == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto failed_1;
    }

    _dbus_string_free (&address);

```

```

    return transport;

failed_1:
    _dbus_close_socket (fd, NULL);
failed_0:
    _dbus_string_free (&address);
    return NULL;
}

/**
 * Creates a new transport for the given binary and arguments. This
 * creates a client-side of a transport. The process will be forked
 * off and executed with stdin/stdout connected to a local AF_UNIX
 * socket.
 *
 * @param path the path to the domain socket.
 * @param argv Parameters list
 * @param error address where an error can be returned.
 * @returns a new transport, or #NULL on failure.
 */
static DBusTransport*
_dbus_transport_new_for_exec (const char      *path,
                             char *const    argv[],
                             DBusError      *error)
{
    int fd;
    DBusTransport *transport;
    DBusString address;
    unsigned i;
    char *escaped;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (!_dbus_string_init (&address))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return NULL;
    }

    fd = -1;

    escaped = dbus_address_escape_value (path);
    if (!escaped)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto failed;
    }

    if (!_dbus_string_append (&address, "unixexec:path=") ||
        !_dbus_string_append (&address, escaped))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);

```



```

        dbus_free (escaped);
        goto failed;
    }

    dbus_free (escaped);

    if (argv)
    {
        for (i = 0; argv[i]; i++)
        {
            dbus_bool_t success;

            escaped = dbus_address_escape_value (argv[i]);
            if (!escaped)
            {
                dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
                goto failed;
            }

            success = _dbus_string_append_printf (&address,
",argv%u=%s", i, escaped);
            dbus_free (escaped);

            if (!success)
            {
                dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
                goto failed;
            }
        }
    }

    fd = _dbus_connect_exec (path, argv, error);
    if (fd < 0)
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        goto failed;
    }

    _dbus_verbose ("Successfully connected to process %s\n",
        path);

    transport = _dbus_transport_new_for_socket (fd, NULL, &address);
    if (transport == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        goto failed;
    }

    _dbus_string_free (&address);

    return transport;

```

```

failed:
    if (fd >= 0)
        _dbus_close_socket (fd, NULL);

    _dbus_string_free (&address);
    return NULL;
}

/**
 * Opens platform specific transport types.
 *
 * @param entry the address entry to try opening
 * @param transport_p return location for the opened transport
 * @param error error to be set
 * @returns result of the attempt
 */
DBusTransportOpenResult
_dbus_transport_open_platform_specific (DBusAddressEntry *entry,
                                       DBusTransport
**transport_p,
                                       DBusError *error)
{
    const char *method;

    method = dbus_address_entry_get_method (entry);
    _dbus_assert (method != NULL);

    if (strcmp (method, "unix") == 0)
    {
        const char *path = dbus_address_entry_get_value (entry, "path");
        const char *tmpdir = dbus_address_entry_get_value (entry,
"tmpdir");
        const char *abstract = dbus_address_entry_get_value (entry,
"abstract");

        if (tmpdir != NULL)
        {
            _dbus_set_bad_address (error, NULL, NULL,
                "cannot use the \"%tmpdir\" option for
an address to connect to, only in an address to listen on");
            return DBUS_TRANSPORT_OPEN_BAD_ADDRESS;
        }

        if (path == NULL && abstract == NULL)
        {
            _dbus_set_bad_address (error, "unix",
                "path or abstract",
                NULL);
            return DBUS_TRANSPORT_OPEN_BAD_ADDRESS;
        }

        if (path != NULL && abstract != NULL)

```

```

        {
            _dbus_set_bad_address (error, NULL, NULL,
                                   "can't specify both \"path\" and
                                   \"abstract\" options in an address");
            return DBUS_TRANSPORT_OPEN_BAD_ADDRESS;
        }

        if (path)
            *transport_p = _dbus_transport_new_for_domain_socket (path,
FALSE,
                                                                    error);
        else
            *transport_p = _dbus_transport_new_for_domain_socket
(abstract, TRUE,
                                                                    error);

        if (*transport_p == NULL)
        {
            _DBUS_ASSERT_ERROR_IS_SET (error);
            return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
        }
        else
        {
            _DBUS_ASSERT_ERROR_IS_CLEAR (error);
            return DBUS_TRANSPORT_OPEN_OK;
        }
    }
else if (strcmp (method, "unixexec") == 0)
    {
        const char *path;
        unsigned i;
        char **argv;

        path = dbus_address_entry_get_value (entry, "path");
        if (path == NULL)
            {
                _dbus_set_bad_address (error, NULL, NULL,
                                         "No process path specified");
                return DBUS_TRANSPORT_OPEN_BAD_ADDRESS;
            }

        /* First count argv arguments */
        for (i = 1; ; i++)
            {
                char t[4+20+1]; /* "argv" plus space for a formatted base 10
64bit integer, plus NUL */

                snprintf (t, sizeof(t), "argv%u", i);

                if (!dbus_address_entry_get_value (entry, t))
                    break;
            }
    }

```

```

/* Allocate string array */
argv = dbus_new0 (char*, i+1);
if (!argv)
{
    dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
    return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
}

/* Fill in string array */
for (i = 0; ; i++)
{
    char t[4+20+1];
    const char *p;

    snprintf (t, sizeof(t), "argv%u", i);

    p = dbus_address_entry_get_value (entry, t);
    if (!p)
    {
        if (i == 0)
            /* If argv0 isn't specified, fill in the path instead
*/
            p = path;
        else
            break;
    }

    argv[i] = _dbus_strdup (p);
    if (!argv[i])
    {
        dbus_free_string_array (argv);
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
    }
}

*transport_p = _dbus_transport_new_for_exec (path, argv, error);
dbus_free_string_array (argv);

if (*transport_p == NULL)
{
    _DBUS_ASSERT_ERROR_IS_SET (error);
    return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
}
else
{
    _DBUS_ASSERT_ERROR_IS_CLEAR (error);
    return DBUS_TRANSPORT_OPEN_OK;
}
}

#ifdef DBUS_ENABLE_LAUNCHD
    else if (strcmp (method, "launchd") == 0)

```

```

{
    DBusError tmp_error = DBUS_ERROR_INIT;
    const char *launchd_env_var = dbus_address_entry_get_value
(entry, "env");
    const char *launchd_socket;
    DBusString socket_path;
    dbus_bool_t valid_socket;

    if (!_dbus_string_init (&socket_path))
    {
        _DBUS_SET_OOM (error);
        return FALSE;
    }

    if (launchd_env_var == NULL)
    {
        _dbus_set_bad_address (error, "launchd", "env", NULL);
        return DBUS_TRANSPORT_OPEN_BAD_ADDRESS;
    }

    valid_socket = _dbus_lookup_launchd_socket (&socket_path,
launchd_env_var, error);

    if (dbus_error_is_set(error))
    {
        _dbus_string_free(&socket_path);
        return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
    }

    if (!valid_socket)
    {
        dbus_set_error(&tmp_error, DBUS_ERROR_BAD_ADDRESS,
"launchd's env var %s does not exist",
launchd_env_var);
        dbus_error_free(error);
        dbus_move_error(&tmp_error, error);
        return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
    }

    launchd_socket = _dbus_string_get_const_data(&socket_path);
    *transport_p = _dbus_transport_new_for_domain_socket
(launchd_socket, FALSE, error);

    if (*transport_p == NULL)
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
    }
    else
    {
        _DBUS_ASSERT_ERROR_IS_CLEAR (error);
        return DBUS_TRANSPORT_OPEN_OK;
    }
}

```

```

        }
    }
#endif
else
    {
        _DBUS_ASSERT_ERROR_IS_CLEAR (error);
        return DBUS_TRANSPORT_OPEN_NOT_HANDLED;
    }
}

/** @} */

#ifdef DBUS_BUILD_TESTS

dbus_bool_t
_dbus_transport_unix_test (void)
{
    DBusConnection *c;
    DBusError error;
    dbus_bool_t ret;
    const char *address;

    dbus_error_init (&error);

    c = dbus_connection_open
("unixexec:argv0=false,argv1=foobar,path=/bin/false", &error);
    _dbus_assert (c != NULL);
    _dbus_assert (!dbus_error_is_set (&error));

    address = _dbus_connection_get_address (c);
    _dbus_assert (address != NULL);

    /* Let's see if the address got parsed, reordered and formatted
correctly */
    ret = strcmp (address,
"unixexec:path=/bin/false,argv0=false,argv1=foobar") == 0;

    dbus_connection_unref (c);

    return ret;
}

#endif

```

File = dbus-transport-unix.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport-unix.h UNIX socket subclasses of DBusTransport
*
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```

```

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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
#ifndef DBUS_TRANSPORT_UNIX_H
#define DBUS_TRANSPORT_UNIX_H

#include <dbus/dbus-transport.h>

DBUS_BEGIN_DECLS

DBusTransport* _dbus_transport_new_for_domain_socket (const char
*path,
                                                    dbus_bool_t
abstract,
                                                    DBusError
*error);

DBUS_END_DECLS

#endif /* DBUS_TRANSPORT_UNIX_H */

File = dbus-transport-win.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport-win.c Windows socket subclasses of DBusTransport
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```

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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

```

```

#include <config.h>
#include "dbus-internals.h"
#include "dbus-connection-internal.h"
#include "dbus-transport-socket.h"
#include "dbus-transport-protected.h"
#include "dbus-watch.h"
#include "dbus-sysdeps-win.h"

```

```

/**
 * @defgroup DBusTransportUnix DBusTransport implementations for UNIX
 * @ingroup DBusInternals
 * @brief Implementation details of DBusTransport on UNIX
 *
 * @{
 */

```

```

/**
 * Opens platform specific transport types.
 *
 * @param entry the address entry to try opening
 * @param transport_p return location for the opened transport
 * @param error error to be set
 * @returns result of the attempt
 */

```

```

DBusTransportOpenResult
_dbus_transport_open_platform_specific (DBusAddressEntry *entry,
                                       DBusTransport
**transport_p,
                                       DBusError *error)
{
    /* currently no Windows-specific transports */
    return DBUS_TRANSPORT_OPEN_NOT_HANDLED;
}

```



```
/** @} */
```

File = dbus-transport-win.h

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport-win.h Windows socket subclasses of DBusTransport
 *
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 *
 */
#ifdef DBUS_TRANSPORT_WIN_H
#define DBUS_TRANSPORT_WIN_H

#include <dbus/dbus-transport.h>

DBUS_BEGIN_DECLS

DBUS_END_DECLS

#endif /* DBUS_TRANSPORT_WIN_H */
```

File = dbus-transport.c

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport.c DBusTransport object (internal to D-Bus
implementation)
 *
```

```
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include <config.h>
#include "dbus-transport-protected.h"
#include "dbus-transport-unix.h"
#include "dbus-transport-socket.h"
#include "dbus-connection-internal.h"
#include "dbus-watch.h"
#include "dbus-auth.h"
#include "dbus-address.h"
#include "dbus-credentials.h"
#include "dbus-mainloop.h"
#include "dbus-message.h"
#ifdef DBUS_BUILD_TESTS
#include "dbus-server-debug-pipe.h"
#endif
```

```
/**
 * @defgroup DBusTransport DBusTransport object
 * @ingroup DBusInternals
 * @brief "Backend" for a DBusConnection.
 *
 * Types and functions related to DBusTransport. A transport is an
 * abstraction that can send and receive data via various kinds of
 * network connections or other IPC mechanisms.
 *
 * @{
 */
```

```
/**
 * @typedef DBusTransport
```



```

                                const DBusString      *server_guid,
                                const DBusString      *address)
{
    DBusMessageLoader *loader;
    DBusAuth *auth;
    DBusCounter *counter;
    char *address_copy;
    DBusCredentials *creds;

    loader = _dbus_message_loader_new ();
    if (loader == NULL)
        return FALSE;

    if (server_guid)
        auth = _dbus_auth_server_new (server_guid);
    else
        auth = _dbus_auth_client_new ();
    if (auth == NULL)
    {
        _dbus_message_loader_unref (loader);
        return FALSE;
    }

    counter = _dbus_counter_new ();
    if (counter == NULL)
    {
        _dbus_auth_unref (auth);
        _dbus_message_loader_unref (loader);
        return FALSE;
    }

    creds = _dbus_credentials_new ();
    if (creds == NULL)
    {
        _dbus_counter_unref (counter);
        _dbus_auth_unref (auth);
        _dbus_message_loader_unref (loader);
        return FALSE;
    }

    if (server_guid)
    {
        _dbus_assert (address == NULL);
        address_copy = NULL;
    }
    else
    {
        _dbus_assert (address != NULL);

        if (!_dbus_string_copy_data (address, &address_copy))
        {
            _dbus_credentials_unref (creds);

```

```

        _dbus_counter_unref (counter);
        _dbus_auth_unref (auth);
        _dbus_message_loader_unref (loader);
        return FALSE;
    }
}

transport->refcount = 1;
transport->vtable = vtable;
transport->loader = loader;
transport->auth = auth;
transport->live_messages = counter;
transport->authenticated = FALSE;
transport->disconnected = FALSE;
transport->is_server = (server_guid != NULL);
transport->send_credentials_pending = !transport->is_server;
transport->receive_credentials_pending = transport->is_server;
transport->address = address_copy;

transport->unix_user_function = NULL;
transport->unix_user_data = NULL;
transport->free_unix_user_data = NULL;

transport->windows_user_function = NULL;
transport->windows_user_data = NULL;
transport->free_windows_user_data = NULL;

transport->expected_guid = NULL;

/* Try to default to something that won't totally hose the system,
 * but doesn't impose too much of a limitation.
 */
transport->max_live_messages_size = _DBUS_ONE_MEGABYTE * 63;

/* On Linux RLIMIT_NOFILE defaults to 1024, so allowing 4096 fds
live
    should be more than enough */
transport->max_live_messages_unix_fds = 4096;

/* credentials read from socket if any */
transport->credentials = creds;

_dbus_counter_set_notify (transport->live_messages,
                          transport->max_live_messages_size,
                          transport->max_live_messages_unix_fds,
                          live_messages_notify,
                          transport);

if (transport->address)
    _dbus_verbose ("Initialized transport on address %s\n", transport-
>address);

```

```

    return TRUE;
}

/**
 * Finalizes base class members of DBusTransport.
 * Chained up to from subclass finalizers.
 *
 * @param transport the transport.
 */
void
_dbus_transport_finalize_base (DBusTransport *transport)
{
    if (!transport->disconnected)
        _dbus_transport_disconnect (transport);

    if (transport->free_unix_user_data != NULL)
        (* transport->free_unix_user_data) (transport->unix_user_data);

    if (transport->free_windows_user_data != NULL)
        (* transport->free_windows_user_data) (transport->
>windows_user_data);

    _dbus_message_loader_unref (transport->loader);
    _dbus_auth_unref (transport->auth);
    _dbus_counter_set_notify (transport->live_messages,
        0, 0, NULL, NULL);
    _dbus_counter_unref (transport->live_messages);
    dbus_free (transport->address);
    dbus_free (transport->expected_guid);
    if (transport->credentials)
        _dbus_credentials_unref (transport->credentials);
}

/**
 * Verifies if a given D-Bus address is a valid address
 * by attempting to connect to it. If it is, returns the
 * opened DBusTransport object. If it isn't, returns #NULL
 * and sets @p error.
 *
 * @param error address where an error can be returned.
 * @returns a new transport, or #NULL on failure.
 */
static DBusTransport*
check_address (const char *address, DBusError *error)
{
    DBusAddressEntry **entries;
    DBusTransport *transport = NULL;
    int len, i;

    _dbus_assert (address != NULL);

```

```

if (!dbus_parse_address (address, &entries, &len, error))
    return NULL; /* not a valid address */

for (i = 0; i < len; i++)
{
    transport = _dbus_transport_open (entries[i], error);
    if (transport != NULL)
        break;
}

dbus_address_entries_free (entries);
return transport;
}

/**
 * Creates a new transport for the "autostart" method.
 * This creates a client-side of a transport.
 *
 * @param error address where an error can be returned.
 * @returns a new transport, or #NULL on failure.
 */
static DBusTransport*
_dbus_transport_new_for_autolaunch (const char *scope, DBusError
*error)
{
    DBusString address;
    DBusTransport *result = NULL;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (!_dbus_string_init (&address))
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return NULL;
    }

    if (!_dbus_get_autolaunch_address (scope, &address, error))
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        goto out;
    }

    result = check_address (_dbus_string_get_const_data (&address),
error);
    if (result == NULL)
        _DBUS_ASSERT_ERROR_IS_SET (error);
    else
        _DBUS_ASSERT_ERROR_IS_CLEAR (error);

out:
    _dbus_string_free (&address);
    return result;
}

```

```

}

static DBusTransportOpenResult
_dbus_transport_open_autolaunch (DBusAddressEntry *entry,
                                  DBusTransport **transport_p,
                                  DBusError *error)
{
    const char *method;

    method = dbus_address_entry_get_method (entry);
    _dbus_assert (method != NULL);

    if (strcmp (method, "autolaunch") == 0)
    {
        const char *scope = dbus_address_entry_get_value (entry,
"scope");

        *transport_p = _dbus_transport_new_for_autolaunch (scope,
error);

        if (*transport_p == NULL)
        {
            _DBUS_ASSERT_ERROR_IS_SET (error);
            return DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT;
        }
        else
        {
            _DBUS_ASSERT_ERROR_IS_CLEAR (error);
            return DBUS_TRANSPORT_OPEN_OK;
        }
    }
    else
    {
        _DBUS_ASSERT_ERROR_IS_CLEAR (error);
        return DBUS_TRANSPORT_OPEN_NOT_HANDLED;
    }
}

static const struct {
    DBusTransportOpenResult (* func) (DBusAddressEntry *entry,
                                      DBusTransport **transport_p,
                                      DBusError *error);
} open_funcs[] = {
    { _dbus_transport_open_socket },
    { _dbus_transport_open_platform_specific },
    { _dbus_transport_open_autolaunch }
#ifdef DBUS_BUILD_TESTS
    , { _dbus_transport_open_debug_pipe }
#endif
};

/**

```



```

* Try to open a new transport for the given address entry. (This
* opens a client-side-of-the-connection transport.)
*
* @param entry the address entry
* @param error location to store reason for failure.
* @returns new transport of #NULL on failure.
*/
DBusTransport*
_dbus_transport_open (DBusAddressEntry *entry,
                     DBusError        *error)
{
    DBusTransport *transport;
    const char *expected_guid_orig;
    char *expected_guid;
    int i;
    DBusError tmp_error = DBUS_ERROR_INIT;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    transport = NULL;
    expected_guid_orig = dbus_address_entry_get_value (entry, "guid");
    expected_guid = _dbus_strdup (expected_guid_orig);

    if (expected_guid_orig != NULL && expected_guid == NULL)
    {
        _DBUS_SET_OOM (error);
        return NULL;
    }

    for (i = 0; i < (int) _DBUS_N_ELEMENTS (open_funcs); ++i)
    {
        DBusTransportOpenResult result;

        _DBUS_ASSERT_ERROR_IS_CLEAR (&tmp_error);
        result = (* open_funcs[i].func) (entry, &transport, &tmp_error);

        switch (result)
        {
            {
            case DBUS_TRANSPORT_OPEN_OK:
                _DBUS_ASSERT_ERROR_IS_CLEAR (&tmp_error);
                goto out;
                break;
            case DBUS_TRANSPORT_OPEN_NOT_HANDLED:
                _DBUS_ASSERT_ERROR_IS_CLEAR (&tmp_error);
                /* keep going through the loop of open_funcs */
                break;
            case DBUS_TRANSPORT_OPEN_BAD_ADDRESS:
                _DBUS_ASSERT_ERROR_IS_SET (&tmp_error);
                goto out;
                break;
            case DBUS_TRANSPORT_OPEN_DID_NOT_CONNECT:
                _DBUS_ASSERT_ERROR_IS_SET (&tmp_error);

```

```

        goto out;
        break;
    }
}

out:

if (transport == NULL)
{
    if (!dbus_error_is_set (&tmp_error))
        _dbus_set_bad_address (&tmp_error,
                                NULL, NULL,
                                "Unknown address type (examples of
valid types are \"tcp\" and on UNIX \"unix\")");

    _DBUS_ASSERT_ERROR_IS_SET (&tmp_error);
    dbus_move_error(&tmp_error, error);
    dbus_free (expected_guid);
}
else
{
    _DBUS_ASSERT_ERROR_IS_CLEAR (&tmp_error);

    /* In the case of autostart the initial guid is NULL
    * and the autostart transport recursively calls
    * _dbus_open_transport wich returns a transport
    * with a guid. That guid is the definitive one.
    *
    * FIXME: if more transports are added they may have
    * an effect on the expected_guid semantics (i.e.
    * expected_guid and transport->expected_guid may
    * both have values). This is very unlikely though
    * we should either throw asserts here for those
    * corner cases or refactor the code so it is
    * clearer on what is expected and what is not
    */
    if(expected_guid)
        transport->expected_guid = expected_guid;
}

return transport;
}

/**
 * Increments the reference count for the transport.
 *
 * @param transport the transport.
 * @returns the transport.
 */
DBusTransport *
_dbus_transport_ref (DBusTransport *transport)
{

```

```

    _dbus_assert (transport->refcount > 0);

    transport->refcount += 1;

    return transport;
}

/**
 * Decrements the reference count for the transport.
 * Disconnects and finalizes the transport if
 * the reference count reaches zero.
 *
 * @param transport the transport.
 */
void
_dbus_transport_unref (DBusTransport *transport)
{
    _dbus_assert (transport != NULL);
    _dbus_assert (transport->refcount > 0);

    transport->refcount -= 1;
    if (transport->refcount == 0)
    {
        _dbus_verbose ("finalizing\n");

        _dbus_assert (transport->vtable->finalize != NULL);

        (* transport->vtable->finalize) (transport);
    }
}

/**
 * Closes our end of the connection to a remote application. Further
 * attempts to use this transport will fail. Only the first call to
 * _dbus_transport_disconnect() will have an effect.
 *
 * @param transport the transport.
 */
void
_dbus_transport_disconnect (DBusTransport *transport)
{
    _dbus_verbose ("start\n");

    _dbus_assert (transport->vtable->disconnect != NULL);

    if (transport->disconnected)
        return;

    (* transport->vtable->disconnect) (transport);

    transport->disconnected = TRUE;
}

```

```

    _dbus_verbose ("end\n");
}

/**
 * Returns #TRUE if the transport has not been disconnected.
 * Disconnection can result from _dbus_transport_disconnect()
 * or because the server drops its end of the connection.
 *
 * @param transport the transport.
 * @returns whether we're connected
 */
dbus_bool_t
_dbus_transport_get_is_connected (DBusTransport *transport)
{
    return !transport->disconnected;
}

static dbus_bool_t
auth_via_unix_user_function (DBusTransport *transport)
{
    DBusCredentials *auth_identity;
    dbus_bool_t allow;
    DBusConnection *connection;
    DBusAllowUnixUserFunction unix_user_function;
    void *unix_user_data;
    dbus_uid_t uid;

    /* Dropping the lock here probably isn't that safe. */

    auth_identity = _dbus_auth_get_identity (transport->auth);
    _dbus_assert (auth_identity != NULL);

    connection = transport->connection;
    unix_user_function = transport->unix_user_function;
    unix_user_data = transport->unix_user_data;
    uid = _dbus_credentials_get_unix_uid (auth_identity);

    _dbus_verbose ("unlock\n");
    _dbus_connection_unlock (connection);

    allow = (* unix_user_function) (connection,
                                   uid,
                                   unix_user_data);

    _dbus_verbose ("lock post unix user function\n");
    _dbus_connection_lock (connection);

    if (allow)
    {
        _dbus_verbose ("Client UID "DBUS_UID_FORMAT" authorized\n",
uid);
    }
}

```

```

    }
else
    {
        _dbus_verbose ("Client UID "DBUS_UID_FORMAT
                      " was rejected, disconnecting\n",
                      _dbus_credentials_get_unix_uid (auth_identity));
        _dbus_transport_disconnect (transport);
    }

return allow;
}

static dbus_bool_t
auth_via_windows_user_function (DBusTransport *transport)
{
    DBusCredentials *auth_identity;
    dbus_bool_t allow;
    DBusConnection *connection;
    DBusAllowWindowsUserFunction windows_user_function;
    void *windows_user_data;
    char *windows_sid;

    /* Dropping the lock here probably isn't that safe. */

    auth_identity = _dbus_auth_get_identity (transport->auth);
    _dbus_assert (auth_identity != NULL);

    connection = transport->connection;
    windows_user_function = transport->windows_user_function;
    windows_user_data = transport->unix_user_data;
    windows_sid = _dbus_strdup (_dbus_credentials_get_windows_sid
                                (auth_identity));

    if (windows_sid == NULL)
    {
        /* OOM */
        return FALSE;
    }

    _dbus_verbose ("unlock\n");
    _dbus_connection_unlock (connection);

    allow = (* windows_user_function) (connection,
                                      windows_sid,
                                      windows_user_data);

    _dbus_verbose ("lock post windows user function\n");
    _dbus_connection_lock (connection);

    if (allow)
    {
        _dbus_verbose ("Client SID '%s' authorized\n", windows_sid);
    }
}

```

```

    }
else
    {
        _dbus_verbose ("Client SID '%s' was rejected, disconnecting\n",
            _dbus_credentials_get_windows_sid
(auth_identity));
        _dbus_transport_disconnect (transport);
    }

    return allow;
}

static dbus_bool_t
auth_via_default_rules (DBusTransport *transport)
{
    DBusCredentials *auth_identity;
    DBusCredentials *our_identity;
    dbus_bool_t allow;

    auth_identity = _dbus_auth_get_identity (transport->auth);
    _dbus_assert (auth_identity != NULL);

    /* By default, connection is allowed if the client is 1) root or 2)
     * has the same UID as us or 3) anonymous is allowed.
     */

    our_identity = _dbus_credentials_new_from_current_process ();
    if (our_identity == NULL)
    {
        /* OOM */
        return FALSE;
    }

    if (transport->allow_anonymous ||
        _dbus_credentials_get_unix_uid (auth_identity) == 0 ||
        _dbus_credentials_same_user (our_identity,
            auth_identity))
    {
        if
(_dbus_credentials_include(our_identity,DBUS_CREDENTIAL_WINDOWS_SID))
            _dbus_verbose ("Client authorized as SID '%s'"
                "matching our SID '%s'\n",
                _dbus_credentials_get_windows_sid(auth_identity),
                _dbus_credentials_get_windows_sid(our_identity));
        else
            _dbus_verbose ("Client authorized as UID "DBUS_UID_FORMAT
                " matching our UID "DBUS_UID_FORMAT"\n",
                _dbus_credentials_get_unix_uid(auth_identity),

```

```

_dbus_credentials_get_unix_uid(our_identity));
    /* We have authenticated! */
    allow = TRUE;
}
else
{
    if
(_dbus_credentials_include(our_identity,DBUS_CREDENTIAL_WINDOWS_SID))
    _dbus_verbose ("Client authorized as SID '%s'"
                  " but our SID is '%s', disconnecting\n",

(_dbus_credentials_get_windows_sid(auth_identity) ?

_dbus_credentials_get_windows_sid(auth_identity) : "<null>"),

(_dbus_credentials_get_windows_sid(our_identity) ?

_dbus_credentials_get_windows_sid(our_identity) : "<null>"));
    else
        _dbus_verbose ("Client authorized as UID "DBUS_UID_FORMAT
                        " but our UID is "DBUS_UID_FORMAT",
disconnecting\n",

_dbus_credentials_get_unix_uid(auth_identity),

_dbus_credentials_get_unix_uid(our_identity));
    _dbus_transport_disconnect (transport);
    allow = FALSE;
}

_dbus_credentials_unref (our_identity);

return allow;
}

/**
 * Returns #TRUE if we have been authenticated. Will return #TRUE
 * even if the transport is disconnected.
 *
 * @todo we drop connection->mutex when calling the
unix_user_function,
 * and windows_user_function, which may not be safe really.
 *
 * @param transport the transport
 * @returns whether we're authenticated
 */
dbus_bool_t
_dbus_transport_get_is_authenticated (DBusTransport *transport)
{
    if (transport->authenticated)

```

```

    return TRUE;
else
{
    dbus_bool_t maybe_authenticated;

    if (transport->disconnected)
        return FALSE;

    /* paranoia ref since we call user callbacks sometimes */
    _dbus_connection_ref_unlocked (transport->connection);

    maybe_authenticated =
        (!(transport->send_credentials_pending ||
          transport->receive_credentials_pending));

    if (maybe_authenticated)
    {
        switch (_dbus_auth_do_work (transport->auth))
        {
            case DBUS_AUTH_STATE_AUTHENTICATED:
                /* leave as maybe_authenticated */
                break;
            default:
                maybe_authenticated = FALSE;
        }
    }

    /* If we're the client, verify the GUID
    */
    if (maybe_authenticated && !transport->is_server)
    {
        const char *server_guid;

        server_guid = _dbus_auth_get_guid_from_server (transport-
>auth);
        _dbus_assert (server_guid != NULL);

        if (transport->expected_guid &&
            strcmp (transport->expected_guid, server_guid) != 0)
        {
            _dbus_verbose ("Client expected GUID '%s' and we got
'%s' from the server\n",
                           transport->expected_guid, server_guid);
            _dbus_transport_disconnect (transport);
            _dbus_connection_unref_unlocked (transport->connection);
            return FALSE;
        }
    }

    /* If we're the server, see if we want to allow this identity to
    proceed.
    */

```



```

    if (maybe_authenticated && transport->is_server)
    {
        dbus_bool_t allow;
        DBusCredentials *auth_identity;

        auth_identity = _dbus_auth_get_identity (transport->auth);
        _dbus_assert (auth_identity != NULL);

        /* If we have an auth'd user and a user function, delegate
         * deciding whether auth credentials are good enough to the
         * app; otherwise, use our default decision process.
         */
        if (transport->unix_user_function != NULL &&
            _dbus_credentials_include (auth_identity,
DBUS_CREDENTIAL_UNIX_USER_ID))
        {
            allow = auth_via_unix_user_function (transport);
        }
        else if (transport->windows_user_function != NULL &&
            _dbus_credentials_include (auth_identity,
DBUS_CREDENTIAL_WINDOWS_SID))
        {
            allow = auth_via_windows_user_function (transport);
        }
        else
        {
            allow = auth_via_default_rules (transport);
        }

        if (!allow)
            maybe_authenticated = FALSE;
    }

    transport->authenticated = maybe_authenticated;

    _dbus_connection_unref_unlocked (transport->connection);
    return maybe_authenticated;
}

/**
 * See dbus_connection_get_is_anonymous().
 *
 * @param transport the transport
 * @returns #TRUE if not authenticated or authenticated as anonymous
 */
dbus_bool_t
_dbus_transport_get_is_anonymous (DBusTransport *transport)
{
    DBusCredentials *auth_identity;

    if (!transport->authenticated)

```

```

    return TRUE;

    auth_identity = _dbus_auth_get_identity (transport->auth);

    if (_dbus_credentials_are_anonymous (auth_identity))
        return TRUE;
    else
        return FALSE;
}

/**
 * Returns TRUE if the transport supports sending unix fds.
 *
 * @param transport the transport
 * @returns #TRUE if TRUE it is possible to send unix fds across the
transport.
 */
dbus_bool_t
_dbus_transport_can_pass_unix_fd(DBusTransport *transport)
{
    return DBUS_TRANSPORT_CAN_SEND_UNIX_FD(transport);
}

/**
 * Gets the address of a transport. It will be
 * #NULL for a server-side transport.
 *
 * @param transport the transport
 * @returns transport's address
 */
const char*
_dbus_transport_get_address (DBusTransport *transport)
{
    return transport->address;
}

/**
 * Gets the id of the server we are connected to (see
 * dbus_server_get_id()). Only works on client side.
 *
 * @param transport the transport
 * @returns transport's server's id or #NULL if we are the server side
 */
const char*
_dbus_transport_get_server_id (DBusTransport *transport)
{
    if (transport->is_server)
        return NULL;
    else if (transport->authenticated)
        return _dbus_auth_get_guid_from_server (transport->auth);
    else
        return transport->expected_guid;
}

```

```

}

/**
 * Handles a watch by reading data, writing data, or disconnecting
 * the transport, as appropriate for the given condition.
 *
 * @param transport the transport.
 * @param watch the watch.
 * @param condition the current state of the watched file descriptor.
 * @returns #FALSE if not enough memory to fully handle the watch
 */
dbus_bool_t
_dbus_transport_handle_watch (DBusTransport      *transport,
                              DBusWatch         *watch,
                              unsigned int       condition)
{
    dbus_bool_t retval;

    _dbus_assert (transport->vtable->handle_watch != NULL);

    if (transport->disconnected)
        return TRUE;

    if (dbus_watch_get_socket (watch) < 0)
    {
        _dbus_warn_check_failed ("Tried to handle an invalidated watch;
this watch should have been removed\n");
        return TRUE;
    }

    _dbus_watch_sanitize_condition (watch, &condition);

    _dbus_transport_ref (transport);
    _dbus_watch_ref (watch);
    retval = (* transport->vtable->handle_watch) (transport, watch,
condition);
    _dbus_watch_unref (watch);
    _dbus_transport_unref (transport);

    return retval;
}

/**
 * Sets the connection using this transport. Allows the transport
 * to add watches to the connection, queue incoming messages,
 * and pull outgoing messages.
 *
 * @param transport the transport.
 * @param connection the connection.
 * @returns #FALSE if not enough memory
 */
dbus_bool_t

```

```

_dbus_transport_set_connection (DBusTransport *transport,
                               DBusConnection *connection)
{
    _dbus_assert (transport->vtable->connection_set != NULL);
    _dbus_assert (transport->connection == NULL);

    transport->connection = connection;

    _dbus_transport_ref (transport);
    if (!(* transport->vtable->connection_set) (transport))
        transport->connection = NULL;
    _dbus_transport_unref (transport);

    return transport->connection != NULL;
}

/**
 * Get the socket file descriptor, if any.
 *
 * @param transport the transport
 * @param fd_p pointer to fill in with the descriptor
 * @returns #TRUE if a descriptor was available
 */
dbus_bool_t
_dbus_transport_get_socket_fd (DBusTransport *transport,
                              int *fd_p)
{
    dbus_bool_t retval;

    if (transport->vtable->get_socket_fd == NULL)
        return FALSE;

    if (transport->disconnected)
        return FALSE;

    _dbus_transport_ref (transport);

    retval = (* transport->vtable->get_socket_fd) (transport,
                                                fd_p);

    _dbus_transport_unref (transport);

    return retval;
}

/**
 * Performs a single poll()/select() on the transport's file
 * descriptors and then reads/writes data as appropriate,
 * queueing incoming messages and sending outgoing messages.
 * This is the backend for _dbus_connection_do_iteration().
 * See _dbus_connection_do_iteration() for full details.
 */

```



```

        _dbus_string_free (&plaintext);
        goto nomem;
    }

    _dbus_message_loader_get_buffer (transport->loader,
                                     &buffer);

    orig_len = _dbus_string_get_length (buffer);

    if (!_dbus_string_move (&plaintext, 0, buffer,
                           orig_len))
    {
        _dbus_string_free (&plaintext);
        goto nomem;
    }

    _dbus_verbose (" %d unused bytes sent to message loader\n",
                  _dbus_string_get_length (buffer) -
                  orig_len);

    _dbus_message_loader_return_buffer (transport->loader,
                                        buffer,
                                        _dbus_string_get_length
(buffer) -
                                        orig_len);

    _dbus_auth_delete_unused_bytes (transport->auth);

    _dbus_string_free (&plaintext);
}
else
{
    const DBusString *bytes;
    DBusString *buffer;
    int orig_len;
    dbus_bool_t succeeded;

    _dbus_message_loader_get_buffer (transport->loader,
                                     &buffer);

    orig_len = _dbus_string_get_length (buffer);

    _dbus_auth_get_unused_bytes (transport->auth,
                                 &bytes);

    succeeded = TRUE;
    if (!_dbus_string_copy (bytes, 0, buffer,
                            _dbus_string_get_length (buffer)))
        succeeded = FALSE;

    _dbus_verbose (" %d unused bytes sent to message loader\n",
                  _dbus_string_get_length (buffer) -

```

```

        orig_len);

        _dbus_message_loader_return_buffer (transport->loader,
                                           buffer,
                                           _dbus_string_get_length
(buffer) -
                                           orig_len);

        if (succeeded)
            _dbus_auth_delete_unused_bytes (transport->auth);
        else
            goto nomem;
    }

    return TRUE;

nomem:
    _dbus_verbose ("Not enough memory to transfer unused bytes from auth
conversation\n");
    return FALSE;
}

/**
 * Reports our current dispatch status (whether there's buffered
 * data to be queued as messages, or not, or we need memory).
 *
 * @param transport the transport
 * @returns current status
 */
DBusDispatchStatus
_dbus_transport_get_dispatch_status (DBusTransport *transport)
{
    if (_dbus_counter_get_size_value (transport->live_messages) >=
transport->max_live_messages_size ||
        _dbus_counter_get_unix_fd_value (transport->live_messages) >=
transport->max_live_messages_unix_fds)
        return DBUS_DISPATCH_COMPLETE; /* complete for now */

    if (!_dbus_transport_get_is_authenticated (transport))
    {
        if (_dbus_auth_do_work (transport->auth) ==
            DBUS_AUTH_STATE_WAITING_FOR_MEMORY)
            return DBUS_DISPATCH_NEED_MEMORY;
        else if (!_dbus_transport_get_is_authenticated (transport))
            return DBUS_DISPATCH_COMPLETE;
    }

    if (!transport->unused_bytes_recovered &&
        !recover_unused_bytes (transport))
        return DBUS_DISPATCH_NEED_MEMORY;

    transport->unused_bytes_recovered = TRUE;

```

```

if (!_dbus_message_loader_queue_messages (transport->loader))
    return DBUS_DISPATCH_NEED_MEMORY;

if (_dbus_message_loader_peek_message (transport->loader) != NULL)
    return DBUS_DISPATCH_DATA_REMAINS;
else
    return DBUS_DISPATCH_COMPLETE;
}

/**
 * Processes data we've read while handling a watch, potentially
 * converting some of it to messages and queueing those messages on
 * the connection.
 *
 * @param transport the transport
 * @returns #TRUE if we had enough memory to queue all messages
 */
dbus_bool_t
_dbus_transport_queue_messages (DBusTransport *transport)
{
    DBusDispatchStatus status;

#ifdef 0
    _dbus_verbose ("_dbus_transport_queue_messages()\n");
#endif

    /* Queue any messages */
    while ((status = _dbus_transport_get_dispatch_status (transport)) ==
DBUS_DISPATCH_DATA_REMAINS)
    {
        DBusMessage *message;
        DBusList *link;

        link = _dbus_message_loader_pop_message_link (transport-
>loader);
        _dbus_assert (link != NULL);

        message = link->data;

        _dbus_verbose ("queueing received message %p\n", message);

        if (!_dbus_message_add_counter (message, transport-
>live_messages))
        {
            _dbus_message_loader_putback_message_link (transport-
>loader,
                                                    link);

            status = DBUS_DISPATCH_NEED_MEMORY;
            break;
        }
    }
    else

```



```

        {
            /* We didn't call the notify function when we added the
counter, so
            * catch up now. Since we have the connection's lock, it's
desirable
            * that we bypass the notify function and call this virtual
method
            * directly. */
            if (transport->vtable->live_messages_changed)
                (* transport->vtable->live_messages_changed) (transport);

            /* pass ownership of link and message ref to connection */
            _dbus_connection_queue_received_message_link (transport-
>connection,
                                                    link);
        }
    }

    if (_dbus_message_loader_get_is_corrupted (transport->loader))
    {
        _dbus_verbose ("Corrupted message stream, disconnecting\n");
        _dbus_transport_disconnect (transport);
    }

    return status != DBUS_DISPATCH_NEED_MEMORY;
}

/**
 * See dbus_connection_set_max_message_size().
 *
 * @param transport the transport
 * @param size the max size of a single message
 */
void
_dbus_transport_set_max_message_size (DBusTransport *transport,
                                     long size)
{
    _dbus_message_loader_set_max_message_size (transport->loader, size);
}

/**
 * See dbus_connection_set_max_message_unix_fds().
 *
 * @param transport the transport
 * @param n the max number of unix fds of a single message
 */
void
_dbus_transport_set_max_message_unix_fds (DBusTransport *transport,
                                          long n)
{
    _dbus_message_loader_set_max_message_unix_fds (transport->loader,
n);
}

```

```

}

/**
 * See dbus_connection_get_max_message_size().
 *
 * @param transport the transport
 * @returns max message size
 */
long
_dbus_transport_get_max_message_size (DBusTransport *transport)
{
    return _dbus_message_loader_get_max_message_size (transport->loader);
}

/**
 * See dbus_connection_get_max_message_unix_fds().
 *
 * @param transport the transport
 * @returns max message unix fds
 */
long
_dbus_transport_get_max_message_unix_fds (DBusTransport *transport)
{
    return _dbus_message_loader_get_max_message_unix_fds (transport->loader);
}

/**
 * See dbus_connection_set_max_received_size().
 *
 * @param transport the transport
 * @param size the max size of all incoming messages
 */
void
_dbus_transport_set_max_received_size (DBusTransport *transport,
                                       long size)
{
    transport->max_live_messages_size = size;
    _dbus_counter_set_notify (transport->live_messages,
                             transport->max_live_messages_size,
                             transport->max_live_messages_unix_fds,
                             live_messages_notify,
                             transport);
}

/**
 * See dbus_connection_set_max_received_unix_fds().
 *
 * @param transport the transport
 * @param n the max unix fds of all incoming messages
 */

```

```

void
_dbus_transport_set_max_received_unix_fds (DBusTransport *transport,
                                           long n)
{
    transport->max_live_messages_unix_fds = n;
    _dbus_counter_set_notify (transport->live_messages,
                             transport->max_live_messages_size,
                             transport->max_live_messages_unix_fds,
                             live_messages_notify,
                             transport);
}

/**
 * See dbus_connection_get_max_received_size().
 *
 * @param transport the transport
 * @returns max bytes for all live messages
 */
long
_dbus_transport_get_max_received_size (DBusTransport *transport)
{
    return transport->max_live_messages_size;
}

/**
 * See dbus_connection_set_max_received_unix_fds().
 *
 * @param transport the transport
 * @returns max unix fds for all live messages
 */
long
_dbus_transport_get_max_received_unix_fds (DBusTransport *transport)
{
    return transport->max_live_messages_unix_fds;
}

/**
 * See dbus_connection_get_unix_user().
 *
 * @param transport the transport
 * @param uid return location for the user ID
 * @returns #TRUE if uid is filled in with a valid user ID
 */
dbus_bool_t
_dbus_transport_get_unix_user (DBusTransport *transport,
                              unsigned long *uid)
{
    DBusCredentials *auth_identity;

    *uid = _DBUS_INT32_MAX; /* better than some root or system user in
                            * case of bugs in the caller. Caller should
                            * never use this value on purpose, however.

```

```

        */

if (!transport->authenticated)
    return FALSE;

auth_identity = _dbus_auth_get_identity (transport->auth);

if (_dbus_credentials_include (auth_identity,
                               DBUS_CREDENTIAL_UNIX_USER_ID))
    {
        *uid = _dbus_credentials_get_unix_uid (auth_identity);
        return TRUE;
    }
else
    return FALSE;
}

/**
 * See dbus_connection_get_unix_process_id().
 *
 * @param transport the transport
 * @param pid return location for the process ID
 * @returns #TRUE if uid is filled in with a valid process ID
 */
dbus_bool_t
_dbus_transport_get_unix_process_id (DBusTransport *transport,
                                     unsigned long *pid)
{
    DBusCredentials *auth_identity;

    *pid = DBUS_PID_UNSET; /* Caller should never use this value on
purpose,
                               * but we set it to a safe number, INT_MAX,
                               * just to root out possible bugs in bad callers.
                               */

if (!transport->authenticated)
    return FALSE;

auth_identity = _dbus_auth_get_identity (transport->auth);

if (_dbus_credentials_include (auth_identity,
                               DBUS_CREDENTIAL_UNIX_PROCESS_ID))
    {
        *pid = _dbus_credentials_get_unix_pid (auth_identity);
        return TRUE;
    }
else
    return FALSE;
}

/**

```

```

* See dbus_connection_get_adt_audit_session_data().
*
* @param transport the transport
* @param data return location for the ADT audit data
* @param data_size return length of audit data
* @returns #TRUE if audit data is filled in with a valid ucred
*/
dbus_bool_t
_dbus_transport_get_adt_audit_session_data (DBusTransport
*transport,
                                           void                **data,
                                           int
*data_size)
{
    DBusCredentials *auth_identity;

    *data = NULL;
    *data_size = 0;

    if (!transport->authenticated)
        return FALSE;

    auth_identity = _dbus_auth_get_identity (transport->auth);

    if (_dbus_credentials_include (auth_identity,
                                  DBUS_CREDENTIAL_ADT_AUDIT_DATA_ID))
    {
        *data = (void *) _dbus_credentials_get_adt_audit_data
(auth_identity);
        *data_size = _dbus_credentials_get_adt_audit_data_size
(auth_identity);
        return TRUE;
    }
    else
        return FALSE;
}

/**
* See dbus_connection_set_unix_user_function().
*
* @param transport the transport
* @param function the predicate
* @param data data to pass to the predicate
* @param free_data_function function to free the data
* @param old_data the old user data to be freed
* @param old_free_data_function old free data function to free it
with
*/
void
_dbus_transport_set_unix_user_function (DBusTransport
*transport,

```

```

function,
                                DBusAllowUnixUserFunction
*data,
                                void
free_data_function,
                                DBusFreeFunction
**old_data,
                                void
                                DBusFreeFunction
*old_free_data_function)
{
    *old_data = transport->unix_user_data;
    *old_free_data_function = transport->free_unix_user_data;

    transport->unix_user_function = function;
    transport->unix_user_data = data;
    transport->free_unix_user_data = free_data_function;
}

/**
 * See dbus_connection_get_windows_user().
 *
 * @param transport the transport
 * @param windows_sid_p return location for the user ID
 * @returns #TRUE if user is available; the returned value may still
be #NULL if no memory to copy it
 */
dbus_bool_t
_dbus_transport_get_windows_user (DBusTransport
*transport,
                                char
**windows_sid_p)
{
    DBusCredentials *auth_identity;

    *windows_sid_p = NULL;

    if (!transport->authenticated)
        return FALSE;

    auth_identity = _dbus_auth_get_identity (transport->auth);

    if (_dbus_credentials_include (auth_identity,
                                DBUS_CREDENTIAL_WINDOWS_SID))
    {
        /* If no memory, we are supposed to return TRUE and set NULL */
        *windows_sid_p = _dbus_strdup (_dbus_credentials_get_windows_sid
(auth_identity));

        return TRUE;
    }
    else

```

```

        return FALSE;
    }

/**
 * See dbus_connection_set_windows_user_function().
 *
 * @param transport the transport
 * @param function the predicate
 * @param data data to pass to the predicate
 * @param free_data_function function to free the data
 * @param old_data the old user data to be freed
 * @param old_free_data_function old free data function to free it
with
 */

void
_dbus_transport_set_windows_user_function (DBusTransport
*transport,

DBusAllowWindowsUserFunction    function,
                                void
*data,
                                DBusFreeFunction
free_data_function,
                                void
**old_data,
                                DBusFreeFunction
*old_free_data_function)
{
    *old_data = transport->windows_user_data;
    *old_free_data_function = transport->free_windows_user_data;

    transport->windows_user_function = function;
    transport->windows_user_data = data;
    transport->free_windows_user_data = free_data_function;
}

/**
 * Sets the SASL authentication mechanisms supported by this
transport.
 *
 * @param transport the transport
 * @param mechanisms the #NULL-terminated array of mechanisms
 *
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_transport_set_auth_mechanisms (DBusTransport *transport,
const char **mechanisms)
{
    return _dbus_auth_set_mechanisms (transport->auth, mechanisms);
}

```

```

/**
 * See dbus_connection_set_allow_anonymous()
 *
 * @param transport the transport
 * @param value #TRUE to allow anonymous connection
 */
void
_dbus_transport_set_allow_anonymous (DBusTransport
*transport,
                                     dbus_bool_t
value)
{
    transport->allow_anonymous = value != FALSE;
}

#ifdef DBUS_ENABLE_STATS
void
_dbus_transport_get_stats (DBusTransport *transport,
                           dbus_uint32_t *queue_bytes,
                           dbus_uint32_t *queue_fds,
                           dbus_uint32_t *peak_queue_bytes,
                           dbus_uint32_t *peak_queue_fds)
{
    if (queue_bytes != NULL)
        *queue_bytes = _dbus_counter_get_size_value (transport-
>live_messages);

    if (queue_fds != NULL)
        *queue_fds = _dbus_counter_get_unix_fd_value (transport-
>live_messages);

    if (peak_queue_bytes != NULL)
        *peak_queue_bytes = _dbus_counter_get_peak_size_value (transport-
>live_messages);

    if (peak_queue_fds != NULL)
        *peak_queue_fds = _dbus_counter_get_peak_unix_fd_value (transport-
>live_messages);
}
#endif /* DBUS_ENABLE_STATS */

/** @} */

```

File = dbus-transport.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-transport.h DBusTransport object (internal to D-BUS
implementation)
*

```



```

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*
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*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
#ifndef DBUS_TRANSPORT_H
#define DBUS_TRANSPORT_H

#include <dbus/dbus-internals.h>
#include <dbus/dbus-connection.h>
#include <dbus/dbus-protocol.h>
#include <dbus/dbus-address.h>

DBUS_BEGIN_DECLS

typedef struct DbusTransport DbusTransport;

DbusTransport*      _dbus_transport_open
(DbusAddressEntry  *entry,
                                     DbusError
*error);
DbusTransport*      _dbus_transport_ref
(DbusTransport     *transport);
void                _dbus_transport_unref
(DbusTransport     *transport);
void                _dbus_transport_disconnect
(DbusTransport     *transport);
dbus_bool_t         _dbus_transport_get_is_connected
(DbusTransport     *transport);
dbus_bool_t         _dbus_transport_get_is_authenticated
(DbusTransport     *transport);
dbus_bool_t         _dbus_transport_get_is_anonymous
(DbusTransport     *transport);
dbus_bool_t         _dbus_transport_can_pass_unix_fd
(DbusTransport     *transport);

```

```

const char*      _dbus_transport_get_address
(DBusTransport  *transport);
const char*      _dbus_transport_get_server_id
(DBusTransport  *transport);
dbus_bool_t      _dbus_transport_handle_watch
(DBusTransport  *transport,
DBusWatch
*watch,
unsigned
int
condition);
dbus_bool_t      _dbus_transport_set_connection
(DBusTransport  *transport,
DBusConnection *connection);
void             _dbus_transport_do_iteration
(DBusTransport  *transport,
unsigned
int
flags,
int
timeout_milliseconds);
DBusDispatchStatus _dbus_transport_get_dispatch_status
(DBusTransport  *transport);
dbus_bool_t      _dbus_transport_queue_messages
(DBusTransport  *transport);
void             _dbus_transport_set_max_message_size
(DBusTransport  *transport,
long
size);
long             _dbus_transport_get_max_message_size
(DBusTransport  *transport);
void             _dbus_transport_set_max_received_size
(DBusTransport  *transport,
long
size);
long             _dbus_transport_get_max_received_size
(DBusTransport  *transport);
void             _dbus_transport_set_max_message_unix_fds
(DBusTransport  *transport,
long
n);
long             _dbus_transport_get_max_message_unix_fds
(DBusTransport  *transport);
void             _dbus_transport_set_max_received_unix_fds
(DBusTransport  *transport,
long
n);

```

```

long
_dbus_transport_get_max_received_unix_fds(DBusTransport
*transport);

dbus_bool_t      _dbus_transport_get_socket_fd
(DBusTransport   *transport,
                 int
*fd_p);
dbus_bool_t      _dbus_transport_get_unix_user
(DBusTransport   *transport,
                 unsigned
long             *uid);
dbus_bool_t      _dbus_transport_get_unix_process_id
(DBusTransport   *transport,
                 unsigned
long             *pid);
dbus_bool_t      _dbus_transport_get_adt_audit_session_data
(DBusTransport   *transport,
                 void
**data,
                 int
*data_size);
void             _dbus_transport_set_unix_user_function
(DBusTransport   *transport,
DBusAllowUnixUserFunction  function,
                 void
*data,
DBusFreeFunction  free_data_function,
                 void
**old_data,
DBusFreeFunction  *old_free_data_function);
dbus_bool_t      _dbus_transport_get_windows_user
(DBusTransport   *transport,
                 char
**windows_sid_p);
void             _dbus_transport_set_windows_user_function
(DBusTransport   *transport,
DBusAllowWindowsUserFunction  function,
                 void
*data,
DBusFreeFunction  free_data_function,
                 void
**old_data,
DBusFreeFunction  *old_free_data_function);
dbus_bool_t      _dbus_transport_set_auth_mechanisms
(DBusTransport   *transport,

```

```

                                                    const char
**mechanisms);
void          _dbus_transport_set_allow_anonymous
(DBusTransport *transport,
                                                    dbus_bool_t
value);

/* if DBUS_ENABLE_STATS */
void _dbus_transport_get_stats (DBusTransport *transport,
                                dbus_uint32_t *queue_bytes,
                                dbus_uint32_t *queue_fds,
                                dbus_uint32_t *peak_queue_bytes,
                                dbus_uint32_t *peak_queue_fds);

DBUS_END_DECLS

#endif /* DBUS_TRANSPORT_H */

```

File = dbus-tutorial.html

```

<html><head><meta http-equiv="Content-Type" content="text/html;
charset=ISO-8859-1"><title>D-Bus Tutorial</title><meta
name="generator" content="DocBook XSL Stylesheets
V1.76.1"></head><body bgcolor="white" text="black" link="#0000FF"
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Tutorial"><div class="titlepage"><div><div><h2 class="title"><a
name="index"></a>D-Bus Tutorial</h2></div><div><div
class="authorgroup"><div class="author"><h3 class="author"><span
class="firstname">Havoc</span> <span
class="surname">Pennington</span></h3><div class="affiliation"><span
class="orgname">Red Hat, Inc.<br></span><div class="address"><p><code
class="email">&lt;<a class="email"
href="mailto:hp@pobox.com">hp@pobox.com</a>&gt;</code></p></div></div>
</div><div class="author"><h3 class="author"><span
class="firstname">David</span> <span
class="surname">Wheeler</span></h3></div><div class="author"><h3
class="author"><span class="firstname">John</span> <span
class="surname">Palmieri</span></h3><div class="affiliation"><span
class="orgname">Red Hat, Inc.<br></span><div class="address"><p><code
class="email">&lt;<a class="email"
href="mailto:johnp@redhat.com">johnp@redhat.com</a>&gt;</code></p></di
v></div></div><div class="author"><h3 class="author"><span
class="firstname">Colin</span> <span
class="surname">Walters</span></h3><div class="affiliation"><span
class="orgname">Red Hat, Inc.<br></span><div class="address"><p><code
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href="mailto:walters@redhat.com">>walters@redhat.com</a>&gt;</code></p>
</div></div></div></div></div><div><p class="releaseinfo">Version
0.5.0</p></div></div><hr></div><div class="toc"><p><b>Table of
Contents</b></p><dl><dt><span class="sect1"><a href="#meta">Tutorial

```

Work In Progress

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Tutorial Work In Progress

Tutorial Work In Progress

This tutorial is not complete; it probably contains some useful information, but

also has plenty of gaps. Right now, you'll also need to refer to the D-Bus specification,

Doxygen reference documentation, and look at some examples of how other apps use D-Bus.

</p><p>

Enhancing the tutorial is definitely encouraged - send your patches or suggestions to the

mailing list. If you create a D-Bus binding, please add a section to the tutorial for your

binding, if only a short section with a couple of examples.

</p></div><div class="sect1" title="What is D-Bus?"><div class="titlepage"><div><div><h2 class="title" style="clear: both">What is D-Bus?</h2></div></div></div><p>

D-Bus is a system for <em class="firstterm">interprocess communication

(IPC). Architecturally, it has several layers:

</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>

A library, <em class="firstterm">libdbus, that allows two

applications to connect to each other and exchange messages.

</p><li class="listitem"><p>

A <em class="firstterm">message bus daemon executable, built on

libdbus, that multiple applications can connect to. The daemon can

route messages from one application to zero or more other applications.

</p><li class="listitem"><p>

<em class="firstterm">Wrapper libraries or <em class="firstterm">bindings

based on particular application frameworks. For example, libdbus-glib and

libdbus-qt. There are also bindings to languages such as Python. These wrapper libraries are the API most people should use,

as they simplify the details of D-Bus programming. libdbus is

intended to be a low-level backend for the higher level bindings.

Much of the libdbus API is only useful for binding implementation.

</p></div><p>

</p><p>

libdbus only supports one-to-one connections, just like a raw network

socket. However, rather than sending byte streams over the connection, you

send <em class="firstterm">messages. Messages have a header identifying

the kind of message, and a body containing a data payload. libdbus also

abstracts the exact transport used (sockets vs. whatever else),
and handles details such as authentication.

</p><p>

The message bus daemon forms the hub of a wheel. Each spoke of
the wheel

is a one-to-one connection to an application using libdbus. An
application sends a message to the bus daemon over its spoke,
and the bus

daemon forwards the message to other connected applications as
appropriate. Think of the daemon as a router.

</p><p>

The bus daemon has multiple instances on a typical computer.

The

first instance is a machine-global singleton, that is, a system
daemon

similar to sendmail or Apache. This instance has heavy security
restrictions on what messages it will accept, and is used for
systemwide

communication. The other instances are created one per user
login session.

These instances allow applications in the user's session to
communicate

with one another.

</p><p>

The systemwide and per-user daemons are separate. Normal
within-session

IPC does not involve the systemwide message bus process and vice
versa.

</p><div class="sect2" title="D-Bus applications"><div
class="titlepage"><div><div><h3 class="title">D-Bus
applications</h3></div></div></div><p>

There are many, many technologies in the world that have
"Inter-process

communication" or "networking" in their stated purpose: CORBA, <a
class="ulink" href="http://www.opengroup.org/dce/"
target="_top">DCE, <a class="ulink"
href="http://www.microsoft.com/com/" target="_top">DCOM, <a
class="ulink"
href="http://developer.kde.org/documentation/library/kdeqt/dcop.html"
target="_top">DCOP, <a class="ulink" href="http://www.xmlrpc.com"
target="_top">XML-RPC, <a class="ulink"
href="http://www.w3.org/TR/SOAP/" target="_top">SOAP, MBUS, <a
class="ulink" href="http://www.zeroc.com/ice.html"
target="_top">Internet Communications Engine (ICE),
and probably hundreds more.

Each of these is tailored for particular kinds of application.

D-Bus is designed for two specific cases:

</p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>

desktop
a whole,
components

Communication between desktop applications in the same session; to allow integration of the desktop session as a whole, and address issues of process lifecycle (when do desktop start and stop running).

operating system,
kernel

Communication between the desktop session and the where the operating system would typically include the and any system daemons or processes.

For the within-desktop-session use case, the GNOME and KDE desktops have significant previous experience with different IPC solutions such as CORBA and DCOP. D-Bus is built on that experience and carefully tailored to meet the needs of these desktop projects in particular. D-Bus may or may not be appropriate for other applications; the FAQ has some comparisons to other IPC systems.

The problem solved by the systemwide or communication-with-the-OS case is explained well by the following text from the Linux Hotplug project:

A gap in current Linux support is that policies with any sort of dynamic "interact with user" component aren't currently supported. For example, that's often needed the first time a network adapter or printer is connected, and to determine appropriate places to mount disk drives. It would seem that such actions could be supported for any case where a responsible human can be identified: single user workstations, or any system which is remotely administered.

This is a classic "remote sysadmin" problem, where in this case hotplugging needs to deliver an event from one security domain (operating system kernel, in this case) to another (desktop for logged-in user, or remote sysadmin). Any effective response must go

the other way: the remote domain taking some action that lets the kernel expose the desired device capabilities. (The action can often be taken asynchronously, for example letting new hardware be idle until a meeting finishes.) At this writing, Linux doesn't have widely adopted solutions to such problems. However, the new D-Bus work may begin to solve that problem.

D-Bus may happen to be useful for purposes other than the one it was designed for. Its general properties that distinguish it from other forms of IPC are:

- Binary protocol designed to be used asynchronously (similar in spirit to the X Window System protocol).
- Stateful, reliable connections held open over time.
- The message bus is a daemon, not a "swarm" or distributed architecture.
- Many implementation and deployment issues are specified rather than left ambiguous/configurable/pluggable.
- Semantics are similar to the existing DCOP system, allowing KDE to adopt it more easily.
- Security features to support the systemwide mode of the message bus.

Concepts

Concepts

Some basic concepts apply no matter what application framework you're using to write a D-Bus application. The exact code you write will be different for GLib vs. Qt vs. Python applications, however.

Here is a diagram ([png](diagram.png) [svg](diagram.svg)) that may help you visualize the concepts that follow.

</p><div class="sect2" title="Native Objects and Object Paths"><div class="titlepage"><div><div><h3 class="title">Native Objects and Object Paths</h3></div></div></div><p>

Your programming framework probably defines what an "object" is like;

usually with a base class. For example: java.lang.Object, GObject, QObject, python's base Object, or whatever. Let's call this a <em class="firsttterm">native object.

</p><p>

The low-level D-Bus protocol, and corresponding libdbus API, does not care about native objects.

However, it provides a concept called an

<em class="firsttterm">object path. The idea of an object path is that

higher-level bindings can name native object instances, and allow remote applications to refer to them.

</p><p>

The object path

looks like a filesystem path, for example an object could be named <code

class="literal">/org/kde/kspread/sheets/3/cells/4/5</code>.

Human-readable paths are nice, but you are free to create an object named <code

class="literal">/com/mycompany/c5yo817y0c1y1c5b</code>

if it makes sense for your application.

</p><p>

Namespacing object paths is smart, by starting them with the components

of a domain name you own (e.g. <code

class="literal">/org/kde/</code>). This keeps different code modules in the same process from stepping on one another's toes.

</p></div><div class="sect2" title="Methods and Signals"><div

class="titlepage"><div><div><h3 class="title">Methods and Signals</h3></div></div></div><p>

Each object has <em class="firsttterm">members; the two kinds of member

are <em class="firsttterm">methods and

<em class="firsttterm">signals. Methods are operations that can be

invoked on an object, with optional input (aka arguments or "in

parameters") and output (aka return values or "out parameters").

Signals are broadcasts from the object to any interested observers

of the object; signals may contain a data payload.

</p><p>

Both methods and signals are referred to by name, such as

"Frobate" or "OnClicked".

[Interfaces](#)

Each object supports one or more `interfaces`.

Think of an interface as a named group of methods and signals, just as it is in GLib or Qt or Java. Interfaces define the `type` of an object instance.

DBus identifies interfaces with a simple namespaced string, something like `org.freedesktop.Introspectable`.

Most bindings will map these interface names directly to the appropriate programming language construct, for example to Java interfaces or C++ pure virtual classes.

[Proxies](#)

A `proxy object` is a convenient native object created to represent a remote object in another process. The low-level DBus API involves manually creating a method call message, sending it, then manually receiving and processing the method reply message. Higher-level bindings provide proxies as an alternative.

Proxies look like a normal native object; but when you invoke a method on the proxy object, the binding converts it into a DBus method call message, waits for the reply message, unpacks the return value, and returns it from the native method..

In pseudocode, programming without proxies might look like this:

```
Message message = new Message("/remote/object/path",
"MethodName", arg1, arg2);
Connection connection = getBusConnection();
connection.send(message);
Message reply = connection.waitForReply(message);
if (reply.isError()) {

} else {
    Object returnValue = reply.getReturnValue();
}
```

Programming with proxies might look like this:

```
Message message = new Message("/remote/object/path",
```

```
Proxy proxy = new Proxy(getBusConnection(),
"/remote/object/path");
Object returnValue = proxy.MethodName(arg1, arg2);
</pre><p>
```

</p></div><div class="sect2" title="Bus Names"><div class="titlepage"><div><div><h3 class="title">Bus Names</h3></div></div></div><p>

When each application connects to the bus daemon, the daemon immediately

assigns it a name, called the <em class="firstterm">unique connection name.

A unique name begins with a ':' (colon) character. These names are never

reused during the lifetime of the bus daemon - that is, you know

a given name will always refer to the same application.

An example of a unique name might be

<code class="literal">:34-907</code>. The numbers after the colon have

no meaning other than their uniqueness.

</p><p>

When a name is mapped

to a particular application's connection, that application is said to

<em class="firstterm">own that name.

</p><p>

Applications may ask to own additional <em class="firstterm">well-known

names. For example, you could write a specification to define a name called <code

class="literal">com.mycompany.TextEditor</code>.

Your definition could specify that to own this name, an application

should have an object at the path

<code class="literal">/com/mycompany/TextFileManager</code> supporting the

interface <code

class="literal">org.freedesktop.FileHandler</code>.

</p><p>

Applications could then send messages to this bus name, object, and interface to execute method calls.

</p><p>

You could think of the unique names as IP addresses, and the well-known names as domain names. So

<code class="literal">com.mycompany.TextEditor</code> might map to something like

<code class="literal">:34-907</code> just as <code class="literal">mycompany.com</code> maps

to something like <code class="literal">192.168.0.5</code>.

</p><p>

Names have a second important use, other than routing messages. They

are used to track lifecycle. When an application exits (or crashes), its connection to the message bus will be closed by the operating system kernel. The message bus then sends out notification messages telling remaining applications that the application's names have lost their owner. By tracking these notifications, your application can reliably monitor the lifetime of other applications.

`</p><p>`
Bus names can also be used to coordinate single-instance applications. If you want to be sure only one `<code class="literal">com.mycompany.TextEditor</code>` application is running for example, have the text editor application exit if the bus name already has an owner.

`</p></div><div class="sect2" title="Addresses"><div class="titlepage"><div><div><h3 class="title">Addresses</h3></div></div></div><p>`
Applications using D-Bus are either servers or clients. A server listens for incoming connections; a client connects to a server. Once the connection is established, it is a symmetric flow of messages; the client-server distinction only matters when setting up the connection.

`</p><p>`
If you're using the bus daemon, as you probably are, your application will be a client of the bus daemon. That is, the bus daemon listens for connections and your application initiates a connection to the bus daemon.

`</p><p>`
A D-Bus `<em class="firsttterm">address` specifies where a server will listen, and where a client will connect. For example, the address `<code class="literal">unix:path=/tmp/abcdef</code>` specifies that the server will listen on a UNIX domain socket at the path `<code class="literal">/tmp/abcdef</code>` and the client will connect to that socket. An address can also specify TCP/IP sockets, or any other

transport defined in future iterations of the D-Bus specification.

</p><p>

When using D-Bus with a message bus daemon, libdbus automatically discovers the address of the per-session bus

daemon by reading an environment variable. It discovers the systemwide bus daemon by checking a well-known UNIX domain socket path

(though you can override this address with an environment variable).

</p><p>

If you're using D-Bus without a bus daemon, it's up to you to define which application will be the server and which will be the client, and specify a mechanism for them to agree on the server's address. This is an unusual case.

</p></div><div class="sect2" title="Big Conceptual Picture"><div class="titlepage"><div><div><h3 class="title">Big Conceptual Picture</h3></div></div></div><p>

Pulling all these concepts together, to specify a particular method call on a particular object instance, a number of nested components have to be named:

</p><pre class="programlisting">

```
Address -&gt; [Bus Name] -&gt; Path -&gt; Interface -&gt;
```

Method

</pre><p>

The bus name is in brackets to indicate that it's optional -- you only

provide a name to route the method call to the right application

when using the bus daemon. If you have a direct connection to another

application, bus names aren't used; there's no bus daemon.

</p><p>

The interface is also optional, primarily for historical reasons; DCOP does not require specifying the interface, instead simply forbidding duplicate method names on the same object instance. D-Bus will thus let you omit the interface, but if your method name is ambiguous it is undefined which method will be invoked.

</p></div><div class="sect2" title="Messages - Behind the Scenes"><div class="titlepage"><div><div><h3 class="title">Messages - Behind the Scenes</h3></div></div></div><p>

D-Bus works by sending messages between processes. If you're using

a sufficiently high-level binding, you may never work with messages directly.

</p><p>

There are 4 message types:

</p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>

Method call messages ask to invoke a method on an object.

</p><li class="listitem"><p>

Method return messages return the results of invoking a method.

</p><li class="listitem"><p>

Error messages return an exception caused by invoking a method.

</p><li class="listitem"><p>

Signal messages are notifications that a given signal has been emitted (that an event has occurred).

You could also think of these as "event" messages.

</p></div><p>

</p><p>

A method call maps very simply to messages: you send a method call

message, and receive either a method return message or an error message

in reply.

</p><p>

Each message has a <em class="firsttterm">header, including <em class="firsttterm">fields,

and a <em class="firsttterm">body, including <em class="firsttterm">arguments. You can think

of the header as the routing information for the message, and the body as the payload.

Header fields might include the sender bus name, destination bus name, method or signal name,

and so forth. One of the header fields is a <em class="firsttterm">type signature describing the

values found in the body. For example, the letter "i" means "32-bit integer" so the signature

"ii" means the payload has two 32-bit integers.

</p></div><div class="sect2" title="Calling a Method - Behind the Scenes"><div class="titlepage"><div><div><h3 class="title">Calling a Method - Behind the Scenes</h3></div></div></div><p>

A method call in DBus consists of two messages; a method call message sent from process A to process B,

and a matching method reply message sent from process B to process A. Both the call and the reply messages

are routed through the bus daemon. The caller includes a different serial number in each call message, and the

reply message includes this number to allow the caller to match replies to calls.

</p><p>

The call message will contain any arguments to the method.

The reply message may indicate an error, or may contain data returned by the method.

</p><p>

A method invocation in DBus happens as follows:

```
</p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
    The language binding may provide a proxy, such that
    invoking a method on
        an in-process object invokes a method on a remote object
    in another process. If so, the
        application calls a method on the proxy, and the proxy
        constructs a method call message to send to the remote
    process.
</p></li><li class="listitem"><p>
    For more low-level APIs, the application may construct a
    method call message itself, without
        using a proxy.
</p></li><li class="listitem"><p>
    In either case, the method call message contains: a bus
    name belonging to the remote process; the name of the method;
        the arguments to the method; an object path inside the
    remote process; and optionally the name of the
        interface that specifies the method.
</p></li><li class="listitem"><p>
    The method call message is sent to the bus daemon.
</p></li><li class="listitem"><p>
    The bus daemon looks at the destination bus name. If a
    process owns that name,
        the bus daemon forwards the method call to that process.
    Otherwise, the bus daemon
        creates an error message and sends it back as the reply
    to the method call message.
</p></li><li class="listitem"><p>
    The receiving process unpacks the method call message.
    In a simple low-level API situation, it
        may immediately run the method and send a method reply
    message to the bus daemon.
        When using a high-level binding API, the binding might
    examine the object path, interface,
        and method name, and convert the method call message
    into an invocation of a method on
        a native object (GObject, java.lang.Object, GObject,
    etc.), then convert the return
        value from the native method into a method reply
    message.
</p></li><li class="listitem"><p>
    The bus daemon receives the method reply message and
    sends it to the process that
        made the method call.
</p></li><li class="listitem"><p>
    The process that made the method call looks at the
    method reply and makes use of any
        return values included in the reply. The reply may also
    indicate that an error occurred.
        When using a binding, the method reply message may be
    converted into the return value of
```


of a proxy method, or into an exception.

The bus daemon never reorders messages. That is, if you send two method call messages to the same recipient, they will be received in the order they were sent. The recipient is not required to reply to the calls in order, however; for example, it may process each method call in a separate thread, and return reply messages in an undefined order depending on when the threads complete. Method calls have a unique serial number used by the method caller to match reply messages to call messages.

A signal in DBus consists of a single message, sent by one process to any number of other processes.

That is, a signal is a unidirectional broadcast. The signal may contain arguments (a data payload), but

because it is a broadcast, it never has a "return value." Contrast this with a method call

(see [the section called "Calling a Method - Behind the Scenes"](#) where the method call message has a matching method reply message.

The emitter (aka sender) of a signal has no knowledge of the signal recipients. Recipients register

with the bus daemon to receive signals based on "match rules" - these rules would typically include the sender and

the signal name. The bus daemon sends each signal only to recipients who have expressed interest in that signal.

A signal in DBus happens as follows:

- A signal message is created and sent to the bus daemon.

- When using the low-level API this may be

- done manually, with certain bindings it may be done for you by the binding when a native object emits a native signal or event.

-

- The signal message contains the name of the interface that specifies the signal;

- the name of the signal; the bus name of the process sending the signal; and

- any arguments

-

Any process on the message bus can register "match rules" indicating which signals it is interested in. The bus has a list of registered match rules.

The bus daemon examines the signal and determines which processes are interested in it.

It sends the signal message to these processes.

Each process receiving the signal decides what to do with it; if using a binding, the binding may choose to emit a native signal on a proxy object. If using the low-level API, the process may just look at the signal sender and name and decide what to do based on that.

[Introspection](#)

D-Bus objects may support the interface `org.freedesktop.DBus.Introspectable`.

This interface has one method `Introspect` which takes no arguments and returns an XML string. The XML string describes the interfaces, methods, and signals of the object.

See the D-Bus specification for more details on this introspection format.

[GLib API: Using Remote Objects](#)

GLib API: Using Remote Objects

The GLib binding is defined in the header file `<dbus/dbus-glib.h>`.

[D-Bus - GLib type mappings](#)

D-Bus - GLib type mappings

The heart of the GLib bindings for D-Bus is the mapping it provides between D-Bus "type signatures" and GLib types (`GType`). The D-Bus type system is composed of

a number of "basic" types, along with several "container" types.

[Basic type mappings](#)

Basic type mappings

Below is a list of the basic types, along with their associated mapping to a `GType`.

D-Bus basic type	GType	Free function	Notes
	<code>BYTE</code>		

<code>G_TYPE_UCHAR</code>			
<code>BOOLEAN</code>			
<code>G_TYPE_BOOLEAN</code>			
<code>INT16</code>			
<code>G_TYPE_INT</code>			Will be changed to a <code>G_TYPE_INT16</code> once GLib has it
<code>UINT16</code>			
<code>G_TYPE_UINT</code>			Will be changed to a <code>G_TYPE_UINT16</code> once GLib has it
<code>INT32</code>			
<code>G_TYPE_INT</code>			Will be changed to a <code>G_TYPE_INT32</code> once GLib has it
<code>UINT32</code>			
<code>G_TYPE_UINT</code>			Will be changed to a <code>G_TYPE_UINT32</code> once GLib has it
<code>INT64</code>			
<code>G_TYPE_GINT64</code>			
<code>UINT64</code>			
<code>G_TYPE_GUINT64</code>			
<code>DOUBLE</code>			
<code>G_TYPE_DOUBLE</code>			
<code>STRING</code>			
<code>G_TYPE_STRING</code>			
<code>g_free</code>			
<code>OBJECT_PATH</code>			
<code>DBUS_TYPE_G_PROXY</code>			
<code>g_object_unref</code>			The returned proxy does not have an interface set; use <code>dbus_g_proxy_set_interface</code> to invoke methods

As you can see, the basic mapping is fairly straightforward.

</p></div><div class="sect3" title="Container type mappings"><div class="titlepage"><div><div><h4 class="title">Container type mappings</h4></div></div></div><p>

The D-Bus type system also has a number of "container" types, such as `DBUS_TYPE_ARRAY` and `DBUS_TYPE_STRUCT`. The D-Bus type system

is fully recursive, so one can for example have an array of array of strings (i.e. type signature `aas`).

</p><p>

However, not all of these types are in common use; for example, at the time of this writing the author knows of no one using `DBUS_TYPE_STRUCT`, or a `DBUS_TYPE_ARRAY` containing any non-basic

type. The approach the GLib bindings take is pragmatic; try to map the most common types in the most obvious way, and let using less common and more complex types be less "natural".

</p><p>

First, D-Bus type signatures which have an "obvious" corresponding built-in GLib type are mapped using that type:

D-Bus type	Description	GType	C typedef	Free function	Notes
<code>as</code>	Array of strings	<code>G_TYPE_STRV</code>	<code>char **</code>	<code>g_strfreev</code>	
<code>v</code>	Generic value container	<code>G_TYPE_VALUE</code>	<code>GValue *</code>	<code>g_value_unset</code>	The calling conventions for values expect that method callers have allocated return values; see below.

The next most common recursive type signatures are arrays of basic values. The most obvious mapping for arrays of basic types is a `GArray`. Now, GLib does not

provide a builtin `GType` for `GArray`. However, we actually need more than that - we need a "parameterized" type which includes the contained type. Why we need this we will see below.

The approach taken is to create these types in the D-Bus GLib bindings; however, there is nothing D-Bus specific about them. In the future, we hope to include such "fundamental" types in GLib

itself.

D-Bus type	Description	GType	C typedef	Free function	Notes
<code>ay</code>	Array of bytes	<code>DBUS_TYPE_G_BYTE_ARRAY</code>	<code>GArray *</code>	<code>g_array_free</code>	
<code>au</code>	Array of uint	<code>DBUS_TYPE_G_UINT_ARRAY</code>	<code>GArray *</code>	<code>g_array_free</code>	
<code>ai</code>	Array of int	<code>DBUS_TYPE_G_INT_ARRAY</code>	<code>GArray *</code>	<code>g_array_free</code>	

```

class="literal">ax</code></td><td>Array of int64</td><td><code
class="literal">DBUS_TYPE_G_INT64_ARRAY</code></td><td><code
class="literal">GArray
*</code></td><td>g_array_free</td><td> </td></tr><tr><td><code
class="literal">at</code></td><td>Array of uint64</td><td><code
class="literal">DBUS_TYPE_G_UINT64_ARRAY</code></td><td><code
class="literal">GArray
*</code></td><td>g_array_free</td><td> </td></tr><tr><td><code
class="literal">ad</code></td><td>Array of double</td><td><code
class="literal">DBUS_TYPE_G_DOUBLE_ARRAY</code></td><td><code
class="literal">GArray
*</code></td><td>g_array_free</td><td> </td></tr><tr><td><code
class="literal">ab</code></td><td>Array of boolean</td><td><code
class="literal">DBUS_TYPE_G_BOOLEAN_ARRAY</code></td><td><code
class="literal">GArray
*</code></td><td>g_array_free</td><td> </td></tr></tbody></table></div
><p>

```

</p><p>

D-Bus also includes a special type `DBUS_TYPE_DICT_ENTRY` which is only valid in arrays. It's intended to be mapped to a "dictionary" type by bindings. The obvious GLib mapping here is `GHashTable`. Again, however, there is no builtin `GType` for a `GHashTable`. Moreover, just like for arrays, we need a parameterized type so that the bindings can communicate which types are contained in the hash table.

</p><p>

At present, only strings are supported. Work is in progress to include more types.

```

</p><div class="informaltable"><table
border="1"><colgroup><col><col><col><col><col><col></colgroup><thead><
tr><th>D-Bus type
signature</th><th>Description</th><th>GType</th><th>C
typedef</th><th>Free
function</th><th>Notes</th></tr></thead><tbody><tr><td><code
class="literal">a{ss}</code></td><td>Dictionary mapping strings to
strings</td><td><code
class="literal">DBUS_TYPE_G_STRING_STRING_HASHTABLE</code></td><td><co
de class="literal">GHashTable
*</code></td><td>g_hash_table_destroy</td><td> </td></tr></tbody></tab
le></div><p>

```

```

</p></div><div class="sect3" title="Arbitrarily recursive type
mappings"><div class="titlepage"><div><div><h4 class="title"><a
name="glib-generic-typemappings"></a>Arbitrarily recursive type
mappings</h4></div></div></div><p>

```

Finally, it is possible users will want to write or invoke D-Bus methods which have arbitrarily complex type signatures not directly supported by these bindings. For this case, we have a

`DBusGValue` which acts as a kind of special

variant value which may be iterated over manually. The

`GType` associated is

`DBUS_TYPE_G_VALUE`.

TODO insert usage of `DBUS_TYPE_G_VALUE` here.

`<div class="sect2" title="A sample program"><div class="titlepage"><div><div><h3 class="title">A sample program</h3></div></div></div><p>Here is a D-Bus program using the GLib bindings.`

`</p><pre class="programlisting">`

`int`

`main (int argc, char **argv)`

`{`

`DBusGConnection *connection;`

`GError *error;`

`DBusGProxy *proxy;`

`char **name_list;`

`char **name_list_ptr;`

`g_type_init ();`

`error = NULL;`

`connection = dbus_g_bus_get (DBUS_BUS_SESSION,
&error);`

`if (connection == NULL)`

`{`

`g_printerr ("Failed to open connection to bus: %s\n",
error->message);`

`g_error_free (error);`

`exit (1);`

`}`

`/* Create a proxy object for the "bus driver" (name
"org.freedesktop.DBus") */`

`proxy = dbus_g_proxy_new_for_name (connection,
DBUS_SERVICE_DBUS,
DBUS_PATH_DBUS,
DBUS_INTERFACE_DBUS);`

`/* Call ListNames method, wait for reply */`

`error = NULL;`

`if (!dbus_g_proxy_call (proxy, "ListNames", &error,
G_TYPE_INVALID,`

`G_TYPE_STRV, &name_list,`

`G_TYPE_INVALID))`

`{`

`/* Just do demonstrate remote exceptions versus regular GError`

`*/`

```

        if (error-&gt;domain == DBUS_GERROR && error-&gt;code ==
DBUS_GERROR_REMOTE_EXCEPTION)
            g_printerr ("Caught remote method exception %s: %s",
                        dbus_g_error_get_name (error),
                        error-&gt;message);
        else
            g_printerr ("Error: %s\n", error-&gt;message);
        g_error_free (error);
        exit (1);
    }

    /* Print the results */

    g_print ("Names on the message bus:\n");

    for (name_list_ptr = name_list; *name_list_ptr; name_list_ptr++)
        {
            g_print (" %s\n", *name_list_ptr);
        }
    g_strfreev (name_list);

    g_object_unref (proxy);

    return 0;
}

```

</pre><p>

</p></div><div class="sect2" title="Program initalization"><div class="titlepage"><div><div><h3 class="title">Program initalization</h3></div></div></div><p>

A connection to the bus is acquired using `dbus_g_bus_get`. Next, a proxy is created for the object `"/org/freedesktop/DBus"` with interface `org.freedesktop.DBus` on the service `org.freedesktop.DBus`. This is a proxy for the message bus itself.

</p></div><div class="sect2" title="Understanding method invocation"><div class="titlepage"><div><div><h3 class="title">Understanding method invocation</h3></div></div></div><p>

You have a number of choices for method invocation. First, as used above, `dbus_g_proxy_call` sends

a

method call to the remote object, and blocks until a reply is recieved. The outgoing arguments are specified in the varargs array, terminated with

class="literal">G_TYPE_INVALID</code>.

Next, pointers to return values are specified, followed again by `G_TYPE_INVALID`.

</p><p>

To invoke a method asynchronously, use

`dbus_g_proxy_begin_call`. This returns a

```

    <code class="literal">DBusGPendingCall</code> object; you may
then set a
    notification function using
    <code class="literal">dbus_g_pending_call_set_notify</code>.
    </p></div><div class="sect2" title="Connecting to object
signals"><div class="titlepage"><div><div><h3 class="title"><a
name="glib-signal-connection"></a>Connecting to object
signals</h3></div></div></div><p>
    You may connect to signals using
    <code class="literal">dbus_g_proxy_add_signal</code> and
    <code class="literal">dbus_g_proxy_connect_signal</code>. You
must
    invoke <code class="literal">dbus_g_proxy_add_signal</code> to
specify
    the signature of your signal handlers; you may then invoke
    <code class="literal">dbus_g_proxy_connect_signal</code> multiple
times.
    </p><p>
    Note that it will often be the case that there is no builtin
marshaller for the type signature of a remote signal. In that
case, you must generate a marshaller yourself by using
<span class="application">glib-genmarshal</span>, and then
register
    it using <code
class="literal">dbus_g_object_register_marshaller</code>.
    </p></div><div class="sect2" title="Error handling and remote
exceptions"><div class="titlepage"><div><div><h3 class="title"><a
name="glib-error-handling"></a>Error handling and remote
exceptions</h3></div></div></div><p>
    All of the GLib binding methods such as
    <code class="literal">dbus_g_proxy_end_call</code> return a
    <code class="literal">GError</code>. This <code
class="literal">GError</code> can
    represent two different things:
    </p><div class="itemizedlist"><ul class="itemizedlist"
type="disc"><li class="listitem"><p>
        An internal D-Bus error, such as an out-of-memory
        condition, an I/O error, or a network timeout. Errors
        generated by the D-Bus library itself have the domain
        <code class="literal">DBUS_GERROR</code>, and a corresponding
code
        such as <code class="literal">DBUS_GERROR_NO_MEMORY</code>.
It will
        not be typical for applications to handle these errors
        specifically.
    </p></li><li class="listitem"><p>
        A remote D-Bus exception, thrown by the peer, bus, or
        service. D-Bus remote exceptions have both a textual
        "name" and a "message". The GLib bindings store this
        information in the <code class="literal">GError</code>, but
some
        special rules apply.

```


</p><p>

The set error will have the domain

<code class="literal">DBUS_GERROR</code> as above, and will

also

have the code

<code class="literal">DBUS_GERROR_REMOTE_EXCEPTION</code>.

In order

to access the remote exception name, you must use a special accessor, such as

<code class="literal">dbus_g_error_has_name</code> or

<code class="literal">dbus_g_error_get_name</code>. The

remote

exception detailed message is accessible via the regular GError <code class="literal">message</code> member.

</p></div><p>

</p></div><div class="sect2" title="More examples of method invocation"><div class="titlepage"><div><div><h3 class="title">More examples of method invocation</h3></div></div></div><div class="sect3" title="Sending an integer and string, receiving an array of bytes"><div class="titlepage"><div><div><h4 class="title">Sending an integer and string, receiving an array of bytes</h4></div></div></div><p>

</p><pre class="programlisting">

```
GArray *arr;
```

```
error = NULL;
```

```
if (!dbus_g_proxy_call (proxy, "Foobar", &error,
                        G_TYPE_INT, 42, G_TYPE_STRING, "hello",
                        G_TYPE_INVALID,
                        DBUS_TYPE_G_UCHAR_ARRAY, &arr, G_TYPE_INVALID))
```

```
{
    /* Handle error */
}
```

```
g_assert (arr != NULL);
```

```
printf ("got back %u values", arr->len);
```

</pre><p>

</p></div><div class="sect3" title="Sending a GHashTable"><div class="titlepage"><div><div><h4 class="title">Sending a GHashTable</h4></div></div></div><p>

</p><pre class="programlisting">

```
GHashTable *hash = g_hash_table_new (g_str_hash, g_str_equal);
guint32 ret;
```

```
g_hash_table_insert (hash, "foo", "bar");
```

```
g_hash_table_insert (hash, "baz", "whee");
```

```
error = NULL;
```

```
if (!dbus_g_proxy_call (proxy, "HashSize", &error,
                        DBUS_TYPE_G_STRING_STRING_HASH, hash,
```

G_TYPE_INVALID,

```
                        G_TYPE_UINT, &ret, G_TYPE_INVALID))
```

```

    {
        /* Handle error */
    }
    g_assert (ret == 2);
    g_hash_table_destroy (hash);
</pre><p>
    </p></div><div class="sect3" title="Receiving a boolean and a
string"><div class="titlepage"><div><div><h4 class="title"><a
name="glib-receiving-bool-int"></a>Receiving a boolean and a
string</h4></div></div></div><p>
</p><pre class="programlisting">
    gboolean boolret;
    char *strret;

    error = NULL;
    if (!dbus_g_proxy_call (proxy, "GetStuff", &error,
                          G_TYPE_INVALID,
                          G_TYPE_BOOLEAN, &boolret,
                          G_TYPE_STRING, &strret,
                          G_TYPE_INVALID))
    {
        /* Handle error */
    }
    printf ("%s %s", boolret ? "TRUE" : "FALSE", strret);
    g_free (strret);
</pre><p>
    </p></div><div class="sect3" title="Sending two arrays of
strings"><div class="titlepage"><div><div><h4 class="title"><a
name="glib-sending-str-arrays"></a>Sending two arrays of
strings</h4></div></div></div><p>
</p><pre class="programlisting">
    /* NULL terminate */
    char *strs_static[] = {"foo", "bar", "baz", NULL};
    /* Take pointer to array; cannot pass array directly */
    char **strs_static_p = strs_static;
    char **strs_dynamic;

    strs_dynamic = g_new (char *, 4);
    strs_dynamic[0] = g_strdup ("hello");
    strs_dynamic[1] = g_strdup ("world");
    strs_dynamic[2] = g_strdup ("!");
    /* NULL terminate */
    strs_dynamic[3] = NULL;

    error = NULL;
    if (!dbus_g_proxy_call (proxy, "TwoStrArrays", &error,
                          G_TYPE_STRV, strs_static_p,
                          G_TYPE_STRV, strs_dynamic,
                          G_TYPE_INVALID,
                          G_TYPE_INVALID))
    {
        /* Handle error */
    }

```

```

    }
    g_strfreev (strs_dynamic);
</pre><p>
    </p></div><div class="sect3" title="Sending a boolean, receiving
an array of strings"><div class="titlepage"><div><div><h4
class="title"><a name="glib-getting-str-array"></a>Sending a boolean,
receiving an array of strings</h4></div></div></div><p>
</p><pre class="programlisting">
char **strs;
char **strs_p;
gboolean blah;

error = NULL;
blah = TRUE;
if (!dbus_g_proxy_call (proxy, "GetStrs", &error,
                        G_TYPE_BOOLEAN, blah,
                        G_TYPE_INVALID,
                        G_TYPE_STRV, &strs,
                        G_TYPE_INVALID))
{
    /* Handle error */
}
for (strs_p = strs; *strs_p; strs_p++)
    printf ("got string: \"%s\\\"", *strs_p);
g_strfreev (strs);
</pre><p>
    </p></div><div class="sect3" title="Sending a variant"><div
class="titlepage"><div><div><h4 class="title"><a name="glib-sending-
variant"></a>Sending a variant</h4></div></div></div><p>
</p><pre class="programlisting">
GValue val = {0, };

g_value_init (&val, G_TYPE_STRING);
g_value_set_string (&val, "hello world");

error = NULL;
if (!dbus_g_proxy_call (proxy, "SendVariant", &error,
                        G_TYPE_VALUE, &val, G_TYPE_INVALID,
                        G_TYPE_INVALID))
{
    /* Handle error */
}
g_assert (ret == 2);
g_value_unset (&val);
</pre><p>
    </p></div><div class="sect3" title="Receiving a variant"><div
class="titlepage"><div><div><h4 class="title"><a name="glib-receiving-
variant"></a>Receiving a variant</h4></div></div></div><p>
</p><pre class="programlisting">
GValue val = {0, };

error = NULL;

```

```

    if (!dbus_g_proxy_call (proxy, "GetVariant", &error,
G_TYPE_INVALID,
                                G_TYPE_VALUE, &val, G_TYPE_INVALID))
    {
        /* Handle error */
    }
    if (G_VALUE_TYPE (&val) == G_TYPE_STRING)
        printf ("%s\n", g_value_get_string (&val));
    else if (G_VALUE_TYPE (&val) == G_TYPE_INT)
        printf ("%d\n", g_value_get_int (&val));
    else
        ...
    g_value_unset (&val);

```

Generated Bindings

Generated Bindings

By using the Introspection XML files, convenient client-side bindings can be automatically created to ease the use of a remote Dbus object.

Here is a sample XML file which describes an object that exposes one method, named `ManyArgs`.

```

<?xml version="1.0" encoding="UTF-8" ?>
<node name="/com/example/MyObject">
  <interface name="com.example.MyObject">
    <method name="ManyArgs">
      <arg type="u" name="x" direction="in" />
      <arg type="s" name="str" direction="in" />
      <arg type="d" name="trouble" direction="in" />
      <arg type="d" name="d_ret" direction="out" />
      <arg type="s" name="str_ret" direction="out" />
    </method>
  </interface>
</node>

```

Run `dbus-binding-tool --mode=glib-client` `FILENAME` `HEADER_NAME` to generate the header

file. For example: `dbus-binding-tool --mode=glib-client my-object.xml > my-object-bindings.h`.

This will generate inline functions with the following prototypes:

```

/* This is a blocking call */

```

```

gboolean
com_example_MyObject_many_args (DBusGProxy *proxy, const guint IN_x,
                                const char * IN_str, const gdouble
IN_trouble,
                                gdouble* OUT_d_ret, char **
OUT_str_ret,
                                GError **error);

```

```

/* This is a non-blocking call */
DBusGProxyCall*
com_example_MyObject_many_args_async (DBusGProxy *proxy, const guint
IN_x,
                                const char * IN_str, const
gdouble IN_trouble,
com_example_MyObject_many_args_reply callback,
                                gpointer userdata);

```

```

/* This is the typedef for the non-blocking callback */
typedef void
(*com_example_MyObject_many_args_reply)
(DBusGProxy *proxy, gdouble OUT_d_ret, char * OUT_str_ret,
 GError *error, gpointer userdata);

```

The first argument in all functions is a `DBusGProxy` class="literal">DBusGProxy, which you should create with the usual `dbus_g_proxy_new_*` class="literal">dbus_g_proxy_new_ functions. Following that are the "in" arguments, and then either the "out" arguments and a `GError *` class="literal">GError * for the synchronous (blocking) function, or callback and user data arguments for the asynchronous (non-blocking) function. The callback in the asynchronous function passes the `DBusGProxy *` class="literal">DBusGProxy *, the returned "out" arguments, an `GError *` class="literal">GError * which is set if there was an error otherwise `NULL` class="literal">NULL, and the user data.

As with the server-side bindings support (see [the section called "GLib API: Implementing Objects"](#glib-server "GLib API: Implementing Objects")), the exact behaviour of the client-side bindings can be manipulated using "annotations". Currently the only annotation used by the client bindings is `org.freedesktop.DBus.GLib.NoReply` class="literal">org.freedesktop.DBus.GLib.NoReply, which sets the

flag indicating that the client isn't expecting a reply to the method call, so a reply shouldn't be sent. This is often used to speed up rapid method calls where there are no "out" arguments, and not knowing if the method succeeded is an acceptable compromise to half the traffic on the bus.

```
</p></div></div><div class="sect1" title="GLib API: Implementing Objects"><div class="titlepage"><div><div><h2 class="title" style="clear: both"><a name="glib-server"></a>GLib API: Implementing Objects</h2></div></div></div><p>
```

At the moment, to expose a GObject via D-Bus, you must write XML by hand which describes the methods exported by the object. In the future, this manual step will be obviated by the upcoming GLib introspection support.

```
</p><p>
```

Here is a sample XML file which describes an object that exposes one method, named `ManyArgs`.

```
</p><pre class="programlisting">
```

```
&lt;?xml version="1.0" encoding="UTF-8" ?&gt;
```

```
&lt;node name="/com/example/MyObject"&gt;
```

```
  &lt;interface name="com.example.MyObject"&gt;
```

```
    &lt;annotation name="org.freedesktop.DBus.GLib.CSymbol" value="my_object"/&gt;
```

```
    &lt;method name="ManyArgs"&gt;
```

```
      &lt;!-- This is optional, and in this case is redundant --&gt;
```

```
      &lt;annotation name="org.freedesktop.DBus.GLib.CSymbol" value="my_object_many_args"/&gt;
```

```
      &lt;arg type="u" name="x" direction="in" /&gt;
```

```
      &lt;arg type="s" name="str" direction="in" /&gt;
```

```
      &lt;arg type="d" name="trouble" direction="in" /&gt;
```

```
      &lt;arg type="d" name="d_ret" direction="out" /&gt;
```

```
      &lt;arg type="s" name="str_ret" direction="out" /&gt;
```

```
    &lt;/method>
```

```
  &lt;/interface>
```

```
&lt;/node>
```

```
</pre><p>
```

```
</p><p>
```

This XML is in the same format as the D-Bus introspection XML format. Except we must include an "annotation" which give the C symbols corresponding to the object implementation prefix (`my_object`). In addition, if

particular

methods symbol names deviate from C convention

(i.e. `ManyArgs` ->

`many_args`), you may specify an

annotation

giving the C symbol.

</p><p>

Once you have written this XML, run `dbus-binding-tool --mode=glib-server <em class="replaceable"><code>FILENAME</code> > <em class="replaceable"><code>HEADER_NAME</code>.</code> to generate a header file. For example: dbus-binding-tool --mode=glib-server my-object.xml > my-object-glue.h.`

</p><p>

Next, include the generated header in your program, and invoke `dbus_g_object_class_install_info` in the class initializer, passing the object class and "object info" included in the

header. For example:

```
dbus_g_object_type_install_info (COM_FOO_TYPE_MY_OBJECT,
&amp;com_foo_my_object_info);
```

This should be done exactly once per object class.

</p><p>

To actually implement the method, just define a C function named e.g.

`my_object_many_args` in the same file as the info

header is included. At the moment, it is required that this function

conform to the following rules:

- <p><div class="itemizedlist"><ul class="itemizedlist" type="disc"><li class="listitem"><p>

The function must return a value of type `gboolean`;

`TRUE` on success, and `FALSE`

otherwise.

- <p><li class="listitem"><p>

The first parameter is a pointer to an instance of the object.

- <p><li class="listitem"><p>

Following the object instance pointer are the method input values.

- <p><li class="listitem"><p>

Following the input values are pointers to return values.

- <p><li class="listitem"><p>

The final parameter must be a `GError**`.

If the function returns `FALSE` for an

error, the error parameter must be initialized with

`g_set_error`.

- <p><p>

</p><p>

Finally, you can export an object using `dbus_g_connection_register_g_object`. For example:

```
dbus_g_connection_register_g_object (connection,
                                     "/com/foo/MyObject",
                                     obj);
```

Server-side Annotations

Server-side Annotations

There are several annotations that are used when generating the

server-side bindings. The most common annotation is `org.freedesktop.DBus.GLib.CSymbol` but there are other annotations which are often useful.

`org.freedesktop.DBus.GLib.CSymbol`

This annotation is used to specify the C symbol names for the various types (interface, method, etc), if it differs from the name DBus generates.

`org.freedesktop.DBus.GLib.Async`

This annotation marks the method implementation as an asynchronous function, which doesn't return a response straight away but will send the response at some later point to complete the call. This is used to implement non-blocking services where method calls can take time.

When a method is asynchronous, the function prototype is different. It is required that the function conform to the following rules:

- The function must return a value of type `gboolean`; `TRUE` on success, and `FALSE` otherwise. TODO: the return value is currently ignored.

The first parameter is a pointer to an instance of the object.

Following the object instance pointer are the method input values.

The final parameter must be a `DBusGMethodInvocation`. This is used when sending the response message back to the client, by

calling `dbus_g_method_return` or `dbus_g_method_return_error`.

This attribute can only be applied to "out"

`&arg` nodes, and specifies that the parameter isn't being copied when returned. For example, this

turns a 's' argument from a `char **` to a `const char **`, and results in the argument not being freed by DBus after the message is sent.

This attribute can only be applied to "out" `&arg` nodes, and alters the expected

function signature. It currently can be set to two values: `""` or `"error"`. The

argument marked with this attribute is not returned via a pointer argument, but by the function's return value.

If the attribute's value is the empty string, the `GError` argument is also omitted so there is no standard way to return an error value. This is very useful for interfacing with existing code, as it is possible to match existing APIs.

If the attribute's value is `"error"`, then the final argument is a `GError *` as usual.

Some examples to demonstrate the usage. This introspection XML:

```
<pre class="programlisting">
<method name="Increment">
  <arg type="u" name="x" />
  <arg type="u" direction="out" />
</method>
```

Expects the following function declaration:

```
gboolean
my_object_increment (MyObject *obj, gint32 x, gint32 *ret, GError
**error);
```

```
</pre>
This introspection XML:
<pre class="programlisting">
<method name="IncrementRetVal">
  <arg type="u" name="x" />
  <arg type="u" direction="out" />
  <annotation name="org.freedesktop.DBus.GLib.ReturnVal"
value="" />
  </arg>
</method>
```

Expects the following function declaration:

```
</pre>
gint32
my_object_increment_retval (MyObject *obj, gint32 x)
```

```
</pre>
This introspection XML:
<pre class="programlisting">
<method name="IncrementRetValError">
  <arg type="u" name="x" />
  <arg type="u" direction="out" />
  <annotation name="org.freedesktop.DBus.GLib.ReturnVal"
value="error" />
  </arg>
</method>
```

Expects the following function declaration:

```
</pre>
gint32
my_object_increment_retval_error (MyObject *obj, gint32 x, GError
**error)
```

```
</pre>
```

```

        </p></dd></dl></div><p>
    </p></div></div><div class="sect1" title="Python API"><div
class="titlepage"><div><div><h2 class="title" style="clear: both"><a
name="python-client"></a>Python API</h2></div></div></div><p>
    The Python API, dbus-python, is now documented separately in
    <a class="ulink" href="http://dbus.freedesktop.org/doc/dbus-
python/doc/tutorial.html" target="_top">the dbus-python tutorial</a>
    (also available in doc/tutorial.txt,
    and doc/tutorial.html if built with python-docutils, in the
    dbus-python
    source distribution).
    </p></div><div class="sect1" title="Qt API: Using Remote
Objects"><div class="titlepage"><div><div><h2 class="title"
style="clear: both"><a name="qt-client"></a>Qt API: Using Remote
Objects</h2></div></div></div><p>

    The Qt bindings are not yet documented.

    </p></div><div class="sect1" title="Qt API: Implementing
Objects"><div class="titlepage"><div><div><h2 class="title"
style="clear: both"><a name="qt-server"></a>Qt API: Implementing
Objects</h2></div></div></div><p>
    The Qt bindings are not yet documented.
    </p></div></div></body></html>

```

File = dbus-tutorial.xml

```

<?xml version="1.0" standalone="no"?>
<!DOCTYPE article PUBLIC "-//OASIS//DTD DocBook XML V4.1.2//EN"
"http://www.oasis-open.org/docbook/xml/4.1.2/docbookx.dtd"
[
]>

<article id="index">
  <articleinfo>
    <title>D-Bus Tutorial</title>
    <releaseinfo>Version 0.5.0</releaseinfo>
    <date>20 August 2006</date>
    <authorgroup>
      <author>
        <firstname>Havoc</firstname>
        <surname>Pennington</surname>
        <affiliation>
          <orgname>Red Hat, Inc.</orgname>
          <address><email>hp@pobox.com</email></address>
        </affiliation>
      </author>
      <author>
        <firstname>David</firstname>
        <surname>Wheeler</surname>

```

```

    </author>
    <author>
    <firstname>John</firstname>
    <surname>Palmieri</surname>
    <affiliation>
        <orgname>Red Hat, Inc.</orgname>
        <address><email>johnp@redhat.com</email></address>
    </affiliation>
    </author>
    <author>
    <firstname>Colin</firstname>
    <surname>Walters</surname>
    <affiliation>
        <orgname>Red Hat, Inc.</orgname>
        <address><email>walters@redhat.com</email></address>
    </affiliation>
    </author>
</authorgroup>
</articleinfo>

<sect1 id="meta">
    <title>Tutorial Work In Progress</title>

    <para>
        This tutorial is not complete; it probably contains some useful
        information, but
        also has plenty of gaps. Right now, you'll also need to refer to
        the D-Bus specification,
        Doxygen reference documentation, and look at some examples of
        how other apps use D-Bus.
    </para>

    <para>
        Enhancing the tutorial is definitely encouraged - send your
        patches or suggestions to the
        mailing list. If you create a D-Bus binding, please add a
        section to the tutorial for your
        binding, if only a short section with a couple of examples.
    </para>

</sect1>

<sect1 id="whatis">
    <title>What is D-Bus?</title>
    <para>
        D-Bus is a system for <firstterm>interprocess
        communication</firstterm>
        (IPC). Architecturally, it has several layers:

        <itemizedlist>
            <listitem>
                <para>

```

A library, `libdbus`, that allows two applications to connect to each other and exchange messages.

A `message bus daemon` executable, built on `libdbus`, that multiple applications can connect to. The daemon can route messages from one application to zero or more other applications.

`Wrapper libraries` or `bindings` based on particular application frameworks. For example, `libdbus-glib` and `libdbus-qt`. There are also bindings to languages such as Python. These wrapper libraries are the API most people should use, as they simplify the details of D-Bus programming. `libdbus` is intended to be a low-level backend for the higher level bindings. Much of the `libdbus` API is only useful for binding implementation.

`libdbus` only supports one-to-one connections, just like a raw network socket. However, rather than sending byte streams over the connection, you send `messages`. Messages have a header identifying the kind of message, and a body containing a data payload. `libdbus` also abstracts the exact transport used (sockets vs. whatever else), and handles details such as authentication.

The message bus daemon forms the hub of a wheel. Each spoke of the wheel

is a one-to-one connection to an application using libdbus. An application sends a message to the bus daemon over its spoke, and the bus daemon forwards the message to other connected applications as appropriate. Think of the daemon as a router.

The first instance is a machine-global singleton, that is, a system daemon similar to sendmail or Apache. This instance has heavy security restrictions on what messages it will accept, and is used for systemwide communication. The other instances are created one per user login session. These instances allow applications in the user's session to communicate with one another.

The systemwide and per-user daemons are separate. Normal within-session IPC does not involve the systemwide message bus process and vice versa.

D-Bus applications

There are many, many technologies in the world that have "Inter-process communication" or "networking" in their stated purpose: [CORBA](http://www.omg.org), [DCE](http://www.opengroup.org/dce/), [DCOM](http://www.microsoft.com/com/), [DCOP](http://developer.kde.org/documentation/library/kdeqt/dcop.html), [XML-RPC](http://www.xmlrpc.com), [SOAP](http://www.w3.org/TR/SOAP/), [MBUS](http://www.mbus.org), [Internet Communications Engine \(ICE\)](http://www.zeroc.com/ice.html), and probably hundreds more. Each of these is tailored for particular kinds of application. D-Bus is designed for two specific cases:

-
-

desktop
a whole,
components

Communication between desktop applications in the same session; to allow integration of the desktop session as a whole, and address issues of process lifecycle (when do desktop components start and stop running).

</para>
</listitem>
<listitem>
<para>
operating system,
kernel

Communication between the desktop session and the where the operating system would typically include the and any system daemons or processes.

</para>
</listitem>
</itemizedlist>
</para>
<para>
desktops
solutions

For the within-desktop-session use case, the GNOME and KDE have significant previous experience with different IPC solutions such as CORBA and DCOP. D-Bus is built on that experience and carefully tailored to meet the needs of these desktop projects in particular. D-Bus may or may not be appropriate for other applications; the FAQ has some comparisons to other IPC systems.

</para>
<para>
the-OS case
project:

The problem solved by the systemwide or communication-with-the-OS case is explained well by the following text from the Linux Hotplug project:

<blockquote>
<para>
sort of
a network
appropriate places
be
identified:

A gap in current Linux support is that policies with any dynamic "interact with user" component aren't currently supported. For example, that's often needed the first time adapter or printer is connected, and to determine appropriate places to mount disk drives. It would seem that such actions could be supported for any case where a responsible human can be identified: single user workstations, or any system which is remotely administered.

</para>

<para>
This is a classic "remote sysadmin" problem, where in this
case hotplugging needs to deliver an event from one security
domain (operating system kernel, in this case) to another
(desktop for logged-in user, or remote sysadmin). Any effective
response must go the other way: the remote domain taking some action that
lets the kernel expose the desired device capabilities. (The action
can often be taken asynchronously, for example letting new hardware
be idle until a meeting finishes.) At this writing, Linux doesn't
have widely adopted solutions to such problems. However, the
new D-Bus work may begin to solve that problem.

</para>
</blockquote>
</para>
<para>

D-Bus may happen to be useful for purposes other than the one
it was designed for. Its general properties that distinguish it from
other forms of IPC are:

- <itemizedlist>
 - <listitem>
 - <para>
Binary protocol designed to be used asynchronously
(similar in spirit to the X Window System protocol).
 - </para>
 - </listitem>
 - <listitem>
 - <para>
Stateful, reliable connections held open over time.
 - </para>
 - </listitem>
 - <listitem>
 - <para>
The message bus is a daemon, not a "swarm" or
distributed architecture.
 - </para>
 - </listitem>
 - <listitem>
 - <para>
Many implementation and deployment issues are specified
 - </listitem>

rather than left ambiguous/configurable/pluggable.


```

        </para>
    </listitem>
    <listitem>
        <para>
            Semantics are similar to the existing DCOP system,
allowing
            KDE to adopt it more easily.
        </para>
    </listitem>
    <listitem>
        <para>
            Security features to support the systemwide mode of the
            message bus.
        </para>
    </listitem>
</itemizedlist>
</para>
</sect2>
</sect1>
<sect1 id="concepts">
    <title>Concepts</title>
    <para>
        Some basic concepts apply no matter what application framework
you're
        using to write a D-Bus application. The exact code you write
will be
        different for GLib vs. Qt vs. Python applications, however.
    </para>

    <para>
        Here is a diagram (<ulink url="diagram.png">png</ulink> <ulink
        url="diagram.svg">svg</ulink>) that may help you visualize the
concepts
        that follow.
    </para>

    <sect2 id="objects">
        <title>Native Objects and Object Paths</title>
        <para>
            Your programming framework probably defines what an "object"
is like;
            usually with a base class. For example: java.lang.Object,
GObject, QObject,
            python's base Object, or whatever. Let's call this a
<firstterm>native object</firstterm>.
        </para>
        <para>
            The low-level D-Bus protocol, and corresponding libdbus API,
does not care about native objects.
            However, it provides a concept called an
            <firstterm>object path</firstterm>. The idea of an object path
is that

```

higher-level bindings can name native object instances, and allow remote applications to refer to them.

</para>

<para>

The object path looks like a filesystem path, for example an object could be named <literal>/org/kde/kspread/sheets/3/cells/4/5</literal>. Human-readable paths are nice, but you are free to create an object named

<literal>/com/mycompany/c5yo817y0c1y1c5b</literal>

if it makes sense for your application.

</para>

<para>

Namespacing object paths is smart, by starting them with the components

of a domain name you own (e.g. <literal>/org/kde</literal>).

This

keeps different code modules in the same process from stepping on one another's toes.

</para>

</sect2>

<sect2 id="members">

<title>Methods and Signals</title>

<para>

Each object has <firstterm>members</firstterm>; the two kinds of member

are <firstterm>methods</firstterm> and

<firstterm>signals</firstterm>. Methods are operations that can be

invoked on an object, with optional input (aka arguments or "in

parameters") and output (aka return values or "out parameters").

Signals are broadcasts from the object to any interested observers

of the object; signals may contain a data payload.

</para>

<para>

Both methods and signals are referred to by name, such as "Frobate" or "OnClicked".

</para>

</sect2>

<sect2 id="interfaces">

<title>Interfaces</title>

<para>

Each object supports one or more
<firstterm>interfaces</firstterm>.

Think of an interface as a named group of methods and signals, just as it is in GLib or Qt or Java. Interfaces define the <emphasis>type</emphasis> of an object instance.

</para>

<para>

DBus identifies interfaces with a simple namespaced string, something like

<literal>org.freedesktop.Introspectable</literal>.

Most bindings will map these interface names directly to the appropriate programming language construct, for example to Java interfaces or C++ pure virtual classes.

</para>

</sect2>

<sect2 id="proxies">

<title>Proxies</title>

<para>

A <firstterm>proxy object</firstterm> is a convenient native object created to

represent a remote object in another process. The low-level DBus API involves manually creating

a method call message, sending it, then manually receiving and processing

the method reply message. Higher-level bindings provide proxies as an alternative.

Proxies look like a normal native object; but when you invoke a method on the proxy

object, the binding converts it into a DBus method call message, waits for the reply

message, unpacks the return value, and returns it from the native method..

</para>

<para>

In pseudocode, programming without proxies might look like this:

<programlisting>

```
Message message = new Message("/remote/object/path",  
"MethodName", arg1, arg2);
```

```
Connection connection = getBusConnection();
```

```
connection.send(message);
```

```
Message reply = connection.waitForReply(message);
```

```
if (reply.isError()) {
```

```
    } else {
```

```
        Object returnValue = reply.getReturnValue();
```

```
    }
```

</programlisting>

</para>

<para>

Programming with proxies might look like this:

```
    <programlisting>
        Proxy proxy = new Proxy(getBusConnection(),
"/remote/object/path");
        Object returnValue = proxy.MethodName(arg1, arg2);
    </programlisting>
</para>
</sect2>
```

```
<sect2 id="bus-names">
  <title>Bus Names</title>
```

```
  <para>
    When each application connects to the bus daemon, the daemon
immediately
    assigns it a name, called the <firstterm>unique connection
name</firstterm>.
    A unique name begins with a ':' (colon) character. These names
are never
    reused during the lifetime of the bus daemon - that is, you
know
    a given name will always refer to the same application.
    An example of a unique name might be
    <literal>:34-907</literal>. The numbers after the colon have
no meaning other than their uniqueness.
  </para>
```

```
  <para>
    When a name is mapped
    to a particular application's connection, that application is
said to
    <firstterm>own</firstterm> that name.
  </para>
```

```
  <para>
    Applications may ask to own additional <firstterm>well-known
names</firstterm>. For example, you could write a
specification to
    define a name called
<literal>com.mycompany.TextEditor</literal>.
    Your definition could specify that to own this name, an
application
    should have an object at the path
    <literal>/com/mycompany/TextFileManager</literal> supporting
the
    interface <literal>org.freedesktop.FileHandler</literal>.
  </para>
```

```
  <para>
    Applications could then send messages to this bus name,
object, and interface to execute method calls.
  </para>
```

```
<para>
  You could think of the unique names as IP addresses, and the
  well-known names as domain names. So
  <literal>com.mycompany.TextEditor</literal> might map to
something like
  <literal>:34-907</literal> just as
<literal>mycompany.com</literal> maps
  to something like <literal>192.168.0.5</literal>.
</para>
```

```
<para>
  Names have a second important use, other than routing
messages. They
  are used to track lifecycle. When an application exits (or
crashes), its
  connection to the message bus will be closed by the operating
system
  kernel. The message bus then sends out notification messages
telling
  remaining applications that the application's names have lost
their
  owner. By tracking these notifications, your application can
reliably
  monitor the lifetime of other applications.
</para>
```

```
<para>
  Bus names can also be used to coordinate single-instance
applications.
  If you want to be sure only one
  <literal>com.mycompany.TextEditor</literal> application is
running for
  example, have the text editor application exit if the bus name
already
  has an owner.
</para>
```

```
</sect2>
```

```
<sect2 id="addresses">
  <title>Addresses</title>
```

```
<para>
  Applications using D-Bus are either servers or clients. A
server
  listens for incoming connections; a client connects to a
server. Once
  the connection is established, it is a symmetric flow of
messages; the
  client-server distinction only matters when setting up the
connection.
</para>
```

`<para>`
If you're using the bus daemon, as you probably are, your application will be a client of the bus daemon. That is, the bus daemon listens for connections and your application initiates a connection to the bus daemon.
`</para>`

`<para>`
A D-Bus `<firstterm>address</firstterm>` specifies where a server will listen, and where a client will connect. For example, the address `<literal>unix:path=/tmp/abcdef</literal>` specifies that the server will listen on a UNIX domain socket at the path `<literal>/tmp/abcdef</literal>` and the client will connect to that socket. An address can also specify TCP/IP sockets, or any other transport defined in future iterations of the D-Bus specification.
`</para>`

`<para>`
When using D-Bus with a message bus daemon, `libdbus` automatically discovers the address of the per-session bus daemon by reading an environment variable. It discovers the systemwide bus daemon by checking a well-known UNIX domain socket path (though you can override this address with an environment variable).
`</para>`

`<para>`
If you're using D-Bus without a bus daemon, it's up to you to define which application will be the server and which will be the client, and specify a mechanism for them to agree on the server's address. This is an unusual case.
`</para>`

`</sect2>`

`<sect2 id="bigpicture">`
`<title>Big Conceptual Picture</title>`

`<para>`
Pulling all these concepts together, to specify a particular

method call on a particular object instance, a number of nested components have to be named:

```
<programlisting>
```

```
    Address -&gt; [Bus Name] -&gt; Path -&gt; Interface -&gt;
```

Method

```
</programlisting>
```

The bus name is in brackets to indicate that it's optional -- you only

provide a name to route the method call to the right application

when using the bus daemon. If you have a direct connection to another

application, bus names aren't used; there's no bus daemon.

```
</para>
```

```
<para>
```

The interface is also optional, primarily for historical reasons; DCOP does not require specifying the interface, instead simply forbidding duplicate method names on the same object instance. D-Bus will thus let you omit the interface, but if your method name is ambiguous it is undefined which method will be invoked.

```
</para>
```

```
</sect2>
```

```
<sect2 id="messages">
```

```
<title>Messages - Behind the Scenes</title>
```

```
<para>
```

D-Bus works by sending messages between processes. If you're using

a sufficiently high-level binding, you may never work with messages directly.

```
</para>
```

```
<para>
```

There are 4 message types:

```
<itemizedlist>
```

```
<listitem>
```

```
<para>
```

Method call messages ask to invoke a method on an object.

```
</para>
```

```
</listitem>
```

```
<listitem>
```

```
<para>
```

Method return messages return the results of invoking a method.

```
</para>
```

```
</listitem>
```

```
<listitem>
```

```
<para>
```

Error messages return an exception caused by

```

        invoking a method.
    </para>
</listitem>
<listitem>
    <para>
        Signal messages are notifications that a given signal
        has been emitted (that an event has occurred).
        You could also think of these as "event" messages.
    </para>
</listitem>
</itemizedlist>
</para>
<para>
    A method call maps very simply to messages: you send a method
call
    message, and receive either a method return message or an
error message
    in reply.
</para>
<para>
    Each message has a <firstterm>header</firstterm>, including
<firstterm>fields</firstterm>,
    and a <firstterm>body</firstterm>, including
<firstterm>arguments</firstterm>. You can think
    of the header as the routing information for the message, and
the body as the payload.
    Header fields might include the sender bus name, destination
bus name, method or signal name,
    and so forth. One of the header fields is a <firstterm>type
signature</firstterm> describing the
    values found in the body. For example, the letter "i" means
"32-bit integer" so the signature
    "ii" means the payload has two 32-bit integers.
</para>
</sect2>

<sect2 id="callprocedure">
    <title>Calling a Method - Behind the Scenes</title>

    <para>
        A method call in Dbus consists of two messages; a method call
message sent from process A to process B,
        and a matching method reply message sent from process B to
process A. Both the call and the reply messages
        are routed through the bus daemon. The caller includes a
different serial number in each call message, and the
        reply message includes this number to allow the caller to
match replies to calls.
    </para>

    <para>
        The call message will contain any arguments to the method.

```


The reply message may indicate an error, or may contain data returned by the method.

</para>

<para>

A method invocation in DBus happens as follows:

<itemizedlist>

<listitem>

<para>

The language binding may provide a proxy, such that invoking a method on an in-process object invokes a method on a remote object in another process. If so, the application calls a method on the proxy, and the proxy constructs a method call message to send to the remote process.

</para>

</listitem>

<listitem>

<para>

For more low-level APIs, the application may construct a method call message itself, without using a proxy.

</para>

</listitem>

<listitem>

<para>

In either case, the method call message contains: a bus name belonging to the remote process; the name of the method; the arguments to the method; an object path inside the remote process; and optionally the name of the interface that specifies the method.

</para>

</listitem>

<listitem>

<para>

The method call message is sent to the bus daemon.

</para>

</listitem>

<listitem>

<para>

The bus daemon looks at the destination bus name. If a process owns that name, the bus daemon forwards the method call to that process. Otherwise, the bus daemon creates an error message and sends it back as the reply to the method call message.

</para>

</listitem>

<listitem>

<para>

The receiving process unpacks the method call message. In a simple low-level API situation, it may immediately run the method and send a method reply message to the bus daemon.

When using a high-level binding API, the binding might examine the object path, interface, and method name, and convert the method call message into an invocation of a method on a native object (GObject, java.lang.Object, QObject, etc.), then convert the return value from the native method into a method reply message.

```
</para>
</listitem>
<listitem>
```

The bus daemon receives the method reply message and sends it to the process that made the method call.

```
</para>
</listitem>
<listitem>
```

The process that made the method call looks at the method reply and makes use of any return values included in the reply. The reply may also indicate that an error occurred.

When using a binding, the method reply message may be converted into the return value of a proxy method, or into an exception.

```
</para>
</listitem>
</itemizedlist>
</para>
```

The bus daemon never reorders messages. That is, if you send two method call messages to the same recipient, they will be received in the order they were sent. The recipient is not required to reply to the calls in order, however; for example, it may process each method call in a separate thread, and return reply messages in an undefined order depending on when the threads complete. Method calls have a unique serial number used by the method caller to match reply messages to call messages.

```
</para>
```

```
</sect2>
```

```
<sect2 id="signalprocedure">
```

```
<title>Emitting a Signal - Behind the Scenes</title>
```

<para>

A signal in Dbus consists of a single message, sent by one process to any number of other processes.

That is, a signal is a unidirectional broadcast. The signal may contain arguments (a data payload), but

because it is a broadcast, it never has a "return value."

Contrast this with a method call

(see <xref linkend="callprocedure"/>) where the method call message has a matching method reply message.

</para>

<para>

The emitter (aka sender) of a signal has no knowledge of the signal recipients. Recipients register

with the bus daemon to receive signals based on "match rules"

- these rules would typically include the sender and

the signal name. The bus daemon sends each signal only to recipients who have expressed interest in that signal.

</para>

<para>

A signal in Dbus happens as follows:

<itemizedlist>

<listitem>

<para>

A signal message is created and sent to the bus daemon. When using the low-level API this may be

done manually, with certain bindings it may be done for you by the binding when a native object

emits a native signal or event.

</para>

</listitem>

<listitem>

<para>

The signal message contains the name of the interface that specifies the signal;

the name of the signal; the bus name of the process sending the signal; and

any arguments

</para>

</listitem>

<listitem>

<para>

Any process on the message bus can register "match rules" indicating which signals it

is interested in. The bus has a list of registered match rules.

</para>

</listitem>

</listitem>

```

    <para>
        The bus daemon examines the signal and determines which
processes are interested in it.
        It sends the signal message to these processes.
    </para>
</listitem>
<listitem>
    <para>
        Each process receiving the signal decides what to do
with it; if using a binding,
        the binding may choose to emit a native signal on a
proxy object. If using the
        low-level API, the process may just look at the signal
sender and name and decide
        what to do based on that.
    </para>
</listitem>
</itemizedlist>
</para>

```

```
</sect2>
```

```
<sect2 id="introspection">
  <title>Introspection</title>
```

```

    <para>
        D-Bus objects may support the interface
<literal>org.freedesktop.DBus.Introspectable</literal>.
        This interface has one method <literal>Introspect</literal>
which takes no arguments and returns
        an XML string. The XML string describes the interfaces,
methods, and signals of the object.
        See the D-Bus specification for more details on this
introspection format.
    </para>

```

```
</sect2>
```

```
</sect1>
```

```
<sect1 id="glib-client">
  <title>GLib API: Using Remote Objects</title>
```

```

    <para>
        The GLib binding is defined in the header file
<literal>&lt;dbus/dbus-glib.h&gt;</literal>.
    </para>

```

```
<sect2 id="glib-typemappings">
  <title>D-Bus - GLib type mappings</title>
```

```

    <para>
        The heart of the GLib bindings for D-Bus is the mapping it

```

provides between D-Bus "type signatures" and GLib types (<literal>GType</literal>). The D-Bus type system is composed of a number of "basic" types, along with several "container" types.

</para>
<sect3 id="glib-basic-typemappings">
<title>Basic type mappings</title>

<para>
Below is a list of the basic types, along with their associated mapping to a <literal>GType</literal>.

<informaltable>
<tgroup cols="4">
<thead>
<row>
<entry>D-Bus basic type</entry>
<entry>GType</entry>
<entry>Free function</entry>
<entry>Notes</entry>
</row>
</thead>
<tbody>
<row>
<entry><literal>BYTE</literal></entry>
<entry><literal>G_TYPE_UCHAR</literal></entry>
<entry></entry>
<entry></entry>
</row><row>
<entry><literal>BOOLEAN</literal></entry>
<entry><literal>G_TYPE_BOOLEAN</literal></entry>
<entry></entry>
<entry></entry>
</row><row>
<entry><literal>INT16</literal></entry>
<entry><literal>G_TYPE_INT</literal></entry>
<entry></entry>
<entry>Will be changed to a
<literal>G_TYPE_INT16</literal> once GLib has it</entry>
</row><row>
<entry><literal>UINT16</literal></entry>
<entry><literal>G_TYPE_UINT</literal></entry>
<entry></entry>
<entry>Will be changed to a
<literal>G_TYPE_UINT16</literal> once GLib has it</entry>
</row><row>
<entry><literal>INT32</literal></entry>
<entry><literal>G_TYPE_INT</literal></entry>
<entry></entry>
<entry>Will be changed to a
<literal>G_TYPE_INT32</literal> once GLib has it</entry>
</row><row>
<entry><literal>UINT32</literal></entry>
<entry><literal>G_TYPE_UINT</literal></entry>
<entry></entry>

<entry>Will be changed to a <literal>G_TYPE_UINT32</literal> once GLib has it</entry>
</row><row>
<entry><literal>INT64</literal></entry>
<entry><literal>G_TYPE_GINT64</literal></entry>
<entry></entry>
<entry></entry>
</row><row>
<entry><literal>UINT64</literal></entry>
<entry><literal>G_TYPE_GUINT64</literal></entry>
<entry></entry>
<entry></entry>
</row><row>
<entry><literal>DOUBLE</literal></entry>
<entry><literal>G_TYPE_DOUBLE</literal></entry>
<entry></entry>
<entry></entry>
</row><row>
<entry><literal>STRING</literal></entry>
<entry><literal>G_TYPE_STRING</literal></entry>
<entry><literal>g_free</literal></entry>
<entry></entry>
</row><row>
<entry><literal>OBJECT_PATH</literal></entry>
<entry><literal>DBUS_TYPE_G_PROXY</literal></entry>
<entry><literal>g_object_unref</literal></entry>
<entry>The returned proxy does not have an interface set; use <literal>dbus_g_proxy_set_interface</literal> to invoke methods</entry>
</row>
</tbody>
</tgroup>
</informaltable>

As you can see, the basic mapping is fairly straightforward.

</para>

</sect3>

<sect3 id="glib-container-typemappings">

<title>Container type mappings</title>

<para>

The D-Bus type system also has a number of "container" types, such as <literal>DBUS_TYPE_ARRAY</literal> and <literal>DBUS_TYPE_STRUCT</literal>. The D-Bus type system is fully recursive, so one can for example have an array of array of strings (i.e. type signature <literal>aas</literal>).

</para>

<para>

However, not all of these types are in common use; for example, at the time of this writing the author knows of no one using <literal>DBUS_TYPE_STRUCT</literal>, or a <literal>DBUS_TYPE_ARRAY</literal> containing any non-basic type. The approach the GLib bindings take is pragmatic; try

to map the most common types in the most obvious way, and let using less common and more complex types be less "natural".

</para>

<para>

First, D-Bus type signatures which have an "obvious" corresponding built-in GLib type are mapped using that type:

<informaltable>

<tgroup cols="6">

<thead>

<row>

<entry>D-Bus type signature</entry>

<entry>Description</entry>

<entry>GType</entry>

<entry>C typedef</entry>

<entry>Free function</entry>

<entry>Notes</entry>

</row>

</thead>

<tbody>

<row>

<entry><literal>as</literal></entry>

<entry>Array of strings</entry>

<entry><literal>G_TYPE_STRV</literal></entry>

<entry><literal>char **</literal></entry>

<entry><literal>g_strfreev</literal></entry>

<entry></entry>

</row><row>

<entry><literal>v</literal></entry>

<entry>Generic value container</entry>

<entry><literal>G_TYPE_VALUE</literal></entry>

<entry><literal>GValue *</literal></entry>

<entry><literal>g_value_unset</literal></entry>

<entry>The calling conventions for values expect that

method callers have allocated return values; see below.</entry>

</row>

</tbody>

</tgroup>

</informaltable>

</para>

<para>

The next most common recursive type signatures are arrays of basic values. The most obvious mapping for arrays of basic types is a <literal>GArray</literal>. Now, GLib does not provide a builtin <literal>GType</literal> for <literal>GArray</literal>. However, we actually need more than that - we need a "parameterized" type which includes the contained type. Why we need this we will see below.

</para>

<para>

The approach taken is to create these types in the D-Bus GLib bindings; however, there is nothing D-Bus specific about them.

GLib

In the future, we hope to include such "fundamental" types in itself.

```
<informaltable>
  <tgroup cols="6">
    <thead>
      <row>
        <entry>D-Bus type signature</entry>
        <entry>Description</entry>
        <entry>GType</entry>
        <entry>C typedef</entry>
        <entry>Free function</entry>
        <entry>Notes</entry>
      </row>
    </thead>
    <tbody>
      <row>
        <entry><literal>ay</literal></entry>
        <entry>Array of bytes</entry>
        <entry><literal>DBUS_TYPE_G_BYTE_ARRAY</literal></entry>
        <entry><literal>GArray *</literal></entry>
        <entry>g_array_free</entry>
        <entry></entry>
      </row>
      <row>
        <entry><literal>au</literal></entry>
        <entry>Array of uint</entry>
        <entry><literal>DBUS_TYPE_G_UINT_ARRAY</literal></entry>
        <entry><literal>GArray *</literal></entry>
        <entry>g_array_free</entry>
        <entry></entry>
      </row>
      <row>
        <entry><literal>ai</literal></entry>
        <entry>Array of int</entry>
        <entry><literal>DBUS_TYPE_G_INT_ARRAY</literal></entry>
        <entry><literal>GArray *</literal></entry>
        <entry>g_array_free</entry>
        <entry></entry>
      </row>
      <row>
        <entry><literal>ax</literal></entry>
        <entry>Array of int64</entry>
        <entry><literal>DBUS_TYPE_G_INT64_ARRAY</literal></entry>
        <entry><literal>GArray *</literal></entry>
        <entry>g_array_free</entry>
        <entry></entry>
      </row>
      <row>
        <entry><literal>at</literal></entry>
        <entry>Array of uint64</entry>

```



```

<entry><literal>DBUS_TYPE_G_UINT64_ARRAY</literal></entry>
  <entry><literal>GArray *</literal></entry>
  <entry>g_array_free</entry>
  <entry></entry>
</row>
<row>
  <entry><literal>ad</literal></entry>
  <entry>Array of double</entry>

```

```

<entry><literal>DBUS_TYPE_G_DOUBLE_ARRAY</literal></entry>
  <entry><literal>GArray *</literal></entry>
  <entry>g_array_free</entry>
  <entry></entry>
</row>
<row>
  <entry><literal>ab</literal></entry>
  <entry>Array of boolean</entry>

```

```

<entry><literal>DBUS_TYPE_G_BOOLEAN_ARRAY</literal></entry>
  <entry><literal>GArray *</literal></entry>
  <entry>g_array_free</entry>
  <entry></entry>
</row>
</tbody>
</tgroup>
</informaltable>

```

</para>

<para>

D-Bus also includes a special type `DBUS_TYPE_DICT_ENTRY` which is only valid in arrays. It's intended to be mapped to a "dictionary" type by bindings. The obvious GLib mapping here is `GHashTable`.

Again,

however, there is no builtin `GType` for a `GHashTable`.

Moreover, just like for arrays, we need a parameterized type so that

the bindings can communicate which types are contained in the hash table.

</para>

<para>

At present, only strings are supported. Work is in progress to include more types.

<informaltable>

<tgroup cols="6">

<thead>

<row>

<entry>D-Bus type signature</entry>

<entry>Description</entry>

<entry>GType</entry>

<entry>C typedef</entry>

```

        <entry>Free function</entry>
        <entry>Notes</entry>
    </row>
</thead>
<tbody>
<row>
    <entry><literal>a{ss}</literal></entry>
    <entry>Dictionary mapping strings to strings</entry>
</row>
<entry><literal>DBUS_TYPE_G_STRING_STRING_HASHTABLE</literal></entry>
    <entry><literal>GHashTable *</literal></entry>
    <entry>g_hash_table_destroy</entry>
    <entry></entry>
</row>
</tbody>
</tgroup>
</informaltable>
</para>
</sect3>
<sect3 id="glib-generic-typemappings">
<title>Arbitrarily recursive type mappings</title>
<para>
    Finally, it is possible users will want to write or invoke D-
Bus
    methods which have arbitrarily complex type signatures not
    directly supported by these bindings. For this case, we have a
    <literal>DBusGValue</literal> which acts as a kind of special
    variant value which may be iterated over manually. The
    <literal>GType</literal> associated is
    <literal>DBUS_TYPE_G_VALUE</literal>.
</para>
<para>
    TODO insert usage of <literal>DBUS_TYPE_G_VALUE</literal> here.
</para>
</sect3>
</sect2>
<sect2 id="sample-program-1">
    <title>A sample program</title>
    <para>Here is a D-Bus program using the GLib bindings.
</para>
<programlisting>
int
main (int argc, char **argv)
{
    DBusGConnection *connection;
    GError *error;
    DBusGProxy *proxy;
    char **name_list;
    char **name_list_ptr;

    g_type_init ();

    error = NULL;

```

```

connection = dbus_g_bus_get (DBUS_BUS_SESSION,
                             &error);
if (connection == NULL)
{
    g_printerr ("Failed to open connection to bus: %s\n",
                error->message);
    g_error_free (error);
    exit (1);
}

/* Create a proxy object for the "bus driver" (name
"org.freedesktop.DBus") */

proxy = dbus_g_proxy_new_for_name (connection,
                                    DBUS_SERVICE_DBUS,
                                    DBUS_PATH_DBUS,
                                    DBUS_INTERFACE_DBUS);

/* Call ListNames method, wait for reply */
error = NULL;
if (!dbus_g_proxy_call (proxy, "ListNames", &error,
G_TYPE_INVALID,
                        G_TYPE_STRV, &name_list,
G_TYPE_INVALID))
{
    /* Just do demonstrate remote exceptions versus regular GError
*/
    if (error->domain == DBUS_GERROR && error->code ==
DBUS_GERROR_REMOTE_EXCEPTION)
        g_printerr ("Caught remote method exception %s: %s",
                    dbus_g_error_get_name (error),
                    error->message);
    else
        g_printerr ("Error: %s\n", error->message);
    g_error_free (error);
    exit (1);
}

/* Print the results */

g_print ("Names on the message bus:\n");

for (name_list_ptr = name_list; *name_list_ptr; name_list_ptr++)
{
    g_print (" %s\n", *name_list_ptr);
}
g_strfreev (name_list);

g_object_unref (proxy);

return 0;
}

```

```
</programlisting>
</para>
</sect2>
<sect2 id="glib-program-setup">
  <title>Program initialization</title>
  <para>
    A connection to the bus is acquired using
    <literal>dbus_g_bus_get</literal>. Next, a proxy
    is created for the object "/org/freedesktop/DBus" with
    interface <literal>org.freedesktop.DBus</literal>
    on the service <literal>org.freedesktop.DBus</literal>.
    This is a proxy for the message bus itself.
  </para>
</sect2>
<sect2 id="glib-method-invocation">
  <title>Understanding method invocation</title>
  <para>
    You have a number of choices for method invocation. First, as
    used above, <literal>dbus_g_proxy_call</literal> sends a
    method call to the remote object, and blocks until a reply is
    recieved. The outgoing arguments are specified in the varargs
    array, terminated with <literal>G_TYPE_INVALID</literal>.
    Next, pointers to return values are specified, followed again
    by <literal>G_TYPE_INVALID</literal>.
  </para>
  <para>
    To invoke a method asynchronously, use
    <literal>dbus_g_proxy_begin_call</literal>. This returns a
    <literal>DBusGPendingCall</literal> object; you may then set a
    notification function using
    <literal>dbus_g_pending_call_set_notify</literal>.
  </para>
</sect2>
<sect2 id="glib-signal-connection">
  <title>Connecting to object signals</title>
  <para>
    You may connect to signals using
    <literal>dbus_g_proxy_add_signal</literal> and
    <literal>dbus_g_proxy_connect_signal</literal>. You must
    invoke <literal>dbus_g_proxy_add_signal</literal> to specify
    the signature of your signal handlers; you may then invoke
    <literal>dbus_g_proxy_connect_signal</literal> multiple times.
  </para>
  <para>
    Note that it will often be the case that there is no builtin
    marshaller for the type signature of a remote signal. In that
    case, you must generate a marshaller yourself by using
    <application>glib-genmarshal</application>, and then register
    it using <literal>dbus_g_object_register_marshaller</literal>.
  </para>
</sect2>
<sect2 id="glib-error-handling">
```

```

<title>Error handling and remote exceptions</title>
<para>
All of the GLib binding methods such as
<literal>dbus_g_proxy_end_call</literal> return a
<literal>GError</literal>. This <literal>GError</literal> can
represent two different things:
<itemizedlist>
<listitem>
<para>
An internal D-Bus error, such as an out-of-memory
condition, an I/O error, or a network timeout. Errors
generated by the D-Bus library itself have the domain
<literal>DBUS_GERROR</literal>, and a corresponding code
such as <literal>DBUS_GERROR_NO_MEMORY</literal>. It will
not be typical for applications to handle these errors
specifically.
</para>
</listitem>
<listitem>
<para>
A remote D-Bus exception, thrown by the peer, bus, or
service. D-Bus remote exceptions have both a textual
"name" and a "message". The GLib bindings store this
information in the <literal>GError</literal>, but some
special rules apply.
</para>
<para>
The set error will have the domain
<literal>DBUS_GERROR</literal> as above, and will also
have the code
<literal>DBUS_GERROR_REMOTE_EXCEPTION</literal>. In order
to access the remote exception name, you must use a
special accessor, such as
<literal>dbus_g_error_has_name</literal> or
<literal>dbus_g_error_get_name</literal>. The remote
exception detailed message is accessible via the regular
GError <literal>message</literal> member.
</para>
</listitem>
</itemizedlist>
</para>
</sect2>
<sect2 id="glib-more-examples">
<title>More examples of method invocation</title>
<sect3 id="glib-sending-stuff">
<title>Sending an integer and string, receiving an array of
bytes</title>
<para>
<programlisting>
GArray *arr;

error = NULL;

```

```

if (!dbus_g_proxy_call (proxy, "Foobar", &error,
                        G_TYPE_INT, 42, G_TYPE_STRING, "hello",
                        G_TYPE_INVALID,
                        DBUS_TYPE_G_UCHAR_ARRAY, &arr, G_TYPE_INVALID))
{
    /* Handle error */
}
g_assert (arr != NULL);
printf ("got back %u values", arr->len);
</programlisting>
</para>
</sect3>
<sect3 id="glib-sending-hash">
<title>Sending a GHashTable</title>
<para>
<programlisting>
GHashTable *hash = g_hash_table_new (g_str_hash, g_str_equal);
guint32 ret;

g_hash_table_insert (hash, "foo", "bar");
g_hash_table_insert (hash, "baz", "whee");

error = NULL;
if (!dbus_g_proxy_call (proxy, "HashSize", &error,
                        DBUS_TYPE_G_STRING_STRING_HASH, hash,
G_TYPE_INVALID,
                        G_TYPE_UINT, &ret, G_TYPE_INVALID))
{
    /* Handle error */
}
g_assert (ret == 2);
g_hash_table_destroy (hash);
</programlisting>
</para>
</sect3>
<sect3 id="glib-receiving-bool-int">
<title>Receiving a boolean and a string</title>
<para>
<programlisting>
gboolean boolret;
char *strret;

error = NULL;
if (!dbus_g_proxy_call (proxy, "GetStuff", &error,
                        G_TYPE_INVALID,
                        G_TYPE_BOOLEAN, &boolret,
                        G_TYPE_STRING, &strret,
                        G_TYPE_INVALID))
{
    /* Handle error */
}
printf ("%s %s", boolret ? "TRUE" : "FALSE", strret);

```

```

    g_free (strret);
</programlisting>
    </para>
    </sect3>
    <sect3 id="glib-sending-str-arrays">
    <title>Sending two arrays of strings</title>
    <para>
<programlisting>
    /* NULL terminate */
    char *strs_static[] = {"foo", "bar", "baz", NULL};
    /* Take pointer to array; cannot pass array directly */
    char **strs_static_p = strs_static;
    char **strs_dynamic;

    strs_dynamic = g_new (char *, 4);
    strs_dynamic[0] = g_strdup ("hello");
    strs_dynamic[1] = g_strdup ("world");
    strs_dynamic[2] = g_strdup ("!");
    /* NULL terminate */
    strs_dynamic[3] = NULL;

    error = NULL;
    if (!dbus_g_proxy_call (proxy, "TwoStrArrays", &error,
                           G_TYPE_STRV, strs_static_p,
                           G_TYPE_STRV, strs_dynamic,
                           G_TYPE_INVALID,
                           G_TYPE_INVALID))
    {
        /* Handle error */
    }
    g_strfreev (strs_dynamic);
</programlisting>
    </para>
    </sect3>
    <sect3 id="glib-getting-str-array">
    <title>Sending a boolean, receiving an array of strings</title>
    <para>
<programlisting>
    char **strs;
    char **strs_p;
    gboolean blah;

    error = NULL;
    blah = TRUE;
    if (!dbus_g_proxy_call (proxy, "GetStrs", &error,
                           G_TYPE_BOOLEAN, blah,
                           G_TYPE_INVALID,
                           G_TYPE_STRV, &strs,
                           G_TYPE_INVALID))
    {
        /* Handle error */
    }

```

```

    for (strs_p = strs; *strs_p; strs_p++)
        printf ("got string: \"%s\\\"", *strs_p);
    g_strfreev (strs);
</programlisting>
    </para>
</sect3>
    <sect3 id="glib-sending-variant">
    <title>Sending a variant</title>
    <para>
<programlisting>
    GValue val = {0, };

    g_value_init (&val, G_TYPE_STRING);
    g_value_set_string (&val, "hello world");

    error = NULL;
    if (!dbus_g_proxy_call (proxy, "SendVariant", &error,
                            G_TYPE_VALUE, &val, G_TYPE_INVALID,
                            G_TYPE_INVALID))
    {
        /* Handle error */
    }
    g_assert (ret == 2);
    g_value_unset (&val);
</programlisting>
    </para>
</sect3>
    <sect3 id="glib-receiving-variant">
    <title>Receiving a variant</title>
    <para>
<programlisting>
    GValue val = {0, };

    error = NULL;
    if (!dbus_g_proxy_call (proxy, "GetVariant", &error,
                            G_TYPE_INVALID,
                                G_TYPE_VALUE, &val, G_TYPE_INVALID))
    {
        /* Handle error */
    }
    if (G_VALUE_TYPE (&val) == G_TYPE_STRING)
        printf ("%s\\n", g_value_get_string (&val));
    else if (G_VALUE_TYPE (&val) == G_TYPE_INT)
        printf ("%d\\n", g_value_get_int (&val));
    else
        ...
    g_value_unset (&val);
</programlisting>
    </para>
</sect3>
</sect2>

```



```

<sect2 id="glib-generated-bindings">
  <title>Generated Bindings</title>
  <para>
    By using the Introspection XML files, convenient client-side
bindings
    can be automatically created to ease the use of a remote DBus
object.
  </para>
  <para>
    Here is a sample XML file which describes an object that
exposes
    one method, named <literal>ManyArgs</literal>.
    <programlisting>
<?xml version="1.0" encoding="UTF-8" ?>
<node name="/com/example/MyObject">
  <interface name="com.example.MyObject">
    <method name="ManyArgs">
      <arg type="u" name="x" direction="in" />
      <arg type="s" name="str" direction="in" />
      <arg type="d" name="trouble" direction="in" />
      <arg type="d" name="d_ret" direction="out" />
      <arg type="s" name="str_ret" direction="out" />
    </method>
  </interface>
</node>
</programlisting>
  </para>
  <para>
    Run <literal>dbus-binding-tool --mode=glib-client
    <replaceable>FILENAME</replaceable> &gt;
    <replaceable>HEADER_NAME</replaceable></literal> to generate
the header
    file. For example: <command>dbus-binding-tool --mode=glib-
client
    my-object.xml &gt; my-object-bindings.h</command>. This
will generate
    inline functions with the following prototypes:
    <programlisting>
/* This is a blocking call */
gboolean
com_example_MyObject_many_args (DBusGProxy *proxy, const guint IN_x,
                                const char * IN_str, const gdouble
IN_trouble,
                                gdouble* OUT_d_ret, char **
OUT_str_ret,
                                GError **error);

/* This is a non-blocking call */
DBusGProxyCall*
com_example_MyObject_many_args_async (DBusGProxy *proxy, const guint
IN_x,

```

```

                                const char * IN_str, const
gdouble IN_trouble,

com_example_MyObject_many_args_reply callback,
                                gpointer userdata);

/* This is the typedef for the non-blocking callback */
typedef void
(*com_example_MyObject_many_args_reply)
(DBusGProxy *proxy, gdouble OUT_d_ret, char * OUT_str_ret,
 GError *error, gpointer userdata);
</programlisting>
    The first argument in all functions is a <literal>DBusGProxy
    *</literal>, which you should create with the usual
    <literal>dbus_g_proxy_new_*</literal> functions. Following
that are the
    "in" arguments, and then either the "out" arguments and a
    <literal>GError *</literal> for the synchronous (blocking)
function, or
    callback and user data arguments for the asynchronous (non-
blocking)
    function. The callback in the asynchronous function passes
the
    <literal>DBusGProxy *</literal>, the returned "out" arguments,
an
    <literal>GError *</literal> which is set if there was an error
otherwise
    <literal>NULL</literal>, and the user data.
</para>
<para>
    As with the server-side bindings support (see <xref
    linkend="glib-server"/>), the exact behaviour of the client-
side
    bindings can be manipulated using "annotations". Currently
the only
    annotation used by the client bindings is
    <literal>org.freedesktop.DBus.GLib.NoReply</literal>, which
sets the
    flag indicating that the client isn't expecting a reply to the
method
    call, so a reply shouldn't be sent. This is often used to
speed up
    rapid method calls where there are no "out" arguments, and not
knowing
    if the method succeeded is an acceptable compromise to half
the traffic
    on the bus.
    </para>
</sect2>
</sect1>

<sect1 id="glib-server">

```

<title>GLib API: Implementing Objects</title>

<para>

At the moment, to expose a GObject via D-Bus, you must write XML by hand which describes the methods exported by the object. In the future, this manual step will be obviated by the upcoming GLib introspection support.

</para>

<para>

Here is a sample XML file which describes an object that exposes one method, named <code>ManyArgs</code>.

<programlisting>

```
<?xml version="1.0" encoding="UTF-8" ?>

<node name="/com/example/MyObject">

  <interface name="com.example.MyObject">
    <annotation name="org.freedesktop.DBus.GLib.CSymbol"
value="my_object"/>
    <method name="ManyArgs">
      <!-- This is optional, and in this case is redundant -->
      <annotation name="org.freedesktop.DBus.GLib.CSymbol"
value="my_object_many_args"/>
      <arg type="u" name="x" direction="in" />
      <arg type="s" name="str" direction="in" />
      <arg type="d" name="trouble" direction="in" />
      <arg type="d" name="d_ret" direction="out" />
      <arg type="s" name="str_ret" direction="out" />
    </method>
  </interface>
</node>
</programlisting>
```

</para>

<para>

This XML is in the same format as the D-Bus introspection XML format. Except we must include an "annotation" which give the C symbols corresponding to the object implementation prefix (<code>my_object</code>). In addition, if particular methods symbol names deviate from C convention (i.e. <code>ManyArgs</code> -> <code>many_args</code>), you may specify an annotation giving the C symbol.

</para>

<para>

Once you have written this XML, run <code>dbus-binding-tool -mode=glib-server <replaceable>FILENAME</replaceable> <replaceable>HEADER_NAME</replaceable></code> to generate a header file. For example: <code>dbus-binding-tool --mode=glib-server my-object.xml <replaceable>my-object-glue.h</replaceable></code>.

</para>

<para>

Next, include the generated header in your program, and invoke <code>dbus_g_object_class_install_info</code> in the class

initializer, passing the object class and "object info" included in the

header. For example:

```
<programlisting>
dbus_g_object_type_install_info (COM_FOO_TYPE_MY_OBJECT,
&amp;com_foo_my_object_info);
</programlisting>
```

This should be done exactly once per object class.

</para>

<para>

To actually implement the method, just define a C function named e.g.

<literal>my_object_many_args</literal> in the same file as the info

header is included. At the moment, it is required that this function

conform to the following rules:

<itemizedlist>

<listitem>

<para>

The function must return a value of type <literal>gboolean</literal>;

<literal>TRUE</literal> on success, and <literal>FALSE</literal>

otherwise.

</para>

</listitem>

<listitem>

<para>

The first parameter is a pointer to an instance of the object.

</para>

</listitem>

<listitem>

<para>

Following the object instance pointer are the method input values.

</para>

</listitem>

<listitem>

<para>

Following the input values are pointers to return values.

</para>

</listitem>

<listitem>

<para>

The final parameter must be a <literal>GError **</literal>.

If the function returns <literal>FALSE</literal> for an

error, the error parameter must be initialized with

<literal>g_set_error</literal>.

</para>

</listitem>

```

    </itemizedlist>
</para>
<para>
    Finally, you can export an object using
<literal>dbus_g_connection_register_g_object</literal>. For example:
    <programlisting>
        dbus_g_connection_register_g_object (connection,
                                           "/com/foo/MyObject",
                                           obj);
    </programlisting>
</para>

<sect2 id="glib-annotations">
    <title>Server-side Annotations</title>
    <para>
        There are several annotations that are used when generating
the
        server-side bindings. The most common annotation is
        <literal>org.freedesktop.DBus.GLib.CSymbol</literal> but there
are other
        annotations which are often useful.
    <variablelist>
        <varlistentry>

<term><literal>org.freedesktop.DBus.GLib.CSymbol</literal></term>
        <listitem>
            <para>
                This annotation is used to specify the C symbol names
for
                the various types (interface, method, etc), if it
differs from the
                name DBus generates.
            </para>
        </listitem>
    </varlistentry>
    <varlistentry>

<term><literal>org.freedesktop.DBus.GLib.Async</literal></term>
        <listitem>
            <para>
                This annotation marks the method implementation as an
straight
                asynchronous function, which doesn't return a response
complete
                away but will send the response at some later point to
services where
                the call. This is used to implement non-blocking
                method calls can take time.
            </para>
            <para>
                When a method is asynchronous, the function prototype
is

```

different. It is required that the function conform to the

following rules:

<itemizedlist>

<listitem>

<para>

The function must return a value of type <literal>gboolean</literal>;

<literal>TRUE</literal> on success, and <literal>FALSE</literal>

otherwise. TODO: the return value is currently ignored.

</para>

</listitem>

<listitem>

<para>

The first parameter is a pointer to an instance of the object.

</para>

</listitem>

<listitem>

<para>

Following the object instance pointer are the method

input values.

</para>

</listitem>

<listitem>

<para>

The final parameter must be a <literal>DBusGMethodInvocation *</literal>.

This is used

when sending the response message back to the client, by

calling <literal>dbus_g_method_return</literal>

or <literal>dbus_g_method_return_error</literal>.

</para>

</listitem>

</itemizedlist>

</para>

</listitem>

</varlistentry>

<varlistentry>

<term><literal>org.freedesktop.DBus.GLib.Const</literal></term>

<listitem>

<para>This attribute can only be applied to "out" <literal><arg></literal> nodes, and specifies that the

parameter isn't being copied when returned. For example, this

turns a 's' argument from a `char **` to a `const char **`, and results in the argument not being freed by DBus after the message is sent.

This attribute can only be applied to "out" `<arg>` nodes, and alters the expected function signature. It currently can be set to two values: `""` or `"error"`. The argument marked with this attribute is not returned via a pointer argument, but by the function's return value. If the attribute's value is the empty string, the `GError` * argument is also omitted so there is no standard way to return an error value. This is very useful for interfacing with existing code, as it is possible to match existing APIs.

If the attribute's value is `"error"`, then the final argument is a `GError *` as usual.

Some examples to demonstrate the usage. This introspection XML:

```

<programlisting>
<method name="Increment">
  <arg type="u" name="x" />
  <arg type="u" direction="out" />
</method>
</programlisting>

```

Expects the following function declaration:

```

<programlisting>
gboolean
my_object_increment (MyObject *obj, gint32 x, gint32 *ret, GError
**error);
</programlisting>

```

```

        </para>
        <para>
            This introspection XML:
            <programlisting>
<method name="IncrementRetVal">
    <arg type="u" name="x" />
    <arg type="u" direction="out" >
        <annotation name="org.freedesktop.DBus.GLib.ReturnVal"
value=""/>
        </arg>
    </method>
    </programlisting>
            Expects the following function declaration:
            <programlisting>
gint32
my_object_increment_retval (MyObject *obj, gint32 x)
    </programlisting>
        </para>
        <para>
            This introspection XML:
            <programlisting>
<method name="IncrementRetValError">
    <arg type="u" name="x" />
    <arg type="u" direction="out" >
        <annotation name="org.freedesktop.DBus.GLib.ReturnVal"
value="error"/>
        </arg>
    </method>
    </programlisting>
            Expects the following function declaration:
            <programlisting>
gint32
my_object_increment_retval_error (MyObject *obj, gint32 x, GError
**error)
    </programlisting>
        </para>
    </listitem>
</varlistentry>
</variablelist>
</para>
</sect2>
</sect1>

<sect1 id="python-client">
    <title>Python API</title>
    <para>
        The Python API, dbus-python, is now documented separately in
        <ulink url="http://dbus.freedesktop.org/doc/dbus-
python/doc/tutorial.html">the dbus-python tutorial</ulink> (also
        available in doc/tutorial.txt,
        and doc/tutorial.html if built with python-docutils, in the
        dbus-python

```



```

        source distribution).
    </para>
</sect1>

<sect1 id="qt-client">
    <title>Qt API: Using Remote Objects</title>
    <para>

        The Qt bindings are not yet documented.

    </para>
</sect1>

<sect1 id="qt-server">
    <title>Qt API: Implementing Objects</title>
    <para>
        The Qt bindings are not yet documented.
    </para>
</sect1>
</article>

File = dbus-types.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-types.h  types such as dbus_bool_t
 *
 * Copyright (C) 2002  Red Hat Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify
it under the terms of the GNU General Public License as published
by
the Free Software Foundation; either version 2 of the License, or
(at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301  USA
 */
#endif !defined (DBUS_INSIDE_DBUS_H) && !defined (DBUS_COMPILATION)

```

```

#error "Only <dbus/dbus.h> can be included directly, this file may
disappear or change contents."
#endif

#ifndef DBUS_TYPES_H
#define DBUS_TYPES_H

#include <stddef.h>
#include <dbus/dbus-arch-deps.h>

typedef dbus_uint32_t  dbus_unichar_t;
/* boolean size must be fixed at 4 bytes due to wire protocol! */
typedef dbus_uint32_t  dbus_bool_t;

/* Normally docs are in .c files, but there isn't a .c file for this.
*/
/**
 * @defgroup DBusTypes Basic types
 * @ingroup DBus
 * @brief dbus_bool_t, dbus_int32_t, etc.
 *
 * Typedefs for common primitive types.
 *
 * @{
 */
/**
 * @typedef dbus_bool_t
 *
 * A boolean, valid values are #TRUE and #FALSE.
 */
/**
 * @typedef dbus_uint32_t
 *
 * A 32-bit unsigned integer on all platforms.
 */
/**
 * @typedef dbus_int32_t
 *
 * A 32-bit signed integer on all platforms.
 */
/**
 * @typedef dbus_uint16_t
 *
 * A 16-bit unsigned integer on all platforms.
 */
/**
 * @typedef dbus_int16_t

```

```

*
* A 16-bit signed integer on all platforms.
*/

/**
* @typedef dbus_uint64_t
*
* A 64-bit unsigned integer on all platforms that support it.
* If supported, #DBUS_HAVE_INT64 will be defined.
*
* C99 requires a 64-bit type and most likely all interesting
* compilers support one. GLib for example flat-out requires
* a 64-bit type.
*
* You probably want to just assume #DBUS_HAVE_INT64 is always
defined.
*/

/**
* @typedef dbus_int64_t
*
* A 64-bit signed integer on all platforms that support it.
* If supported, #DBUS_HAVE_INT64 will be defined.
*
* C99 requires a 64-bit type and most likely all interesting
* compilers support one. GLib for example flat-out requires
* a 64-bit type.
*
* You probably want to just assume #DBUS_HAVE_INT64 is always
defined.
*/

/**
* @def DBUS_HAVE_INT64
*
* Defined if 64-bit integers are available. Will be defined
* on any platform you care about, unless you care about
* some truly ancient UNIX, or some bizarre embedded platform.
*
* C99 requires a 64-bit type and most likely all interesting
* compilers support one. GLib for example flat-out requires
* a 64-bit type.
*
* You should feel comfortable ignoring this macro and just using
* int64 unconditionally.
*/

/**
* @def DBUS_INT64_CONSTANT
*

```

```

* Declare a 64-bit signed integer constant. The macro
* adds the necessary "LL" or whatever after the integer,
* giving a literal such as "325145246765LL"
*/

/**
 * @def DBUS_UINT64_CONSTANT
 *
 * Declare a 64-bit unsigned integer constant. The macro
 * adds the necessary "ULL" or whatever after the integer,
 * giving a literal such as "325145246765ULL"
 */

/**
 * An 8-byte struct you could use to access int64 without having
 * int64 support
 */
typedef struct
{
    dbus_uint32_t first32; /**< first 32 bits in the 8 bytes (beware
endian issues) */
    dbus_uint32_t second32; /**< second 32 bits in the 8 bytes (beware
endian issues) */
} DBus8ByteStruct;

/**
 * A simple value union that lets you access bytes as if they
 * were various types; useful when dealing with basic types via
 * void pointers and varargs.
 *
 * This union also contains a pointer member (which can be used
 * to retrieve a string from dbus_message_iter_get_basic(), for
 * instance), so on future platforms it could conceivably be larger
 * than 8 bytes.
 */
typedef union
{
    unsigned char bytes[8]; /**< as 8 individual bytes */
    dbus_int16_t i16; /**< as int16 */
    dbus_uint16_t u16; /**< as int16 */
    dbus_int32_t i32; /**< as int32 */
    dbus_uint32_t u32; /**< as int32 */
    dbus_bool_t bool_val; /**< as boolean */
#ifdef DBUS_HAVE_INT64
    dbus_int64_t i64; /**< as int64 */
    dbus_uint64_t u64; /**< as int64 */
#endif
    DBus8ByteStruct eight; /**< as 8-byte struct */
    double dbl; /**< as double */
    unsigned char byt; /**< as byte */
    char *str; /**< as char* (string, object path or
signature) */

```

```

    int fd;                /**< as Unix file descriptor */
} DBusBasicValue;

/** @} */

#endif /* DBUS_TYPES_H */

File = dbus-userdb-util.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-userdb-util.c Would be in dbus-userdb.c, but not used in
libdbus
*
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
#include <config.h>
#define DBUS_USERDB_INCLUDES_PRIVATE 1
#include "dbus-userdb.h"
#include "dbus-test.h"
#include "dbus-internals.h"
#include "dbus-protocol.h"
#include <string.h>

#if HAVE_SYSTEMD
#include <systemd/sd-daemon.h>
#include <systemd/sd-login.h>
#endif

/**
* @addtogroup DBusInternalsUtils

```

```

* @ {
*/

/**
 * Checks to see if the UID sent in is the console user
 *
 * @param uid UID of person to check
 * @param error return location for errors
 * @returns #TRUE if the UID is the same as the console user and there
are no errors
 */
dbus_bool_t
_dbus_is_console_user (dbus_uid_t uid,
                      DBusError *error)
{
    DBusUserDatabase *db;
    const DBusUserInfo *info;
    dbus_bool_t result = FALSE;

#ifdef HAVE_SYSTEMD
    if (sd_booted () > 0)
    {
        int r;

        /* Check whether this user is logged in on at least one physical
        seat */
        r = sd_uid_get_seats (uid, 0, NULL);
        if (r < 0)
        {
            dbus_set_error (error, _dbus_error_from_errno (-r),
                "Failed to determine seats of user \"
DBUS_UID_FORMAT \"\": %s",
                uid,
                _dbus_strerror (-r));
            return FALSE;
        }

        return (r > 0);
    }
#endif

#ifdef HAVE_CONSOLE_OWNER_FILE
    DBusString f;
    DBusStat st;

    if (!_dbus_string_init (&f))
    {
        _DBUS_SET_OOM (error);
        return FALSE;
    }
#endif

```

```

if (!_dbus_string_append(&f, DBUS_CONSOLE_OWNER_FILE))
{
    _dbus_string_free(&f);
    _DBUS_SET_OOM (error);
    return FALSE;
}

if (_dbus_stat(&f, &st, NULL) && (st.uid == uid))
{
    _dbus_string_free(&f);
    return TRUE;
}

_dbus_string_free(&f);

#endif /* HAVE_CONSOLE_OWNER_FILE */

_dbus_user_database_lock_system ();

db = _dbus_user_database_get_system ();
if (db == NULL)
{
    dbus_set_error (error, DBUS_ERROR_FAILED, "Could not get system
database.");
    _dbus_user_database_unlock_system ();
    return FALSE;
}

/* TPTD: this should be cache-safe, we've locked the DB and
_dbus_user_at_console doesn't pass it on. */
info = _dbus_user_database_lookup (db, uid, NULL, error);

if (info == NULL)
{
    _dbus_user_database_unlock_system ();
    return FALSE;
}

result = _dbus_user_at_console (info->username, error);

_dbus_user_database_unlock_system ();

return result;
}

/**
 * Gets user ID given username
 *
 * @param username the username
 * @param uid return location for UID
 * @returns #TRUE if username existed and we got the UID

```

```

*/
dbus_bool_t
_dbus_get_user_id (const DBusString *username,
                  dbus_uid_t      *uid)
{
    return _dbus_get_user_id_and_primary_group (username, uid, NULL);
}

/**
 * Gets group ID given groupname
 *
 * @param groupname the groupname
 * @param gid return location for GID
 * @returns #TRUE if group name existed and we got the GID
 */
dbus_bool_t
_dbus_get_group_id (const DBusString *groupname,
                   dbus_gid_t      *gid)
{
    DBusUserDatabase *db;
    const DBusGroupInfo *info;
    _dbus_user_database_lock_system ();

    db = _dbus_user_database_get_system ();
    if (db == NULL)
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (!_dbus_user_database_get_groupname (db, groupname,
                                           &info, NULL))
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    *gid = info->gid;

    _dbus_user_database_unlock_system ();
    return TRUE;
}

/**
 * Gets user ID and primary group given username
 *
 * @param username the username
 * @param uid_p return location for UID
 * @param gid_p return location for GID
 * @returns #TRUE if username existed and we got the UID and GID
 */
dbus_bool_t

```



```

_dbus_get_user_id_and_primary_group (const DBusString *username,
                                     dbus_uid_t      *uid_p,
                                     dbus_gid_t      *gid_p)
{
    DBusUserDatabase *db;
    const DBusUserInfo *info;
    _dbus_user_database_lock_system ();

    db = _dbus_user_database_get_system ();
    if (db == NULL)
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (!_dbus_user_database_get_username (db, username,
                                          &info, NULL))
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (uid_p)
        *uid_p = info->uid;
    if (gid_p)
        *gid_p = info->primary_gid;

    _dbus_user_database_unlock_system ();
    return TRUE;
}

/**
 * Looks up a gid or group name in the user database. Only one of
 * name or GID can be provided. There are wrapper functions for this
 * that are better to use, this one does no locking or anything on the
 * database and otherwise sort of sucks.
 *
 * @param db the database
 * @param gid the group ID or #DBUS_GID_UNSET
 * @param groupname group name or #NULL
 * @param error error to fill in
 * @returns the entry in the database
 */
DBusGroupInfo*
_dbus_user_database_lookup_group (DBusUserDatabase *db,
                                  dbus_gid_t      gid,
                                  const DBusString *groupname,
                                  DBusError       *error)
{
    DBusGroupInfo *info;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

```

```

/* See if the group is really a number */
if (gid == DBUS_UID_UNSET)
{
    unsigned long n;

    if (_dbus_is_a_number (groupname, &n))
        gid = n;
}

#ifdef DBUS_ENABLE_USERDB_CACHE
if (gid != DBUS_GID_UNSET)
    info = _dbus_hash_table_lookup_uintptr (db->groups, gid);
else
    info = _dbus_hash_table_lookup_string (db->groups_by_name,
                                          _dbus_string_get_const_data
(groupname));
if (info)
{
    _dbus_verbose ("Using cache for GID "DBUS_GID_FORMAT"
information\n",
                  info->gid);
    return info;
}
#else
if (1)
#endif
{
    if (gid != DBUS_GID_UNSET)
        _dbus_verbose ("No cache for GID "DBUS_GID_FORMAT"\n",
                      gid);
    else
        _dbus_verbose ("No cache for groupname \"%s\"\n",
                      _dbus_string_get_const_data (groupname));

    info = dbus_new0 (DBusGroupInfo, 1);
    if (info == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return NULL;
    }

    if (gid != DBUS_GID_UNSET)
    {
        if (!_dbus_group_info_fill_gid (info, gid, error))
        {
            _DBUS_ASSERT_ERROR_IS_SET (error);
            _dbus_group_info_free_allocated (info);
            return NULL;
        }
    }
}

```



```

{
    *info = _dbus_user_database_lookup_group (db, DBUS_GID_UNSET,
groupname, error);
    return *info != NULL;
}

/**
 * Gets the user information for the given GID,
 * returned group info should not be freed.
 *
 * @param db user database
 * @param gid the group ID
 * @param info return location for const ref to group info
 * @param error error location
 * @returns #FALSE if error is set
 */
dbus_bool_t
_dbus_user_database_get_gid (DBusUserDatabase      *db,
                             dbus_gid_t           gid,
                             const DBusGroupInfo **info,
                             DBusError           *error)
{
    *info = _dbus_user_database_lookup_group (db, gid, NULL, error);
    return *info != NULL;
}

/**
 * Gets all groups corresponding to the given UID. Returns #FALSE
 * if no memory, or user isn't known, but always initializes
 * group_ids to a NULL array.
 *
 * @param uid the UID
 * @param group_ids return location for array of group IDs
 * @param n_group_ids return location for length of returned array
 * @returns #TRUE if the UID existed and we got some credentials
 */
dbus_bool_t
_dbus_groups_from_uid (dbus_uid_t      uid,
                      dbus_gid_t      **group_ids,
                      int              *n_group_ids)
{
    DBusUserDatabase *db;
    const DBusUserInfo *info;
    *group_ids = NULL;
    *n_group_ids = 0;

    _dbus_user_database_lock_system ();

    db = _dbus_user_database_get_system ();
    if (db == NULL)
    {

```

```

    _dbus_user_database_unlock_system ();
    return FALSE;
}

if (!_dbus_user_database_get_uid (db, uid,
                                &info, NULL))
{
    _dbus_user_database_unlock_system ();
    return FALSE;
}

_dbus_assert (info->uid == uid);

if (info->n_group_ids > 0)
{
    *group_ids = dbus_new (dbus_gid_t, info->n_group_ids);
    if (*group_ids == NULL)
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    *n_group_ids = info->n_group_ids;

    memcpy (*group_ids, info->group_ids, info->n_group_ids * sizeof
(dbus_gid_t));
}

_dbus_user_database_unlock_system ();
return TRUE;
}
/** @} */

#ifdef DBUS_BUILD_TESTS
#include <stdio.h>

/**
 * Unit test for dbus-userdb.c.
 *
 * @returns #TRUE on success.
 */
dbus_bool_t
_dbus_userdb_test (const char *test_data_dir)
{
    const DBusString *username;
    const DBusString *homedir;
    dbus_uid_t uid;
    unsigned long *group_ids;
    int n_group_ids, i;
    DBusError error;

    if (!_dbus_username_from_current_process (&username))

```

```

    _dbus_assert_not_reached ("didn't get username");

if (!_dbus_homedir_from_current_process (&homedir))
    _dbus_assert_not_reached ("didn't get homedir");

if (!_dbus_get_user_id (username, &uid))
    _dbus_assert_not_reached ("didn't get uid");

if (!_dbus_groups_from_uid (uid, &group_ids, &n_group_ids))
    _dbus_assert_not_reached ("didn't get groups");

printf ("    Current user: %s homedir: %s gids:",
        _dbus_string_get_const_data (username),
        _dbus_string_get_const_data (homedir));

for (i=0; i<n_group_ids; i++)
    printf(" %ld", group_ids[i]);

printf ("\n");

dbus_error_init (&error);
printf ("Is Console user: %i\n",
        _dbus_is_console_user (uid, &error));
printf ("Invocation was OK: %s\n", error.message ? error.message :
"yes");
dbus_error_free (&error);
printf ("Is Console user 4711: %i\n",
        _dbus_is_console_user (4711, &error));
printf ("Invocation was OK: %s\n", error.message ? error.message :
"yes");
dbus_error_free (&error);

dbus_free (group_ids);

return TRUE;
}
#endif /* DBUS_BUILD_TESTS */

```

File = dbus-userdb.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-userdb.c User database abstraction
 *
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```

```

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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
#include <config.h>
#define DBUS_USERDB_INCLUDES_PRIVATE 1
#include "dbus-userdb.h"
#include "dbus-hash.h"
#include "dbus-test.h"
#include "dbus-internals.h"
#include "dbus-protocol.h"
#include "dbus-credentials.h"
#include <string.h>

/**
 * @addtogroup DBusInternalsUtils
 * @{
 */

/**
 * Frees the given #DBusUserInfo's members with _dbus_user_info_free()
 * and also calls dbus_free() on the block itself
 *
 * @param info the info
 */
void
_dbus_user_info_free_allocated (DBusUserInfo *info)
{
    if (info == NULL) /* hash table will pass NULL */
        return;

    _dbus_user_info_free (info);
    dbus_free (info);
}

/**
 * Frees the given #DBusGroupInfo's members with
_dbus_group_info_free()
 * and also calls dbus_free() on the block itself
 */

```

```

    * @param info the info
    */
void
_dbus_group_info_free_allocated (DBusGroupInfo *info)
{
    if (info == NULL) /* hash table will pass NULL */
        return;

    _dbus_group_info_free (info);
    dbus_free (info);
}

/**
 * Frees the members of info
 * (but not info itself)
 * @param info the user info struct
 */
void
_dbus_user_info_free (DBusUserInfo *info)
{
    dbus_free (info->group_ids);
    dbus_free (info->username);
    dbus_free (info->homedir);
}

/**
 * Frees the members of info (but not info itself).
 *
 * @param info the group info
 */
void
_dbus_group_info_free (DBusGroupInfo *info)
{
    dbus_free (info->groupname);
}

/**
 * Checks if a given string is actually a number
 * and converts it if it is
 *
 * @param str the string to check
 * @param num the memory location of the unsigned long to fill in
 * @returns TRUE if str is a number and num is filled in
 */
dbus_bool_t
_dbus_is_a_number (const DBusString *str,
                  unsigned long *num)
{
    int end;

    if (_dbus_string_parse_uint (str, 0, num, &end) &&
        end == _dbus_string_get_length (str))

```



```

        return TRUE;
    else
        return FALSE;
}

/**
 * Looks up a uid or username in the user database. Only one of name
 * or UID can be provided. There are wrapper functions for this that
 * are better to use, this one does no locking or anything on the
 * database and otherwise sort of sucks.
 *
 * @param db the database
 * @param uid the user ID or #DBUS_UID_UNSET
 * @param username username or #NULL
 * @param error error to fill in
 * @returns the entry in the database
 */
DBusUserInfo*
_dbus_user_database_lookup (DBusUserDatabase *db,
                           dbus_uid_t      uid,
                           const DBusString *username,
                           DBusError       *error)
{
    DBusUserInfo *info;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);
    _dbus_assert (uid != DBUS_UID_UNSET || username != NULL);

    /* See if the username is really a number */
    if (uid == DBUS_UID_UNSET)
    {
        unsigned long n;

        if (_dbus_is_a_number (username, &n))
            uid = n;
    }

#ifdef DBUS_ENABLE_USERDB_CACHE
    if (uid != DBUS_UID_UNSET)
        info = _dbus_hash_table_lookup_uintptr (db->users, uid);
    else
        info = _dbus_hash_table_lookup_string (db->users_by_name,
        _dbus_string_get_const_data (username));

    if (info)
    {
        _dbus_verbose ("Using cache for UID "DBUS_UID_FORMAT"
information\n",
                    info->uid);
        return info;
    }
    else
#endif

```



```

        info))
    {
        _dbus_hash_table_remove_uintptr (db->users, info->uid);
        dbus_set_error (error, DBUS_ERROR_NO_MEMORY, NULL);
        return NULL;
    }

    return info;
}

static dbus_bool_t database_locked = FALSE;
static DBusUserDatabase *system_db = NULL;
static DBusString process_username;
static DBusString process_homedir;

static void
shutdown_system_db (void *data)
{
    if (system_db != NULL)
        _dbus_user_database_unref (system_db);
    system_db = NULL;
    _dbus_string_free (&process_username);
    _dbus_string_free (&process_homedir);
}

static dbus_bool_t
init_system_db (void)
{
    _dbus_assert (database_locked);

    if (system_db == NULL)
    {
        DBusError error = DBUS_ERROR_INIT;
        const DBusUserInfo *info;

        system_db = _dbus_user_database_new ();
        if (system_db == NULL)
            return FALSE;

        if (!_dbus_user_database_get_uid (system_db,
                                         _dbus_getuid (),
                                         &info,
                                         &error))
        {
            _dbus_user_database_unref (system_db);
            system_db = NULL;

            if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
            {
                dbus_error_free (&error);
                return FALSE;
            }
        }
    }
}

```

```

    }
    else
    {
        /* This really should not happen. */
        _dbus_warn ("Could not get password database information
for UID of current process: %s\n",
                    error.message);
        dbus_error_free (&error);
        return FALSE;
    }
}

if (!_dbus_string_init (&process_username))
{
    _dbus_user_database_unref (system_db);
    system_db = NULL;
    return FALSE;
}

if (!_dbus_string_init (&process_homedir))
{
    _dbus_string_free (&process_username);
    _dbus_user_database_unref (system_db);
    system_db = NULL;
    return FALSE;
}

if (!_dbus_string_append (&process_username,
                        info->username) ||
    !_dbus_string_append (&process_homedir,
                        info->homedir) ||
    !_dbus_register_shutdown_func (shutdown_system_db, NULL))
{
    _dbus_string_free (&process_username);
    _dbus_string_free (&process_homedir);
    _dbus_user_database_unref (system_db);
    system_db = NULL;
    return FALSE;
}
}

return TRUE;
}

/**
 * Locks global system user database.
 */
void
_dbus_user_database_lock_system (void)
{
    _DBUS_LOCK (system_users);
    database_locked = TRUE;
}

```

```

}

/**
 * Unlocks global system user database.
 */
void
_dbus_user_database_unlock_system (void)
{
    database_locked = FALSE;
    _DBUS_UNLOCK (system_users);
}

/**
 * Gets the system global user database;
 * must be called with lock held (_dbus_user_database_lock_system()).
 *
 * @returns the database or #NULL if no memory
 */
DBusUserDatabase*
_dbus_user_database_get_system (void)
{
    _dbus_assert (database_locked);

    init_system_db ();

    return system_db;
}

/**
 * Flushes the system global user database;
 */
void
_dbus_user_database_flush_system (void)
{
    _dbus_user_database_lock_system ();

    if (system_db != NULL)
        _dbus_user_database_flush (system_db);

    _dbus_user_database_unlock_system ();
}

/**
 * Gets username of user owning current process. The returned string
 * is valid until dbus_shutdown() is called.
 *
 * @param username place to store pointer to username
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_username_from_current_process (const DBusString **username)
{

```

```

_dbus_user_database_lock_system ();
if (!init_system_db ())
{
    _dbus_user_database_unlock_system ();
    return FALSE;
}
*username = &process_username;
_dbus_user_database_unlock_system ();

return TRUE;
}

/**
 * Gets homedir of user owning current process. The returned string
 * is valid until dbus_shutdown() is called.
 *
 * @param homedir place to store pointer to homedir
 * @returns #FALSE if no memory
 */
dbus_bool_t
_dbus_homedir_from_current_process (const DBusString **homedir)
{
    _dbus_user_database_lock_system ();
    if (!init_system_db ())
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }
    *homedir = &process_homedir;
    _dbus_user_database_unlock_system ();

    return TRUE;
}

/**
 * Gets the home directory for the given user.
 *
 * @param username the username
 * @param homedir string to append home directory to
 * @returns #TRUE if user existed and we appended their homedir
 */
dbus_bool_t
_dbus_homedir_from_username (const DBusString *username,
                             DBusString *homedir)
{
    DBusUserDatabase *db;
    const DBusUserInfo *info;
    _dbus_user_database_lock_system ();

    db = _dbus_user_database_get_system ();
    if (db == NULL)
    {

```

```

        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (!_dbus_user_database_get_username (db, username,
                                           &info, NULL))
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (!_dbus_string_append (homedir, info->homedir))
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    _dbus_user_database_unlock_system ();
    return TRUE;
}

/**
 * Gets the home directory for the given user.
 *
 * @param uid the uid
 * @param homedir string to append home directory to
 * @returns #TRUE if user existed and we appended their homedir
 */
dbus_bool_t
_dbus_homedir_from_uid (dbus_uid_t          uid,
                       DBusString          *homedir)
{
    DBusUserDatabase *db;
    const DBusUserInfo *info;
    _dbus_user_database_lock_system ();

    db = _dbus_user_database_get_system ();
    if (db == NULL)
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (!_dbus_user_database_get_uid (db, uid,
                                      &info, NULL))
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (!_dbus_string_append (homedir, info->homedir))
    {

```

```

        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    _dbus_user_database_unlock_system ();
    return TRUE;
}

/**
 * Adds the credentials corresponding to the given username.
 *
 * Used among other purposes to parse a desired identity provided
 * from a client in the auth protocol. On UNIX this means parsing a
 * UID, on Windows probably parsing an SID string.
 *
 * @todo this is broken because it treats OOM and parse error
 * the same way. Needs a #DBusError.
 *
 * @param credentials credentials to fill in
 * @param username the username
 * @returns #TRUE if the username existed and we got some credentials
 */
dbus_bool_t
_dbus_credentials_add_from_user (DBusCredentials *credentials,
                                const DBusString *username)
{
    DBusUserDatabase *db;
    const DBusUserInfo *info;

    _dbus_user_database_lock_system ();

    db = _dbus_user_database_get_system ();
    if (db == NULL)
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (!_dbus_user_database_get_username (db, username,
                                          &info, NULL))
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    if (!_dbus_credentials_add_unix_uid(credentials, info->uid))
    {
        _dbus_user_database_unlock_system ();
        return FALSE;
    }

    _dbus_user_database_unlock_system ();
}

```



```

    return TRUE;
}

/**
 * Creates a new user database object used to look up and
 * cache user information.
 * @returns new database, or #NULL on out of memory
 */
DBusUserDatabase*
_dbus_user_database_new (void)
{
    DBusUserDatabase *db;

    db = dbus_new0 (DBusUserDatabase, 1);
    if (db == NULL)
        return NULL;

    db->refcount = 1;

    db->users = _dbus_hash_table_new (DBUS_HASH_UINTPTR,
                                     NULL, (DBusFreeFunction)
_dbus_user_info_free_allocated);

    if (db->users == NULL)
        goto failed;

    db->groups = _dbus_hash_table_new (DBUS_HASH_UINTPTR,
                                      NULL, (DBusFreeFunction)
_dbus_group_info_free_allocated);

    if (db->groups == NULL)
        goto failed;

    db->users_by_name = _dbus_hash_table_new (DBUS_HASH_STRING,
                                             NULL, NULL);
    if (db->users_by_name == NULL)
        goto failed;

    db->groups_by_name = _dbus_hash_table_new (DBUS_HASH_STRING,
                                              NULL, NULL);
    if (db->groups_by_name == NULL)
        goto failed;

    return db;

failed:
    _dbus_user_database_unref (db);
    return NULL;
}

/**
 * Flush all information out of the user database.

```

```

*/
void
_dbus_user_database_flush (DBusUserDatabase *db)
{
    _dbus_hash_table_remove_all(db->users_by_name);
    _dbus_hash_table_remove_all(db->groups_by_name);
    _dbus_hash_table_remove_all(db->users);
    _dbus_hash_table_remove_all(db->groups);
}

#ifdef DBUS_BUILD_TESTS
/**
 * Increments refcount of user database.
 * @param db the database
 * @returns the database
 */
DBusUserDatabase *
_dbus_user_database_ref (DBusUserDatabase *db)
{
    _dbus_assert (db->refcount > 0);

    db->refcount += 1;

    return db;
}
#endif /* DBUS_BUILD_TESTS */

/**
 * Decrements refcount of user database.
 * @param db the database
 */
void
_dbus_user_database_unref (DBusUserDatabase *db)
{
    _dbus_assert (db->refcount > 0);

    db->refcount -= 1;
    if (db->refcount == 0)
    {
        if (db->users)
            _dbus_hash_table_unref (db->users);

        if (db->groups)
            _dbus_hash_table_unref (db->groups);

        if (db->users_by_name)
            _dbus_hash_table_unref (db->users_by_name);

        if (db->groups_by_name)
            _dbus_hash_table_unref (db->groups_by_name);

        dbus_free (db);
    }
}

```

```

    }
}

/**
 * Gets the user information for the given UID,
 * returned user info should not be freed.
 *
 * @param db user database
 * @param uid the user ID
 * @param info return location for const ref to user info
 * @param error error location
 * @returns #FALSE if error is set
 */
dbus_bool_t
_dbus_user_database_get_uid (DBusUserDatabase *db,
                             dbus_uid_t uid,
                             const DBusUserInfo **info,
                             DBusError *error)
{
    *info = _dbus_user_database_lookup (db, uid, NULL, error);
    return *info != NULL;
}

/**
 * Gets the user information for the given username.
 *
 * @param db user database
 * @param username the user name
 * @param info return location for const ref to user info
 * @param error error location
 * @returns #FALSE if error is set
 */
dbus_bool_t
_dbus_user_database_get_username (DBusUserDatabase *db,
                                  const DBusString *username,
                                  const DBusUserInfo **info,
                                  DBusError *error)
{
    *info = _dbus_user_database_lookup (db, DBUS_UID_UNSET, username,
    error);
    return *info != NULL;
}

/** @} */

/* Tests in dbus-userdb-util.c */

File = dbus-userdb.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */

```

```

/* dbus-userdb.h User database abstraction
 *
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 *
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 *
 */

#ifndef DBUS_USERDB_H
#define DBUS_USERDB_H

#include <dbus/dbus-sysdeps-unix.h>

#ifdef DBUS_WIN
#error "Don't include this on Windows"
#endif

DBUS_BEGIN_DECLS

typedef struct DbusUserDatabase DbusUserDatabase;

#ifdef DBUS_USERDB_INCLUDES_PRIVATE
#include <dbus/dbus-hash.h>

/**
 * Internals of DbusUserDatabase
 */
struct DbusUserDatabase
{
    int refcount; /**< Reference count */

    DbusHashTable *users; /**< Users in the database by UID */
    DbusHashTable *groups; /**< Groups in the database by GID */
    DbusHashTable *users_by_name; /**< Users in the database by name */

```

```

    DBusHashTable *groups_by_name; /**< Groups in the database by name
*/

};

DBusUserDatabase* _dbus_user_database_new          (void);
DBusUserDatabase* _dbus_user_database_ref        (DBusUserDatabase
*db);
void              _dbus_user_database_flush      (DBusUserDatabase
*db);
void              _dbus_user_database_unref      (DBusUserDatabase
*db);
dbus_bool_t      _dbus_user_database_get_uid    (DBusUserDatabase
*db,
uid,
DBusUserInfo    **info,
DBusError
*error);
dbus_bool_t      _dbus_user_database_get_gid    (DBusUserDatabase
*db,
gid,
DBusGroupInfo   **info,
DBusError
*error);
dbus_bool_t      _dbus_user_database_get_username (DBusUserDatabase
*db,
*username,
DBusUserInfo    **info,
DBusError
*error);
dbus_bool_t      _dbus_user_database_get_groupname (DBusUserDatabase
*db,
*groupname,
DBusGroupInfo   **info,
DBusError
*error);

DBusUserInfo*   _dbus_user_database_lookup    (DBusUserDatabase *db,
uid,
*username,

```

```

DBusError
*error);
DBusGroupInfo* _dbus_user_database_lookup_group (DBusUserDatabase *db,
gid,
dbus_gid_t
*groupname,
const DBusString
DBusError
*error);
void _dbus_user_info_free_allocated (DBusUserInfo
*info);
void _dbus_group_info_free_allocated (DBusGroupInfo
*info);
#endif /* DBUS_USERDB_INCLUDES_PRIVATE */

DBusUserDatabase* _dbus_user_database_get_system (void);
void _dbus_user_database_lock_system (void);
void _dbus_user_database_unlock_system (void);
void _dbus_user_database_flush_system (void);

dbus_bool_t _dbus_get_user_id (const DBusString
*username,
dbus_uid_t
*uid);
dbus_bool_t _dbus_get_group_id (const DBusString
*group_name,
dbus_gid_t
*gid);
dbus_bool_t _dbus_get_user_id_and_primary_group (const DBusString
*username,
dbus_uid_t
*uid_p,
dbus_gid_t
*gid_p);
dbus_bool_t _dbus_credentials_from_uid (dbus_uid_t
user_id,
DBusCredentials
*credentials);
dbus_bool_t _dbus_groups_from_uid (dbus_uid_t uid,
dbus_gid_t
**group_ids,
int
*n_group_ids);
dbus_bool_t _dbus_is_console_user (dbus_uid_t
uid,
DBusError
*error);

dbus_bool_t _dbus_is_a_number (const DBusString
*str,
unsigned long
*num);

```

```

dbus_bool_t _dbus_username_from_current_process (const DBusString
**username);
dbus_bool_t _dbus_homedir_from_current_process (const DBusString
**homedir);
dbus_bool_t _dbus_homedir_from_username      (const DBusString
*username,
                                             DBusString
*homedir);

dbus_bool_t _dbus_homedir_from_uid          (dbus_uid_t
uid,
                                             DBusString
*homedir);

DBUS_END_DECLS

#endif /* DBUS_USERDB_H */

```

File = dbus-uuidgen.1

```

.\"
.\" dbus\--uuidgen manual page.
.\" Copyright (C) 2006 Red Hat, Inc.
.\"
.TH dbus\--uuidgen 1
.SH NAME
dbus\--uuidgen \- Utility to generate UUIDs
.SH SYNOPSIS
.PP
.B dbus\--uuidgen [\--version] [\--ensure[=FILENAME]] [\--get[=FILENAME]]
.SH DESCRIPTION

The \fIdbus\--uuidgen\fP command generates or reads a universally
unique ID.

.PP
Note that the D\--Bus UUID has no relationship to RFC 4122 and does not
generate
UUIDs compatible with that spec. Many systems have a separate command
for that (often called "uuidgen").

.PP
See http://www.freedesktop.org/software/dbus/ for more information
about D\--Bus.

.PP

```

The primary usage of `\fIdbus\--uuidgen\fi` is to run in the post-install

script of a D-Bus package like this:

```
.nf
```

```
dbus\--uuidgen \--ensure
```

```
.fi
```

```
.PP
```

This will ensure that `/var/lib/dbus/machine-id` exists and has the `uuid` in it.

It won't overwrite an existing `uuid`, since this id should remain fixed for a single machine until the next reboot at least.

```
.PP
```

The important properties of the machine UUID are that 1) it remains unchanged until the next reboot and 2) it is different for any two running instances of the OS kernel. That is, if two processes see the same UUID, they should also see the same shared memory, UNIX domain sockets, local X displays, `localhost.localdomain` resolution, process IDs, and so forth.

```
.PP
```

If you run `\fIdbus\--uuidgen\fi` with no options it just prints a new `uuid` made up out of thin air.

```
.PP
```

If you run it with `\--get`, it prints the machine UUID by default, or the UUID in the specified file if you specify a file.

```
.PP
```

If you try to change an existing `machine-id` on a running system, it will probably result in bad things happening. Don't try to change this file. Also, don't make it the same on two different systems; it needs to be different anytime there are two different kernels running.

```
.PP
```

The UUID should be different on two different virtual machines, because there are two different kernels.

```
.SH OPTIONS
```

The following options are supported:

```
.TP
```

```
.I "\--get[=FILENAME]"
```

If a filename is not given, defaults to

`localstatedir/lib/dbus/machine-id`

(`localstatedir` is usually `/var`). If this file exists and is valid, the `uuid` in the file is printed on `stdout`. Otherwise, the command exits with a nonzero status.


```
.TP
.I "\-\-ensure[=FILENAME]"
If a filename is not given, defaults to
localstatedir/lib/dbus/machine\-id
(localstatedir is usually /var). If this file exists then it will be
validated, and a failure code returned if it contains the wrong thing.
If the file does not exist, it will be created with a new uuid in it.
On success, prints no output.
```

```
.TP
.I "\-\-version"
Print the version of dbus\-\-uuidgen
```

```
.SH AUTHOR
See http://www.freedesktop.org/software/dbus/doc/AUTHORS
```

```
.SH BUGS
Please send bug reports to the D\-\-Bus mailing list or bug tracker,
see http://www.freedesktop.org/software/dbus/
```

File = dbus-uuidgen.c

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-uuidgen.c The guts of the dbus-uuidgen binary live in
libdbus, in this file.
*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
#include <config.h>
```

```

#include "dbus-uuidgen.h"
#include "dbus-internals.h"
#include "dbus-string.h"
#include "dbus-protocol.h"

#ifdef DBUS_WIN
#error "dbus-uuidgen should not be needed on Windows"
#endif

/**
 * @defgroup DBusInternalsUuidgen dbus-uuidgen implementation
 * @ingroup DBusInternals
 * @brief Functions for dbus-uuidgen binary
 *
 * These are not considered part of the ABI, and if you call them
 * you will get screwed by future changes.
 *
 * @{
 */

static dbus_bool_t
return_uuid (DBusGUID *uuid,
             char **uuid_p,
             DBusError *error)
{
    if (uuid_p)
    {
        DBusString encoded;

        if (!_dbus_string_init (&encoded))
        {
            _DBUS_SET_OOM (error);
            return FALSE;
        }

        if (!_dbus_uuid_encode (uuid, &encoded) ||
            !_dbus_string_steal_data (&encoded, uuid_p))
        {
            _DBUS_SET_OOM (error);
            _dbus_string_free (&encoded);
            return FALSE;
        }
        _dbus_string_free (&encoded);
    }
    return TRUE;
}

/**
 * For use by the dbus-uuidgen binary ONLY, do not call this.
 * We can and will change this function without modifying
 * the libdbus soname.
 */

```

```

* @param filename the file or #NULL for the machine ID file
* @param uuid_p out param to return the uuid
* @param create_if_not_found whether to create it if not already
there
* @param error error return
* @returns #FALSE if error is set
*/
dbus_bool_t
dbus_internal_do_not_use_get_uuid (const char *filename,
                                   char          **uuid_p,
                                   dbus_bool_t create_if_not_found,
                                   DBusError   *error)
{
    DBusGUID uuid;

    if (filename)
    {
        DBusString filename_str;
        _dbus_string_init_const (&filename_str, filename);
        if (!_dbus_read_uuid_file (&filename_str, &uuid,
create_if_not_found, error))
            goto error;
    }
    else
    {
        if (!_dbus_read_local_machine_uuid (&uuid, create_if_not_found,
error))
            goto error;
    }

    if (!return_uuid(&uuid, uuid_p, error))
        goto error;

    return TRUE;

error:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    return FALSE;
}

/**
* For use by the dbus-uuidgen binary ONLY, do not call this.
* We can and will change this function without modifying
* the libdbus soname.
*
* @param uuid_p out param to return the uuid
* @returns #FALSE if no memory
*/
dbus_bool_t
dbus_internal_do_not_use_create_uuid (char          **uuid_p)
{
    DBusGUID uuid;

```

```

    _dbus_generate_uuid (&uuid);
    return return_uuid (&uuid, uuid_p, NULL);
}

/** @} */

```

File = dbus-uuidgen.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-uuidgen.h The guts of the dbus-uuidgen binary live in
libdbus, in this file.
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
#ifdef DBUS_INSIDE_DBUS_H
#error "You can't include dbus-uuidgen.h in the public header dbus.h"
#endif

#ifndef DBUS_UUIDGEN_H
#define DBUS_UUIDGEN_H

#include <dbus/dbus-types.h>
#include <dbus/dbus-errors.h>

DBUS_BEGIN_DECLS

dbus_bool_t dbus_internal_do_not_use_get_uuid (const char
*filename,
char **uuid_p,

```

```

                                                    dbus_bool_t
create_if_not_found,
                                                    DBusError *error);
dbus_bool_t dbus_internal_do_not_use_ensure_uid (const char
*filename,
                                                    char **uuid_p,
                                                    DBusError *error);
dbus_bool_t dbus_internal_do_not_use_create_uid (char **uuid_p);

DBUS_END_DECLS

#endif /* DBUS_UUIDGEN_H */

```

File = dbus-valgrind-internal.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-valgrind-internal.h - valgrind glue
 *
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 *
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
 * 02110-1301 USA
 */

```

```

#ifndef DBUS_VALGRIND_INTERNAL_H
#define DBUS_VALGRIND_INTERNAL_H

#include "config.h"
#include "dbus-internals.h"

#ifdef WITH_VALGRIND
# include <memcheck.h>

```

```

# include <valgrind.h>
#else
# define VALGRIND_CREATE_MEMPOOL(_1, _2, _3) /* nothing */
# define VALGRIND_DESTROY_MEMPOOL(_1) /* nothing */
# define VALGRIND_MEMPOOL_ALLOC(_1, _2, _3) /* nothing */
# define VALGRIND_MEMPOOL_FREE(_1, _2) /* nothing */

/* Recent gcc will warn if you have a statement that's just a macro
 * expanding to (0), but not if you have an inline stub function that
 * always returns 0, so let's do the latter. */
static inline int
VALGRIND_MAKE_MEM_UNDEFINED (void *addr,
                             size_t len)
{
    return 0;
}

static inline int
VALGRIND_PRINTF (const char *format,
                 ...)
{
    return 0;
}

static inline int
VALGRIND_PRINTF_BACKTRACE (const char *format,
                           ...)
{
    return 0;
}

# define RUNNING_ON_VALGRIND 0
#endif /* WITH_VALGRIND */

#endif /* header guard */

```

File = dbus-watch.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-watch.c DbusWatch implementation
 *
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```

```

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*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>
#include "dbus-internals.h"
#include "dbus-watch.h"
#include "dbus-list.h"

/**
 * @defgroup DBusWatchInternals DBusWatch implementation details
 * @ingroup DBusInternals
 * @brief implementation details for DBusWatch
 *
 * @{
 */

/**
 * Implementation of DBusWatch
 */
struct DBusWatch
{
    int refcount;                /**< Reference count */
    int fd;                      /**< File descriptor. */
    unsigned int flags;         /**< Conditions to watch. */

    DBusWatchHandler handler;   /**< Watch handler. */
    void *handler_data;         /**< Watch handler
data. */
    DBusFreeFunction free_handler_data_function; /**< Free the watch
handler data. */

    void *data;                 /**< Application data. */
    DBusFreeFunction free_data_function; /**< Free the application data.
*/
    unsigned int enabled : 1;   /**< Whether it's enabled. */
    unsigned int oom_last_time : 1; /**< Whether it was OOM last
time. */
};

dbus_bool_t
_dbus_watch_get_enabled (DBusWatch *watch)

```

```

{
    return watch->enabled;
}

dbus_bool_t
_dbus_watch_get_oom_last_time (DBusWatch *watch)
{
    return watch->oom_last_time;
}

void
_dbus_watch_set_oom_last_time (DBusWatch *watch,
                               dbus_bool_t oom)
{
    watch->oom_last_time = oom;
}

/**
 * Creates a new DBusWatch. Used to add a file descriptor to be polled
 * by a main loop.
 *
 * @param fd the file descriptor to be watched.
 * @param flags the conditions to watch for on the descriptor.
 * @param enabled the initial enabled state
 * @param handler the handler function
 * @param data data for handler function
 * @param free_data_function function to free the data
 * @returns the new DBusWatch object.
 */
DBusWatch*
_dbus_watch_new (int fd,
                 unsigned int flags,
                 dbus_bool_t enabled,
                 DBusWatchHandler handler,
                 void *data,
                 DBusFreeFunction free_data_function)
{
    DBusWatch *watch;

#define VALID_WATCH_FLAGS (DBUS_WATCH_WRITABLE | DBUS_WATCH_READABLE)

    _dbus_assert ((flags & VALID_WATCH_FLAGS) == flags);

    watch = dbus_new0 (DBusWatch, 1);
    if (watch == NULL)
        return NULL;

    watch->refcount = 1;
    watch->fd = fd;
    watch->flags = flags;
    watch->enabled = enabled;

```



```

    watch->handler = handler;
    watch->handler_data = data;
    watch->free_handler_data_function = free_data_function;

    return watch;
}

/**
 * Increments the reference count of a DBusWatch object.
 *
 * @param watch the watch object.
 * @returns the watch object.
 */
DBusWatch *
_dbus_watch_ref (DBusWatch *watch)
{
    watch->refcount += 1;

    return watch;
}

/**
 * Decrements the reference count of a DBusWatch object
 * and finalizes the object if the count reaches zero.
 *
 * @param watch the watch object.
 */
void
_dbus_watch_unref (DBusWatch *watch)
{
    _dbus_assert (watch != NULL);
    _dbus_assert (watch->refcount > 0);

    watch->refcount -= 1;
    if (watch->refcount == 0)
    {
        if (watch->fd != -1)
            _dbus_warn ("this watch should have been invalidated");

        dbus_watch_set_data (watch, NULL, NULL); /* call
free_data_function */

        if (watch->free_handler_data_function)
            (* watch->free_handler_data_function) (watch->handler_data);

        dbus_free (watch);
    }
}

/**
 * Clears the file descriptor from a now-invalid watch object so that
 * no one tries to use it. This is because a watch may stay alive due

```

```

* to reference counts after the file descriptor is closed.
* Invalidation makes it easier to catch bugs. It also
* keeps people from doing dorky things like assuming file descriptors
* are unique (never recycled).
*
* @param watch the watch object.
*/
void
_dbus_watch_invalidate (DBusWatch *watch)
{
    watch->fd = -1;
    watch->flags = 0;
}

/**
 * Sanitizes the given condition so that it only contains
 * flags that the DBusWatch requested. e.g. if the
 * watch is a DBUS_WATCH_READABLE watch then
 * DBUS_WATCH_WRITABLE will be stripped from the condition.
 *
 * @param watch the watch object.
 * @param condition address of the condition to sanitize.
 */
void
_dbus_watch_sanitize_condition (DBusWatch *watch,
                               unsigned int *condition)
{
    if (!(watch->flags & DBUS_WATCH_READABLE))
        *condition &= ~DBUS_WATCH_READABLE;
    if (!(watch->flags & DBUS_WATCH_WRITABLE))
        *condition &= ~DBUS_WATCH_WRITABLE;
}

/**
 * @typedef DBusWatchList
 *
 * Opaque data type representing a list of watches
 * and a set of DBusAddWatchFunction/DBusRemoveWatchFunction.
 * Automatically handles removing/re-adding watches
 * when the DBusAddWatchFunction is updated or changed.
 * Holds a reference count to each watch.
 *
 * Used in the implementation of both DBusServer and
 * DBusClient.
 */

/**
 * DBusWatchList implementation details. All fields
 * are private.
 */

```

```

*/
struct DBusWatchList
{
    DBusList *watches;          /**< Watch objects. */

    DBusAddWatchFunction add_watch_function;    /**< Callback for adding
a watch. */
    DBusRemoveWatchFunction remove_watch_function; /**< Callback for
removing a watch. */
    DBusWatchToggledFunction watch_toggled_function; /**< Callback on
toggling enablement */
    void *watch_data;          /**< Data for watch
callbacks */
    DBusFreeFunction watch_free_data_function; /**< Free function for
watch callback data */
};

/**
 * Creates a new watch list. Returns #NULL if insufficient
 * memory exists.
 *
 * @returns the new watch list, or #NULL on failure.
 */
DBusWatchList*
_dbus_watch_list_new (void)
{
    DBusWatchList *watch_list;

    watch_list = dbus_new0 (DBusWatchList, 1);
    if (watch_list == NULL)
        return NULL;

    return watch_list;
}

/**
 * Frees a DBusWatchList.
 *
 * @param watch_list the watch list.
 */
void
_dbus_watch_list_free (DBusWatchList *watch_list)
{
    /* free watch_data and removes watches as a side effect */
    _dbus_watch_list_set_functions (watch_list,
                                   NULL, NULL, NULL, NULL, NULL);
    _dbus_list_foreach (&watch_list->watches,
                       (DBusForeachFunction) _dbus_watch_unref,
                       NULL);
    _dbus_list_clear (&watch_list->watches);

    dbus_free (watch_list);
}

```

```

}

/**
 * Sets the watch functions. This function is the "backend"
 * for dbus_connection_set_watch_functions() and
 * dbus_server_set_watch_functions().
 *
 * @param watch_list the watch list.
 * @param add_function the add watch function.
 * @param remove_function the remove watch function.
 * @param toggled_function function on toggling enabled flag, or #NULL
 * @param data the data for those functions.
 * @param free_data_function the function to free the data.
 * @returns #FALSE if not enough memory
 */
dbus_bool_t
_dbus_watch_list_set_functions (DBusWatchList      *watch_list,
                               DBusAddWatchFunction  add_function,
                               DBusRemoveWatchFunction
remove_function,
                               DBusWatchToggledFunction
toggled_function,
                               void                  *data,
                               DBusFreeFunction
free_data_function)
{
    /* Add watches with the new watch function, failing on OOM */
    if (add_function != NULL)
    {
        DBusList *link;

        link = _dbus_list_get_first_link (&watch_list->watches);
        while (link != NULL)
        {
            DBusList *next = _dbus_list_get_next_link (&watch_list->watches,
                                                         link);

#ifdef DBUS_ENABLE_VERBOSE_MODE
            {
                const char *watch_type;
                int flags;

                flags = dbus_watch_get_flags (link->data);
                if ((flags & DBUS_WATCH_READABLE) &&
                    (flags & DBUS_WATCH_WRITABLE))
                    watch_type = "readwrite";
                else if (flags & DBUS_WATCH_READABLE)
                    watch_type = "read";
                else if (flags & DBUS_WATCH_WRITABLE)
                    watch_type = "write";
            }
#endif
        }
    }
}

```

```

        else
            watch_type = "not read or write";

            _dbus_verbose ("Adding a %s watch on fd %d using newly-set
add watch function\n",
                        watch_type,
                        dbus_watch_get_socket (link->data));
        }
#endif /* DBUS_ENABLE_VERBOSE_MODE */

    if (!(* add_function) (link->data, data))
    {
        /* remove it all again and return FALSE */
        DBusList *link2;

        link2 = _dbus_list_get_first_link (&watch_list-
>watches);
        while (link2 != link)
        {
            DBusList *next = _dbus_list_get_next_link
(&watch_list->watches,
                                                    link2);

            _dbus_verbose ("Removing watch on fd %d using newly-
set remove function because initial add failed\n",
                        dbus_watch_get_socket (link2->data));

            (* remove_function) (link2->data, data);

            link2 = next;
        }

        return FALSE;
    }

    link = next;
}

/* Remove all current watches from previous watch handlers */
if (watch_list->remove_watch_function != NULL)
{
    _dbus_verbose ("Removing all pre-existing watches\n");

    _dbus_list_foreach (&watch_list->watches,
                        (DBusForeachFunction) watch_list-
>remove_watch_function,
                        watch_list->watch_data);
}

if (watch_list->watch_free_data_function != NULL)

```

```

        (* watch_list->watch_free_data_function) (watch_list->watch_data);

watch_list->add_watch_function = add_function;
watch_list->remove_watch_function = remove_function;
watch_list->watch_toggled_function = toggled_function;
watch_list->watch_data = data;
watch_list->watch_free_data_function = free_data_function;

return TRUE;
}

/**
 * Adds a new watch to the watch list, invoking the
 * application DbusAddWatchFunction if appropriate.
 *
 * @param watch_list the watch list.
 * @param watch the watch to add.
 * @returns #TRUE on success, #FALSE if no memory.
 */
dbus_bool_t
_dbus_watch_list_add_watch (DBusWatchList *watch_list,
                            DBusWatch     *watch)
{
    if (!_dbus_list_append (&watch_list->watches, watch))
        return FALSE;

    _dbus_watch_ref (watch);

    if (watch_list->add_watch_function != NULL)
    {
        _dbus_verbose ("Adding watch on fd %d\n",
                      dbus_watch_get_socket (watch));

        if (!(* watch_list->add_watch_function) (watch,
                                                watch_list->
>watch_data))
        {
            _dbus_list_remove_last (&watch_list->watches, watch);
            _dbus_watch_unref (watch);
            return FALSE;
        }
    }

    return TRUE;
}

/**
 * Removes a watch from the watch list, invoking the
 * application's DbusRemoveWatchFunction if appropriate.
 *
 * @param watch_list the watch list.
 * @param watch the watch to remove.

```

```

*/
void
_dbus_watch_list_remove_watch (DBusWatchList *watch_list,
                               DBusWatch      *watch)
{
    if (!_dbus_list_remove (&watch_list->watches, watch))
        _dbus_assert_not_reached ("Nonexistent watch was removed");

    if (watch_list->remove_watch_function != NULL)
    {
        _dbus_verbose ("Removing watch on fd %d\n",
                      dbus_watch_get_socket (watch));

        (* watch_list->remove_watch_function) (watch,
                                              watch_list->watch_data);
    }

    _dbus_watch_unref (watch);
}

/**
 * Sets a watch to the given enabled state, invoking the
 * application's DBusWatchToggledFunction if appropriate.
 *
 * @param watch_list the watch list.
 * @param watch the watch to toggle.
 * @param enabled #TRUE to enable
 */
void
_dbus_watch_list_toggle_watch (DBusWatchList *watch_list,
                              DBusWatch      *watch,
                              dbus_bool_t     enabled)
{
    enabled = !enabled;

    if (enabled == watch->enabled)
        return;

    watch->enabled = enabled;

    if (watch_list->watch_toggled_function != NULL)
    {
        _dbus_verbose ("Toggling watch %p on fd %d to %d\n",
                      watch, dbus_watch_get_socket (watch), watch-
>enabled);

        (* watch_list->watch_toggled_function) (watch,
                                              watch_list->watch_data);
    }
}

/**

```

```

* Sets the handler for the watch.
*
* @todo this function only exists because of the weird
* way connection watches are done, see the note
* in docs for _dbus_connection_handle_watch().
*
* @param watch the watch
* @param handler the new handler
* @param data the data
* @param free_data_function free data with this
*/
void
_dbus_watch_set_handler (DBusWatch      *watch,
                        DBusWatchHandler handler,
                        void             *data,
                        DBusFreeFunction free_data_function)
{
    if (watch->free_handler_data_function)
        (* watch->free_handler_data_function) (watch->handler_data);

    watch->handler = handler;
    watch->handler_data = data;
    watch->free_handler_data_function = free_data_function;
}

/** @} */

/**
 * @defgroup DBusWatch DBusWatch
 * @ingroup DBus
 * @brief Object representing a file descriptor to be watched.
 *
 * Types and functions related to DBusWatch. A watch represents
 * a file descriptor that the main loop needs to monitor,
 * as in Qt's QSocketNotifier or GLib's g_io_add_watch().
 *
 * Use dbus_connection_set_watch_functions() or
 * dbus_server_set_watch_functions()
 * to be notified when libdbus needs to add or remove watches.
 *
 * @{
 */

/**
 * @typedef DBusWatch
 *
 * Opaque object representing a file descriptor
 * to be watched for changes in readability,
 * writability, or hangup.
 */

/**

```



```

* Deprecated former name of dbus_watch_get_unix_fd().
*
* @param watch the DBusWatch object.
* @returns the file descriptor to watch.
*/
int
dbus_watch_get_fd (DBusWatch *watch)
{
    _dbus_return_val_if_fail (watch != NULL, -1);

    return dbus_watch_get_unix_fd(watch);
}

/**
* Returns a UNIX file descriptor to be watched,
* which may be a pipe, socket, or other type of
* descriptor. On UNIX this is preferred to
* dbus_watch_get_socket() since it works with
* more kinds of #DBusWatch.
*
* Always returns -1 on Windows. On Windows you use
* dbus_watch_get_socket() to get a Winsock socket to watch.
*
* @param watch the DBusWatch object.
* @returns the file descriptor to watch.
*/
int
dbus_watch_get_unix_fd (DBusWatch *watch)
{
    _dbus_return_val_if_fail (watch != NULL, -1);

    /* FIXME remove #ifdef and do this on a lower level
    * (watch should have set_socket and set_unix_fd and track
    * which it has, and the transport should provide the
    * appropriate watch type)
    */
#ifdef DBUS_UNIX
    return watch->fd;
#else
    return dbus_watch_get_socket( watch );
#endif
}

/**
* Returns a socket to be watched, on UNIX this will return -1 if our
* transport is not socket-based so dbus_watch_get_unix_fd() is
* preferred.
*
* On Windows, dbus_watch_get_unix_fd() returns -1 but this function
* returns a Winsock socket (assuming the transport is socket-based,
* as it always is for now).
*
*/

```

```

* @param watch the DBusWatch object.
* @returns the socket to watch.
*/
int
dbus_watch_get_socket (DBusWatch *watch)
{
    _dbus_return_val_if_fail (watch != NULL, -1);

    return watch->fd;
}

/**
* Gets flags from DBusWatchFlags indicating
* what conditions should be monitored on the
* file descriptor.
*
* The flags returned will only contain DBUS_WATCH_READABLE
* and DBUS_WATCH_WRITABLE, never DBUS_WATCH_HANGUP or
* DBUS_WATCH_ERROR; all watches implicitly include a watch
* for hangups, errors, and other exceptional conditions.
*
* @param watch the DBusWatch object.
* @returns the conditions to watch.
*/
unsigned int
dbus_watch_get_flags (DBusWatch *watch)
{
    _dbus_return_val_if_fail (watch != NULL, 0);
    _dbus_assert ((watch->flags & VALID_WATCH_FLAGS) == watch->flags);

    return watch->flags;
}

/**
* Gets data previously set with dbus_watch_set_data()
* or #NULL if none.
*
* @param watch the DBusWatch object.
* @returns previously-set data.
*/
void*
dbus_watch_get_data (DBusWatch *watch)
{
    _dbus_return_val_if_fail (watch != NULL, NULL);

    return watch->data;
}

/**
* Sets data which can be retrieved with dbus_watch_get_data().
* Intended for use by the DBusAddWatchFunction and
* DBusRemoveWatchFunction to store their own data. For example with

```

```

* Qt you might store the QSocketNotifier for this watch and with GLib
* you might store a GSource.
*
* @param watch the DBusWatch object.
* @param data the data.
* @param free_data_function function to be called to free the data.
*/
void
dbus_watch_set_data (DBusWatch      *watch,
                    void            *data,
                    DBusFreeFunction free_data_function)
{
    _dbus_return_if_fail (watch != NULL);

    _dbus_verbose ("Setting watch fd %d data to data = %p function = %p
from data = %p function = %p\n",
                  dbus_watch_get_socket (watch),
                  data, free_data_function, watch->data, watch-
>free_data_function);

    if (watch->free_data_function != NULL)
        (* watch->free_data_function) (watch->data);

    watch->data = data;
    watch->free_data_function = free_data_function;
}

/**
 * Returns whether a watch is enabled or not. If not
 * enabled, it should not be polled by the main loop.
 *
 * @param watch the DBusWatch object
 * @returns #TRUE if the watch is enabled
 */
dbus_bool_t
dbus_watch_get_enabled (DBusWatch *watch)
{
    _dbus_return_val_if_fail (watch != NULL, FALSE);

    return watch->enabled;
}

/**
 * Called to notify the D-Bus library when a previously-added watch is
 * ready for reading or writing, or has an exception such as a hangup.
 *
 * If this function returns #FALSE, then the file descriptor may still
 * be ready for reading or writing, but more memory is needed in order
 * to do the reading or writing. If you ignore the #FALSE return, your
 * application may spin in a busy loop on the file descriptor until
 * memory becomes available, but nothing more catastrophic should

```

```

* happen.
*
* dbus_watch_handle() cannot be called during the
* DBusAddWatchFunction, as the connection will not be ready to handle
* that watch yet.
*
* It is not allowed to reference a DBusWatch after it has been passed
* to remove_function.
*
* @param watch the DBusWatch object.
* @param flags the poll condition using #DBusWatchFlags values
* @returns #FALSE if there wasn't enough memory
*/
dbus_bool_t
dbus_watch_handle (DBusWatch *watch,
                  unsigned int flags)
{
    _dbus_return_val_if_fail (watch != NULL, FALSE);

#ifdef DBUS_DISABLE_CHECKS
    if (watch->fd < 0 || watch->flags == 0)
    {
        _dbus_warn_check_failed ("Watch is invalid, it should have been
removed\n");
        return TRUE;
    }
#endif

    _dbus_return_val_if_fail (watch->fd >= 0 /* fails if watch was
removed */, TRUE);

    _dbus_watch_sanitization_condition (watch, &flags);

    if (flags == 0)
    {
        _dbus_verbose ("After sanitization, watch flags on fd %d were
0\n",
                      watch->fd);
        return TRUE;
    }
    else
        return (* watch->handler) (watch, flags,
                                   watch->handler_data);
}

/** @} */

```

File = dbus-watch.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus-watch.h DBusWatch internal interfaces
 *
 * Copyright (C) 2002 Red Hat Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify
 * it under the terms of the GNU General Public License as published
by
 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
#ifdef DBUS_WATCH_H
#define DBUS_WATCH_H

#include <dbus/dbus-internals.h>
#include <dbus/dbus-connection.h>

DBUS_BEGIN_DECLS

/**
 * @addtogroup DBusWatchInternals
 * @{
 */

/* Public methods on DBusWatch are in dbus-connection.h */

typedef struct DBusWatchList DBusWatchList;

#define _DBUS_WATCH_NVAL (1<<4)

/** function to run when the watch is handled */
typedef dbus_bool_t (* DBusWatchHandler) (DBusWatch *watch,
                                           unsigned int flags,
                                           void *data);

DBusWatch* _dbus_watch_new (int fd,
                            unsigned int flags,
                            dbus_bool_t enabled,

```

```

DBusWatchHandler handler,
void *data,
DBusFreeFunction
free_data_function);
DBusWatch* _dbus_watch_ref (DBusWatch *watch);
void _dbus_watch_unref (DBusWatch *watch);
void _dbus_watch_invalidate (DBusWatch *watch);
void _dbus_watch_sanitiz_e_condition (DBusWatch *watch,
unsigned int
*condition);
void _dbus_watch_set_handler (DBusWatch *watch,
DBusWatchHandler handler,
void *data,
DBusFreeFunction
free_data_function);

DBusWatchList* _dbus_watch_list_new (void);
void _dbus_watch_list_free (DBusWatchList
*watch_list);
dbus_bool_t _dbus_watch_list_set_functions (DBusWatchList
*watch_list,
DBusAddWatchFunction
add_function,
DBusRemoveWatchFunction
remove_function,
DBusWatchToggledFunction toggled_function,
void
*data,
DBusFreeFunction
free_data_function);
dbus_bool_t _dbus_watch_list_add_watch (DBusWatchList
*watch_list,
DBusWatch
*watch);
void _dbus_watch_list_remove_watch (DBusWatchList
*watch_list,
DBusWatch
*watch);
void _dbus_watch_list_toggle_watch (DBusWatchList
*watch_list,
DBusWatch
*watch,
dbus_bool_t
enabled);
dbus_bool_t _dbus_watch_get_enabled (DBusWatch
*watch);
dbus_bool_t _dbus_watch_get_oom_last_time (DBusWatch
*watch);

```

```

void          _dbus_watch_set_oom_last_time (DBusWatch
*watch,
                                                dbus_bool_t
oom);

/** @} */

DBUS_END_DECLS

#endif /* DBUS_WATCH_H */

```

File = dbus.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dbus.h Convenience header including all other headers
 *
 * Copyright (C) 2002, 2003 Red Hat Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify
 * it under the terms of the GNU General Public License as published
by
 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */

```

```

#ifndef DBUS_H
#define DBUS_H

#define DBUS_INSIDE_DBUS_H 1

#include <dbus/dbus-arch-deps.h>
#include <dbus/dbus-address.h>
#include <dbus/dbus-bus.h>
#include <dbus/dbus-connection.h>
#include <dbus/dbus-errors.h>
#include <dbus/dbus-macros.h>

```

```

#include <dbus/dbus-message.h>
#include <dbus/dbus-misc.h>
#include <dbus/dbus-pending-call.h>
#include <dbus/dbus-protocol.h>
#include <dbus/dbus-server.h>
#include <dbus/dbus-shared.h>
#include <dbus/dbus-signature.h>
#include <dbus/dbus-syntax.h>
#include <dbus/dbus-threads.h>
#include <dbus/dbus-types.h>

#undef DBUS_INSIDE_DBUS_H

/**
 * @defgroup DBus D-Bus low-level public API
 * @brief The low-level public API of the D-Bus library
 *
 * libdbus provides a low-level C API intended primarily for use by
 * bindings to specific object systems and languages. D-Bus is most
 * convenient when used with the GLib bindings, Python bindings, Qt
 * bindings, Mono bindings, and so forth. This low-level API has a
 * lot of complexity useful only for bindings.
 *
 * @{
 */

/** @} */

/**
 * @mainpage
 *
 * This manual documents the low-level D-Bus C API. If you
 use
 * this low-level API directly, you're signing up for some pain.
 *
 * Caveats aside, you might get started learning the low-level API by
 reading
 * about @ref DBusConnection and @ref DBusMessage.
 *
 * There are several other places to look for D-Bus information, such
 * as the tutorial and the specification; those can be found at the D-Bus
 \* website. If you're interested in a sysadmin or package
 * maintainer's perspective on the dbus-daemon itself and its
 * configuration, be sure to check out the man pages as well.
 *
 * The low-level API documented in this manual deliberately lacks
 * most convenience functions - those are left up to higher-level
 libraries
 * based on frameworks such as GLib, Qt, Python, Mono, Java,
 * etc. These higher-level libraries (often called "D-Bus bindings")
 * have features such as object systems and main loops that allow a

```



```

* <em>much</em> more convenient API.
*
* The low-level API also contains plenty of clutter to support
* integration with arbitrary object systems, languages, main loops,
* and so forth. These features add a lot of noise to the API that you
* probably don't care about unless you're coding a binding.
*
* This manual also contains docs for @ref DBusInternals "D-Bus
internals",
* so you can use it to get oriented to the D-Bus source code if
you're
* interested in patching the code. You should also read the
* file HACKING which comes with the source code if you plan to
contribute to
* D-Bus.
*
* As you read the code, you can identify internal D-Bus functions
* because they start with an underscore ('_') character. Also, any
* identifier or macro that lacks a DBus, dbus_, or DBUS_ namespace
* prefix is internal, with a couple of exceptions such as #NULL,
* #TRUE, and #FALSE.
*/

```

```

#endif /* DBUS_H */

```

```

File = dbus.service

```

```

[Unit]
Description=D-Bus System Message Bus
Requires=dbus.socket
After=syslog.target

```

```

[Service]
ExecStart=/usr/bin/dbus-daemon --system --address=systemd: --nofork --
nospidfile --systemd-activation
ExecReload=/usr/bin/dbus-send --print-reply --system --
type=method_call --dest=org.freedesktop.DBus /
org.freedesktop.DBus.ReloadConfig
OOMScoreAdjust=-900

```

```

File = dbus.service.in

```

```

[Unit]
Description=D-Bus System Message Bus
Requires=dbus.socket
After=syslog.target

```

```

[Service]

```

```
ExecStart=@EXPANDED_BINDIR@/dbus-daemon --system --address=systemd: --  
nofork --nopidfile --systemd-activation  
ExecReload=@EXPANDED_BINDIR@/dbus-send --print-reply --system --  
type=method_call --dest=org.freedesktop.DBus /  
org.freedesktop.DBus.ReloadConfig  
OOMScoreAdjust=-900
```

File = dbus.socket

```
[Unit]  
Description=D-Bus System Message Bus Socket
```

```
[Socket]  
ListenStream=/var/run/dbus/system_bus_socket
```

File = dbus.socket.in

```
[Unit]  
Description=D-Bus System Message Bus Socket
```

```
[Socket]  
ListenStream=@DBUS_SYSTEM_SOCKET@
```

File = dcop-howto.txt

DCOP: Desktop COmmunications Protocol

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October 14, 1999

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Extended with DCOP Signals by Waldo Bastian <bastian@kde.org>
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Motivation and Background:

The motivation behind building a protocol like DCOP is simple. For the past year, we have been attempting to enable interprocess communication between KDE applications. KDE already has an extremely simple IPC mechanism called KWMcom, which is (was!) used for communicating between the panel and the window manager for instance. It is about as

simple as it gets, passing messages via X Atoms. For this reason it is limited in the size and complexity of the data that can be passed (X atoms must be small to remain efficient) and it also makes it so that X is required. CORBA was thought to be a more effective IPC/RPC solution. However, after a year of attempting to make heavy use of CORBA in KDE, we have realized that it is a bit slow and memory intensive for simple use. It also has no authentication available.

What we really needed was an extremely simple protocol with basic authorization, along the lines of MIT-MAGIC-COOKIE, as used by X. It would not be able to do NEARLY what CORBA was able to do, but for the simple tasks required it would be sufficient. Some examples of such tasks might be an application sending a message to the panel saying, "I have started, stop displaying the 'application starting' wait state," or having a new application that starts query to see if any other applications of the same name are running. If they are, simply call a function on the remote application to create a new window, rather than starting a new process.

Implementation:

DCOP is a simple IPC/RPC mechanism built to operate over sockets. Either unix domain sockets or tcp/ip sockets are supported. DCOP is built on top of the Inter Client Exchange (ICE) protocol, which comes standard as a part of X11R6 and later. It also depends on Qt, but beyond that it does not require any other libraries. Because of this, it is extremely lightweight, enabling it to be linked into all KDE applications with low overhead.

Model:

The model is simple. Each application using DCOP is a client. They communicate to each other through a DCOP server, which functions like a traffic director, dispatching messages/calls to the proper destinations. All clients are peers of each other.

Two types of actions are possible with DCOP: "send and forget" messages, which do not block, and "calls," which block waiting for some data to be returned.

Any data that will be sent is serialized (marshalled, for you CORBA types) using the built-in QDataStream operators available in all of the Qt classes. This is fast and easy. In fact it's so little work that you can easily write the marshalling code by hand. In addition, there's a simple IDL-like compiler available (dcopidl and dcopidl2cpp) that generates stubs and skeletons for you. Using the dcopidl compiler has the additional benefit of type safety.

This HOWTO describes the manual method first and covers the dcopidl compiler later.

Establishing the Connection:

KApplication has gained a method called "KApplication::dcopClient()" which returns a pointer to a DCOPClient instance. The first time this method is called, the client class will be created. DCOPClients have unique identifiers attached to them which are based on what KApplication::name() returns. In fact, if there is only a single instance of the program running, the appId will be equal to KApplication::name().

To actually enable DCOP communication to begin, you must use DCOPClient::attach(). This will attempt to attach to the DCOP server. If no server is found or there is any other type of error, attach() will return false. KApplication will catch a dcop signal and display an appropriate error message box in that case.

After connecting with the server via DCOPClient::attach(), you need to register this appId with the server so it knows about you. Otherwise, you are communicating anonymously. Use the DCOPClient::registerAs(const QString &name) to do so. In the simple case:

```
/*
 * returns the appId that is actually registered, which _may_ be
 * different from what you passed
 */
appId = client->registerAs(kApp->name());
```

If you never retrieve the DCOPClient pointer from KApplication, the object will not be created and thus there will be no memory overhead.

You may also detach from the server by calling DCOPClient::detach(). If you wish to attach again you will need to re-register as well. If you only wish to change the ID under which you are registered, simply call DCOPClient::registerAs() with the new name.

KUniqueApplication automatically registers itself to DCOP. If you are using KUniqueApplication you should not attach or register yourself, this is already done. The appId is by definition equal to kapp->name(). You can retrieve the registered DCOP client by calling kapp->dcopClient().

Sending Data to a Remote Application:

To actually communicate, you have one of two choices. You may either call the "send" or the "call" method. Both methods require three identification parameters: an application identifier, a remote object,

a remote function. Sending is asynchronous (i.e. it returns immediately) and may or may not result in your own application being sent a message at some point in the future. Then "send" requires one and "call" requires two data parameters.

The remote object must be specified as an object hierarchy. That is, if the toplevel object is called "fooObject" and has the child "barObject", you would reference this object as "fooObject/barObject". Functions must be described by a full function signature. If the remote function is called "doIt", and it takes an int, it would be described as "doIt(int)". Please note that the return type is not specified here, as it is not part of the function signature (or at least the C++ understanding of a function signature). You will get the return type of a function back as an extra parameter to `DCOPClient::call()`. See the section on `call()` for more details.

In order to actually get the data to the remote client, it must be "serialized" via a `QDataStream` operating on a `QByteArray`. This is how the data parameter is "built". A few examples will make clear how this works.

Say you want to call "doIt" as described above, and not block (or wait for a response). You will not receive the return value of the remotely called function, but you will not hang while the RPC is processed either. The return value of `send()` indicates whether DCOP communication succeeded or not.

```
QByteArray data;
QDataStream arg(data, IO_WriteOnly);
arg << 5;
if (!client->send("someAppId", "fooObject/barObject", "doIt(int)",
                data))
    qDebug("there was some error using DCOP.");
```

OK, now let's say we wanted to get the data back from the remotely called function. You have to execute a `call()` instead of a `send()`. The returned value will then be available in the data parameter "reply". The actual return value of `call()` is still whether or not DCOP communication was successful.

```
QByteArray data, replyData;
QString replyType;
QDataStream arg(data, IO_WriteOnly);
arg << 5;
if (!client->call("someAppId", "fooObject/barObject", "doIt(int)",
                data, replyType, replyData))
```

```

    qDebug("there was some error using DCOP.");
else {
    QDataStream reply(replyData, IO_ReadOnly);
    if (replyType == "QString") {
        QString result;
        reply >> result;
        print("the result is: %s",result.latin1());
    } else
        qDebug("doIt returned an unexpected type of reply!");
}
}

```

N.B.: You cannot call() a method belonging to an application which has registered with an unique numeric id appended to its textual name (see dcopclient.h for more info). In this case, DCOP would not know which application it should connect with to call the method. This is not an issue with send(), as you can broadcast to all applications that have registered with appname-<numeric_id> by using a wildcard (e.g. 'konsole-*'), which will send your signal to all applications called 'konsole'.

Receiving Data via DCOP:

Currently the only real way to receive data from DCOP is to multiply inherit from the normal class that you are inheriting (usually some sort of QWidget subclass or QObject) as well as the DCOPObject class. DCOPObject provides one very important method: DCOPObject::process(). This is a pure virtual method that you must implement in order to process DCOP messages that you receive. It takes a function signature, QByteArray of parameters, and a reference to a QByteArray for the reply data that you must fill in.

Think of DCOPObject::process() as a sort of dispatch agent. In the future, there will probably be a precompiler for your sources to write this method for you. However, until that point you need to examine the incoming function signature and take action accordingly. Here is an example implementation.

```

bool BarObject::process(const QString &fun, const QByteArray &data,
                        QString &replyType, QByteArray &replyData)
{
    if (fun == "doIt(int)") {
        QDataStream arg(data, IO_ReadOnly);
        int i; // parameter
        arg >> i;
        QString result = self->doIt (i);
        QDataStream reply(replyData, IO_WriteOnly);
        reply << result;
        replyType = "QString";
        return true;
    }
}

```

```

    } else {
        qDebug("unknown function call to BarObject::process()");
        return false;
    }
}

```

Receiving Calls and processing them:

If your applications is able to process incoming function calls right away the above code is all you need. When your application needs to do more complex tasks you might want to do the processing out of 'process' function call and send the result back later when it becomes available.

For this you can ask your DCOPClient for a transactionId. You can then return from the 'process' function and when the result is available finish the transaction. In the mean time your application can receive incoming DCOP function calls from other clients.

Such code could like this:

```

bool BarObject::process(const QString &fun, const QByteArray &data,
                       QString &, QByteArray &)
{
    if (fun == "doIt(int)") {
        QDataStream arg(data, IO_ReadOnly);
        int i; // parameter
        arg >> i;
        QString result = self->doIt(i);

        DCOPClientTransaction *myTransaction;
        myTransaction = kapp->dcopClient()->beginTransaction();

        // start processing...
        // Calls slotProcessingDone when finished.
        startProcessing( myTransaction, i);

        return true;
    } else {
        qDebug("unknown function call to BarObject::process()");
        return false;
    }
}

```

```

slotProcessingDone(DCOPClientTransaction *myTransaction, const QString
&result)
{
    QString replyType = "QString";
    QByteArray replyData;
    QDataStream reply(replyData, IO_WriteOnly);
    reply << result;
}

```

```
    kapp->dcopClient()->endTransaction( myTransaction, replyType,  
replyData );  
}
```

DCOP Signals

Sometimes a component wants to send notifications via DCOP to other components but does not know which components will be interested in these notifications. One could use a broadcast in such a case but this is a very crude method. For a more sophisticated method DCOP signals have been invented.

DCOP signals are very similar to Qt signals, there are some differences though. A DCOP signal can be connected to a DCOP function. Whenever the DCOP signal gets emitted, the DCOP functions to which the signal is connected are being called. DCOP signals are, just like Qt signals, one way. They do not provide a return value.

A DCOP signal originates from a DCOP Object/DCOP Client combination (sender). It can be connected to a function of another DCOP Object/DCOP Client combination (receiver).

There are two major differences between connections of Qt signals and connections of DCOP signals. In DCOP, unlike Qt, a signal connections can have an anonymous sender and, unlike Qt, a DCOP signal connection can be non-volatile.

With DCOP one can connect a signal without specifying the sending DCOP Object or DCOP Client. In that case signals from any DCOP Object and/or DCOP Client will be delivered. This allows the specification of certain events without tying oneself to a certain object that implements the events.

Another DCOP feature are so called non-volatile connections. With Qt signal connections, the connection gets deleted when either sender or receiver of the signal gets deleted. A volatile DCOP signal connection will behave the

same. However, a non-volatile DCOP signal connection will not get deleted when the sending object gets deleted. Once a new object gets created with the same name as the original sending object, the connection will be restored. There is no difference between the two when the receiving object gets deleted, in that case the signal connection will always be deleted.

A receiver can create a non-volatile connection while the sender doesn't (yet) exist. An anonymous DCOP connection should always be non-volatile.

The following example shows how KLauncher emits a signal whenever it notices that an application that was started via KLauncher terminates.

```
QByteArray params;
QDataStream stream(params, IO_WriteOnly);
stream << pid;
kapp->dcopClient()->emitDCOPSignal("clientDied(pid_t)", params);
```

The task manager of the KDE panel connects to this signal. It uses an anonymous connection (it doesn't require that the signal is being emitted by KLauncher) that is non-volatile:

```
connectDCOPSignal(0, 0, "clientDied(pid_t)", "clientDied(pid_t)",
false);
```

It connects the clientDied(pid_t) signal to its own clientDied(pid_t) DCOP function. In this case the signal and the function to call have the same name. This isn't needed as long as the arguments of both signal and receiving function match. The receiving function may ignore one or more of the trailing arguments of the signal. E.g. it is allowed to connect the clientDied(pid_t) signal to a clientDied(void) DCOP function.

Using the dcopidl compiler

dcopidl makes setting up a DCOP server easy. Instead of having to implement the process() method and unmarshalling (retrieving from QByteArray) parameters manually, you can let dcopidl create the necessary code on your behalf.

This also allows you to describe the interface for your class in a single, separate header file.

Writing an IDL file is very similar to writing a normal C++ header. An exception is the keyword 'ASYNC'. It indicates that a call to this function shall be processed asynchronously. For the C++ compiler, it expands to 'void'.

Example:

```
#ifndef MY_INTERFACE_H
#define MY_INTERFACE_H

#include <dcopobject.h>

class MyInterface : virtual public DCOPObject
{
    K_DCOP

    k_dcop:

        virtual ASYNC myAsynchronousMethod(QString someParameter) = 0;
        virtual QRect mySynchronousMethod() = 0;
};

#endif
```

As you can see, you're essentially declaring an abstract base class, which virtually inherits from DCOPObject.

If you're using the standard KDE build scripts, then you can simply add this file (which you would call MyInterface.h) to your sources directory. Then you edit your Makefile.am, adding 'MyInterface.skel' to your SOURCES list and MyInterface.h to include_HEADERS.

The build scripts will use dcopidl to parse MyInterface.h, converting it to an XML description in MyInterface.kidl. Next, a file called MyInterface_skel.cpp will automatically be created, compiled and linked with your binary.

The next thing you have to do is to choose which of your classes will implement the interface described in MyInterface.h. Alter the inheritance of this class such that it virtually inherits from MyInterface. Then add declarations to your class interface similar to those on MyInterface.h, but virtual, not pure virtual.

Example:

```

class MyClass: public QObject, virtual public MyInterface
{
    Q_OBJECT

public:
    MyClass();
    ~MyClass();

    ASYNC myAsynchronousMethod(QString someParameter);
    QRect mySynchronousMethod();
};

```

Note: (Qt issue) Remember that if you are inheriting from QObject, you must place it first in the list of inherited classes.

In the implementation of your class' ctor, you must explicitly initialize those classes from which you are inheriting from. This is, of course, good practise, but it is essential here as you need to tell DCOPObject the name of the interface which your are implementing.

Example:

```

MyClass::MyClass()
    : QObject(),
      DCOPObject("MyInterface")
{
    // whatever...
}

```

Now you can simply implement the methods you have declared in your interface, exactly the same as you would normally.

Example:

```

void MyClass::myAsynchronousMethod(QString someParameter)
{
    qDebug("myAsyncMethod called with param ` " + someParameter + "`");
}

```

It is not necessary (though very clean) to define an interface as an abstract class of its own, like we did in the example above. We could just as well have defined a k_dcop section directly within MyClass:

```

class MyClass: public QObject, virtual public DCOPObject
{
    Q_OBJECT

```

```

K_DCOP

public:
    MyClass();
    ~MyClass();

    k_dcop:
        ASYNC myAsynchronousMethod(QString someParameter);
        QRECT mySynchronousMethod();
};

```

In addition to skeletons, `dcopidl2cpp` also generate stubs. Those make it easy to call a DCOP interface without doing the marshalling manually. To use a stub, add `MyInterface.stub` to the `SOURCES` list of your `Makefile.am`. The stub class will then be called `MyInterface_stub`.

Conclusion:

Hopefully this document will get you well on your way into the world of inter-process communication with KDE! Please direct all comments and/or suggestions to Preston Brown <pbrown@kde.org> and Matthias Ettrich <ettrich@kde.org>.

Inter-user communication

Sometimes it might be interesting to use DCOP between processes belonging to different users, e.g. a frontend process running with the user's id, and a backend process running as root.

To do this, two steps have to be taken:

- a) both processes need to talk to the same DCOP server
- b) the authentication must be ensured

For the first step, you simply pass the server address (as found in `.DCOPserver`) to the second process. For the authentication, you can use the `ICEAUTHORITY` environment variable to tell the second process where to find the authentication information. (Note that this implies that the second process is able to read the authentication file, so it will probably only work if the second process runs as root. If it should run as another user, a similar approach to what `kdesu` does with `xauth` must be taken. In fact, it would be a very good idea to add DCOP support to `kdesu`!)

For example

```

ICEAUTHORITY=~user/.ICEauthority kdesu root -c kcmroot -dcopserver
`cat ~user/.DCOPserver`

```

will, after kdesu got the root password, execute kcmroot as root, talking to the user's dcop server.

NOTE: DCOP communication is not encrypted, so please do not pass important information around this way.

Performance Tests:

A few back-of-the-napkin tests folks:

Code:

```
#include <kapplication.h>

int main(int argc, char **argv)
{
    KApplication *app;

    app = new KApplication(argc, argv, "testit");
    return app->exec();
}
```

Compiled with:

```
g++ -O2 -o testit testit.cpp -I$QTDIR/include -L$QTDIR/lib -lkdecore
```

on Linux yields the following memory use statistics:

```
VmSize:      8076 kB
VmLck:        0 kB
VmRSS:       4532 kB
VmData:      208 kB
VmStk:       20 kB
VmExe:        4 kB
VmLib:      6588 kB
```

If I create the KApplication's DCOPClient, and call attach() and registerAs(), it changes to this:

```
VmSize:      8080 kB
VmLck:        0 kB
VmRSS:       4624 kB
VmData:      208 kB
VmStk:       20 kB
VmExe:        4 kB
VmLib:      6588 kB
```

Basically it appears that using DCOP causes 100k more memory to be

resident, but no more data or stack. So this will be shared between all processes, right? 100k to enable DCOP in all apps doesn't seem bad at all. :)

OK now for some timings. Just creating a KApplication and then exiting (i.e. removing the call to KApplication::exec) takes this much time:

```
0.28user 0.02system 0:00.32elapsed 92%CPU (0avgtext+0avgdata
0maxresident)k
0inputs+0outputs (1084major+62minor)pagefaults 0swaps
```

I.e. about 1/3 of a second on my PII-233. Now, if we create our DCOP object and attach to the server, it takes this long:

```
0.27user 0.03system 0:00.34elapsed 87%CPU (0avgtext+0avgdata
0maxresident)k
0inputs+0outputs (1107major+65minor)pagefaults 0swaps
```

I.e. about 1/3 of a second. Basically DCOPClient creation and attaching gets lost in the statistical variation ("noise"). I was getting times between .32 and .48 over several runs for both of the example programs, so obviously system load is more relevant than the extra two calls to DCOPClient::attach and DCOPClient::registerAs, as well as the actual DCOPClient constructor time.

File = debug-allow-all-fail.conf

```
<!-- Bus that listens on a debug pipe and doesn't create any
restrictions -->
```

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <listen>debug-pipe:name=test-server</listen>
  <listen>unix:tmpdir=/tmp</listen>
  <type>system</type>
  <servicehelper>/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-
external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/bus/dbus-daemon-launch-
helper-test</servicehelper>
  <servicedir>/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-
external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/data/invalid-service-
files-system</servicedir>
```

```
<policy context="default">
  <allow send_interface="*" />
  <allow receive_interface="*" />
  <allow own="*" />
  <allow user="*" />
</policy>
</busconfig>
```

File = debug-allow-all-fail.conf.in

```
<!-- Bus that listens on a debug pipe and doesn't create any
restrictions -->
```

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <listen>debug-pipe:name=test-server</listen>
  <listen>@TEST_LISTEN@</listen>
  <type>system</type>
  <servicehelper>@TEST_LAUNCH_HELPER_BINARY@</servicehelper>
  <servicedir>@DBUS_TEST_DATA@/invalid-service-files-
system</servicedir>
  <policy context="default">
    <allow send_interface="*" />
    <allow receive_interface="*" />
    <allow own="*" />
    <allow user="*" />
  </policy>
</busconfig>
```

File = debug-allow-all-pass.conf

```
<!-- Bus that listens on a debug pipe and doesn't create any
restrictions -->
```

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <listen>debug-pipe:name=test-server</listen>
  <listen>unix:tmpdir=/tmp</listen>
  <type>system</type>
  <servicehelper>/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-
external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/bus/dbus-daemon-launch-
helper-test</servicehelper>
```

```

    <servicedir>/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-
external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/data/valid-service-
files-system</servicedir>
    <policy context="default">
        <allow send_interface="*" />
        <allow receive_interface="*" />
        <allow own="*" />
        <allow user="*" />
    </policy>
</busconfig>

```

File = debug-allow-all-pass.conf.in

```

<!-- Bus that listens on a debug pipe and doesn't create any
restrictions -->

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
    <listen>debug-pipe:name=test-server</listen>
    <listen>@TEST_LISTEN@</listen>
    <type>system</type>
    <servicehelper>@TEST_LAUNCH_HELPER_BINARY@</servicehelper>
    <servicedir>@DBUS_TEST_DATA@/valid-service-files-system</servicedir>
    <policy context="default">
        <allow send_interface="*" />
        <allow receive_interface="*" />
        <allow own="*" />
        <allow user="*" />
    </policy>
</busconfig>

```

File = debug-allow-all-sha1.conf

```

<!-- Bus that listens on a debug pipe and requires SHA1 auth, used to
test SHA1 -->

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
    <listen>debug-pipe:name=test-server</listen>
    <listen>unix:tmpdir=/tmp</listen>
    <servicedir>/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-
external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-

```



```

gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/data/valid-service-
files</servicedir>
  <auth>DBUS_COOKIE_SHA1</auth>
  <policy context="default">
    <allow send_interface="*" />
    <allow receive_interface="*" />
    <allow own="*" />
    <allow user="*" />
  </policy>
</busconfig>

```

File = debug-allow-all-sha1.conf.in

```

<!-- Bus that listens on a debug pipe and requires SHA1 auth, used to
test SHA1 -->

```

```

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <listen>debug-pipe:name=test-server</listen>
  <listen>@TEST_LISTEN@</listen>
  <servicedir>@DBUS_TEST_DATA@/valid-service-files</servicedir>
  <auth>DBUS_COOKIE_SHA1</auth>
  <policy context="default">
    <allow send_interface="*" />
    <allow receive_interface="*" />
    <allow own="*" />
    <allow user="*" />
  </policy>
</busconfig>

```

File = debug-allow-all.conf

```

<!-- Bus that listens on a debug pipe and doesn't create any
restrictions -->

```

```

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <listen>debug-pipe:name=test-server</listen>
  <listen>unix:tmpdir=/tmp</listen>
  <servicedir>/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-
external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/data/valid-service-
files</servicedir>
  <policy context="default">

```

```
    <allow send_interface="*" />
    <allow receive_interface="*" />
    <allow own="*" />
    <allow user="*" />
  </policy>
</busconfig>
```

File = debug-allow-all.conf.in

```
<!-- Bus that listens on a debug pipe and doesn't create any
restrictions -->
```

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <listen>debug-pipe:name=test-server</listen>
  <listen>@TEST_LISTEN@</listen>
  <servicedir>@DBUS_TEST_DATA@/valid-service-files</servicedir>
  <policy context="default">
    <allow send_interface="*" />
    <allow receive_interface="*" />
    <allow own="*" />
    <allow user="*" />
  </policy>
</busconfig>
```

File = debug-echo.service

```
[D-BUS Service]
Name=org.freedesktop.DBus.GLib.TestEchoService
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/test/test-service
```

File = debug-echo.service.in

```
[D-BUS Service]
Name=org.freedesktop.DBus.GLib.TestEchoService
Exec=@TEST_SERVICE_BINARY@
```

File = debug-glib.service

```
[D-BUS Service]
```

```
Name=org.freedesktop.DBus.GLib.TestService
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/test/core/test-service-glib
```

```
File = debug-glib.service.in
```

```
[D-BUS Service]
Name=org.freedesktop.DBus.GLib.TestService
Exec=@TEST_CORE_SERVICE_BINARY@
```

```
File = depcomp
```

```
#!/bin/sh
# depcomp - compile a program generating dependencies as side-effects

scriptversion=2012-07-12.20; # UTC

# Copyright (C) 1999-2012 Free Software Foundation, Inc.

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<http://www.gnu.org/licenses/>.

# As a special exception to the GNU General Public License, if you
# distribute this file as part of a program that contains a
# configuration script generated by Autoconf, you may include it under
# the same distribution terms that you use for the rest of that
program.

# Originally written by Alexandre Oliva <oliva@dcc.unicamp.br>.

case $1 in
  '')
    echo "$0: No command. Try '$0 --help' for more information."
  1>&2
    exit 1;
  ;;

```

```

-h | --h*)
    cat <<\EOF
Usage: depcomp [--help] [--version] PROGRAM [ARGS]

Run PROGRAMS ARGS to compile a file, generating dependencies
as side-effects.

Environment variables:
depmode      Dependency tracking mode.
source       Source file read by 'PROGRAMS ARGS'.
object       Object file output by 'PROGRAMS ARGS'.
DEPDIR       directory where to store dependencies.
depfile      Dependency file to output.
tmpdepfile   Temporary file to use when outputting dependencies.
libtool      Whether libtool is used (yes/no).

Report bugs to <bug-automake@gnu.org>.
EOF
    exit $?
    ;;
-v | --v*)
    echo "depcomp $scriptversion"
    exit $?
    ;;
esac

# A tabulation character.
tab=' '
# A newline character.
nl='
'

if test -z "$depmode" || test -z "$source" || test -z "$object"; then
    echo "depcomp: Variables source, object and depmode must be set"
    1>&2
    exit 1
fi

# Dependencies for sub/bar.o or sub/bar.obj go into sub/.deps/bar.Po.
depfile=${depfile-`echo "$object" |
    sed 's|[\^\\\/]*$|'${DEPDIR}-
.deps}'/&|;s|\.\.([\^.]*)$|.P\1|;s|Pobj$|Po|'`}
tmpdepfile=${tmpdepfile-`echo "$depfile" | sed
's/\.\.([\^.]*)$/T\1/'`}

rm -f "$tmpdepfile"

# Avoid interferences from the environment.
gccflag= dashmflag=

# Some modes work just like other modes, but use different flags. We
# parameterize here, but still list the modes in the big case below,

```

```

# to make depend.m4 easier to write.  Note that we *cannot* use a case
# here, because this file can only contain one case statement.
if test "$depmode" = hp; then
    # HP compiler uses -M and no extra arg.
    gccflag=-M
    depmode=gcc
fi

if test "$depmode" = dashXmstdout; then
    # This is just like dashmstdout with a different argument.
    dashmflag=-xM
    depmode=dashmstdout
fi

cygpath_u="cygpath -u -f -"
if test "$depmode" = msvcmsys; then
    # This is just like msvisualcpp but w/o cygpath translation.
    # Just convert the backslash-escaped backslashes to single forward
    # slashes to satisfy depend.m4
    cygpath_u='sed s,\\\\,/,g'
    depmode=msvisualcpp
fi

if test "$depmode" = msvc7msys; then
    # This is just like msvc7 but w/o cygpath translation.
    # Just convert the backslash-escaped backslashes to single forward
    # slashes to satisfy depend.m4
    cygpath_u='sed s,\\\\,/,g'
    depmode=msvc7
fi

if test "$depmode" = xlc; then
    # IBM C/C++ Compilers xlc/xlC can output gcc-like dependency
    # information.
    gccflag=-qmakedep=gcc,-MF
    depmode=gcc
fi

case "$depmode" in
gcc3)
    ## gcc 3 implements dependency tracking that does exactly what
    ## we want.  Yay!  Note: for some reason libtool 1.4 doesn't like
    ## it if -MD -MP comes after the -MF stuff.  Hmm.
    ## Unfortunately, FreeBSD c89 acceptance of flags depends upon
    ## the command line argument order; so add the flags where they
    ## appear in depend2.am.  Note that the slowdown incurred here
    ## affects only configure: in makefiles, %FASTDEP% shortcuts this.
    for arg
    do
        case $arg in
        -c) set fnord "$@" -MT "$object" -MD -MP -MF "$tmpdepfile" "$arg"
        ;;

```

```

    *) set fnord "$@" "$arg" ;;
    esac
    shift # fnord
    shift # $arg
done
"$@"
stat=$?
if test $stat -eq 0; then :
else
    rm -f "$tmpdepfile"
    exit $stat
fi
mv "$tmpdepfile" "$depfile"
;;

gcc)
## Note that this doesn't just cater to obsosete pre-3.x GCC
## compilers.
## but also to in-use compilers like IMB xlc/xlC and the HP C
## compiler.
## (see the conditional assignment to $gccflag above).
## There are various ways to get dependency output from gcc. Here's
## why we pick this rather obscure method:
## - Don't want to use -MD because we'd like the dependencies to end
##   up in a subdir. Having to rename by hand is ugly.
##   (We might end up doing this anyway to support other compilers.)
## - The DEPENDENCIES_OUTPUT environment variable makes gcc act like
##   -MM, not -M (despite what the docs say). Also, it might not be
##   supported by the other compilers which use the 'gcc' depmode.
## - Using -M directly means running the compiler twice (even worse
##   than renaming).
    if test -z "$gccflag"; then
        gccflag=-MD,
    fi
    "$@" -Wp,"$gccflag$tmpdepfile"
    stat=$?
    if test $stat -eq 0; then :
    else
        rm -f "$tmpdepfile"
        exit $stat
    fi
    rm -f "$depfile"
    echo "$object : \\" > "$depfile"
    alpha=ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz
## The second -e expression handles DOS-style file names with drive
## letters.
    sed -e 's/^[^:]*: / /' \
        -e 's/^[\'$alpha\]:\[^\:]*: / /' < "$tmpdepfile" >> "$depfile"
## This next piece of magic avoids the "deleted header file" problem.
## The problem is that when a header file which appears in a .P file
## is deleted, the dependency causes make to die (because there is
## typically no way to rebuild the header). We avoid this by adding

```

```

## dummy dependencies for each header file.  Too bad gcc doesn't do
## this for us directly.
tr ' ' "$nl" < "$tmpdepfile" |
## Some versions of gcc put a space before the ':'.  On the theory
## that the space means something, we add a space to the output as
## well.  hp depmode also adds that space, but also prefixes the VPATH
## to the object.  Take care to not repeat it in the output.
## Some versions of the HPUX 10.20 sed can't process this invocation
## correctly.  Breaking it into two sed invocations is a workaround.
sed -e 's/^\$//' -e '/^$/d' -e "s|.*$object$||" -e '/:$/d' \
| sed -e 's/$/ :/' >> "$depfile"
rm -f "$tmpdepfile"
;;

hp)
# This case exists only to let depend.m4 do its work.  It works by
# looking at the text of this script.  This case will never be run,
# since it is checked for above.
exit 1
;;

sgi)
if test "$libtool" = yes; then
"$@" "-Wp,-MDupdate,$tmpdepfile"
else
"$@" -MDupdate "$tmpdepfile"
fi
stat=$?
if test $stat -eq 0; then :
else
rm -f "$tmpdepfile"
exit $stat
fi
rm -f "$depfile"

if test -f "$tmpdepfile"; then # yes, the sourcefile depend on
other files
echo "$object : \" > "$depfile"

# Clip off the initial element (the dependent).  Don't try to be
# clever and replace this with sed code, as IRIX sed won't handle
# lines with more than a fixed number of characters (4096 in
# IRIX 6.2 sed, 8192 in IRIX 6.5).  We also remove comment lines;
# the IRIX cc adds comments like '#:fec' to the end of the
# dependency line.
tr ' ' "$nl" < "$tmpdepfile" \
| sed -e 's/^\.\o:/' -e 's/#.*$/' -e '/^$/ d' | \
tr "$nl" ' ' >> "$depfile"
echo >> "$depfile"

# The second pass generates a dummy entry for each header file.
tr ' ' "$nl" < "$tmpdepfile" \

```

```

    | sed -e 's/^\.*\.\o$//' -e 's/#.*$//' -e '/^$/ d' -e 's/$/://' \
    >> "$depfile"
else
    # The sourcefile does not contain any dependencies, so just
    # store a dummy comment line, to avoid errors with the Makefile
    # "include basename.Plo" scheme.
    echo "#dummy" > "$depfile"
fi
rm -f "$tmpdepfile"
;;

xlc)
# This case exists only to let depend.m4 do its work. It works by
# looking at the text of this script. This case will never be run,
# since it is checked for above.
exit 1
;;

aix)
# The C for AIX Compiler uses -M and outputs the dependencies
# in a .u file. In older versions, this file always lives in the
# current directory. Also, the AIX compiler puts '$object:' at the
# start of each line; $object doesn't have directory information.
# Version 6 uses the directory in both cases.
dir=`echo "$object" | sed -e 's|/[^/]*$|/'`
test "x$dir" = "x$object" && dir=
base=`echo "$object" | sed -e 's|^\.*|/' -e 's/\.\o$//' -e
's/\.\lo$//'`
if test "$libtool" = yes; then
    tmpdepfile1=$dir$base.u
    tmpdepfile2=$base.u
    tmpdepfile3=$dir.libs/$base.u
    "$@" -Wc,-M
else
    tmpdepfile1=$dir$base.u
    tmpdepfile2=$dir$base.u
    tmpdepfile3=$dir$base.u
    "$@" -M
fi
stat=$?

if test $stat -eq 0; then :
else
    rm -f "$tmpdepfile1" "$tmpdepfile2" "$tmpdepfile3"
    exit $stat
fi

for tmpdepfile in "$tmpdepfile1" "$tmpdepfile2" "$tmpdepfile3"
do
    test -f "$tmpdepfile" && break
done
if test -f "$tmpdepfile"; then

```



```

# Each line is of the form 'foo.o: dependent.h'.
# Do two passes, one to just change these to
# '$object: dependent.h' and one to simply 'dependent.h:'.
sed -e "s,^.*\.[a-z]*:,$object:," < "$tmpdepfile" > "$depfile"
sed -e 's,^.*\.[a-z]*:[ "$stab" ]*,,' -e 's,$,:',' < "$tmpdepfile"
>> "$depfile"
else
# The sourcefile does not contain any dependencies, so just
# store a dummy comment line, to avoid errors with the Makefile
# "include basename.Plo" scheme.
echo "#dummy" > "$depfile"
fi
rm -f "$tmpdepfile"
;;

icc)
# Intel's C compiler anf tcc (Tiny C Compiler) understand '-MD -MF
file'.
# However on
#   $CC -MD -MF foo.d -c -o sub/foo.o sub/foo.c
# ICC 7.0 will fill foo.d with something like
#   foo.o: sub/foo.c
#   foo.o: sub/foo.h
# which is wrong. We want
#   sub/foo.o: sub/foo.c
#   sub/foo.o: sub/foo.h
#   sub/foo.c:
#   sub/foo.h:
# ICC 7.1 will output
#   foo.o: sub/foo.c sub/foo.h
# and will wrap long lines using '\':
#   foo.o: sub/foo.c ... \
#     sub/foo.h ... \
#     ...
# tcc 0.9.26 (FIXME still under development at the moment of
writing)
# will emit a similar output, but also prepend the continuation
lines
# with horizontal tabulation characters.
"$@" -MD -MF "$tmpdepfile"
stat=$?
if test $stat -eq 0; then :
else
  rm -f "$tmpdepfile"
  exit $stat
fi
rm -f "$depfile"
# Each line is of the form 'foo.o: dependent.h',
# or 'foo.o: dep1.h dep2.h \', or ' dep3.h dep4.h \'.
# Do two passes, one to just change these to
# '$object: dependent.h' and one to simply 'dependent.h:'.
sed -e "s/^[ $stab][ $stab]*/ /" -e "s,^[^:]*:,$object :," \

```

```

    < "$tmpdepfile" > "$depfile"
sed '
s/[ '"$stab"' ][ '"$stab"' ]*/ /g
s/^ *//
s/ *\\*$//
s/^[^:]*: *//
/^$/d
/::$/d
s/$/ :/
' < "$tmpdepfile" >> "$depfile"
rm -f "$tmpdepfile"
;;

## The order of this option in the case statement is important, since
the
## shell code in configure will try each of these formats in the order
## listed in this file.  A plain '-MD' option would be understood by
many
## compilers, so we must ensure this comes after the gcc and icc
options.
pgcc)
  # Portland's C compiler understands '-MD'.
  # Will always output deps to 'file.d' where file is the root name of
the
  # source file under compilation, even if file resides in a
subdirectory.
  # The object file name does not affect the name of the '.d' file.
  # pgcc 10.2 will output
  #   foo.o: sub/foo.c sub/foo.h
  # and will wrap long lines using '\ ' :
  #   foo.o: sub/foo.c ... \
  #     sub/foo.h ... \
  #     ...
  dir=`echo "$object" | sed -e 's|/[^\/*]*$|/|'`
  test "x$dir" = "x$object" && dir=
  # Use the source, not the object, to determine the base name, since
  # that's sadly what pgcc will do too.
  base=`echo "$source" | sed -e 's|^\.*$|'|' -e 's|\.[-_a-zA-Z0-9]*$|/|'`
  tmpdepfile="$base.d"

  # For projects that build the same source file twice into different
object
  # files, the pgcc approach of using the *source* file root name can
cause
  # problems in parallel builds.  Use a locking strategy to avoid
stomping on
  # the same $tmpdepfile.
  lockdir="$base.d-lock"
  trap "echo '$0: caught signal, cleaning up...' >&2; rm -rf $lockdir"
1 2 13 15
  numtries=100
  i=$numtries

```

```

while test $i -gt 0 ; do
    # mkdir is a portable test-and-set.
    if mkdir $lockdir 2>/dev/null; then
        # This process acquired the lock.
        "$@" -MD
        stat=$?
        # Release the lock.
        rm -rf $lockdir
        break
    else
        ## the lock is being held by a different process,
        ## wait until the winning process is done or we timeout
        while test -d $lockdir && test $i -gt 0; do
            sleep 1
            i=`expr $i - 1`
        done
    fi
    i=`expr $i - 1`
done
trap - 1 2 13 15
if test $i -le 0; then
    echo "$0: failed to acquire lock after $numtries attempts" >&2
    echo "$0: check lockdir '$lockdir'" >&2
    exit 1
fi

if test $stat -ne 0; then
    rm -f "$tmpdepfile"
    exit $stat
fi
rm -f "$depfile"
# Each line is of the form `foo.o: dependent.h',
# or `foo.o: dep1.h dep2.h \', or `dep3.h dep4.h \'.
# Do two passes, one to just change these to
# `$object: dependent.h' and one to simply `dependent.h:'.
sed "s,^[^:]*:,$object :," < "$tmpdepfile" > "$depfile"
# Some versions of the HP-UX 10.20 sed can't process this invocation
# correctly. Breaking it into two sed invocations is a workaround.
sed 's,^[^:]*: \(.*\)$, \1,;s/^\$//;/^\$/d;/:$/d' < "$tmpdepfile" |
    sed -e 's/$/ :/' >> "$depfile"
rm -f "$tmpdepfile"
;;

hp2)
    # The "hp" stanza above does not work with aCC (C++) and HP's ia64
    # compilers, which have integrated preprocessors. The correct
    option
    # to use with these is +Maked; it writes dependencies to a file
    named
    # 'foo.d', which lands next to the object file, wherever that
    # happens to be.
    # Much of this is similar to the tru64 case; see comments there.

```

```

dir=`echo "$object" | sed -e 's|/[^/]*$|/|'`
test "x$dir" = "x$object" && dir=
base=`echo "$object" | sed -e 's|^.*$|' -e 's/\.o$//' -e
's/\.lo$//'`
if test "$libtool" = yes; then
  tmpdepfile1=$dir$base.d
  tmpdepfile2=$dir.libs/$base.d
  "$@" -Wc,+Maked
else
  tmpdepfile1=$dir$base.d
  tmpdepfile2=$dir$base.d
  "$@" +Maked
fi
stat=$?
if test $stat -eq 0; then :
else
  rm -f "$tmpdepfile1" "$tmpdepfile2"
  exit $stat
fi

for tmpdepfile in "$tmpdepfile1" "$tmpdepfile2"
do
  test -f "$tmpdepfile" && break
done
if test -f "$tmpdepfile"; then
  sed -e "s,^.*\.[a-z]*:,$object:," "$tmpdepfile" > "$depfile"
  # Add 'dependent.h:' lines.
  sed -ne '2,${
    s/^ *//
    s/ \\*$$//
    s/$/:/
    p
  }' "$tmpdepfile" >> "$depfile"
else
  echo "#dummy" > "$depfile"
fi
rm -f "$tmpdepfile" "$tmpdepfile2"
;;

tru64)
  # The Tru64 compiler uses -MD to generate dependencies as a side
  # effect. 'cc -MD -o foo.o ...' puts the dependencies into
  'foo.o.d'.
  # At least on Alpha/Redhat 6.1, Compaq CCC V6.2-504 seems to put
  # dependencies in 'foo.d' instead, so we check for that too.
  # Subdirectories are respected.
  dir=`echo "$object" | sed -e 's|/[^/]*$|/|'`
  test "x$dir" = "x$object" && dir=
  base=`echo "$object" | sed -e 's|^.*$|' -e 's/\.o$//' -e
  's/\.lo$//'`

  if test "$libtool" = yes; then

```

```

# With Tru64 cc, shared objects can also be used to make a
# static library. This mechanism is used in libtool 1.4 series
to
# handle both shared and static libraries in a single
compilation.
# With libtool 1.4, dependencies were output in
$dir.libs/$base.lo.d.
#
# With libtool 1.5 this exception was removed, and libtool now
# generates 2 separate objects for the 2 libraries. These two
# compilations output dependencies in $dir.libs/$base.o.d and
# in $dir$base.o.d. We have to check for both files, because
# one of the two compilations can be disabled. We should prefer
# $dir$base.o.d over $dir.libs/$base.o.d because the latter is
# automatically cleaned when .libs/ is deleted, while ignoring
# the former would cause a distcleancheck panic.
tmpdepfile1=$dir.libs/$base.lo.d # libtool 1.4
tmpdepfile2=$dir$base.o.d # libtool 1.5
tmpdepfile3=$dir.libs/$base.o.d # libtool 1.5
tmpdepfile4=$dir.libs/$base.d # Compaq CCC V6.2-504
"$@" -Wc,-MD
else
tmpdepfile1=$dir$base.o.d
tmpdepfile2=$dir$base.d
tmpdepfile3=$dir$base.d
tmpdepfile4=$dir$base.d
"$@" -MD
fi

stat=$?
if test $stat -eq 0; then :
else
rm -f "$tmpdepfile1" "$tmpdepfile2" "$tmpdepfile3"
"$tmpdepfile4"
exit $stat
fi

for tmpdepfile in "$tmpdepfile1" "$tmpdepfile2" "$tmpdepfile3"
"$tmpdepfile4"
do
test -f "$tmpdepfile" && break
done
if test -f "$tmpdepfile"; then
sed -e 's,^\.*\.[a-z]*:,$object:,' < "$tmpdepfile" > "$depfile"
sed -e 's,^\.*\.[a-z]*:['"$tab"' ]*,,' -e 's,$,:' <
"$tmpdepfile" >> "$depfile"
else
echo "#dummy" > "$depfile"
fi
rm -f "$tmpdepfile"
;;

```

```

msvc7)
  if test "$libtool" = yes; then
    showIncludes=-Wc,-showIncludes
  else
    showIncludes=-showIncludes
  fi
  "$@" $showIncludes > "$tmpdepfile"
  stat=$?
  grep -v '^Note: including file: ' "$tmpdepfile"
  if test "$stat" = 0; then :
  else
    rm -f "$tmpdepfile"
    exit $stat
  fi
  rm -f "$depfile"
  echo "$object : \\" > "$depfile"
  # The first sed program below extracts the file names and escapes
  # backslashes for cygpath. The second sed program outputs the file
  # name when reading, but also accumulates all include files in the
  # hold buffer in order to output them again at the end. This only
  # works with sed implementations that can handle large buffers.
  sed < "$tmpdepfile" -n '
/^Note: including file: *\(.*\)/ {
  s//\1/
  s/\\/\\\\/g
  p
}' | $cygpath_u | sort -u | sed -n '
s/ /\ \ /g
s/\(.*\)/'"$tab"' \1 \ \ /p
s/.\(.*\) \ \ / \1:/
H
$ {
  s/.*/'"$tab"'/
  G
  p
}' >> "$depfile"
  rm -f "$tmpdepfile"
  ;;

msvc7msys)
  # This case exists only to let depend.m4 do its work. It works by
  # looking at the text of this script. This case will never be run,
  # since it is checked for above.
  exit 1
  ;;

#nosideeffect)
  # This comment above is used by automake to tell side-effect
  # dependency tracking mechanisms from slower ones.

dashmstdout)
  # Important note: in order to support this mode, a compiler *must*

```

```

# always write the preprocessed file to stdout, regardless of -o.
"$@" || exit $?

# Remove the call to Libtool.
if test "$libtool" = yes; then
  while test "X$1" != 'X--mode=compile'; do
    shift
  done
  shift
fi

# Remove '-o $object'.
IFS=" "
for arg
do
  case $arg in
    -o)
      shift
      ;;
    $object)
      shift
      ;;
    *)
      set fnord "$@" "$arg"
      shift # fnord
      shift # $arg
      ;;
  esac
done

test -z "$dashmflag" && dashmflag=-M
# Require at least two characters before searching for ':'
# in the target name. This is to cope with DOS-style filenames:
# a dependency such as 'c:/foo/bar' could be seen as target 'c'
otherwise.
"$@" $dashmflag |
  sed 's:^(["$stab"])*[^:"$stab"] [^:][^:]*\:[["$stab"]
]*:"$object"\: :' > "$tmpdepfile"
rm -f "$depfile"
cat < "$tmpdepfile" > "$depfile"
tr ' ' "$nl" < "$tmpdepfile" | \
## Some versions of the HPUX 10.20 sed can't process this invocation
## correctly. Breaking it into two sed invocations is a workaround.
sed -e 's/^\$//' -e '/^\$/d' -e '/:$/d' | sed -e 's/$/ :/' >>
"$depfile"
rm -f "$tmpdepfile"
;;

dashXmstdout)
# This case only exists to satisfy depend.m4. It is never actually
# run, as this mode is specially recognized in the preamble.
exit 1

```

```

;;

makedepend)
"$@" || exit $?
# Remove any Libtool call
if test "$libtool" = yes; then
  while test "X$1" != 'X--mode=compile'; do
    shift
  done
  shift
fi
# X makedepend
shift
cleared=no eat=no
for arg
do
  case $cleared in
  no)
    set ""; shift
    cleared=yes ;;
  esac
  if test $eat = yes; then
    eat=no
    continue
  fi
  case "$arg" in
  -D*|-I*)
    set fnord "$@" "$arg"; shift ;;
  # Strip any option that makedepend may not understand. Remove
  # the object too, otherwise makedepend will parse it as a source
file.
  -arch)
    eat=yes ;;
  -*|$object)
    ;;
  *)
    set fnord "$@" "$arg"; shift ;;
  esac
done
obj_suffix=`echo "$object" | sed 's/^\.*\././'`
touch "$tmpdepfile"
${MAKEDEPEND-makedepend} -o"$obj_suffix" -f"$tmpdepfile" "$@"
rm -f "$depfile"
# makedepend may prepend the VPATH from the source file name to the
object.
# No need to regex-escape $object, excess matching of '.' is
harmless.
sed "s|^\.*\($object *:\)|\1|" "$tmpdepfile" > "$depfile"
sed '1,2d' "$tmpdepfile" | tr ' ' "\n" | \
## Some versions of the HPUX 10.20 sed can't process this invocation
## correctly. Breaking it into two sed invocations is a workaround.

```



```

    sed -e 's/^\$//\' -e '/^\$/d' -e '/:\$/d' | sed -e 's/\$/ :/' >>
"$depfile"
    rm -f "$tmpdepfile" "$tmpdepfile".bak
;;

cpp)
# Important note: in order to support this mode, a compiler *must*
# always write the preprocessed file to stdout.
"$@" || exit $?

# Remove the call to Libtool.
if test "$libtool" = yes; then
    while test "X$1" != 'X--mode=compile'; do
        shift
    done
    shift
fi

# Remove '-o $object'.
IFS=" "
for arg
do
    case $arg in
    -o)
        shift
        ;;
    $object)
        shift
        ;;
    *)
        set fnord "$@" "$arg"
        shift # fnord
        shift # $arg
        ;;
    esac
done

"$@" -E |
    sed -n -e '/^# [0-9][0-9]* "\([^"]*\)"\./ s:: \1 \\:p' \
        -e '/^#line [0-9][0-9]* "\([^"]*\)"\./ s:: \1 \\:p' |
    sed '$ s: \\$::' > "$tmpdepfile"
rm -f "$depfile"
echo "$object : \\" > "$depfile"
cat < "$tmpdepfile" >> "$depfile"
sed < "$tmpdepfile" '/^\$/d;s/^\ //;s/ \\$//;s/\$/ :/' >> "$depfile"
rm -f "$tmpdepfile"
;;

msvisualcpp)
# Important note: in order to support this mode, a compiler *must*
# always write the preprocessed file to stdout.
"$@" || exit $?

```

```

# Remove the call to Libtool.
if test "$libtool" = yes; then
  while test "X$1" != 'X--mode=compile'; do
    shift
  done
  shift
fi

IFS=" "
for arg
do
  case "$arg" in
    -o)
      shift
      ;;
    $object)
      shift
      ;;
    "-Gm"|" /Gm"|" -Gi"|" /Gi"|" -ZI"|" /ZI")
      set fnord "$@"
      shift
      shift
      ;;
    *)
      set fnord "$@" "$arg"
      shift
      shift
      ;;
  esac
done
"$@" -E 2>/dev/null |
sed -n '/^#line [0-9][0-9]* "\([^"]*\)"/ s::\1:p' | $cygpath_u |
sort -u > "$tmpdepfile"
rm -f "$depfile"
echo "$object : \" > "$depfile"
sed < "$tmpdepfile" -n -e 's% %\ %g' -e '/^\(.*\)$/ s::'"$stab"' \1
\\:p' >> "$depfile"
echo "$stab" >> "$depfile"
sed < "$tmpdepfile" -n -e 's% %\ %g' -e '/^\(.*\)$/ s::\1\\:p' >>
"$depfile"
rm -f "$tmpdepfile"
;;

msvcmsys)
  # This case exists only to let depend.m4 do its work.  It works by
  # looking at the text of this script.  This case will never be run,
  # since it is checked for above.
  exit 1
  ;;

none)

```

```
    exec "$@"
    ;;
*)
    echo "Unknown depmode $depmode" 1>&2
    exit 1
    ;;
esac

exit 0

# Local Variables:
# mode: shell-script
# sh-indentation: 2
# eval: (add-hook 'write-file-hooks 'time-stamp)
# time-stamp-start: "scriptversion="
# time-stamp-format: "%:y-%02m-%02d.%02H"
# time-stamp-time-zone: "UTC"
# time-stamp-end: "; # UTC"
# End:

File = depcomp.~1~

#!/bin/sh
# depcomp - compile a program generating dependencies as side-effects

scriptversion=2012-07-12.20; # UTC

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# distribute this file as part of a program that contains a
# configuration script generated by Autoconf, you may include it under
# the same distribution terms that you use for the rest of that
program.
```

```

# Originally written by Alexandre Oliva <oliva@dcc.unicamp.br>.

case $1 in
  '')
    echo "$0: No command. Try '$0 --help' for more information."
1>&2
    exit 1;
    ;;
  -h | --h*)
    cat <<\EOF
Usage: depcomp [--help] [--version] PROGRAM [ARGS]

Run PROGRAMS ARGS to compile a file, generating dependencies
as side-effects.

Environment variables:
  depmode      Dependency tracking mode.
  source       Source file read by 'PROGRAMS ARGS'.
  object       Object file output by 'PROGRAMS ARGS'.
  DEPDIR       directory where to store dependencies.
  depfile      Dependency file to output.
  tmpdepfile   Temporary file to use when outputting dependencies.
  libtool      Whether libtool is used (yes/no).

Report bugs to <bug-automake@gnu.org>.
EOF
  exit $?
  ;;
  -v | --v*)
    echo "depcomp $scriptversion"
    exit $?
  ;;
esac

# A tabulation character.
tab=' '
# A newline character.
nl='
'

if test -z "$depmode" || test -z "$source" || test -z "$object"; then
  echo "depcomp: Variables source, object and depmode must be set"
1>&2
  exit 1
fi

# Dependencies for sub/bar.o or sub/bar.obj go into sub/.deps/bar.Po.
depfile=${depfile-`echo "$object" |
  sed 's|[\^\\\/]*$|'${DEPDIR}-
.deps}'/&|s|\.\.([\^.]*)$|.P\1|;s|Pobj$|Po|'`}
tmpdepfile=${tmpdepfile-`echo "$depfile" | sed
's/\.\.([\^.]*)$/.T\1/'`}

```

```

rm -f "$tmpdepfile"

# Avoid interferences from the environment.
gccflag= dashmflag=

# Some modes work just like other modes, but use different flags. We
# parameterize here, but still list the modes in the big case below,
# to make depend.m4 easier to write. Note that we *cannot* use a case
# here, because this file can only contain one case statement.
if test "$depmode" = hp; then
    # HP compiler uses -M and no extra arg.
    gccflag=-M
    depmode=gcc
fi

if test "$depmode" = dashXmstdout; then
    # This is just like dashmstdout with a different argument.
    dashmflag=-xM
    depmode=dashmstdout
fi

cygpath_u="cygpath -u -f -"
if test "$depmode" = msvcmsys; then
    # This is just like msvisualcpp but w/o cygpath translation.
    # Just convert the backslash-escaped backslashes to single forward
    # slashes to satisfy depend.m4
    cygpath_u='sed s,\\\\,/,g'
    depmode=msvisualcpp
fi

if test "$depmode" = msvc7msys; then
    # This is just like msvc7 but w/o cygpath translation.
    # Just convert the backslash-escaped backslashes to single forward
    # slashes to satisfy depend.m4
    cygpath_u='sed s,\\\\,/,g'
    depmode=msvc7
fi

if test "$depmode" = xlc; then
    # IBM C/C++ Compilers xlc/xlC can output gcc-like dependency
    information.
    gccflag=-qmakedep=gcc,-MF
    depmode=gcc
fi

case "$depmode" in
gcc3)
## gcc 3 implements dependency tracking that does exactly what
## we want. Yay! Note: for some reason libtool 1.4 doesn't like
## it if -MD -MP comes after the -MF stuff. Hmm.
## Unfortunately, FreeBSD c89 acceptance of flags depends upon

```

```

## the command line argument order; so add the flags where they
## appear in depend2.am. Note that the slowdown incurred here
## affects only configure: in makefiles, %FASTDEP% shortcuts this.
  for arg
  do
    case $arg in
      -c) set fnord "$@" -MT "$object" -MD -MP -MF "$tmpdepfile" "$arg"
;;
      *) set fnord "$@" "$arg" ;;
    esac
    shift # fnord
    shift # $arg
  done
  "$@"
  stat=$?
  if test $stat -eq 0; then :
  else
    rm -f "$tmpdepfile"
    exit $stat
  fi
  mv "$tmpdepfile" "$depfile"
;;

```

```

gcc)
## Note that this doesn't just cater to obsosete pre-3.x GCC
## compilers.
## but also to in-use compilers like IMB xlc/xlC and the HP C
## compiler.
## (see the conditional assignment to $gccflag above).
## There are various ways to get dependency output from gcc. Here's
## why we pick this rather obscure method:
## - Don't want to use -MD because we'd like the dependencies to end
##   up in a subdir. Having to rename by hand is ugly.
##   (We might end up doing this anyway to support other compilers.)
## - The DEPENDENCIES_OUTPUT environment variable makes gcc act like
##   -MM, not -M (despite what the docs say). Also, it might not be
##   supported by the other compilers which use the 'gcc' depmode.
## - Using -M directly means running the compiler twice (even worse
##   than renaming).
  if test -z "$gccflag"; then
    gccflag=-MD,
  fi
  "$@" -Wp,"$gccflag$tmpdepfile"
  stat=$?
  if test $stat -eq 0; then :
  else
    rm -f "$tmpdepfile"
    exit $stat
  fi
  rm -f "$depfile"
  echo "$object : \" > \"$depfile"
  alpha=ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxy

```

```

## The second -e expression handles DOS-style file names with drive
## letters.
    sed -e 's/^[^:]*: / /' \
        -e 's/^[^$alpha]:\./[^\:]*: / /' < "$tmpdepfile" >> "$depfile"
## This next piece of magic avoids the "deleted header file" problem.
## The problem is that when a header file which appears in a .P file
## is deleted, the dependency causes make to die (because there is
## typically no way to rebuild the header). We avoid this by adding
## dummy dependencies for each header file. Too bad gcc doesn't do
## this for us directly.
    tr ' ' "$nl" < "$tmpdepfile" |
## Some versions of gcc put a space before the ':'. On the theory
## that the space means something, we add a space to the output as
## well. hp depmode also adds that space, but also prefixes the VPATH
## to the object. Take care to not repeat it in the output.
## Some versions of the HPUX 10.20 sed can't process this invocation
## correctly. Breaking it into two sed invocations is a workaround.
    sed -e 's/^\$//\' -e '/^\$/d' -e "s|.*$object$||" -e '/:$/d' \
        | sed -e 's/$/ :/' >> "$depfile"
    rm -f "$tmpdepfile"
;;

hp)
# This case exists only to let depend.m4 do its work. It works by
# looking at the text of this script. This case will never be run,
# since it is checked for above.
exit 1
;;

sgi)
if test "$libtool" = yes; then
    "$@" "-Wp,-MDupdate,$tmpdepfile"
else
    "$@" -MDupdate "$tmpdepfile"
fi
stat=$?
if test $stat -eq 0; then :
else
    rm -f "$tmpdepfile"
    exit $stat
fi
rm -f "$depfile"

if test -f "$tmpdepfile"; then # yes, the sourcefile depend on
other files
    echo "$object : \\" > "$depfile"

# Clip off the initial element (the dependent). Don't try to be
# clever and replace this with sed code, as IRIX sed won't handle
# lines with more than a fixed number of characters (4096 in
# IRIX 6.2 sed, 8192 in IRIX 6.5). We also remove comment lines;
# the IRIX cc adds comments like '#:fec' to the end of the

```

```

# dependency line.
tr ' ' "$nl" < "$tmpdepfile" \
| sed -e 's/^\.*\.\o:/' -e 's/#.*$/' -e '/^$/ d' | \
tr "$nl" ' ' >> "$depfile"
echo >> "$depfile"

# The second pass generates a dummy entry for each header file.
tr ' ' "$nl" < "$tmpdepfile" \
| sed -e 's/^\.*\.\o:/' -e 's/#.*$/' -e '/^$/ d' -e 's/\/:/' \
>> "$depfile"
else
# The sourcefile does not contain any dependencies, so just
# store a dummy comment line, to avoid errors with the Makefile
# "include basename.Plo" scheme.
echo "#dummy" > "$depfile"
fi
rm -f "$tmpdepfile"
;;

xlc)
# This case exists only to let depend.m4 do its work. It works by
# looking at the text of this script. This case will never be run,
# since it is checked for above.
exit 1
;;

aix)
# The C for AIX Compiler uses -M and outputs the dependencies
# in a .u file. In older versions, this file always lives in the
# current directory. Also, the AIX compiler puts '$object:' at the
# start of each line; $object doesn't have directory information.
# Version 6 uses the directory in both cases.
dir=`echo "$object" | sed -e 's|/[^/]*$|/'`
test "x$dir" = "x$object" && dir=
base=`echo "$object" | sed -e 's|^\.*|/' -e 's|\.\o$/' -e
's/\.\lo$/'`
if test "$libtool" = yes; then
tmpdepfile1=$dir$base.u
tmpdepfile2=$base.u
tmpdepfile3=$dir.libs/$base.u
"$@" -Wc,-M
else
tmpdepfile1=$dir$base.u
tmpdepfile2=$dir$base.u
tmpdepfile3=$dir$base.u
"$@" -M
fi
stat=$?

if test $stat -eq 0; then :
else
rm -f "$tmpdepfile1" "$tmpdepfile2" "$tmpdepfile3"

```



```

    exit $stat
fi

for tmpdepfile in "$tmpdepfile1" "$tmpdepfile2" "$tmpdepfile3"
do
    test -f "$tmpdepfile" && break
done
if test -f "$tmpdepfile"; then
    # Each line is of the form 'foo.o: dependent.h'.
    # Do two passes, one to just change these to
    # '$object: dependent.h' and one to simply 'dependent.h:'.
    sed -e 's,^.*\.[a-z]*:,$object:', < "$tmpdepfile" > "$depfile"
    sed -e 's,^.*\.[a-z]*:['"$stab"' ]*,,' -e 's,$:,,' < "$tmpdepfile"
>> "$depfile"
else
    # The sourcefile does not contain any dependencies, so just
    # store a dummy comment line, to avoid errors with the Makefile
    # "include basename.Plo" scheme.
    echo "#dummy" > "$depfile"
fi
rm -f "$tmpdepfile"
;;

icc)
# Intel's C compiler anf tcc (Tiny C Compiler) understand '-MD -MF
file'.
# However on
#   $CC -MD -MF foo.d -c -o sub/foo.o sub/foo.c
# ICC 7.0 will fill foo.d with something like
#   foo.o: sub/foo.c
#   foo.o: sub/foo.h
# which is wrong. We want
#   sub/foo.o: sub/foo.c
#   sub/foo.o: sub/foo.h
#   sub/foo.c:
#   sub/foo.h:
# ICC 7.1 will output
#   foo.o: sub/foo.c sub/foo.h
# and will wrap long lines using '\':
#   foo.o: sub/foo.c ... \
#   sub/foo.h ... \
#   ...
# tcc 0.9.26 (FIXME still under development at the moment of
writing)
# will emit a similar output, but also prepend the continuation
lines
# with horizontal tabulation characters.
"$@" -MD -MF "$tmpdepfile"
stat=$?
if test $stat -eq 0; then :
else
    rm -f "$tmpdepfile"

```

```

    exit $stat
fi
rm -f "$depfile"
# Each line is of the form 'foo.o: dependent.h',
# or 'foo.o: dep1.h dep2.h \'', or ' dep3.h dep4.h \'.
# Do two passes, one to just change these to
# '$object: dependent.h' and one to simply 'dependent.h:'.
sed -e "s/^[ $stab][ $stab]*/ /" -e "s,^[^:]*:,$object :," \
    < "$tmpdepfile" > "$depfile"
sed '
s/[ "$stab"'] [ "$stab"']* /g
s/^ *//
s/ *\\*$/
s/^[^:]*: *//
/^$/d
/:$/d
s/$/ :/
' < "$tmpdepfile" >> "$depfile"
rm -f "$tmpdepfile"
;;

```

The order of this option in the case statement is important, since the ## shell code in configure will try each of these formats in the order ## listed in this file. A plain '-MD' option would be understood by many ## compilers, so we must ensure this comes after the gcc and icc options.

pgcc)

```

# Portland's C compiler understands '-MD'.
# Will always output deps to 'file.d' where file is the root name of
the
# source file under compilation, even if file resides in a
subdirectory.
# The object file name does not affect the name of the '.d' file.
# pgcc 10.2 will output
#   foo.o: sub/foo.c sub/foo.h
# and will wrap long lines using '\' :
#   foo.o: sub/foo.c ... \
#     sub/foo.h ... \
#     ...
dir=`echo "$object" | sed -e 's|/[^/]*$|/|'`
test "x$dir" = "x$object" && dir=
# Use the source, not the object, to determine the base name, since
# that's sadly what pgcc will do too.
base=`echo "$source" | sed -e 's|^[^./]*|' -e 's|\.[-_a-zA-Z0-9]*$|/'`
tmpdepfile="$base.d"

```

For projects that build the same source file twice into different object # files, the pgcc approach of using the *source* file root name can cause

```

# problems in parallel builds. Use a locking strategy to avoid
stomping on
# the same $tmpdepfile.
lockdir="$base.d-lock"
trap "echo '$0: caught signal, cleaning up...' >&2; rm -rf $lockdir"
1 2 13 15
numtries=100
i=$numtries
while test $i -gt 0 ; do
# mkdir is a portable test-and-set.
if mkdir $lockdir 2>/dev/null; then
# This process acquired the lock.
"$@" -MD
stat=$?
# Release the lock.
rm -rf $lockdir
break
else
## the lock is being held by a different process,
## wait until the winning process is done or we timeout
while test -d $lockdir && test $i -gt 0; do
sleep 1
i=`expr $i - 1`
done
fi
i=`expr $i - 1`
done
trap - 1 2 13 15
if test $i -le 0; then
echo "$0: failed to acquire lock after $numtries attempts" >&2
echo "$0: check lockdir '$lockdir'" >&2
exit 1
fi

if test $stat -ne 0; then
rm -f "$tmpdepfile"
exit $stat
fi
rm -f "$depfile"
# Each line is of the form `foo.o: dependent.h',
# or `foo.o: dep1.h dep2.h \', or ` dep3.h dep4.h \'.
# Do two passes, one to just change these to
# `$object: dependent.h' and one to simply `dependent.h:'.
sed "s,^[^:]*:,$object :," < "$tmpdepfile" > "$depfile"
# Some versions of the HP-UX 10.20 sed can't process this invocation
# correctly. Breaking it into two sed invocations is a workaround.
sed 's,^[^:]*: \(.*\)$, \1,;s/^\$//;/^\$/d;/:$/d' < "$tmpdepfile" |
sed -e 's/$/ :/' >> "$depfile"
rm -f "$tmpdepfile"
;;

```

hp2)

```

# The "hp" stanza above does not work with aCC (C++) and HP's ia64
# compilers, which have integrated preprocessors.  The correct
option
# to use with these is +Maked; it writes dependencies to a file
named
# 'foo.d', which lands next to the object file, wherever that
# happens to be.
# Much of this is similar to the tru64 case; see comments there.
dir=`echo "$object" | sed -e 's|/[^/]*$|/|'`
test "x$dir" = "x$object" && dir=
base=`echo "$object" | sed -e 's|^.*$/||' -e 's/\.o$//' -e
's/\.lo$//'`
if test "$libtool" = yes; then
    tmpdepfile1=$dir$base.d
    tmpdepfile2=$dir.libs/$base.d
    "$@" -Wc,+Maked
else
    tmpdepfile1=$dir$base.d
    tmpdepfile2=$dir$base.d
    "$@" +Maked
fi
stat=$?
if test $stat -eq 0; then :
else
    rm -f "$tmpdepfile1" "$tmpdepfile2"
    exit $stat
fi

for tmpdepfile in "$tmpdepfile1" "$tmpdepfile2"
do
    test -f "$tmpdepfile" && break
done
if test -f "$tmpdepfile"; then
    sed -e 's,^.*\.[a-z]*:,$object:,' "$tmpdepfile" > "$depfile"
    # Add 'dependent.h:' lines.
    sed -ne '2,${
        s/^ *//
        s/ \\\*$//
        s/$/:/
        p
    }' "$tmpdepfile" >> "$depfile"
else
    echo "#dummy" > "$depfile"
fi
rm -f "$tmpdepfile" "$tmpdepfile2"
;;

tru64)
# The Tru64 compiler uses -MD to generate dependencies as a side
# effect.  'cc -MD -o foo.o ...' puts the dependencies into
'foo.o.d'.
# At least on Alpha/Redhat 6.1, Compaq CCC V6.2-504 seems to put

```

```

# dependencies in 'foo.d' instead, so we check for that too.
# Subdirectories are respected.
dir=`echo "$object" | sed -e 's|/[^/]*$|/|'`
test "x$dir" = "x$object" && dir=
base=`echo "$object" | sed -e 's|^.*//|' -e 's/\.o$//' -e
's/\.lo$//'`

if test "$libtool" = yes; then
  # With Tru64 cc, shared objects can also be used to make a
  # static library.  This mechanism is used in libtool 1.4 series
to
  # handle both shared and static libraries in a single
compilation.
  # With libtool 1.4, dependencies were output in
$dir.libs/$base.lo.d.
  #
  # With libtool 1.5 this exception was removed, and libtool now
  # generates 2 separate objects for the 2 libraries.  These two
  # compilations output dependencies in $dir.libs/$base.o.d and
  # in $dir$base.o.d.  We have to check for both files, because
  # one of the two compilations can be disabled.  We should prefer
  # $dir$base.o.d over $dir.libs/$base.o.d because the latter is
  # automatically cleaned when .libs/ is deleted, while ignoring
  # the former would cause a distcleancheck panic.
  tmpdepfile1=$dir.libs/$base.lo.d      # libtool 1.4
  tmpdepfile2=$dir$base.o.d             # libtool 1.5
  tmpdepfile3=$dir.libs/$base.o.d      # libtool 1.5
  tmpdepfile4=$dir.libs/$base.d         # Compaq CCC V6.2-504
  "$@" -Wc,-MD
else
  tmpdepfile1=$dir$base.o.d
  tmpdepfile2=$dir$base.d
  tmpdepfile3=$dir$base.d
  tmpdepfile4=$dir$base.d
  "$@" -MD
fi

stat=$?
if test $stat -eq 0; then :
else
  rm -f "$tmpdepfile1" "$tmpdepfile2" "$tmpdepfile3"
"$tmpdepfile4"
  exit $stat
fi

for tmpdepfile in "$tmpdepfile1" "$tmpdepfile2" "$tmpdepfile3"
"$tmpdepfile4"
do
  test -f "$tmpdepfile" && break
done
if test -f "$tmpdepfile"; then
  sed -e "s,^.*\.[a-z]*:,$object:," < "$tmpdepfile" > "$depfile"

```

```

        sed -e 's,^.*\.[a-z]*:['"$tab"' ]*,,' -e 's,$$,:',' <
"$tmpdepfile" >> "$depfile"
    else
        echo "#dummy" > "$depfile"
    fi
    rm -f "$tmpdepfile"
;;

```

msvc7)

```

if test "$libtool" = yes; then
    showIncludes=-Wc,-showIncludes
else
    showIncludes=-showIncludes
fi
"$@" $showIncludes > "$tmpdepfile"
stat=$?
grep -v '^Note: including file: ' "$tmpdepfile"
if test "$stat" = 0; then :
else
    rm -f "$tmpdepfile"
    exit $stat
fi
rm -f "$depfile"
echo "$object : \\" > "$depfile"
# The first sed program below extracts the file names and escapes
# backslashes for cygpath. The second sed program outputs the file
# name when reading, but also accumulates all include files in the
# hold buffer in order to output them again at the end. This only
# works with sed implementations that can handle large buffers.
sed < "$tmpdepfile" -n '
/^Note: including file: *\(.*\)/ {
    s//\1/
    s/\\/\\\\/g
    p
}' | $cygpath_u | sort -u | sed -n '
s/ /\ /g
s/\(.*\)/'"$tab"' \1 \ /p
s/.\(.*\) \\/\1:/
H
$ {
    s/.*/'"$tab"'/
    G
    p
}' >> "$depfile"
rm -f "$tmpdepfile"
;;

```

msvc7msys)

```

# This case exists only to let depend.m4 do its work. It works by
# looking at the text of this script. This case will never be run,
# since it is checked for above.
exit 1

```

```

;;

#nosideeffect)
# This comment above is used by automake to tell side-effect
# dependency tracking mechanisms from slower ones.

dashmstdout)
# Important note: in order to support this mode, a compiler *must*
# always write the preprocessed file to stdout, regardless of -o.
"$@" || exit $?

# Remove the call to Libtool.
if test "$libtool" = yes; then
  while test "X$1" != 'X--mode=compile'; do
    shift
  done
  shift
fi

# Remove '-o $object'.
IFS=" "
for arg
do
  case $arg in
    -o)
      shift
      ;;
    $object)
      shift
      ;;
    *)
      set fnord "$@" "$arg"
      shift # fnord
      shift # $arg
      ;;
  esac
done

test -z "$dashmflag" && dashmflag=-M
# Require at least two characters before searching for ':'
# in the target name. This is to cope with DOS-style filenames:
# a dependency such as 'c:/foo/bar' could be seen as target 'c'
otherwise.
"$@" $dashmflag |
  sed 's:^(["$stab" ]*[^:"$stab" ][:][^:]*\:[["$stab"
]*:"$object"\: : ' > "$tmpdepfile"
rm -f "$depfile"
cat < "$tmpdepfile" > "$depfile"
tr ' ' "$nl" < "$tmpdepfile" | \
## Some versions of the HP-UX 10.20 sed can't process this invocation
## correctly. Breaking it into two sed invocations is a workaround.

```

```

    sed -e 's/^\$//' -e '/^\$/d' -e '/:\$/d' | sed -e 's/\$/ :/' >>
"$depfile"
    rm -f "$tmpdepfile"
;;

dashXmstdout)
# This case only exists to satisfy depend.m4.  It is never actually
# run, as this mode is specially recognized in the preamble.
exit 1
;;

makedepend)
"$@" || exit $?
# Remove any Libtool call
if test "$libtool" = yes; then
    while test "X$1" != 'X--mode=compile'; do
        shift
    done
    shift
fi
# X makedepend
shift
cleared=no eat=no
for arg
do
    case $cleared in
    no)
        set ""; shift
        cleared=yes ;;
    esac
    if test $eat = yes; then
        eat=no
        continue
    fi
    case "$arg" in
    -D*|-I*)
        set fnord "$@" "$arg"; shift ;;
    # Strip any option that makedepend may not understand.  Remove
    # the object too, otherwise makedepend will parse it as a source
file.
    -arch)
        eat=yes ;;
    -*|$object)
        ;;
    *)
        set fnord "$@" "$arg"; shift ;;
    esac
done
obj_suffix=`echo "$object" | sed 's/^\.*\././'`
touch "$tmpdepfile"
${MAKEDEPEND-makedepend} -o"$obj_suffix" -f"$tmpdepfile" "$@"
rm -f "$depfile"

```



```
# makedepend may prepend the VPATH from the source file name to the object.
```

```
# No need to regex-escape $object, excess matching of '.' is harmless.
```

```
sed "s|^.*\($object *:\)|\1|" "$tmpdepfile" > "$depfile"
```

```
sed '1,2d' "$tmpdepfile" | tr ' ' "$nl" | \
```

```
## Some versions of the HPUX 10.20 sed can't process this invocation ## correctly. Breaking it into two sed invocations is a workaround.
```

```
sed -e 's/^\$//' -e '/^$/d' -e '/:$/d' | sed -e 's/$/ :/' >> "$depfile"
```

```
rm -f "$tmpdepfile" "$tmpdepfile".bak
```

```
;;
```

```
cpp)
```

```
# Important note: in order to support this mode, a compiler *must*
```

```
# always write the preprocessed file to stdout.
```

```
"$@" || exit $?
```

```
# Remove the call to Libtool.
```

```
if test "$libtool" = yes; then
```

```
while test "X$1" != 'X--mode=compile'; do
```

```
shift
```

```
done
```

```
shift
```

```
fi
```

```
# Remove '-o $object'.
```

```
IFS=" "
```

```
for arg
```

```
do
```

```
case $arg in
```

```
-o)
```

```
shift
```

```
;;
```

```
$object)
```

```
shift
```

```
;;
```

```
*)
```

```
set fnord "$@" "$arg"
```

```
shift # fnord
```

```
shift # $arg
```

```
;;
```

```
esac
```

```
done
```

```
"$@" -E |
```

```
sed -n -e '/^# [0-9][0-9]* "\([^"]*\)".*/ s:: \1 \\:p' \
```

```
-e '/^#line [0-9][0-9]* "\([^"]*\)".*/ s:: \1 \\:p' |
```

```
sed '$ s: \\$::' > "$tmpdepfile"
```

```
rm -f "$depfile"
```

```
echo "$object : \\" > "$depfile"
```

```
cat < "$tmpdepfile" >> "$depfile"
```

```

sed < "$tmpdepfile" '/^$/d;s/^ //;s/ \\$//;s/$/ :/' >> "$depfile"
rm -f "$tmpdepfile"
;;

msvisualcpp)
# Important note: in order to support this mode, a compiler *must*
# always write the preprocessed file to stdout.
"$@" || exit $?

# Remove the call to Libtool.
if test "$libtool" = yes; then
  while test "X$1" != 'X--mode=compile'; do
    shift
  done
  shift
fi

IFS=" "
for arg
do
  case "$arg" in
    -o)
      shift
      ;;
    $object)
      shift
      ;;
    "-Gm"|" /Gm"|" -Gi"|" /Gi"|" -ZI"|" /ZI")
      set fnord "$@"
      shift
      shift
      ;;
    *)
      set fnord "$@" "$arg"
      shift
      shift
      ;;
  esac
done
"$@" -E 2>/dev/null |
sed -n '/^#line [0-9][0-9]* "\([^"]*\)"/ s::\1:p' | $cygpath_u |
sort -u > "$tmpdepfile"
rm -f "$depfile"
echo "$object : \" > "$depfile"
sed < "$tmpdepfile" -n -e 's% %\ %g' -e '/^\(.*\)$/ s::"$stab"'\1
\\:p' >> "$depfile"
echo "$stab" >> "$depfile"
sed < "$tmpdepfile" -n -e 's% %\ %g' -e '/^\(.*\)$/ s::\1\\:p' >>
"$depfile"
rm -f "$tmpdepfile"
;;

```

```

msvcmsys)
    # This case exists only to let depend.m4 do its work.  It works by
    # looking at the text of this script.  This case will never be run,
    # since it is checked for above.
    exit 1
    ;;

none)
    exec "$@"
    ;;

*)
    echo "Unknown depmode $demode" 1>&2
    exit 1
    ;;
esac

exit 0

```

```

# Local Variables:
# mode: shell-script
# sh-indentation: 2
# eval: (add-hook 'write-file-hooks 'time-stamp)
# time-stamp-start: "scriptversion="
# time-stamp-format: "%:y-%02m-%02d.%02H"
# time-stamp-time-zone: "UTC"
# time-stamp-end: "; # UTC"
# End:

```

File = desktop-file.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* desktop-file.c .desktop file parser
 *
 * Copyright (C) 2003 CodeFactory AB
 * Copyright (C) 2003 Red Hat Inc.
 *
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 * it under the terms of the GNU General Public License as published
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 * the Free Software Foundation; either version 2 of the License, or
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```

```

*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>
#include <dbus/dbus-sysdeps.h>
#include <dbus/dbus-internals.h>
#include "desktop-file.h"
#include "utils.h"

typedef struct
{
    char *key;
    char *value;
} BusDesktopFileLine;

typedef struct
{
    char *section_name;

    int n_lines;
    BusDesktopFileLine *lines;
    int n_allocated_lines;
} BusDesktopFileSection;

struct BusDesktopFile
{
    int n_sections;
    BusDesktopFileSection *sections;
    int n_allocated_sections;
};

/**
 * Parser for service files.
 */
typedef struct
{
    DBusString data; /**< The data from the file */

    BusDesktopFile *desktop_file; /**< The resulting object */
    int current_section; /**< The current section being parsed */

    int pos; /**< Current position */
    int len; /**< Length */
    int line_num; /**< Current line number */
} BusDesktopFileParser;

```

```

#define VALID_KEY_CHAR 1
#define VALID_LOCALE_CHAR 2
static unsigned char valid[256] = {
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x3 , 0x2 , 0x0 ,
    0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 ,
    0x3 , 0x3 , 0x3 , 0x3 , 0x3 ,
    0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x2 ,
    0x0 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 ,
    0x3 , 0x3 , 0x3 , 0x3 , 0x3 ,
    0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 , 0x3 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
    0x0 , 0x0 , 0x0 , 0x0 , 0x0 ,
};

```

```

static void report_error (BusDesktopFileParser *parser,
                          char *message,
                          const char *error_name,
                          DBusError *error);

```

```

static void
parser_free (BusDesktopFileParser *parser)
{
    bus_desktop_file_free (parser->desktop_file);

    _dbus_string_free (&parser->data);
}

```

```

static void
bus_desktop_file_line_free (BusDesktopFileLine *line)

```

```

{
    dbus_free (line->key);
    dbus_free (line->value);
}

static void
bus_desktop_file_section_free (BusDesktopFileSection *section)
{
    int i;

    for (i = 0; i < section->n_lines; i++)
        bus_desktop_file_line_free (&section->lines[i]);

    dbus_free (section->lines);
    dbus_free (section->section_name);
}

void
bus_desktop_file_free (BusDesktopFile *desktop_file)
{
    int i;

    for (i = 0; i < desktop_file->n_sections; i++)
        bus_desktop_file_section_free (&desktop_file->sections[i]);
    dbus_free (desktop_file->sections);

    dbus_free (desktop_file);
}

static dbus_bool_t
grow_lines_in_section (BusDesktopFileSection *section)
{
    BusDesktopFileLine *lines;

    int new_n_lines;

    if (section->n_allocated_lines == 0)
        new_n_lines = 1;
    else
        new_n_lines = section->n_allocated_lines*2;

    lines = dbus_realloc (section->lines,
                          sizeof (BusDesktopFileLine) * new_n_lines);

    if (lines == NULL)
        return FALSE;

    section->lines = lines;
    section->n_allocated_lines = new_n_lines;

    return TRUE;
}

```

```

static dbus_bool_t
grow_sections (BusDesktopFile *desktop_file)
{
    int new_n_sections;
    BusDesktopFileSection *sections;

    if (desktop_file->n_allocated_sections == 0)
        new_n_sections = 1;
    else
        new_n_sections = desktop_file->n_allocated_sections*2;

    sections = dbus_realloc (desktop_file->sections,
                             sizeof (BusDesktopFileSection) *
new_n_sections);
    if (sections == NULL)
        return FALSE;

    desktop_file->sections = sections;

    desktop_file->n_allocated_sections = new_n_sections;

    return TRUE;
}

```

```

static char *
unescape_string (BusDesktopFileParser *parser,
                 const DBusString      *str,
                 int                    pos,
                 int                    end_pos,
                 DBusError              *error)
{
    char *retval, *q;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    /* len + 1 is enough, because unescaping never makes the
     * string longer
     */
    retval = dbus_malloc (end_pos - pos + 1);
    if (retval == NULL)
    {
        BUS_SET_OOM (error);
        return NULL;
    }

    q = retval;

    while (pos < end_pos)
    {
        if (_dbus_string_get_byte (str, pos) == 0)
        {

```

```

        /* Found an embedded null */
        dbus_free (retval);
        report_error (parser, "Text to be unescaped contains
embedded nul",
                    BUS_DESKTOP_PARSE_ERROR_INVALID_ESCAPES,
error);
        return NULL;
    }

    if (_dbus_string_get_byte (str, pos) == '\\')
    {
        pos ++;

        if (pos >= end_pos)
        {
            /* Escape at end of string */
            dbus_free (retval);
            report_error (parser, "Text to be unescaped ended in
\\",
                        BUS_DESKTOP_PARSE_ERROR_INVALID_ESCAPES,
error);
            return NULL;
        }

        switch (_dbus_string_get_byte (str, pos))
        {
            case 's':
                *q++ = ' ';
                break;
            case 't':
                *q++ = '\t';
                break;
            case 'n':
                *q++ = '\n';
                break;
            case 'r':
                *q++ = '\r';
                break;
            case '\\':
                *q++ = '\\';
                break;
            default:
                /* Invalid escape code */
                dbus_free (retval);
                report_error (parser, "Text to be unescaped had invalid
escape sequence",
                            BUS_DESKTOP_PARSE_ERROR_INVALID_ESCAPES,
error);
                return NULL;
        }
        pos++;
    }

```



```

        else
        {
            *q++ = _dbus_string_get_byte (str, pos);

            pos++;
        }
    }

    *q = 0;

    return retval;
}

static BusDesktopFileSection*
new_section (BusDesktopFile *desktop_file,
            const char *name)
{
    int n;
    char *name_copy;

    if (desktop_file->n_allocated_sections == desktop_file->n_sections)
    {
        if (!grow_sections (desktop_file))
            return NULL;
    }

    name_copy = _dbus_strdup (name);
    if (name_copy == NULL)
        return NULL;

    n = desktop_file->n_sections;
    desktop_file->sections[n].section_name = name_copy;

    desktop_file->sections[n].n_lines = 0;
    desktop_file->sections[n].lines = NULL;
    desktop_file->sections[n].n_allocated_lines = 0;

    if (!grow_lines_in_section (&desktop_file->sections[n]))
    {
        dbus_free (desktop_file->sections[n].section_name);
        desktop_file->sections[n].section_name = NULL;
        return NULL;
    }

    desktop_file->n_sections += 1;

    return &desktop_file->sections[n];
}

static BusDesktopFileSection*
open_section (BusDesktopFileParser *parser,
            char *name)

```

```

{
    BusDesktopFileSection *section;

    section = new_section (parser->desktop_file, name);
    if (section == NULL)
        return NULL;

    parser->current_section = parser->desktop_file->n_sections - 1;
    _dbus_assert (&parser->desktop_file->sections[parser->current_section] == section);

    return section;
}

static BusDesktopFileLine *
new_line (BusDesktopFileParser *parser)
{
    BusDesktopFileSection *section;
    BusDesktopFileLine *line;

    section = &parser->desktop_file->sections[parser->current_section];

    if (section->n_allocated_lines == section->n_lines)
    {
        if (!grow_lines_in_section (section))
            return NULL;
    }

    line = &section->lines[section->n_lines++];

    _DBUS_ZERO(*line);

    return line;
}

static dbus_bool_t
is_blank_line (BusDesktopFileParser *parser)
{
    int p;
    char c;

    p = parser->pos;

    c = _dbus_string_get_byte (&parser->data, p);

    while (c && c != '\n')
    {
        if (!(c == ' ' || c == '\t' || c == '\n' || c == '\r' || c ==
'\f'))
            return FALSE;

        p++;
    }
}

```

```

        c = _dbus_string_get_byte (&parser->data, p);
    }

    return TRUE;
}

static void
parse_comment_or_blank (BusDesktopFileParser *parser)
{
    int line_end, eol_len;

    if (!_dbus_string_find_eol (&parser->data, parser->pos, &line_end,
&eol_len))
        line_end = parser->len;

    if (line_end == parser->len)
        parser->pos = parser->len;
    else
        parser->pos = line_end + eol_len;

    parser->line_num += 1;
}

static dbus_bool_t
is_valid_section_name (const char *name)
{
    /* 5. Group names may contain all ASCII characters except for
control characters and '[' and ']'. */

    while (*name)
    {
        if (!((*name >= 'A' && *name <= 'Z') || (*name >= 'a' || *name
<= 'z') ||
            *name == '\n' || *name == '\t'))
            return FALSE;

        name++;
    }

    return TRUE;
}

static dbus_bool_t
parse_section_start (BusDesktopFileParser *parser, DBusError *error)
{
    int line_end, eol_len;
    char *section_name;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (!_dbus_string_find_eol (&parser->data, parser->pos, &line_end,
&eol_len))

```

```

    line_end = parser->len;

    if (line_end - parser->pos <= 2 ||
        _dbus_string_get_byte (&parser->data, line_end - 1) != ']')
    {
        report_error (parser, "Invalid syntax for section header",
BUS_DESKTOP_PARSE_ERROR_INVALID_SYNTAX, error);
        parser_free (parser);
        return FALSE;
    }

    section_name = unescape_string (parser,
                                    &parser->data, parser->pos + 1,
line_end - 1,
                                    error);

    if (section_name == NULL)
    {
        parser_free (parser);
        return FALSE;
    }

    if (!is_valid_section_name (section_name))
    {
        report_error (parser, "Invalid characters in section name",
BUS_DESKTOP_PARSE_ERROR_INVALID_CHARS, error);
        parser_free (parser);
        dbus_free (section_name);
        return FALSE;
    }

    if (open_section (parser, section_name) == NULL)
    {
        dbus_free (section_name);
        parser_free (parser);
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (line_end == parser->len)
        parser->pos = parser->len;
    else
        parser->pos = line_end + eol_len;

    parser->line_num += 1;

    dbus_free (section_name);

    return TRUE;
}

static dbus_bool_t

```

```

parse_key_value (BusDesktopFileParser *parser, DBusError *error)
{
    int line_end, eol_len;
    int key_start, key_end;
    int value_start;
    int p;
    char *value, *tmp;
    DBusString key;
    BusDesktopFileLine *line;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (!_dbus_string_find_eol (&parser->data, parser->pos, &line_end,
&eol_len))
        line_end = parser->len;

    p = parser->pos;
    key_start = p;
    while (p < line_end &&
        (valid[_dbus_string_get_byte (&parser->data, p)] &
VALID_KEY_CHAR))
        p++;
    key_end = p;

    if (key_start == key_end)
    {
        report_error (parser, "Empty key name",
BUS_DESKTOP_PARSE_ERROR_INVALID_SYNTAX, error);
        parser_free (parser);
        return FALSE;
    }

    /* We ignore locales for now */
    if (p < line_end && _dbus_string_get_byte (&parser->data, p) == '[')
    {
        if (line_end == parser->len)
            parser->pos = parser->len;
        else
            parser->pos = line_end + eol_len;

        parser->line_num += 1;

        return TRUE;
    }

    /* Skip space before '=' */
    while (p < line_end && _dbus_string_get_byte (&parser->data, p) == '
')
        p++;

    if (p < line_end && _dbus_string_get_byte (&parser->data, p) != '=')
    {

```

```

        report_error (parser, "Invalid characters in key name",
BUS_DESKTOP_PARSE_ERROR_INVALID_CHARS, error);
        parser_free (parser);
        return FALSE;
    }

    if (p == line_end)
    {
        report_error (parser, "No '=' in key/value pair",
BUS_DESKTOP_PARSE_ERROR_INVALID_SYNTAX, error);
        parser_free (parser);
        return FALSE;
    }

    /* Skip the '=' */
    p++;

    /* Skip space after '=' */
    while (p < line_end && _dbus_string_get_byte (&parser->data, p) == '
')
        p++;

    value_start = p;

    value = unescape_string (parser, &parser->data, value_start,
line_end, error);
    if (value == NULL)
    {
        parser_free (parser);
        return FALSE;
    }

    line = new_line (parser);
    if (line == NULL)
    {
        dbus_free (value);
        parser_free (parser);
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!_dbus_string_init (&key))
    {
        dbus_free (value);
        parser_free (parser);
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!_dbus_string_copy_len (&parser->data, key_start, key_end -
key_start,
                                &key, 0))

```

```

    {
        _dbus_string_free (&key);
        dbus_free (value);
        parser_free (parser);
        BUS_SET_OOM (error);
        return FALSE;
    }

if (!_dbus_string_steal_data (&key, &tmp))
    {
        _dbus_string_free (&key);
        dbus_free (value);
        parser_free (parser);
        BUS_SET_OOM (error);
        return FALSE;
    }

_dbus_string_free (&key);

line->key = tmp;
line->value = value;

if (line_end == parser->len)
    parser->pos = parser->len;
else
    parser->pos = line_end + eol_len;

parser->line_num += 1;

return TRUE;
}

static void
report_error (BusDesktopFileParser *parser,
              char *message,
              const char *error_name,
              DBusError *error)
{
    const char *section_name = NULL;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (parser->current_section != -1)
        section_name = parser->desktop_file->sections[parser->current_section].section_name;

    if (section_name)
        dbus_set_error (error, error_name,
                       "Error in section %s at line %d: %s\n",
                       section_name, parser->line_num, message);
    else
        dbus_set_error (error, error_name,

```

```

        "Error at line %d: %s\n", parser->line_num,
message);
}

#if 0
static void
dump_desktop_file (BusDesktopFile *file)
{
    int i;

    for (i = 0; i < file->n_sections; i++)
    {
        int j;

        printf ("[%s]\n", file->sections[i].section_name);

        for (j = 0; j < file->sections[i].n_lines; j++)
        {
            printf ("%s=%s\n", file->sections[i].lines[j].key,
                    file->sections[i].lines[j].value);
        }
    }
}
#endif

BusDesktopFile*
bus_desktop_file_load (DBusString *filename,
                      DBusError *error)
{
    DBusString str;
    BusDesktopFileParser parser;
    DBusStat sb;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    /* Clearly there's a race here, but it's just to make it unlikely
     * that we do something silly, we still handle doing it below.
     */
    if (!_dbus_stat (filename, &sb, error))
        return NULL;

    if (sb.size > _DBUS_ONE_KILOBYTE * 128)
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
            "Desktop file size (%ld bytes) is too large",
(long) sb.size);
        return NULL;
    }

    if (!_dbus_string_init (&str))
    {
        BUS_SET_OOM (error);
    }
}

```



```

    return NULL;
}

if (!_dbus_file_get_contents (&str, filename, error))
{
    _dbus_string_free (&str);
    return NULL;
}

if (!_dbus_string_validate_utf8 (&str, 0, _dbus_string_get_length
(&str)))
{
    _dbus_string_free (&str);
    dbus_set_error (error, DBUS_ERROR_FAILED,
                    "invalid UTF-8");
    return NULL;
}

parser.desktop_file = dbus_new0 (BusDesktopFile, 1);
if (parser.desktop_file == NULL)
{
    _dbus_string_free (&str);
    BUS_SET_OOM (error);
    return NULL;
}

parser.data = str;
parser.line_num = 1;
parser.pos = 0;
parser.len = _dbus_string_get_length (&parser.data);
parser.current_section = -1;

while (parser.pos < parser.len)
{
    if (_dbus_string_get_byte (&parser.data, parser.pos) == '[')
    {
        if (!parse_section_start (&parser, error))
        {
            return NULL;
        }
    }
    else if (is_blank_line (&parser) ||
             _dbus_string_get_byte (&parser.data, parser.pos) == '#')
        parse_comment_or_blank (&parser);
    else
    {
        if (!parse_key_value (&parser, error))
        {
            return NULL;
        }
    }
}
}

```

```

    _dbus_string_free (&parser.data);

    return parser.desktop_file;
}

static BusDesktopFileSection *
lookup_section (BusDesktopFile *desktop_file,
               const char      *section_name)
{
    BusDesktopFileSection *section;
    int i;

    if (section_name == NULL)
        return NULL;

    for (i = 0; i < desktop_file->n_sections; i++)
    {
        section = &desktop_file->sections[i];

        if (strcmp (section->section_name, section_name) == 0)
            return section;
    }

    return NULL;
}

static BusDesktopFileLine *
lookup_line (BusDesktopFile      *desktop_file,
            BusDesktopFileSection *section,
            const char            *keyname)
{
    BusDesktopFileLine *line;
    int i;

    for (i = 0; i < section->n_lines; i++)
    {
        line = &section->lines[i];

        if (strcmp (line->key, keyname) == 0)
            return line;
    }

    return NULL;
}

dbus_bool_t
bus_desktop_file_get_raw (BusDesktopFile *desktop_file,
                        const char      *section_name,
                        const char      *keyname,
                        const char      **val)
{

```

```

BusDesktopFileSection *section;
BusDesktopFileLine *line;

*val = NULL;

section = lookup_section (desktop_file, section_name);

if (!section)
    return FALSE;

line = lookup_line (desktop_file,
                    section,
                    keyname);

if (!line)
    return FALSE;

*val = line->value;

return TRUE;
}

dbus_bool_t
bus_desktop_file_get_string (BusDesktopFile *desktop_file,
                             const char *section,
                             const char *keyname,
                             char **val,
                             DBusError *error)
{
    const char *raw;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    *val = NULL;

    if (!bus_desktop_file_get_raw (desktop_file, section, keyname,
    &raw))
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
            "No \"%s\" key in .service file\n", keyname);
        return FALSE;
    }

    *val = _dbus_strdup (raw);

    if (*val == NULL)
    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    return TRUE;
}

```

```
}
```

```
File = desktop-file.h
```

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* desktop-file.h .desktop file parser
 *
 * Copyright (C) 2003 CodeFactory AB
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify
 * it under the terms of the GNU General Public License as published
by
 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
#ifndef BUS_DESKTOP_FILE_H
#define BUS_DESKTOP_FILE_H

#include <dbus/dbus.h>
#include <dbus/dbus-string.h>

#define BUS_DESKTOP_PARSE_ERROR_INVALID_SYNTAX
"org.freedesktop.DBus.DesktopParseError.InvalidSyntax"
#define BUS_DESKTOP_PARSE_ERROR_INVALID_ESCAPES
"org.freedesktop.DBus.DesktopParseError.InvalidEscapes"
#define BUS_DESKTOP_PARSE_ERROR_INVALID_CHARS
"org.freedesktop.DBus.DesktopParseError.InvalidChars"

#define DBUS_SERVICE_SECTION "D-BUS Service"
#define DBUS_SERVICE_NAME "Name"
#define DBUS_SERVICE_EXEC "Exec"
#define DBUS_SERVICE_USER "User"
#define DBUS_SERVICE_GROUP "Group"
#define DBUS_SERVICE_SYSTEMD_SERVICE "SystemdService"

typedef struct BusDesktopFile BusDesktopFile;
```

```

BusDesktopFile *bus_desktop_file_load (DBusString      *filename,
                                       DBusError        *error);
void           bus_desktop_file_free (BusDesktopFile *file);

dbus_bool_t bus_desktop_file_get_raw      (BusDesktopFile
*desktop_file,
                                       const char      *section_name,
                                       const char      *keyname,
                                       const char      **val);
dbus_bool_t bus_desktop_file_get_string (BusDesktopFile
*desktop_file,
                                       const char      *section,
                                       const char      *keyname,
                                       char            **val,
                                       DBusError        *error);

```

```
#endif /* BUS_DESKTOP_FILE_H */
```

```
File = diagram.png
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File = diagram.svg

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<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!DOCTYPE svg PUBLIC "-//W3C//DTD SVG 1.0//EN"
"http://www.w3.org/TR/2001/REC-SVG-20010904/DTD/svg10.dtd">
<!-- Created with Inkscape (http://www.inkscape.org/) -->
<svg
  id="svg1"
  sodipodi:version="0.32"
  inkscape:version="0.39"
  xmlns="http://www.w3.org/2000/svg"
  xmlns:sodipodi="http://sodipodi.sourceforge.net/DTD/sodipodi-0.dtd"
  xmlns:inkscape="http://www.inkscape.org/inkscape"
  xmlns:xlink="http://www.w3.org/1999/xlink"
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:cc="http://web.resource.org/cc/"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  width="841.88975pt"
  height="595.27559pt"
  sodipodi:docbase="/home/hp/dbus-cvs/dbus/doc"
  sodipodi:docname="diagram.svg">
<defs
  id="defs3">
  <marker
    style="overflow:visible;"
    id="Arrow1M"
    refX="0.0"
    refY="0.0"
    orient="auto"
    inkscape:stockid="Arrow1M">
  <path
    transform="scale(0.4)"
    style="fill-rule:evenodd;stroke:#000000;stroke-
width:1.0pt;marker-start:none;"
    d="M 0.0,0.0 L 5.0,-5.0 L -12.5,0.0 L 5.0,5.0 L 0.0,0.0 z "
    id="path3519"
    sodipodi:nodetypes="ccccc" />
  </marker>
  <marker
    style="overflow:visible;"
    id="Arrow2L"
    refX="0.0"
    refY="0.0"
    orient="auto"
    inkscape:stockid="Arrow2L">
  <path
    transform="scale(1.1) translate(-5,0)"
```

```

            d="M 8.7185878,4.0337352 L -2.2072895,0.016013256 L
8.7185884,-4.0017078 C 6.9730900,-1.6296469 6.9831476,1.6157441
8.7185878,4.0337352 z "
            style="font-size:12.0;fill-rule:evenodd;stroke-
width:0.62500000;stroke-linejoin:round;"
            id="path3515"
            sodipodi:nodetypes="cccc" />
        </marker>
</defs>
<sodipodi:namedview
  id="base"
  pagecolor="#ffffff"
  bordercolor="#666666"
  borderopacity="1.0"
  inkscape:pageopacity="0.0"
  inkscape:pageshadow="2"
  inkscape:zoom="0.90210318"
  inkscape:cx="420.94487"
  inkscape:cy="297.63779"
  inkscape:window-width="1024"
  inkscape:window-height="701"
  showgrid="false"
  inkscape:grid-bbox="false"
  inkscape:grid-points="true"
  inkscape:window-x="0"
  inkscape:window-y="24"
  gridspacingy="2.5000000mm"
  gridspacingx="2.5000000mm"
  showguides="true"
  inkscape:guide-bbox="true">
  <sodipodi:guide
    orientation="horizontal"
    position="268.85797"
    id="guide3566" />
  <sodipodi:guide
    orientation="horizontal"
    position="294.31223"
    id="guide4235" />
  <sodipodi:guide
    orientation="horizontal"
    position="300.40909"
    id="guide4882" />
</sodipodi:namedview>
<metadata
  id="metadata4">
  <rdf:RDF
    id="RDF5">
    <cc:Work
      rdf:about=""
      id="Work6">
    <dc:format
      id="format7">image/svg+xml</dc:format>

```

```
        <dc:type
            id="type9"
            rdf:resource="http://purl.org/dc/dcmitype/StillImage" />
    </cc:Work>
</rdf:RDF>
</metadata>
<rect
    style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:3.7500000;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
opacity:1.0000000;"
    id="rect908"
    width="325.23203"
    height="354.33072"
    x="17.716536"
    y="372.04724" />
<text
    xml:space="preserve"
    style="font-size:18.000000;font-style:normal;font-
variant:normal;font-weight:bold;font-stretch:normal;fill:#000000;fill-
opacity:1.0000000;stroke:none;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;font-
family:Bitstream Vera Sans;text-anchor:start;writing-mode:lr;"
    x="70.778252"
    y="712.73920"
    id="text1532"
    sodipodi:linespacing="100%"><tspan
        id="tspan1533">Application Process 1</tspan></text>
<rect
    style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:2.5000000;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
dasharray:2.5000000 2.5000000 ;stroke-dashoffset:0.0000000;stroke-
opacity:1.0000000;"
    id="rect1535"
    width="148.46259"
    height="46.656849"
    x="106.29921"
    y="378.54001" />
<text
    xml:space="preserve"
    style="font-size:14.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;text-
anchor:middle;writing-mode:lr;"
    x="180.61389"
    y="400.40048"
    id="text2158"
    sodipodi:linespacing="100%"><tspan
        id="tspan2159">DBusConnection</tspan><tspan
```

```

        sodipodi:role="line"
        id="tspan2161"
        x="180.61389"
        y="414.40048">Instance</tspan></text>
<rect
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:2.9950929;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
dasharray:2.9950928 2.9950928 ;stroke-dashoffset:0.0000000;stroke-
opacity:1.0000000;"
  id="rect2170"
  width="148.46259"
  height="66.966240"
  x="28.702768"
  y="549.21259" />
<text
  xml:space="preserve"
  style="font-size:14.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;text-
anchor:middle;writing-mode:lr;"
  x="103.01745"
  y="577.56586"
  id="text2171"
  sodipodi:linespacing="100%"><tspan
  x="103.01745"
  y="577.56586"
  sodipodi:role="line"
  id="tspan2176">C/C++/Python/etc.</tspan><tspan
  x="103.01745"
  y="591.56586"
  sodipodi:role="line"
  id="tspan2178">Object Instance</tspan></text>
<path
  style="fill:#000000;fill-opacity:1.0000000;fill-
rule:nonzero;stroke:none;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;"
  id="path3535"
  d="M 98.938952,408.61479 C 98.744753,409.20303
97.917886,409.67295 97.440945,410.11435 C 95.534947,411.94763
94.266934,414.11555 93.172614,416.33858 C 91.902056,419.02725
90.969281,421.79944 90.107252,424.59229 C 89.589105,426.27374
88.983534,427.90634 88.266907,429.53700 C 87.919667,430.33438
87.622593,431.17598 87.120464,431.91970 C 86.832222,432.30665
86.469422,432.65145 86.167985,433.03184 C 86.015931,433.22254
85.868997,433.41563 85.722131,433.60898 L 82.914336,433.11743 C
83.063402,432.91879 83.213428,432.72069 83.368121,432.52498 C
83.654681,432.15308 83.980737,431.80834 84.285389,431.44731 C
84.811957,430.77175 85.122523,429.97914 85.482400,429.23872 C
86.253056,427.64929 86.903084,426.03861 87.474578,424.39321 C

```



```
88.439548,421.58552 89.442843,418.78792 90.703938,416.05898 C
91.810966,413.77525 92.999191,411.45961 94.849464,409.50748 C
95.094704,409.24876 96.091789,407.90149 95.865737,408.61479 L
98.938952,408.61479 z " />
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
weight:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;"
  x="34.109497"
  y="446.13382"
  id="text3536"><tspan
    id="tspan3537">Locate Object</tspan><tspan
      sodipodi:role="line"
      id="tspan3539"
      x="34.109497"
      y="458.13382">via Object Path</tspan></text>
<path
  style="fill:#000000;fill-opacity:1.0000000;fill-
rule:nonzero;stroke:none;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;"
  id="path3541"
  d="M 60.509867,462.78767 C 60.704066,463.37591
61.530933,463.84583 62.007874,464.28723 C 63.913872,466.12051
65.181885,468.28843 66.276205,470.51146 C 67.546763,473.20013
68.479538,475.97232 69.341567,478.76517 C 69.859714,480.44662
70.465285,482.07922 71.181912,483.70988 C 71.529152,484.50726
71.826226,485.34886 72.328355,486.09258 C 72.616597,486.47953
72.979397,486.82433 73.280834,487.20472 C 73.432888,487.39542
73.579822,487.58851 73.726688,487.78186 L 76.534483,487.29031 C
76.385417,487.09167 76.235391,486.89357 76.080698,486.69786 C
75.794138,486.32596 75.468082,485.98122 75.163430,485.62019 C
74.636862,484.94463 74.326296,484.15202 73.966419,483.41160 C
73.195763,481.82217 72.545735,480.21149 71.974241,478.56609 C
71.009271,475.75840 70.005976,472.96080 68.744881,470.23186 C
67.637853,467.94813 66.449628,465.63249 64.599355,463.68036 C
64.354115,463.42164 63.357030,462.07437 63.583082,462.78767 L
60.509867,462.78767 z " />
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;text-
anchor:start;writing-mode:lr;"
  x="49.100315"
  y="501.60959"
  id="text3542"
  sodipodi:linespacing="100%"><tspan
    x="49.100315"
```

```
    y="501.60959"
    sodipodi:role="line"
    id="tspan3547">Bindings Marshal</tspan><tspan
    x="49.100315"
    y="513.60959"
    sodipodi:role="line"
    id="tspan3549">to Method Call</tspan></text>
<path
  style="fill:#000000;fill-opacity:1.0000000;fill-
rule:nonzero;stroke:none;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;"
  id="path3551"
  d="M 95.295239,519.43211 C 95.101039,520.02035
94.274169,520.49027 93.797229,520.93167 C 91.891239,522.76495
90.623219,524.93287 89.528899,527.15590 C 88.258339,529.84457
87.325569,532.61676 86.463539,535.40961 C 85.945389,537.09106
85.339819,538.72366 84.623199,540.35432 C 84.275959,541.15170
83.978879,541.99330 83.476749,542.73702 C 83.188509,543.12397
82.825709,543.46877 82.524269,543.84916 C 82.372219,544.03986
82.225289,544.23295 82.078419,544.42630 L 79.270619,543.93475 C
79.419689,543.73611 79.569719,543.53801 79.724409,543.34230 C
80.010969,542.97040 80.337029,542.62566 80.641679,542.26463 C
81.168249,541.58907 81.478809,540.79646 81.838689,540.05604 C
82.609339,538.46661 83.259369,536.85593 83.830869,535.21053 C
84.795839,532.40284 85.799129,529.60524 87.060229,526.87630 C
88.167249,524.59257 89.355479,522.27693 91.205749,520.32480 C
91.450989,520.06608 92.448079,518.71881 92.222029,519.43211 L
95.295239,519.43211 z " />
<path
  style="fill:#000000;fill-opacity:1.0000000;fill-
rule:nonzero;stroke:none;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;"
  id="path3552"
  d="M 261.83533,408.61479 C 262.02953,409.20303
262.85640,409.67295 263.33334,410.11435 C 265.23934,411.94763
266.50735,414.11555 267.60167,416.33858 C 268.87223,419.02725
269.80501,421.79944 270.66703,424.59229 C 271.18518,426.27374
271.79075,427.90634 272.50738,429.53700 C 272.85462,430.33438
273.15169,431.17598 273.65382,431.91970 C 273.94206,432.30665
274.30486,432.65145 274.60630,433.03184 C 274.75836,433.22254
274.90529,433.41563 275.05216,433.60898 L 277.85995,433.11743 C
277.71088,432.91879 277.56086,432.72069 277.40617,432.52498 C
277.11961,432.15308 276.79355,431.80834 276.48890,431.44731 C
275.96233,430.77175 275.65176,429.97914 275.29189,429.23872 C
274.52123,427.64929 273.87120,426.03861 273.29971,424.39321 C
272.33474,421.58552 271.33144,418.78792 270.07035,416.05898 C
268.96332,413.77525 267.77510,411.45961 265.92482,409.50748 C
265.67958,409.24876 264.68250,407.90149 264.90855,408.61479 L
261.83533,408.61479 z " />
<text
  xml:space="preserve"
```

```
style="font-size:12.000000;font-style:normal;font-variant:normal;font-weight:normal;font-stretch:normal;fill:#000000;fill-opacity:1.000000;stroke:none;stroke-width:1.000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-opacity:1.000000;font-family:Bitstream Vera Sans;text-anchor:start;writing-mode:lr;"
x="223.98749"
y="446.13382"
id="text3553"
sodipodi:linespacing="100%"><tspan
x="223.98749"
y="446.13382"
sodipodi:role="line"
id="tspan3562">Marshal Method</tspan><tspan
x="223.98749"
y="458.13382"
sodipodi:role="line"
id="tspan3564">Call to Message</tspan></text>
<path
style="fill:#000000;fill-opacity:1.000000;fill-rule:nonzero;stroke:none;stroke-width:1.000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-opacity:1.000000;"
id="path3567"
d="M 278.96485,463.29453 C 278.77065,463.88277
277.94378,464.35269 277.46684,464.79409 C 275.56085,466.62737
274.29283,468.79529 273.19851,471.01832 C 271.92795,473.70699
270.99518,476.47918 270.13315,479.27203 C 269.61500,480.95348
269.00943,482.58608 268.29281,484.21674 C 267.94557,485.01412
267.64849,485.85572 267.14636,486.59944 C 266.85812,486.98639
266.49532,487.33119 266.19388,487.71158 C 266.04183,487.90228
265.89490,488.09537 265.74803,488.28872 L 262.94023,487.79717 C
263.08930,487.59853 263.23933,487.40043 263.39402,487.20472 C
263.68058,486.83282 264.00664,486.48808 264.31129,486.12705 C
264.83786,485.45149 265.14842,484.65888 265.50830,483.91846 C
266.27895,482.32903 266.92898,480.71835 267.50048,479.07295 C
268.46545,476.26526 269.46874,473.46766 270.72984,470.73872 C
271.83686,468.45499 273.02509,466.13935 274.87536,464.18722 C
275.12060,463.92850 276.11769,462.58123 275.89164,463.29453 L
278.96485,463.29453 z " />
<rect
style="fill:none;fill-opacity:0.75000000;fill-rule:evenodd;stroke:#000000;stroke-width:2.7377086;stroke-linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-dasharray:2.7377084 2.7377084 ;stroke-dashoffset:0.0000000;stroke-opacity:1.0000000;"
id="rect3568"
width="124.01746"
height="66.979813"
x="189.79265"
y="495.08902" />
<text
xml:space="preserve"
```

```
    style="font-size:14.000000;font-style:normal;font-variant:normal;font-weight:normal;font-stretch:normal;fill:#000000;fill-opacity:1.000000;stroke:none;stroke-width:1.000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-opacity:1.000000;font-family:Bitstream Vera Sans;text-anchor:middle;writing-mode:lr;"
    x="248.94049"
    y="523.44220"
    id="text3569"
    sodipodi:linespacing="100%"><tspan
      x="248.94049"
      y="523.44220"
      sodipodi:role="line"
      id="tspan3574">Bindings Proxy</tspan><tspan
      x="248.94049"
      y="537.44220"
      sodipodi:role="line"
      id="tspan3576">Object Instance</tspan></text>
<path
  style="fill:#000000;fill-opacity:1.000000;fill-rule:nonzero;stroke:none;stroke-width:1.000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-opacity:1.000000;"
  id="path3578"
  d="M 259.03547,566.92913 C 259.22967,567.51737
260.05653,567.98729 260.53348,568.42869 C 262.43947,570.26197
263.70749,572.42989 264.80181,574.65292 C 266.07236,577.34159
267.00514,580.11378 267.86717,582.90663 C 268.38532,584.58808
268.99089,586.22068 269.70751,587.85134 C 270.05475,588.64872
270.35183,589.49032 270.85396,590.23404 C 271.14220,590.62099
271.50500,590.96579 271.80644,591.34618 C 271.95849,591.53688
272.10542,591.72997 272.25229,591.92332 L 275.06008,591.43177 C
274.91102,591.23313 274.76099,591.03503 274.60630,590.83932 C
274.31974,590.46742 273.99368,590.12268 273.68903,589.76165 C
273.16246,589.08609 272.85190,588.29348 272.49202,587.55306 C
271.72136,585.96363 271.07134,584.35295 270.49984,582.70755 C
269.53487,579.89986 268.53158,577.10226 267.27048,574.37332 C
266.16345,572.08959 264.97523,569.77395 263.12496,567.82182 C
262.87972,567.56310 261.88263,566.21583 262.10868,566.92913 L
259.03547,566.92913 z " />
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-variant:normal;font-weight:normal;font-stretch:normal;fill:#000000;fill-opacity:1.000000;stroke:none;stroke-width:1.000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-opacity:1.000000;font-family:Bitstream Vera Sans;text-anchor:start;writing-mode:lr;"
  x="217.40741"
  y="607.90881"
  id="text3579"
  sodipodi:linespacing="100%"><tspan
    x="217.40741"
```

```

        y="607.90881"
        sodipodi:role="line"
        id="tspan3584">Application Code</tspan></text>
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:0.96172028pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.00000000;marker-
end:url(#Arrow1M);"
  d="M 26.574803,408.60009 C 26.574803,539.68912
26.574803,539.68911 26.574803,531.49606"
  id="path3586"
  sodipodi:nodetypes="cc" />
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
variant:normal;font-weight:bold;font-stretch:normal;fill:#000000;fill-
opacity:1.00000000;stroke:none;stroke-width:1.00000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.00000000;font-
family:Bitstream Vera Sans;text-anchor:start;writing-mode:lr;"
  x="25.977146"
  y="386.45212"
  id="text4220"
  sodipodi:linespacing="100%"><tspan
  id="tspan4221">Incoming</tspan><tspan
  sodipodi:role="line"
  id="tspan4223"
  x="25.977146"
  y="398.45212">Call</tspan></text>
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
variant:normal;font-weight:bold;font-stretch:normal;fill:#000000;fill-
opacity:1.00000000;stroke:none;stroke-width:1.00000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.00000000;font-
family:Bitstream Vera Sans;text-anchor:end;writing-mode:lr;"
  x="335.61411"
  y="386.45212"
  id="text4226"
  sodipodi:linespacing="100%"><tspan
  x="335.61411"
  y="386.45212"
  sodipodi:role="line"
  id="tspan4231">Outgoing</tspan><tspan
  x="335.61411"
  y="398.45212"
  sodipodi:role="line"
  id="tspan4233">Call</tspan></text>
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:0.96172028pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.00000000;marker-
start:url(#Arrow1M);marker-end:none;"

```

```
d="M 327.75591,416.33858 C 327.75591,547.42761
327.75591,547.42760 327.75591,539.23455"
id="path4236"
sodipodi:nodetypes="cc" />
<rect
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:5.7914310;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
opacity:1.0000000;"
  id="rect4870"
  width="885.86591"
  height="310.27252"
  x="88.582680"
  y="8.8582621" />
<text
  xml:space="preserve"
  style="font-size:18.000000;font-style:normal;font-
variant:normal;font-weight:bold;font-stretch:normal;fill:#000000;fill-
opacity:1.0000000;stroke:none;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;font-
family:Bitstream Vera Sans;text-anchor:middle;writing-mode:lr;"
  x="515.42737"
  y="305.44489"
  id="text4871"
  sodipodi:linespacing="100%"><tspan
  x="515.42737"
  y="305.44489"
  sodipodi:role="line"
  id="tspan4874">Bus Daemon Process</tspan></text>
<rect
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:3.7500000;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
opacity:1.0000000;"
  id="rect4876"
  width="325.23203"
  height="354.33072"
  x="708.66144"
  y="373.08359" />
<text
  xml:space="preserve"
  style="font-size:18.000000;font-style:normal;font-
variant:normal;font-weight:bold;font-stretch:normal;fill:#000000;fill-
opacity:1.0000000;stroke:none;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;font-
family:Bitstream Vera Sans;text-anchor:start;writing-mode:lr;"
  x="761.72314"
  y="713.77551"
  id="text4877"
  sodipodi:linespacing="100%"><tspan
  x="761.72314"
  y="713.77551"
```

```

        sodipodi:role="line"
        id="tspan4880">Application Process 2</tspan></text>
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;text-
anchor:start;writing-mode:lr;"
  x="823.49664"
  y="505.18018"
  id="text4883"
  sodipodi:linespacing="100%"><tspan
    x="823.49664"
    y="505.18018"
    sodipodi:role="line"
    id="tspan4888">Same Stuff as in</tspan><tspan
      x="823.49664"
      y="517.18018"
      sodipodi:role="line"
      id="tspan4890">Process 1</tspan></text>
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;text-
anchor:start;writing-mode:lr;"
  x="47.891071"
  y="638.05420"
  id="text4892"
  sodipodi:linespacing="100%"><tspan
    x="47.891071"
    y="638.05420"
    sodipodi:role="line"
    id="tspan4901">(Object Instance Has</tspan><tspan
      x="47.891071"
      y="650.05420"
      sodipodi:role="line"
      id="tspan4903">1 or More Interfaces)</tspan></text>
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.2500000;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
opacity:1.0000000;marker-start:url(#Arrow1M);marker-
end:url(#Arrow1M);stroke-dasharray:none;"
  d="M 162.57260,358.02041 C 165.25213,354.60516
186.01858,328.13688 184.00893,330.69832"
  id="path4905"
  sodipodi:nodetypes="cc" />

```

```
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
weight:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;"
  x="190.57170"
  y="342.62018"
  id="text5539"><tspan
  id="tspan5540">Socket</tspan><tspan
  sodipodi:role="line"
  id="tspan5544"
  x="190.57170"
  y="354.62018">(Bidirectional Message Stream)</tspan></text>
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.2500000;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
opacity:1.0000000;marker-start:url(#Arrow1M);marker-
end:url(#Arrow1M);"
  d="M 827.53876,363.18897 C 824.85916,359.77372
804.09276,333.30544 806.10236,335.86688"
  id="path5546"
  sodipodi:nodetypes="cc" />
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
weight:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;"
  x="840.79150"
  y="345.73135"
  id="text5547"><tspan
  id="tspan5548">Socket</tspan><tspan
  sodipodi:role="line"
  id="tspan5550"
  x="840.79150"
  y="357.73135">(Bidirectional Message Stream)</tspan></text>
<rect
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:2.5000000;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
dasharray:2.5000000 2.5000000 ;stroke-dashoffset:0.0000000;stroke-
opacity:1.0000000;"
  id="rect5552"
  width="148.46259"
  height="46.656849"
  x="124.01575"
  y="263.38251" />
<text
  xml:space="preserve"
```



```
    style="font-size:14.000000;font-style:normal;font-variant:normal;font-weight:normal;font-stretch:normal;fill:#000000;fill-opacity:1.000000;stroke:none;stroke-width:1.000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-opacity:1.000000;font-family:Bitstream Vera Sans;text-anchor:middle;writing-mode:lr;"
    x="198.33043"
    y="285.24298"
    id="text5553"
    sodipodi:linespacing="100%"><tspan
      id="tspan5554">DBusConnection</tspan><tspan
      sodipodi:role="line"
      id="tspan5556"
      x="198.33043"
      y="299.24298">Instance</tspan></text>
<rect
  style="fill:none;fill-opacity:0.75000000;fill-rule:evenodd;stroke:#000000;stroke-width:2.5000000;stroke-linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-dasharray:2.5000000 2.5000000 ;stroke-dashoffset:0.0000000;stroke-opacity:1.0000000;"
  id="rect5558"
  width="148.46259"
  height="46.656849"
  x="719.64764"
  y="263.38251" />
<text
  xml:space="preserve"
  style="font-size:14.000000;font-style:normal;font-variant:normal;font-weight:normal;font-stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;font-family:Bitstream Vera Sans;text-anchor:middle;writing-mode:lr;"
  x="793.96234"
  y="285.24298"
  id="text5559"
  sodipodi:linespacing="100%"><tspan
    id="tspan5560">DBusConnection</tspan><tspan
    sodipodi:role="line"
    id="tspan5562"
    x="793.96234"
    y="299.24298">Instance</tspan></text>
<rect
  style="fill:none;fill-opacity:0.75000000;fill-rule:evenodd;stroke:#000000;stroke-width:2.5000000;stroke-linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-dasharray:2.5000000 2.5000000 ;stroke-dashoffset:0.0000000;stroke-opacity:1.0000000;"
  id="rect5564"
  width="148.46259"
  height="46.656849"
```

```
x="763.77222"
y="378.54001" />
<text
  xml:space="preserve"
  style="font-size:14.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.000000;stroke:none;stroke-
width:1.000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.000000;font-family:Bitstream Vera Sans;text-
anchor:middle;writing-mode:lr;"
  x="838.08691"
  y="400.40048"
  id="text5565"
  sodipodi:linespacing="100%"><tspan
  id="tspan5566">DBusConnection</tspan><tspan
  sodipodi:role="line"
  id="tspan5568"
  x="838.08691"
  y="414.40048">Instance</tspan></text>
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;marker-
end:url(#Arrow1M);"
  d="M 186.02362,248.03149 C 106.29921,26.574797
372.04724,26.574797 372.04724,26.574797"
  id="path5571"
  sodipodi:nodetypes="cc" />
<rect
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:2.1854961;stroke-
linecap:butt;stroke-linejoin:miter;stroke-miterlimit:4.0000000;stroke-
dasharray:2.1854960 2.1854960 ;stroke-dashoffset:0.0000000;stroke-
opacity:1.0000000;"
  id="rect6205"
  width="148.46259"
  height="35.656227"
  x="391.89175"
  y="17.493374" />
<text
  xml:space="preserve"
  style="font-size:14.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;text-
anchor:middle;writing-mode:lr;"
  x="466.20642"
  y="39.577003"
  id="text6206"
  sodipodi:linespacing="100%"><tspan
  x="466.20642"
```

```

        y="39.577003"
        sodipodi:role="line"
        id="tspan6211">Message Dispatcher</tspan></text>
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;marker-
end:url(#Arrow1M);"
  d="M 806.10236,248.03149 C 814.96063,17.716530
549.21260,26.574797 558.07087,26.574797"
  id="path6213"
  sodipodi:nodetypes="cc" />
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;text-
anchor:start;writing-mode:lr;"
  x="380.24341"
  y="71.125053"
  id="text6214"
  sodipodi:linespacing="100%"><tspan
    x="380.24341"
    y="71.125053"
    sodipodi:role="line"
    id="tspan6860">if (message is signal)</tspan><tspan
      x="380.24341"
      y="83.125053"
      sodipodi:role="line"
      id="tspan6862"> broadcast</tspan><tspan
        x="380.24341"
        y="95.125053"
        sodipodi:role="line"
        id="tspan6864">else</tspan><tspan
          x="380.24341"
          y="107.12505"
          sodipodi:role="line"
          id="tspan6866"> find destination named by
message</tspan></text>
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;marker-
end:url(#Arrow1M);"
  d="M 380.90551,79.724404 C 177.16536,53.149601
203.74016,256.88976 203.74016,248.03149"
  id="path6868"
  sodipodi:nodetypes="cc" />
<path

```

```
    style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;marker-
end:url(#Arrow1M);"
    d="M 451.77165,79.724404 C 788.38583,44.291333
779.52756,256.88976 779.52756,248.03149"
    id="path6869"
    sodipodi:nodetypes="cc" />
<rect
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#6a6a6a;stroke-width:2.5000000;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;stroke-
miterlimit:4.0000000;stroke-dasharray:1.2500000,1.2500000;stroke-
dashoffset:0.0000000;"
  id="rect7503"
  width="318.89764"
  height="168.30708"
  x="345.47244"
  y="115.15748" />
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
variant:normal;font-weight:normal;font-
stretch:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;text-
anchor:middle;writing-mode:lr;"
  x="507.10016"
  y="132.70409"
  id="text8137"
  sodipodi:linespacing="100%"><tspan
    id="tspan8138">Destination Table</tspan></text>
<text
  xml:space="preserve"
  style="font-size:12.000000;font-style:normal;font-
weight:normal;fill:#000000;fill-opacity:1.0000000;stroke:none;stroke-
width:1.0000000pt;stroke-linecap:butt;stroke-linejoin:miter;stroke-
opacity:1.0000000;font-family:Bitstream Vera Sans;font-
stretch:normal;font-variant:normal;text-anchor:start;writing-mode:lr;"
  x="422.71124"
  y="158.39366"
  id="text8140"
  sodipodi:linespacing="120%"><tspan
    x="422.71124"
    y="158.39366"
    sodipodi:role="line"
    id="tspan8818">Connection 1</tspan><tspan
    x="422.71124"
    y="172.79366"
    sodipodi:role="line"
    id="tspan8820">Connection 2</tspan><tspan
    x="422.71124"
```

```

y="187.19366"
sodipodi:role="line"
id="tspan8822">&quot;The Session Manager&quot;</tspan><tspan
x="422.71124"
y="201.59366"
sodipodi:role="line"
id="tspan8824">&quot;The Window Manager&quot;</tspan><tspan
x="422.71124"
y="215.99366"
sodipodi:role="line"
id="tspan8826">&quot;The Screensaver&quot;</tspan><tspan
x="422.71124"
y="230.39366"
sodipodi:role="line"
id="tspan8828">&quot;The Text Editor&quot;</tspan><tspan
x="422.71124"
y="244.79366"
sodipodi:role="line"
id="tspan8830">&quot;The Hardware Directory&quot;</tspan><tspan
x="422.71124"
y="259.19367"
sodipodi:role="line"
id="tspan8832">&quot;The Address Book&quot;</tspan><tspan
x="422.71124"
y="273.59367"
sodipodi:role="line"
id="tspan8834">&quot;The Dictionary&quot;</tspan></text>
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;marker-
end:url(#Arrow1M);"
  d="M 416.33858,150.59055 C 239.17323,97.440935
221.45669,256.88976 221.45669,248.03149"
  id="path8179"
  sodipodi:nodetypes="cc" />
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;marker-
end:url(#Arrow1M);"
  d="M 504.92126,168.30708 C 726.37795,106.29921
770.66929,265.74802 761.81102,239.17322"
  id="path8180"
  sodipodi:nodetypes="cc" />
<path
  style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;"
  d=""
  id="path8181"
  sodipodi:nodetypes="" />

```

```

    <path
      style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;marker-
end:url(#Arrow1M);"
      d="M 584.64567,239.17322 C 717.51969,194.88188
761.81102,256.88976 752.95276,248.03149"
      id="path8182"
      sodipodi:nodetypes="cc" />
    <path
      style="fill:none;fill-opacity:0.75000000;fill-
rule:evenodd;stroke:#000000;stroke-width:1.0000000pt;stroke-
linecap:butt;stroke-linejoin:miter;stroke-opacity:1.0000000;marker-
end:url(#Arrow1M);"
      d="M 416.33858,177.16535 C 301.18111,124.01574
230.31496,265.74803 239.17323,248.03149"
      id="path8184"
      sodipodi:nodetypes="cc" />
</svg>

```

File = dict-simple.message

A simple dict

```

VALID_HEADER method_call
REQUIRED_FIELDS
ALIGN 8
END_LENGTH Header
START_LENGTH Body
TYPE DICT
LENGTH Dict
START_LENGTH Dict
STRING 'int32'
TYPE INT32
INT32 0x12345678
END_LENGTH Dict
END_LENGTH Body

```

File = dict.message

Dict with different values

```

VALID_HEADER method_call
REQUIRED_FIELDS
ALIGN 8
END_LENGTH Header
START_LENGTH Body
TYPE DICT

```

```

LENGTH Dict
START_LENGTH Dict
STRING 'boolean'
TYPE BOOLEAN
BYTE 1
STRING 'int32'
TYPE INT32
INT32 0x12345678
STRING 'uint32'
TYPE UINT32
UINT32 0x8765432
STRING 'double'
TYPE DOUBLE
DOUBLE 3.141592653589
STRING 'string'
TYPE STRING
STRING 'This is a string'
STRING 'boolean_array'
TYPE ARRAY
TYPE BOOLEAN
BOOLEAN_ARRAY { true, false, false, true, false }
STRING 'int32_array'
TYPE ARRAY
TYPE INT32
INT32_ARRAY { 1, -2, 3, -4, 5, -6, 7, -8, 9, -10 }
STRING 'uint32_array'
TYPE ARRAY
TYPE UINT32
UINT32_ARRAY { 11, 12, 314, 1911, 57692, 1237, 2834 }
STRING 'double_array'
TYPE ARRAY
TYPE DOUBLE
DOUBLE_ARRAY { 0.1, 0.2, 3.1415926, 2.7183, 10.0, 9.99 }
STRING 'string_array'
TYPE ARRAY
TYPE STRING
STRING_ARRAY { 'Hello', 'This', 'Is', 'A', 'String', 'Array!' }
END_LENGTH Dict
END_LENGTH Body

```

File = dir-watch-default.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dir-watch-default.c OS specific directory change notification for
message bus
*
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*

```

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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*/
```

```
#include <config.h>
```

```
#include <dbus/dbus-internals.h>
```

```
#include "dir-watch.h"
```

```
/* NoOp */
```

```
void
bus_set_watched_dirs (BusContext *context, DBusList **directories)
{
}
```

```
File = dir-watch-dnotify.c
```

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dir-watch-dnotify.c OS specific directory change notification for
message bus
*
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```



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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include <config.h>
```

```
#define _GNU_SOURCE
#include <stdlib.h>
#include <unistd.h>
#include <fcntl.h>
#ifdef HAVE_ERRNO_H
#include <errno.h>
#endif
```

```
#include <dbus/dbus-internals.h>
#include "dir-watch.h"
```

```
#define MAX_DIRS_TO_WATCH 128
```

```
/* use a static array to avoid handling OOM */
static int fds[MAX_DIRS_TO_WATCH];
static int num_fds = 0;
```

```
void
bus_watch_directory (const char *dir, BusContext *context)
{
    int fd;

    _dbus_assert (dir != NULL);

    if (num_fds >= MAX_DIRS_TO_WATCH )
    {
        _dbus_warn ("Cannot watch config directory '%s'. Already
watching %d directories\n", dir, MAX_DIRS_TO_WATCH);
        goto out;
    }

    fd = open (dir, O_RDONLY);
    if (fd < 0)
    {
        _dbus_warn ("Cannot open directory '%s'; error '%s'\n", dir,
_dbus_strerror (errno));
        goto out;
    }
}
```

```

    if (fcntl (fd, F_NOTIFY, DN_CREATE|DN_DELETE|DN_RENAME|DN_MODIFY) ==
-1)
    {
        _dbus_warn ("Cannot setup D_NOTIFY for '%s' error '%s'\n", dir,
_dbus_strerror (errno));
        close (fd);
        goto out;
    }

    fds[num_fds++] = fd;
    _dbus_verbose ("Added watch on config directory '%s'\n", dir);

out:
;
}

void
bus_drop_all_directory_watches (void)
{
    int i;

    _dbus_verbose ("Dropping all watches on config directories\n");

    for (i = 0; i < num_fds; i++)
    {
        if (close (fds[i]) != 0)
        {
            _dbus_verbose ("Error closing fd %d for config directory
watch\n", fds[i]);
        }
    }

    num_fds = 0;
}

```

File = dir-watch-inotify.c

```

/* -*- mode: C; c-file-style: "gnu" -*- */
/* dir-watch-inotify.c OS specific directory change notification for
message bus
*
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*          (c) 2006 Mandriva
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include <config.h>
```

```
#include <stdlib.h>
#include <unistd.h>
#include <fcntl.h>
#include <sys/inotify.h>
#include <sys/types.h>
#include <signal.h>
#include <errno.h>
```

```
#include <dbus/dbus-internals.h>
#include <dbus/dbus-list.h>
#include <dbus/dbus-watch.h>
#include "dir-watch.h"
```

```
#define MAX_DIRS_TO_WATCH 128
#define INOTIFY_EVENT_SIZE (sizeof(struct inotify_event))
#define INOTIFY_BUF_LEN (1024 * (INOTIFY_EVENT_SIZE + 16))
```

```
/* use a static array to avoid handling OOM */
static int wds[MAX_DIRS_TO_WATCH];
static char *dirs[MAX_DIRS_TO_WATCH];
static int num_wds = 0;
static int inotify_fd = -1;
static DBusWatch *watch = NULL;
static DBusLoop *loop = NULL;
```

```
static dbus_bool_t
_handle_inotify_watch (DBusWatch *passed_watch, unsigned int flags,
void *data)
{
    char buffer[INOTIFY_BUF_LEN];
    ssize_t ret = 0;
    int i = 0;
    pid_t pid;
    dbus_bool_t have_change = FALSE;
```

```

ret = read (inotify_fd, buffer, INOTIFY_BUF_LEN);
if (ret < 0)
    _dbus_verbose ("Error reading inotify event: '%s'\n",
_dbus_strerror(errno));
else if (!ret)
    _dbus_verbose ("Error reading inotify event: buffer too small\n");

while (i < ret)
{
    struct inotify_event *ev;
    pid = _dbus_getpid ();

    ev = (struct inotify_event *) &buffer[i];
    i += INOTIFY_EVENT_SIZE + ev->len;
#ifdef DBUS_ENABLE_VERBOSE_MODE
    if (ev->len)
        _dbus_verbose ("event name: '%s'\n", ev->name);
        _dbus_verbose ("inotify event: wd=%d mask=%u cookie=%u
len=%u\n", ev->wd, ev->mask, ev->cookie, ev->len);
#endif
        _dbus_verbose ("Sending SIGHUP signal on reception of a inotify
event\n");
        have_change = TRUE;
    }
    if (have_change)
        (void) kill (pid, SIGHUP);

    return TRUE;
}

#include <stdio.h>

static void
_set_watched_dirs_internal (DBusList **directories)
{
    int new_wds[MAX_DIRS_TO_WATCH];
    char *new_dirs[MAX_DIRS_TO_WATCH];
    DBusList *link;
    int i, j, wd;

    for (i = 0; i < MAX_DIRS_TO_WATCH; i++)
    {
        new_wds[i] = -1;
        new_dirs[i] = NULL;
    }

    i = 0;
    link = _dbus_list_get_first_link (directories);
    while (link != NULL)
    {
        new_dirs[i++] = (char *)link->data;
        link = _dbus_list_get_next_link (directories, link);
    }
}

```

```

    }

    /* Look for directories in both the old and new sets, if
     * we find one, move its data into the new set.
     */
    for (i = 0; new_dirs[i]; i++)
    {
        for (j = 0; j < num_wds; j++)
        {
            if (dirs[j] && strcmp (new_dirs[i], dirs[j]) == 0)
            {
                new_wds[i] = wds[j];
                new_dirs[i] = dirs[j];
                wds[j] = -1;
                dirs[j] = NULL;
                break;
            }
        }
    }

    /* Any directories we find in "wds" with a nonzero fd must
     * not be in the new set, so perform cleanup now.
     */
    for (j = 0; j < num_wds; j++)
    {
        if (wds[j] != -1)
        {
            inotify_rm_watch (inotify_fd, wds[j]);
            dbus_free (dirs[j]);
            wds[j] = -1;
            dirs[j] = NULL;
        }
    }

    for (i = 0; new_dirs[i]; i++)
    {
        if (new_wds[i] == -1)
        {
            /* FIXME - less lame error handling for failing to add a
             * watch; we may need to sleep. */
            wd = inotify_add_watch (inotify_fd, new_dirs[i],
                IN_CLOSE_WRITE | IN_DELETE | IN_MOVED_TO | IN_MOVED_FROM);
            if (wd < 0)
            {
                /* Not all service directories need to exist. */
                if (errno != ENOENT)
                {
                    _dbus_warn ("Cannot setup inotify for '%s'; error
                    '%s'\n", new_dirs[i], _dbus_strerror (errno));
                    goto out;
                }
            }
            else

```

```

        {
            new_wds[i] = -1;
            new_dirs[i] = NULL;
            continue;
        }
    }
    new_wds[i] = wd;
    new_dirs[i] = _dbus_strdup (new_dirs[i]);
    if (!new_dirs[i])
    {
        /* FIXME have less lame handling for OOM, we just
silently fail to
        * watch. (In reality though, the whole OOM handling in
dbus is stupid
        * but we won't go into that in this comment =) )
        */
        inotify_rm_watch (inotify_fd, wd);
        new_wds[i] = -1;
    }
}
}

num_wds = i;

for (i = 0; i < MAX_DIRS_TO_WATCH; i++)
{
    wds[i] = new_wds[i];
    dirs[i] = new_dirs[i];
}

out:;
}

#include <stdio.h>
static void
_shutdown_inotify (void *data)
{
    DBusList *empty = NULL;

    if (inotify_fd == -1)
        return;

    _set_watched_dirs_internal (&empty);

    if (watch != NULL)
    {
        _dbus_loop_remove_watch (loop, watch);
        _dbus_watch_invalidate (watch);
        _dbus_watch_unref (watch);
        _dbus_loop_unref (loop);
    }
    watch = NULL;
}

```

```

loop = NULL;

close (inotify_fd);
inotify_fd = -1;
}

static int
_init_inotify (BusContext *context)
{
    int ret = 0;

    if (inotify_fd == -1)
    {
#ifdef HAVE_INOTIFY_INIT1
        inotify_fd = inotify_init1 (IN_CLOEXEC);
        /* This ensures we still run on older Linux kernels.
         * https://bugs.freedesktop.org/show_bug.cgi?id=23957
         */
        if (inotify_fd < 0)
            inotify_fd = inotify_init ();
#else
        inotify_fd = inotify_init ();
#endif
        if (inotify_fd <= 0)
        {
            _dbus_warn ("Cannot initialize inotify\n");
            goto out;
        }
        loop = bus_context_get_loop (context);
        _dbus_loop_ref (loop);

        watch = _dbus_watch_new (inotify_fd, DBUS_WATCH_READABLE, TRUE,
                                _handle_inotify_watch, NULL, NULL);

        if (watch == NULL)
        {
            _dbus_warn ("Unable to create inotify watch\n");
            goto out;
        }

        if (!_dbus_loop_add_watch (loop, watch))
        {
            _dbus_warn ("Unable to add reload watch to main loop");
            _dbus_watch_unref (watch);
            watch = NULL;
            goto out;
        }

        if (!_dbus_register_shutdown_func (_shutdown_inotify, NULL))
        {
            _dbus_warn ("Unable to register shutdown func");
            _dbus_watch_unref (watch);

```

```

        watch = NULL;
        goto out;
    }
}

ret = 1;

out:
    return ret;
}

void
bus_set_watched_dirs (BusContext *context, DBusList **directories)
{
    if (!_init_inotify (context))
        return;

    _set_watched_dirs_internal (directories);
}

```

File = dir-watch-kqueue.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dir-watch-kqueue.c OS specific directory change notification for
message bus
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

```

```
#include <config.h>
```



```

#include <sys/types.h>
#include <sys/event.h>
#include <sys/time.h>
#include <signal.h>
#include <fcntl.h>
#include <unistd.h>
#ifdef HAVE_ERRNO_H
#include <errno.h>
#endif

#include "bus.h"
#include <dbus/dbus-watch.h>

#include <dbus/dbus-internals.h>
#include <dbus/dbus-list.h>
#include "dir-watch.h"

#define MAX_DIRS_TO_WATCH 128

static int kq = -1;
static int fds[MAX_DIRS_TO_WATCH];
static char *dirs[MAX_DIRS_TO_WATCH];
static int num_fds = 0;
static DBusWatch *watch = NULL;
static DBusLoop *loop = NULL;

static dbus_bool_t
_handle_kqueue_watch (DBusWatch *watch, unsigned int flags, void
*data)
{
    struct kevent ev;
    struct timespec nullts = { 0, 0 };
    int res;
    pid_t pid;

    res = kevent (kq, NULL, 0, &ev, 1, &nullts);

    /* Sleep for half a second to avoid a race when files are
install(1)'d
    * to system.d. */
    usleep(500000);

    if (res > 0)
    {
        pid = getpid ();
        _dbus_verbose ("Sending SIGHUP signal on reception of a
kevent\n");
        (void) kill (pid, SIGHUP);
    }
    else if (res < 0 && errno == EBADF)
    {

```

```

    kq = -1;
    if (watch != NULL)
    {
        _dbus_loop_remove_watch (loop, watch);
        _dbus_watch_invalidate (watch);
        _dbus_watch_unref (watch);
        watch = NULL;
    }
    pid = getpid ();
    _dbus_verbose ("Sending SIGHUP signal since kqueue has been
closed\n");
    (void) kill (pid, SIGHUP);
}

return TRUE;
}

static int
_init_kqueue (BusContext *context)
{
    int ret = 0;

    if (kq < 0)
    {
        kq = kqueue ();
        if (kq < 0)
        {
            _dbus_warn ("Cannot create kqueue; error '%s'\n",
_dbus_strerror (errno));
            goto out;
        }

        loop = bus_context_get_loop (context);

        watch = _dbus_watch_new (kq, DBUS_WATCH_READABLE, TRUE,
            _handle_kqueue_watch, NULL, NULL);

        if (watch == NULL)
        {
            _dbus_warn ("Unable to create kqueue watch\n");
            close (kq);
            kq = -1;
            goto out;
        }

        if (!_dbus_loop_add_watch (loop, watch))
        {
            _dbus_warn ("Unable to add reload watch to main loop");
            _dbus_watch_invalidate (watch);
            _dbus_watch_unref (watch);
            watch = NULL;
        }
    }
}

```

```

        close (kq);
        kq = -1;
        goto out;
    }
}

ret = 1;

out:
return ret;
}

void
bus_set_watched_dirs (BusContext *context, DBusList **directories)
{
    int new_fds[MAX_DIRS_TO_WATCH];
    char *new_dirs[MAX_DIRS_TO_WATCH];
    DBusList *link;
    int i, j, f, fd;
    struct kevent ev;

    if (!_init_kqueue (context))
        goto out;

    for (i = 0; i < MAX_DIRS_TO_WATCH; i++)
    {
        new_fds[i] = -1;
        new_dirs[i] = NULL;
    }

    i = 0;
    link = _dbus_list_get_first_link (directories);
    while (link != NULL)
    {
        new_dirs[i++] = (char *)link->data;
        link = _dbus_list_get_next_link (directories, link);
    }

    /* Look for directories in both the old and new sets, if
     * we find one, move its data into the new set.
     */
    for (i = 0; new_dirs[i]; i++)
    {
        for (j = 0; j < num_fds; j++)
        {
            if (dirs[j] && strcmp (new_dirs[i], dirs[j]) == 0)
            {
                new_fds[i] = fds[j];
                new_dirs[i] = dirs[j];
                fds[j] = -1;
                dirs[j] = NULL;
                break;
            }
        }
    }
}

```

```

    }
}

/* Any directory we find in "fds" with a nonzero fd must
 * not be in the new set, so perform cleanup now.
 */
for (j = 0; j < num_fds; j++)
{
    if (fds[j] != -1)
    {
        close (fds[j]);
        dbus_free (dirs[j]);
        fds[j] = -1;
        dirs[j] = NULL;
    }
}

for (i = 0; new_dirs[i]; i++)
{
    if (new_fds[i] == -1)
    {
        /* FIXME - less lame error handling for failing to add a
watch;
        * we may need to sleep.
        */
        fd = open (new_dirs[i], O_RDONLY);
        if (fd < 0)
        {
            if (errno != ENOENT)
            {
                _dbus_warn ("Cannot open directory '%s'; error
'%s'\n", new_dirs[i], _dbus_strerror (errno));
                goto out;
            }
            else
            {
                new_fds[i] = -1;
                new_dirs[i] = NULL;
                continue;
            }
        }

        EV_SET (&ev, fd, EVFILT_VNODE, EV_ADD | EV_ENABLE |
EV_CLEAR,
                NOTE_DELETE | NOTE_EXTEND | NOTE_WRITE |
NOTE_RENAME, 0, 0);
        if (kevent (kq, &ev, 1, NULL, 0, NULL) == -1)
        {
            _dbus_warn ("Cannot setup a kevent for '%s'; error
'%s'\n", new_dirs[i], _dbus_strerror (errno));
            close (fd);

```

```

        goto out;
    }

    new_fds[i] = fd;
    new_dirs[i] = _dbus_strdup (new_dirs[i]);
    if (!new_dirs[i])
    {
        /* FIXME have less lame handling for OOM, we just
silently fail to
* watch. (In reality though, the whole OOM handling in
dbus is
* stupid but we won't go into that in this comment =) )
*/
        close (fd);
        new_fds[i] = -1;
    }
}
}

num_fds = i;

for (i = 0; i < MAX_DIRS_TO_WATCH; i++)
{
    fds[i] = new_fds[i];
    dirs[i] = new_dirs[i];
}

out:
;
}

```

File = dir-watch.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dir-watch.h Watch directories
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include "bus.h"
```

```
#ifndef DIR_WATCH_H
#define DIR_WATCH_H
```

```
/**
 * Update the set of directories to monitor for changes. The
 * operating-system-specific implementation of this function should
 * avoid creating a window where a directory in both the
 * old and new set isn't monitored.
 *
 * @param context The bus context
 * @param dirs List of strings which are directory paths
 */
void bus_set_watched_dirs (BusContext *context, DBusList **dirs);
```

```
#endif /* DIR_WATCH_H */
```

```
File = dispatch.c
```

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dispatch.c Message dispatcher
 *
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 *
 */
```

```
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include <config.h>
#include "dispatch.h"
#include "connection.h"
#include "driver.h"
#include "services.h"
#include "activation.h"
#include "utils.h"
#include "bus.h"
#include "signals.h"
#include "test.h"
#include <dbus/dbus-internals.h>
#include <string.h>
```

```
#ifdef HAVE_UNIX_FD_PASSING
#include <dbus/dbus-sysdeps-unix.h>
#include <unistd.h>
#endif
```

```
/* This is hard-coded in the files in valid-config-files-*. We have to
use
```

```
 * the debug-pipe transport because the tests in this file require
that
```

```
 * dbus_connection_open_private() does not block. */
#define TEST_DEBUG_PIPE "debug-pipe:name=test-server"
```

```
static dbus_bool_t
send_one_message (DBusConnection *connection,
                 BusContext      *context,
                 DBusConnection *sender,
                 DBusConnection *addressed_recipient,
                 DBusMessage     *message,
                 BusTransaction *transaction,
                 DBusError       *error)
{
    if (!bus_context_check_security_policy (context, transaction,
                                           sender,
                                           addressed_recipient,
                                           connection,
                                           message,
                                           NULL))
        return TRUE; /* silently don't send it */

    if (dbus_message_contains_unix_fds(message) &&
        !dbus_connection_can_send_type(connection, DBUS_TYPE_UNIX_FD))
        return TRUE; /* silently don't send it */
}
```



```

        dbus_set_error (error,
                        DBUS_ERROR_NOT_SUPPORTED,
                        "Tried to send message with Unix file
descriptors"
                        "to a client that doesn't support that.");
        return FALSE;
    }

    /* Dispatch the message */
    if (!bus_transaction_send (transaction, addressed_recipient,
message))
    {
        BUS_SET_OOM (error);
        return FALSE;
    }
}

/* Now dispatch to others who look interested in this message */
connections = bus_transaction_get_connections (transaction);
dbus_error_init (&tmp_error);
matchmaker = bus_context_get_matchmaker (context);

recipients = NULL;
if (!bus_matchmaker_get_recipients (matchmaker, connections,
sender, addressed_recipient,
message,
&recipients))
{
    BUS_SET_OOM (error);
    return FALSE;
}

link = _dbus_list_get_first_link (&recipients);
while (link != NULL)
{
    DBusConnection *dest;

    dest = link->data;

    if (!send_one_message (dest, context, sender,
addressed_recipient,
message, transaction, &tmp_error))
        break;

    link = _dbus_list_get_next_link (&recipients, link);
}

_dbus_list_clear (&recipients);

if (dbus_error_is_set (&tmp_error))
{
    dbus_move_error (&tmp_error, error);
}

```

```

        return FALSE;
    }
else
    return TRUE;
}

static DBusHandlerResult
bus_dispatch (DBusConnection *connection,
             DBusMessage     *message)
{
    const char *sender, *service_name;
    DBusError error;
    BusTransaction *transaction;
    BusContext *context;
    DBusHandlerResult result;
    DBusConnection *addressed_recipient;

    result = DBUS_HANDLER_RESULT_HANDLED;

    transaction = NULL;
    addressed_recipient = NULL;
    dbus_error_init (&error);

    context = bus_connection_get_context (connection);
    _dbus_assert (context != NULL);

    /* If we can't even allocate an OOM error, we just go to sleep
     * until we can.
     */
    while (!bus_connection_preallocate_oom_error (connection))
        _dbus_wait_for_memory ();

    /* Ref connection in case we disconnect it at some point in here */
    dbus_connection_ref (connection);

    service_name = dbus_message_get_destination (message);

#ifdef DBUS_ENABLE_VERBOSE_MODE
    {
        const char *interface_name, *member_name, *error_name;

        interface_name = dbus_message_get_interface (message);
        member_name = dbus_message_get_member (message);
        error_name = dbus_message_get_error_name (message);

        _dbus_verbose ("DISPATCH: %s %s %s to %s\n",
                      interface_name ? interface_name : "(no interface)",
                      member_name ? member_name : "(no member)",
                      error_name ? error_name : "(no error name)",
                      service_name ? service_name : "peer");
    }
#endif /* DBUS_ENABLE_VERBOSE_MODE */
}

```

```

/* If service_name is NULL, if it's a signal we send it to all
 * connections with a match rule. If it's not a signal, there
 * are some special cases here but mostly we just bail out.
 */
if (service_name == NULL)
{
    if (dbus_message_is_signal (message,
                                DBUS_INTERFACE_LOCAL,
                                "Disconnected"))
    {
        bus_connection_disconnected (connection);
        goto out;
    }

    if (dbus_message_get_type (message) != DBUS_MESSAGE_TYPE_SIGNAL)
    {
        /* DbusConnection also handles some of these automatically,
we leave
        * it to do so.
        */
        result = DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
        goto out;
    }
}

/* Create our transaction */
transaction = bus_transaction_new (context);
if (transaction == NULL)
{
    BUS_SET_OOM (&error);
    goto out;
}

/* Assign a sender to the message */
if (bus_connection_is_active (connection))
{
    sender = bus_connection_get_name (connection);
    _dbus_assert (sender != NULL);

    if (!dbus_message_set_sender (message, sender))
    {
        BUS_SET_OOM (&error);
        goto out;
    }

    /* We need to refetch the service name here, because
     * dbus_message_set_sender can cause the header to be
     * reallocated, and thus the service_name pointer will become
     * invalid.
     */
    service_name = dbus_message_get_destination (message);

```

```

    }

    if (service_name &&
        strcmp (service_name, DBUS_SERVICE_DBUS) == 0) /* to bus driver
*/
    {
        if (!bus_context_check_security_policy (context, transaction,
                                                connection, NULL, NULL,
message, &error))
        {
            _dbus_verbose ("Security policy rejected message\n");
            goto out;
        }

        _dbus_verbose ("Giving message to %s\n", DBUS_SERVICE_DBUS);
        if (!bus_driver_handle_message (connection, transaction,
message, &error))
            goto out;
    }
    else if (!bus_connection_is_active (connection)) /* clients must
talk to bus driver first */
    {
        _dbus_verbose ("Received message from non-registered client.
Disconnecting.\n");
        dbus_connection_close (connection);
        goto out;
    }
    else if (service_name != NULL) /* route to named service */
    {
        DBusString service_string;
        BusService *service;
        BusRegistry *registry;

        _dbus_assert (service_name != NULL);

        registry = bus_connection_get_registry (connection);

        _dbus_string_init_const (&service_string, service_name);
        service = bus_registry_lookup (registry, &service_string);

        if (service == NULL && dbus_message_get_auto_start (message))
        {
            BusActivation *activation;
            /* We can't do the security policy check here, since the
addressed
            * recipient service doesn't exist yet. We do it before
sending the
            * message after the service has been created.
            */
            activation = bus_connection_get_activation (connection);

```

```

        if (!bus_activation_activate_service (activation,
connection, transaction, TRUE,
message, service_name,
&error))
    {
        _DBUS_ASSERT_ERROR_IS_SET (&error);
        _dbus_verbose ("bus_activation_activate_service()
failed: %s\n", error.name);
        goto out;
    }

    goto out;
}
else if (service == NULL)
{
    dbus_set_error (&error,
                    DBUS_ERROR_NAME_HAS_NO_OWNER,
                    "Name \"%s\" does not exist",
                    service_name);

    goto out;
}
else
{
    addressed_recipient =
bus_service_get_primary_owners_connection (service);
    _dbus_assert (addressed_recipient != NULL);
}
}

/* Now send the message to its destination (or not, if
* addressed_recipient == NULL), and match it against other
connections'
* match rules.
*/
if (!bus_dispatch_matches (transaction, connection,
addressed_recipient, message, &error))
    goto out;

out:
if (dbus_error_is_set (&error))
{
    if (!dbus_connection_get_is_connected (connection))
    {
        /* If we disconnected it, we won't bother to send it any
error
        * messages.
        */
        _dbus_verbose ("Not sending error to connection we
disconnected\n");
    }
    else if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
    {

```

```

bus_connection_send_oom_error (connection, message);

/* cancel transaction due to OOM */
if (transaction != NULL)
{
    bus_transaction_cancel_and_free (transaction);
    transaction = NULL;
}
else
{
    /* Try to send the real error, if no mem to do that, send
    * the OOM error
    */
    dbus_assert (transaction != NULL);
    if (!bus_transaction_send_error_reply (transaction,
connection,
                                         &error, message))
    {
        bus_connection_send_oom_error (connection, message);

        /* cancel transaction due to OOM */
        if (transaction != NULL)
        {
            bus_transaction_cancel_and_free (transaction);
            transaction = NULL;
        }
    }
}

    dbus_error_free (&error);
}

if (transaction != NULL)
{
    bus_transaction_execute_and_free (transaction);
}

dbus_connection_unref (connection);

return result;
}

static DBusHandlerResult
bus_dispatch_message_filter (DBusConnection    *connection,
                             DBusMessage      *message,
                             void              *user_data)
{
    return bus_dispatch (connection, message);
}

```

```

dbus_bool_t
bus_dispatch_add_connection (DBusConnection *connection)
{
    if (!dbus_connection_add_filter (connection,
                                     bus_dispatch_message_filter,
                                     NULL, NULL))

        return FALSE;

    return TRUE;
}

void
bus_dispatch_remove_connection (DBusConnection *connection)
{
    /* Here we tell the bus driver that we want to get off. */
    bus_driver_remove_connection (connection);

    dbus_connection_remove_filter (connection,
                                   bus_dispatch_message_filter,
                                   NULL);
}

#ifdef DBUS_BUILD_TESTS

#include <stdio.h>

/* This is used to know whether we need to block in order to finish
 * sending a message, or whether the initial dbus_connection_send()
 * already flushed the queue.
 */
#define SEND_PENDING(connection) (dbus_connection_has_messages_to_send
 (connection))

typedef dbus_bool_t (* Check1Func) (BusContext      *context);
typedef dbus_bool_t (* Check2Func) (BusContext      *context,
                                   DBusConnection *connection);

static dbus_bool_t check_no_leftovers (BusContext *context);

static void
block_connection_until_message_from_bus (BusContext      *context,
                                       DBusConnection *connection,
                                       const char
*what_is_expected)
{
    _dbus_verbose ("expecting: %s\n", what_is_expected);

    while (dbus_connection_get_dispatch_status (connection) ==
           DBUS_DISPATCH_COMPLETE &&
           dbus_connection_get_is_connected (connection))
    {
        bus_test_run_bus_loop (context, TRUE);
    }
}

```

```

        bus_test_run_clients_loop (FALSE);
    }
}

static void
spin_connection_until_authenticated (BusContext      *context,
                                     DBusConnection *connection)
{
    _dbus_verbose ("Spinning to auth connection %p\n", connection);
    while (!dbus_connection_get_is_authenticated (connection) &&
           dbus_connection_get_is_connected (connection))
    {
        bus_test_run_bus_loop (context, FALSE);
        bus_test_run_clients_loop (FALSE);
    }
    _dbus_verbose (" ... done spinning to auth connection %p\n",
connection);
}

/* compensate for fact that pop_message() can return #NULL due to OOM
*/
static DBusMessage*
pop_message_waiting_for_memory (DBusConnection *connection)
{
    while (dbus_connection_get_dispatch_status (connection) ==
           DBUS_DISPATCH_NEED_MEMORY)
        _dbus_wait_for_memory ();

    return dbus_connection_pop_message (connection);
}

static DBusMessage*
borrow_message_waiting_for_memory (DBusConnection *connection)
{
    while (dbus_connection_get_dispatch_status (connection) ==
           DBUS_DISPATCH_NEED_MEMORY)
        _dbus_wait_for_memory ();

    return dbus_connection_borrow_message (connection);
}

static void
warn_unexpected_real (DBusConnection *connection,
                     DBusMessage    *message,
                     const char      *expected,
                     const char      *function,
                     int              line)
{
    if (message)
        _dbus_warn ("%s:%d received message interface \"%s\" member \"%s\"
error name \"%s\" on %p, expecting %s\n",
                    function, line,

```



```

        dbus_message_get_interface (message) ?
        dbus_message_get_interface (message) : "(unset)",
        dbus_message_get_member (message) ?
        dbus_message_get_member (message) : "(unset)",
        dbus_message_get_error_name (message) ?
        dbus_message_get_error_name (message) : "(unset)",
        connection,
        expected);
    else
        _dbus_warn ("%s:%d received no message on %p, expecting %s\n",
                    function, line, connection, expected);
}

#define warn_unexpected(connection, message, expected) \
    warn_unexpected_real (connection, message, expected, \
        _DBUS_FUNCTION_NAME, __LINE__)

static void
verbose_message_received (DBusConnection *connection,
                          DBusMessage *message)
{
    _dbus_verbose ("Received message interface \"%s\" member \"%s\" \
error name \"%s\" on %p\n",
                  dbus_message_get_interface (message) ?
                  dbus_message_get_interface (message) : "(unset)",
                  dbus_message_get_member (message) ?
                  dbus_message_get_member (message) : "(unset)",
                  dbus_message_get_error_name (message) ?
                  dbus_message_get_error_name (message) : "(unset)",
                  connection);
}

typedef enum
{
    SERVICE_CREATED,
    OWNER_CHANGED,
    SERVICE_DELETED
} ServiceInfoKind;

typedef struct
{
    ServiceInfoKind expected_kind;
    const char *expected_service_name;
    dbus_bool_t failed;
    DBusConnection *skip_connection;
} CheckServiceOwnerChangedData;

static dbus_bool_t
check_service_owner_changed_foreach (DBusConnection *connection,
                                      void *data)
{
    CheckServiceOwnerChangedData *d = data;

```

```

DBusMessage *message;
DBusError error;
const char *service_name, *old_owner, *new_owner;

if (d->expected_kind == SERVICE_CREATED
    && connection == d->skip_connection)
    return TRUE;

dbus_error_init (&error);
d->failed = TRUE;

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive a message on %p, expecting %s\n",
                connection, "NameOwnerChanged");
    goto out;
}
else if (!dbus_message_is_signal (message,
                                  DBUS_INTERFACE_DBUS,
                                  "NameOwnerChanged"))
{
    warn_unexpected (connection, message, "NameOwnerChanged");

    goto out;
}
else
{
    reget_service_info_data:
    service_name = NULL;
    old_owner = NULL;
    new_owner = NULL;

    dbus_message_get_args (message, &error,
                           DBUS_TYPE_STRING, &service_name,
                           DBUS_TYPE_STRING, &old_owner,
                           DBUS_TYPE_STRING, &new_owner,
                           DBUS_TYPE_INVALID);

    if (dbus_error_is_set (&error))
    {
        if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
        {
            dbus_error_free (&error);
            _dbus_wait_for_memory ();
            goto reget_service_info_data;
        }
        else
        {
            _dbus_warn ("Did not get the expected arguments\n");
            goto out;
        }
    }
}

```

```

    }

    if ((d->expected_kind == SERVICE_CREATED    && ( old_owner[0] ||
!new_owner[0]))
        || (d->expected_kind == OWNER_CHANGED    && (!old_owner[0] ||
!new_owner[0]))
        || (d->expected_kind == SERVICE_DELETED && (!old_owner[0] ||
new_owner[0])))
    {
        _dbus_warn ("inconsistent NameOwnerChanged arguments\n");
        goto out;
    }

    if (strcmp (service_name, d->expected_service_name) != 0)
    {
        _dbus_warn ("expected info on service %s, got info on %s\n",
                    d->expected_service_name,
                    service_name);
        goto out;
    }

    if (*service_name == ':' && new_owner[0]
        && strcmp (service_name, new_owner) != 0)
    {
        _dbus_warn ("inconsistent ServiceOwnedChanged message
(\\\"%s\\\" [ %s -> %s ])\n",
                    service_name, old_owner, new_owner);
        goto out;
    }
}

d->failed = FALSE;

out:
dbus_error_free (&error);

if (message)
    dbus_message_unref (message);

return !d->failed;
}

static void
kill_client_connection (BusContext      *context,
                        DBusConnection *connection)
{
    char *base_service;
    const char *s;
    CheckServiceOwnerChangedData socd;

    _dbus_verbose ("killing connection %p\n", connection);

```

```

s = dbus_bus_get_unique_name (connection);
_dbus_assert (s != NULL);

while ((base_service = _dbus_strdup (s)) == NULL)
    _dbus_wait_for_memory ();

dbus_connection_ref (connection);

/* kick in the disconnect handler that unrefs the connection */
dbus_connection_close (connection);

bus_test_run_everything (context);

_dbus_assert (bus_test_client_listed (connection));

/* Run disconnect handler in test.c */
if (bus_connection_dispatch_one_message (connection))
    _dbus_assert_not_reached ("something received on connection being
killed other than the disconnect");

_dbus_assert (!dbus_connection_get_is_connected (connection));
dbus_connection_unref (connection);
connection = NULL;
_dbus_assert (!bus_test_client_listed (connection));

socd.expected_kind = SERVICE_DELETED;
socd.expected_service_name = base_service;
socd.failed = FALSE;
socd.skip_connection = NULL;

bus_test_clients_foreach (check_service_owner_changed_foreach,
                          &socd);

dbus_free (base_service);

if (socd.failed)
    _dbus_assert_not_reached ("didn't get the expected
NameOwnerChanged (deletion) messages");

    if (!check_no_leftovers (context))
        _dbus_assert_not_reached ("stuff left in message queues after
disconnecting a client");
}

static void
kill_client_connection_unchecked (DBusConnection *connection)
{
    /* This kills the connection without expecting it to affect
    * the rest of the bus.
    */
    _dbus_verbose ("Unchecked kill of connection %p\n", connection);
}

```

```

dbus_connection_ref (connection);
dbus_connection_close (connection);
/* dispatching disconnect handler will unref once */
if (bus_connection_dispatch_one_message (connection))
    _dbus_assert_not_reached ("message other than disconnect
dispatched after failure to register");

    _dbus_assert (!bus_test_client_listed (connection));
    dbus_connection_unref (connection);
}

typedef struct
{
    dbus_bool_t failed;
} CheckNoMessagesData;

static dbus_bool_t
check_no_messages_foreach (DBusConnection *connection,
                           void          *data)
{
    CheckNoMessagesData *d = data;
    DBusMessage *message;

    message = pop_message_waiting_for_memory (connection);
    if (message != NULL)
        {
            warn_unexpected (connection, message, "no messages");

            d->failed = TRUE;
        }

    if (message)
        dbus_message_unref (message);
    return !d->failed;
}

static dbus_bool_t
check_no_leftovers (BusContext *context)
{
    CheckNoMessagesData nmd;

    nmd.failed = FALSE;
    bus_test_clients_foreach (check_no_messages_foreach,
                              &nmd);

    if (nmd.failed)
        {
            _dbus_verbose ("leftover message found\n");
            return FALSE;
        }
    else

```

```

    return TRUE;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_hello_message (BusContext      *context,
                    DBusConnection *connection)
{
    DBusMessage *message;
    DBusMessage *name_message;
    dbus_uint32_t serial;
    dbus_bool_t retval;
    DBusError error;
    const char *name;
    const char *acquired;

    retval = FALSE;
    dbus_error_init (&error);
    name = NULL;
    acquired = NULL;
    message = NULL;
    name_message = NULL;

    _dbus_verbose ("check_hello_message for %p\n", connection);

    message = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                           DBUS_PATH_DBUS,
                                           DBUS_INTERFACE_DBUS,
                                           "Hello");

    if (message == NULL)
        return TRUE;

    dbus_connection_ref (connection); /* because we may get disconnected
 */

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        dbus_connection_unref (connection);
        return TRUE;
    }

    _dbus_assert (dbus_message_has_signature (message, ""));

    dbus_message_unref (message);
    message = NULL;

    if (!dbus_connection_get_is_connected (connection))
    {

```

```

        _dbus_verbose ("connection was disconnected (presumably auth
failed)\n");

        dbus_connection_unref (connection);

        return TRUE;
    }

    /* send our message */
    bus_test_run_clients_loop (SEND_PENDING (connection));

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected (presumably auth
failed)\n");

        dbus_connection_unref (connection);

        return TRUE;
    }

    block_connection_until_message_from_bus (context, connection, "reply
to Hello");

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected (presumably auth
failed)\n");

        dbus_connection_unref (connection);

        return TRUE;
    }

    dbus_connection_unref (connection);

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                    "Hello", serial, connection);
        goto out;
    }

    verbose_message_received (connection, message);

    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
                    dbus_message_get_sender (message) ?
                    dbus_message_get_sender (message) : "(none)");
        goto out;
    }

```

```

    }

    if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
    {
        if (dbus_message_is_error (message,
                                    DBUS_ERROR_NO_MEMORY))
        {
            ; /* good, this is a valid response */
        }
        else
        {
            warn_unexpected (connection, message, "not this error");

            goto out;
        }
    }
    else
    {
        CheckServiceOwnerChangedData socd;

        if (dbus_message_get_type (message) ==
            DBUS_MESSAGE_TYPE_METHOD_RETURN)
        {
            ; /* good, expected */
        }
        else
        {
            warn_unexpected (connection, message, "method return for
Hello");

            goto out;
        }

        retry_get_hello_name:
        if (!dbus_message_get_args (message, &error,
                                    DBUS_TYPE_STRING, &name,
                                    DBUS_TYPE_INVALID))
        {
            if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
            {
                _dbus_verbose ("no memory to get service name arg from
hello\n");

                dbus_error_free (&error);
                _dbus_wait_for_memory ();
                goto retry_get_hello_name;
            }
            else
            {
                _dbus_assert (dbus_error_is_set (&error));
                _dbus_warn ("Did not get the expected single string
argument to hello\n");
                goto out;
            }
        }
    }
}

```



```

    }
}

_dbus_verbose ("Got hello name: %s\n", name);

while (!dbus_bus_set_unique_name (connection, name))
    _dbus_wait_for_memory ();

socd.expected_kind = SERVICE_CREATED;
socd.expected_service_name = name;
socd.failed = FALSE;
socd.skip_connection = connection; /* we haven't done AddMatch
so won't get it ourselves */
bus_test_clients_foreach (check_service_owner_changed_foreach,
                          &socd);

if (socd.failed)
    goto out;

name_message = message;
/* Client should also have gotten ServiceAcquired */

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Expecting %s, got nothing\n",
               "NameAcquired");
    goto out;
}
if (! dbus_message_is_signal (message, DBUS_INTERFACE_DBUS,
                             "NameAcquired"))
{
    _dbus_warn ("Expecting %s, got smthg else\n",
               "NameAcquired");
    goto out;
}

retry_get_acquired_name:
if (!dbus_message_get_args (message, &error,
                           DBUS_TYPE_STRING, &acquired,
                           DBUS_TYPE_INVALID))
{
    if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
    {
        _dbus_verbose ("no memory to get service name arg from
acquired\n");
        dbus_error_free (&error);
        _dbus_wait_for_memory ();
        goto retry_get_acquired_name;
    }
    else
    {

```

```

        _dbus_assert (dbus_error_is_set (&error));
        _dbus_warn ("Did not get the expected single string
argument to ServiceAcquired\n");
        goto out;
    }
}

_dbus_verbose ("Got acquired name: %s\n", acquired);

if (strcmp (acquired, name) != 0)
{
    _dbus_warn ("Acquired name is %s but expected %s\n",
acquired, name);
    goto out;
}
acquired = NULL;
}

if (!check_no_leftovers (context))
    goto out;

retval = TRUE;

out:
_dbus_verbose ("ending - retval = %d\n", retval);

dbus_error_free (&error);

if (message)
    dbus_message_unref (message);

if (name_message)
    dbus_message_unref (name_message);

return retval;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_double_hello_message (BusContext *context,
                            DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;
    DBusError error;

    retval = FALSE;
    dbus_error_init (&error);
    message = NULL;

```

```

_dbus_verbose ("check_double_hello_message for %p\n", connection);

message = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                        DBUS_PATH_DBUS,
                                        DBUS_INTERFACE_DBUS,
                                        "Hello");

if (message == NULL)
    return TRUE;

if (!dbus_connection_send (connection, message, &serial))
{
    dbus_message_unref (message);
    return TRUE;
}

dbus_message_unref (message);
message = NULL;

/* send our message */
bus_test_run_clients_loop (SEND_PENDING (connection));

dbus_connection_ref (connection); /* because we may get disconnected
*/
block_connection_until_message_from_bus (context, connection, "reply
to Hello");

if (!dbus_connection_get_is_connected (connection))
{
    _dbus_verbose ("connection was disconnected\n");

    dbus_connection_unref (connection);

    return TRUE;
}

dbus_connection_unref (connection);

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive a reply to %s %d on %p\n",
               "Hello", serial, connection);
    goto out;
}

verbose_message_received (connection, message);

if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
{
    _dbus_warn ("Message has wrong sender %s\n",

```



```

if (message == NULL)
    return TRUE;

base_service_name = dbus_bus_get_unique_name (connection);

if (!dbus_message_append_args (message,
                               DBUS_TYPE_STRING, &base_service_name,
                               DBUS_TYPE_INVALID))
{
    dbus_message_unref (message);
    return TRUE;
}

if (!dbus_connection_send (connection, message, &serial))
{
    dbus_message_unref (message);
    return TRUE;
}

/* send our message */
bus_test_run_clients_loop (SEND_PENDING (connection));

dbus_message_unref (message);
message = NULL;

dbus_connection_ref (connection); /* because we may get disconnected
*/
block_connection_until_message_from_bus (context, connection, "reply
to GetConnectionUnixUser");

if (!dbus_connection_get_is_connected (connection))
{
    _dbus_verbose ("connection was disconnected\n");

    dbus_connection_unref (connection);

    return TRUE;
}

dbus_connection_unref (connection);

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive a reply to %s %d on %p\n",
               "GetConnectionUnixUser", serial, connection);
    goto out;
}

verbose_message_received (connection, message);

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)

```

```

{
    if (dbus_message_is_error (message, DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
    else
    {
        warn_unexpected (connection, message, "not this error");

        goto out;
    }
}
else
{
    if (dbus_message_get_type (message) ==
DBUS_MESSAGE_TYPE_METHOD_RETURN)
    {
        ; /* good, expected */
    }
    else
    {
        warn_unexpected (connection, message,
                        "method_return for GetConnectionUnixUser");

        goto out;
    }
}

retry_get_property:

    if (!dbus_message_get_args (message, &error,
                                DBUS_TYPE_UINT32, &uid,
                                DBUS_TYPE_INVALID))
    {
        if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
        {
            _dbus_verbose ("no memory to get uid by
GetConnectionUnixUser\n");
            dbus_error_free (&error);
            _dbus_wait_for_memory ();
            goto retry_get_property;
        }
        else
        {
            _dbus_assert (dbus_error_is_set (&error));
            _dbus_warn ("Did not get the expected DBUS_TYPE_UINT32
from GetConnectionUnixUser\n");
            goto out;
        }
    }
}

if (!check_no_leftovers (context))

```

```

        goto out;

    retval = TRUE;

out:
    dbus_error_free (&error);

    if (message)
        dbus_message_unref (message);

    return retval;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_get_connection_unix_process_id (BusContext      *context,
                                      DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;
    DBusError error;
    const char *base_service_name;
    dbus_uint32_t pid;

    retval = FALSE;
    dbus_error_init (&error);
    message = NULL;

    _dbus_verbose ("check_get_connection_unix_process_id for %p\n",
connection);

    message = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                           DBUS_PATH_DBUS,
                                           DBUS_INTERFACE_DBUS,

"GetConnectionUnixProcessID");

    if (message == NULL)
        return TRUE;

    base_service_name = dbus_bus_get_unique_name (connection);

    if (!dbus_message_append_args (message,
                                   DBUS_TYPE_STRING, &base_service_name,
                                   DBUS_TYPE_INVALID))
    {
        dbus_message_unref (message);
        return TRUE;
    }
}

```

```

if (!dbus_connection_send (connection, message, &serial))
{
    dbus_message_unref (message);
    return TRUE;
}

/* send our message */
bus_test_run_clients_loop (SEND_PENDING (connection));

dbus_message_unref (message);
message = NULL;

dbus_connection_ref (connection); /* because we may get disconnected
*/
block_connection_until_message_from_bus (context, connection, "reply
to GetConnectionUnixProcessID");

if (!dbus_connection_get_is_connected (connection))
{
    _dbus_verbose ("connection was disconnected\n");

    dbus_connection_unref (connection);

    return TRUE;
}

dbus_connection_unref (connection);

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                "GetConnectionUnixProcessID", serial, connection);
    goto out;
}

verbose_message_received (connection, message);

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (dbus_message_is_error (message, DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
#ifdef DBUS_WIN
    else if (dbus_message_is_error (message,
DBUS_ERROR_UNIX_PROCESS_ID_UNKNOWN))
    {
        /* We are expecting this error, since we know in the test
suite we aren't
        * talking to a client running on UNIX

```



```

        */
        _dbus_verbose ("Windows correctly does not support
GetConnectionUnixProcessID\n");
    }
#endif
    else
    {
        warn_unexpected (connection, message, "not this error");

        goto out;
    }
}
else
{
#ifdef DBUS_WIN
    warn_unexpected (connection, message,
"GetConnectionUnixProcessID to fail on Windows");
    goto out;
#else
    if (dbus_message_get_type (message) ==
DBUS_MESSAGE_TYPE_METHOD_RETURN)
    {
        ; /* good, expected */
    }
    else
    {
        warn_unexpected (connection, message,
"method_return for
GetConnectionUnixProcessID");

        goto out;
    }

retry_get_property:

    if (!dbus_message_get_args (message, &error,
        DBUS_TYPE_UINT32, &pid,
        DBUS_TYPE_INVALID))
    {
        if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
        {
            _dbus_verbose ("no memory to get pid by
GetConnectionUnixProcessID\n");
            dbus_error_free (&error);
            _dbus_wait_for_memory ();
            goto retry_get_property;
        }
        else
        {
            _dbus_assert (dbus_error_is_set (&error));
            _dbus_warn ("Did not get the expected DBUS_TYPE_UINT32
from GetConnectionUnixProcessID\n");

```

```

        goto out;
    }
}
else
{
    /* test if returned pid is the same as our own pid
    *
    * @todo It would probably be good to restructure the tests
    *       in a way so our parent is the bus that we're
testing
    *       cause then we can test that the pid returned
matches
    *       getpid()
    */
    if (pid != (dbus_uint32_t) _dbus_getpid ())
    {
        _dbus_assert (dbus_error_is_set (&error));
        _dbus_warn ("Result from GetConnectionUnixProcessID is
not our own pid\n");
        goto out;
    }
}
#endif /* !DBUS_WIN */
}

if (!check_no_leftovers (context))
    goto out;

retval = TRUE;

out:
dbus_error_free (&error);

if (message)
    dbus_message_unref (message);

return retval;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_add_match_all (BusContext      *context,
                    DBusConnection *connection)
{
    DBusMessage *message;
    dbus_bool_t retval;
    dbus_uint32_t serial;
    DBusError error;
    const char *empty = "";

```

```

retval = FALSE;
dbus_error_init (&error);
message = NULL;

_dbus_verbose ("check_add_match_all for %p\n", connection);

message = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                       DBUS_PATH_DBUS,
                                       DBUS_INTERFACE_DBUS,
                                       "AddMatch");

if (message == NULL)
    return TRUE;

/* empty string match rule matches everything */
if (!dbus_message_append_args (message, DBUS_TYPE_STRING, &empty,
                              DBUS_TYPE_INVALID))
    {
        dbus_message_unref (message);
        return TRUE;
    }

if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

dbus_message_unref (message);
message = NULL;

dbus_connection_ref (connection); /* because we may get disconnected
*/

/* send our message */
bus_test_run_clients_loop (SEND_PENDING (connection));

if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");

        dbus_connection_unref (connection);

        return TRUE;
    }

block_connection_until_message_from_bus (context, connection, "reply
to AddMatch");

if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");

```

```

        dbus_connection_unref (connection);

        return TRUE;
    }

    dbus_connection_unref (connection);

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                    "AddMatch", serial, connection);
        goto out;
    }

    verbose_message_received (connection, message);

    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
                    dbus_message_get_sender (message) ?
                    dbus_message_get_sender (message) : "(none)");
        goto out;
    }

    if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
    {
        if (dbus_message_is_error (message,
                                    DBUS_ERROR_NO_MEMORY))
        {
            ; /* good, this is a valid response */
        }
        else
        {
            warn_unexpected (connection, message, "not this error");

            goto out;
        }
    }
    else
    {
        if (dbus_message_get_type (message) ==
            DBUS_MESSAGE_TYPE_METHOD_RETURN)
        {
            ; /* good, expected */
            _dbus_assert (dbus_message_get_reply_serial (message) ==
                serial);
        }
        else
        {

```

```

        warn_unexpected (connection, message, "method return for
AddMatch");

        goto out;
    }
}

if (!check_no_leftovers (context))
    goto out;

retval = TRUE;

out:
dbus_error_free (&error);

if (message)
    dbus_message_unref (message);

return retval;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_hello_connection (BusContext *context)
{
    DBusConnection *connection;
    DBusError error;

    dbus_error_init (&error);

    connection = dbus_connection_open_private (TEST_DEBUG_PIPE, &error);
    if (connection == NULL)
    {
        _DBUS_ASSERT_ERROR_IS_SET (&error);
        dbus_error_free (&error);
        return TRUE;
    }

    if (!bus_setup_debug_client (connection))
    {
        dbus_connection_close (connection);
        dbus_connection_unref (connection);
        return TRUE;
    }

    spin_connection_until_authenticated (context, connection);

    if (!check_hello_message (context, connection))
        return FALSE;
}

```

```

if (dbus_bus_get_unique_name (connection) == NULL)
{
    /* We didn't successfully register, so we can't
     * do the usual kill_client_connection() checks
     */
    kill_client_connection_unchecked (connection);
}
else
{
    if (!check_add_match_all (context, connection))
        return FALSE;

    kill_client_connection (context, connection);
}

return TRUE;
}

#define NONEXISTENT_SERVICE_NAME
"test.this.service.does.not.exist.ewuoirjdfxcvn"

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_nonexistent_service_no_auto_start (BusContext      *context,
                                         DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;
    const char *nonexistent = NONEXISTENT_SERVICE_NAME;
    dbus_uint32_t flags;

    message = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                           DBUS_PATH_DBUS,
                                           DBUS_INTERFACE_DBUS,
                                           "StartServiceByName");

    if (message == NULL)
        return TRUE;

    dbus_message_set_auto_start (message, FALSE);

    flags = 0;
    if (!dbus_message_append_args (message,
                                   DBUS_TYPE_STRING, &nonexistent,
                                   DBUS_TYPE_UINT32, &flags,
                                   DBUS_TYPE_INVALID))
    {
        dbus_message_unref (message);
        return TRUE;
    }
}

```

```

    }

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);
    block_connection_until_message_from_bus (context, connection, "reply
to ActivateService on nonexistent");
    bus_test_run_everything (context);

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");
        return TRUE;
    }

    retval = FALSE;

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                    "StartServiceByName", serial, connection);
        goto out;
    }

    verbose_message_received (connection, message);

    if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
    {
        if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
        {
            _dbus_warn ("Message has wrong sender %s\n",
                        dbus_message_get_sender (message) ?
                        dbus_message_get_sender (message) : "(none)");
            goto out;
        }

        if (dbus_message_is_error (message,
                                   DBUS_ERROR_NO_MEMORY))
        {
            ; /* good, this is a valid response */
        }
        else if (dbus_message_is_error (message,
                                       DBUS_ERROR_SERVICE_UNKNOWN))
        {

```

```

        ; /* good, this is expected also */
    }
    else
    {
        warn_unexpected (connection, message, "not this error");
        goto out;
    }
}
else
{
    _dbus_warn ("Did not expect to successfully activate %s\n",
                NONEXISTENT_SERVICE_NAME);
    goto out;
}

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);

return retval;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_nonexistent_service_auto_start (BusContext      *context,
                                       DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;

    message = dbus_message_new_method_call (NONEXISTENT_SERVICE_NAME,
                                           "/org/freedesktop/TestSuite",
                                           "org.freedesktop.TestSuite",
                                           "Echo");

    if (message == NULL)
        return TRUE;

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

```



```

bus_test_run_everything (context);
block_connection_until_message_from_bus (context, connection, "reply
to Echo");
bus_test_run_everything (context);

if (!dbus_connection_get_is_connected (connection))
{
    _dbus_verbose ("connection was disconnected\n");
    return TRUE;
}

retval = FALSE;

message = pop_message_waiting_for_memory (connection);

if (message == NULL)
{
    _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                "Echo message (auto activation)", serial,
connection);
    goto out;
}

verbose_message_received (connection, message);

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
                    dbus_message_get_sender (message) ?
                    dbus_message_get_sender (message) : "(none)");
        goto out;
    }

    if (dbus_message_is_error (message,
                              DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
    else if (dbus_message_is_error (message,
                                    DBUS_ERROR_SERVICE_UNKNOWN))
    {
        ; /* good, this is expected also */
    }
    else
    {
        warn_unexpected (connection, message, "not this error");
        goto out;
    }
}
}

```



```

        goto out;
    }
else
    {
        warn_unexpected (connection, message, "NameOwnerChanged
(creation) for base service");

        goto out;
    }

if (base_service_p)
    *base_service_p = base_service;

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);
dbus_error_free (&error);

return retval;
}

static dbus_bool_t
check_service_activated (BusContext      *context,
                        DBusConnection *connection,
                        const char      *activated_name,
                        const char      *base_service_name,
                        DBusMessage     *initial_message)
{
    DBusMessage *message;
    dbus_bool_t retval;
    DBusError error;
    dbus_uint32_t activation_result;

    retval = FALSE;

    dbus_error_init (&error);

    message = initial_message;
    dbus_message_ref (message);

    if (dbus_message_is_signal (message,
                                DBUS_INTERFACE_DBUS,
                                "NameOwnerChanged"))
    {
        CheckServiceOwnerChangedData socd;
        const char *service_name, *base_service_from_bus, *old_owner;

reget_service_name_arg:
        service_name = NULL;
        old_owner = NULL;
    }
}

```

```

base_service_from_bus = NULL;

if (!dbus_message_get_args (message, &error,
                            DBUS_TYPE_STRING, &service_name,
                            DBUS_TYPE_STRING, &old_owner,
                            DBUS_TYPE_STRING,
&base_service_from_bus,
                            DBUS_TYPE_INVALID))
{
    if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
    {
        dbus_error_free (&error);
        _dbus_wait_for_memory ();
        goto reget_service_name_arg;
    }
    else
    {
        _dbus_warn ("Message %s doesn't have a service name:
%s\n",
                    "NameOwnerChanged (creation)",
                    error.message);
        goto out;
    }
}

if (strcmp (service_name, activated_name) != 0)
{
    _dbus_warn ("Expected to see service %s created, saw %s
instead\n",
                activated_name, service_name);
    goto out;
}

if (strcmp (base_service_name, base_service_from_bus) != 0)
{
    _dbus_warn ("NameOwnerChanged reports wrong base service: %s
owner, expected %s instead\n",
                base_service_from_bus, base_service_name);
    goto out;
}

if (old_owner[0])
{
    _dbus_warn ("expected a %s, got a %s\n",
                "NameOwnerChanged (creation)",
                "NameOwnerChanged (change)");
    goto out;
}

socd.expected_kind = SERVICE_CREATED;
socd.skip_connection = connection;
socd.failed = FALSE;

```

```

socd.expected_service_name = service_name;
bus_test_clients_foreach (check_service_owner_changed_foreach,
                          &socd);

if (socd.failed)
    goto out;

dbus_message_unref (message);
service_name = NULL;
old_owner = NULL;
base_service_from_bus = NULL;

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
    {
        _dbus_warn ("Expected a reply to %s, got nothing\n",
                    "StartServiceByName");
        goto out;
    }
}
else
    {
        warn_unexpected (connection, message, "NameOwnerChanged for the
activated name");

        goto out;
    }

if (dbus_message_get_type (message) !=
    DBUS_MESSAGE_TYPE_METHOD_RETURN)
    {
        warn_unexpected (connection, message, "reply to
StartServiceByName");

        goto out;
    }

activation_result = 0;
if (!dbus_message_get_args (message, &error,
                            DBUS_TYPE_UINT32, &activation_result,
                            DBUS_TYPE_INVALID))
    {
        if (!dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
            {
                _dbus_warn ("Did not have activation result first argument
to %s: %s\n",
                            "StartServiceByName", error.message);
                goto out;
            }
    }

    dbus_error_free (&error);
}

```

```

else
{
    if (activation_result == DBUS_START_REPLY_SUCCESS)
        ; /* Good */
    else if (activation_result == DBUS_START_REPLY_ALREADY_RUNNING)
        ; /* Good also */
    else
    {
        _dbus_warn ("Activation result was %u, no good.\n",
                    activation_result);
        goto out;
    }
}

dbus_message_unref (message);
message = NULL;

if (!check_no_leftovers (context))
{
    _dbus_warn ("Messages were left over after verifying existent
activation results\n");
    goto out;
}

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);
dbus_error_free (&error);

return retval;
}

static dbus_bool_t
check_service_auto_activated (BusContext      *context,
                              DBusConnection *connection,
                              const char     *activated_name,
                              const char     *base_service_name,
                              DBusMessage    *initial_message)
{
    DBusMessage *message;
    dbus_bool_t retval;
    DBusError error;

    retval = FALSE;

    dbus_error_init (&error);

    message = initial_message;
    dbus_message_ref (message);

```

```

if (dbus_message_is_signal (message,
                            DBUS_INTERFACE_DBUS,
                            "NameOwnerChanged"))
{
    const char *service_name;
    CheckServiceOwnerChangedData socd;

reget_service_name_arg:
    if (!dbus_message_get_args (message, &error,
                                DBUS_TYPE_STRING, &service_name,
                                DBUS_TYPE_INVALID))
    {
        if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
        {
            dbus_error_free (&error);
            _dbus_wait_for_memory ();
            goto reget_service_name_arg;
        }
        else
        {
            _dbus_warn ("Message %s doesn't have a service name:
%s\n",
                        "NameOwnerChanged",
                        error.message);
            dbus_error_free (&error);
            goto out;
        }
    }

    if (strcmp (service_name, activated_name) != 0)
    {
        _dbus_warn ("Expected to see service %s created, saw %s
instead\n",
                    activated_name, service_name);
        goto out;
    }

    socd.expected_kind = SERVICE_CREATED;
    socd.expected_service_name = service_name;
    socd.failed = FALSE;
    socd.skip_connection = connection;
    bus_test_clients_foreach (check_service_owner_changed_foreach,
                              &socd);

    if (socd.failed)
        goto out;

    /* Note that this differs from regular activation in that we
don't get a
    * reply to ActivateService here.
    */

```



```

        dbus_message_unref (message);
        message = NULL;
        service_name = NULL;
    }
else
    {
        warn_unexpected (connection, message, "NameOwnerChanged for the
activated name");

        goto out;
    }

    retval = TRUE;

out:
    if (message)
        dbus_message_unref (message);

    return retval;
}

static dbus_bool_t
check_service_deactivated (BusContext      *context,
                           DBusConnection *connection,
                           const char      *activated_name,
                           const char      *base_service)
{
    dbus_bool_t retval;
    CheckServiceOwnerChangedData socd;

    retval = FALSE;

    /* Now we are expecting ServiceOwnerChanged (deletion) messages for
the base
    * service and the activated_name. The base service
    * notification is required to come last.
    */
    socd.expected_kind = SERVICE_DELETED;
    socd.expected_service_name = activated_name;
    socd.failed = FALSE;
    socd.skip_connection = NULL;
    bus_test_clients_foreach (check_service_owner_changed_foreach,
                             &socd);

    if (socd.failed)
        goto out;

    socd.expected_kind = SERVICE_DELETED;
    socd.expected_service_name = base_service;
    socd.failed = FALSE;
    socd.skip_connection = NULL;
    bus_test_clients_foreach (check_service_owner_changed_foreach,

```

```

        &socd);

    if (socd.failed)
        goto out;

    retval = TRUE;

out:
    return retval;
}

static dbus_bool_t
check_send_exit_to_service (BusContext      *context,
                           DBusConnection *connection,
                           const char      *service_name,
                           const char      *base_service)
{
    dbus_bool_t got_error;
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;

    _dbus_verbose ("Sending exit message to the test service\n");

    retval = FALSE;

    /* Kill off the test service by sending it a quit message */
    message = dbus_message_new_method_call (service_name,

"/org/freedesktop/TestSuite",

                                         "org.freedesktop.TestSuite",
                                         "Exit");

    if (message == NULL)
    {
        /* Do this again; we still need the service to exit... */
        if (!check_send_exit_to_service (context, connection,
                                         service_name, base_service))
            goto out;

        return TRUE;
    }

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);

        /* Do this again; we still need the service to exit... */
        if (!check_send_exit_to_service (context, connection,
                                         service_name, base_service))
            goto out;
    }
}

```

```

    return TRUE;
}

dbus_message_unref (message);
message = NULL;

/* send message */
bus_test_run_clients_loop (SEND_PENDING (connection));

/* read it in and write it out to test service */
bus_test_run_bus_loop (context, FALSE);

/* see if we got an error during message bus dispatching */
bus_test_run_clients_loop (FALSE);
message = borrow_message_waiting_for_memory (connection);
got_error = message != NULL && dbus_message_get_type (message) ==
DBUS_MESSAGE_TYPE_ERROR;
if (message)
{
    dbus_connection_return_message (connection, message);
    message = NULL;
}

if (!got_error)
{
    /* If no error, wait for the test service to exit */
    block_connection_until_message_from_bus (context, connection,
"test service to exit");

    bus_test_run_everything (context);
}

if (got_error)
{
    message = pop_message_waiting_for_memory (connection);
    _dbus_assert (message != NULL);

    if (dbus_message_get_reply_serial (message) != serial)
    {
        warn_unexpected (connection, message,
            "error with the correct reply serial");
        goto out;
    }

    if (!dbus_message_is_error (message,
        DBUS_ERROR_NO_MEMORY))
    {
        warn_unexpected (connection, message,
            "a no memory error from asking test service
to exit");
        goto out;
    }
}

```

```

    _dbus_verbose ("Got error %s when asking test service to
exit\n",
                  dbus_message_get_error_name (message));

    /* Do this again; we still need the service to exit... */
    if (!check_send_exit_to_service (context, connection,
                                     service_name, base_service))
        goto out;
}
else
{
    if (!check_service_deactivated (context, connection,
                                    service_name, base_service))
        goto out;

    /* Should now have a NoReply error from the Exit() method
    * call; it should have come after all the deactivation
    * stuff.
    */
    message = pop_message_waiting_for_memory (connection);

    if (message == NULL)
    {
        warn_unexpected (connection, NULL,
                        "reply to Exit() method call");
        goto out;
    }
    if (!dbus_message_is_error (message,
                                DBUS_ERROR_NO_REPLY))
    {
        warn_unexpected (connection, message,
                        "NoReply error from Exit() method call");
        goto out;
    }

    if (dbus_message_get_reply_serial (message) != serial)
    {
        warn_unexpected (connection, message,
                        "error with the correct reply serial");
        goto out;
    }

    _dbus_verbose ("Got error %s after test service exited\n",
                  dbus_message_get_error_name (message));

    if (!check_no_leftovers (context))
    {
        _dbus_warn ("Messages were left over after %s\n",
                    _DBUS_FUNCTION_NAME);
        goto out;
    }
}

```

```

    }

    retval = TRUE;

out:
    if (message)
        dbus_message_unref (message);

    return retval;
}

static dbus_bool_t
check_got_error (BusContext      *context,
                 DBusConnection *connection,
                 const char      *first_error_name,
                 ...)
{
    DBusMessage *message;
    dbus_bool_t retval;
    va_list ap;
    dbus_bool_t error_found;
    const char *error_name;

    retval = FALSE;

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not get an expected error\n");
        goto out;
    }

    if (dbus_message_get_type (message) != DBUS_MESSAGE_TYPE_ERROR)
    {
        warn_unexpected (connection, message, "an error");

        goto out;
    }

    error_found = FALSE;

    va_start (ap, first_error_name);
    error_name = first_error_name;
    while (error_name != NULL)
    {
        if (dbus_message_is_error (message, error_name))
        {
            error_found = TRUE;
            break;
        }
        error_name = va_arg (ap, char*);
    }
}

```

```

va_end (ap);

if (!error_found)
{
    _dbus_warn ("Expected error %s or other, got %s instead\n",
                first_error_name,
                dbus_message_get_error_name (message));
    goto out;
}

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);

return retval;
}

typedef enum
{
    GOT_SERVICE_CREATED,
    GOT_SERVICE_DELETED,
    GOT_ERROR,
    GOT_SOMETHING_ELSE
} GotServiceInfo;

static GotServiceInfo
check_got_service_info (DBusMessage *message)
{
    GotServiceInfo message_kind;

    if (dbus_message_is_signal (message,
                                DBUS_INTERFACE_DBUS,
                                "NameOwnerChanged"))
    {
        DBusError error;
        const char *service_name, *old_owner, *new_owner;
        dbus_error_init (&error);

        reget_service_info_data:
        service_name = NULL;
        old_owner = NULL;
        new_owner = NULL;

        dbus_message_get_args (message, &error,
                                DBUS_TYPE_STRING, &service_name,
                                DBUS_TYPE_STRING, &old_owner,
                                DBUS_TYPE_STRING, &new_owner,
                                DBUS_TYPE_INVALID);

        if (dbus_error_is_set (&error))
            {

```



```

        "StartServiceByName");

if (message == NULL)
    return TRUE;

dbus_message_set_auto_start (message, FALSE);

flags = 0;
if (!dbus_message_append_args (message,
                               DBUS_TYPE_STRING, &existent,
                               DBUS_TYPE_UINT32, &flags,
                               DBUS_TYPE_INVALID))
    {
        dbus_message_unref (message);
        return TRUE;
    }

if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

dbus_message_unref (message);
message = NULL;

bus_test_run_everything (context);

/* now wait for the message bus to hear back from the activated
 * service.
 */
block_connection_until_message_from_bus (context, connection,
"activated service to connect");

bus_test_run_everything (context);

if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");
        return TRUE;
    }

retval = FALSE;

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
    {
        _dbus_warn ("Did not receive any messages after %s %d on %p\n",
                    "StartServiceByName", serial, connection);
        goto out;
    }

```



```

verbose_message_received (connection, message);
_dbus_verbose (" (after sending %s)\n", "StartServiceByName");

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
                    dbus_message_get_sender (message) ?
                    dbus_message_get_sender (message) : "(none)");
        goto out;
    }

    if (dbus_message_is_error (message,
                               DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
    else if (dbus_message_is_error (message,
                                    DBUS_ERROR_SPAWN_CHILD_EXITED)
||
            dbus_message_is_error (message,
                                    DBUS_ERROR_SPAWN_CHILD_SIGNALED)
||
            dbus_message_is_error (message,
                                    DBUS_ERROR_SPAWN_EXEC_FAILED))
    {
        ; /* good, this is expected also */
    }
    else
    {
        _dbus_warn ("Did not expect error %s\n",
                    dbus_message_get_error_name (message));
        goto out;
    }
}
else
{
    GotServiceInfo message_kind;

    if (!check_base_service_activated (context, connection,
                                       message, &base_service))
        goto out;

    base_service_message = message;
    message = NULL;

    /* We may need to block here for the test service to exit or
finish up */
    block_connection_until_message_from_bus (context, connection,
"test service to exit or finish up");
}

```

```

message = dbus_connection_borrow_message (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive any messages after base service
creation notification\n");
    goto out;
}

message_kind = check_got_service_info (message);

dbus_connection_return_message (connection, message);
message = NULL;

switch (message_kind)
{
case GOT_SOMETHING_ELSE:
    _dbus_warn ("Unexpected message after ActivateService "
announcement");
    goto out;

case GOT_ERROR:
    if (!check_got_error (context, connection,
        DBUS_ERROR_SPAWN_CHILD_EXITED,
        DBUS_ERROR_NO_MEMORY,
        NULL))
        goto out;
    /* A service deleted should be coming along now after this
error.
    * We can also get the error *after* the service deleted.
    */

    /* fall through */

case GOT_SERVICE_DELETED:
    {
        /* The service started up and got a base address, but then
        * failed to register under EXISTENT_SERVICE_NAME
        */
        CheckServiceOwnerChangedData socd;

        socd.expected_kind = SERVICE_DELETED;
        socd.expected_service_name = base_service;
        socd.failed = FALSE;
        socd.skip_connection = NULL;

        bus_test_clients_foreach
(check_service_owner_changed_foreach,
                                &socd);

        if (socd.failed)
            goto out;
    }
}

```

```

/* Now we should get an error about the service exiting
 * if we didn't get it before.
 */
if (message_kind != GOT_ERROR)
{
    block_connection_until_message_from_bus (context,
connection, "error about service exiting");

    /* and process everything again */
    bus_test_run_everything (context);

    if (!check_got_error (context, connection,
        DBUS_ERROR_SPAWN_CHILD_EXITED,
        DBUS_ERROR_NO_MEMORY,
        NULL))
        goto out;
}
break;
}

case GOT_SERVICE_CREATED:
    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Failed to pop message we just put back! "
            "should have been a NameOwnerChanged
(creation)\n");
        goto out;
    }

    if (!check_service_activated (context, connection,
EXISTENT_SERVICE_NAME,
        base_service, message))
        goto out;

    dbus_message_unref (message);
    message = NULL;

    if (!check_no_leftovers (context))
    {
        _dbus_warn ("Messages were left over after successful
activation\n");
        goto out;
    }

    if (!check_send_exit_to_service (context, connection,
EXISTENT_SERVICE_NAME,
base_service))
        goto out;

    break;
}

```

```

        }
    }

    retval = TRUE;

out:
    if (message)
        dbus_message_unref (message);

    if (base_service_message)
        dbus_message_unref (base_service_message);

    return retval;
}

#ifdef DBUS_WIN_FIXME
/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_segfault_service_no_auto_start (BusContext      *context,
                                       DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;
    const char *segv_service;
    dbus_uint32_t flags;

    message = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                           DBUS_PATH_DBUS,
                                           DBUS_INTERFACE_DBUS,
                                           "StartServiceByName");

    if (message == NULL)
        return TRUE;

    dbus_message_set_auto_start (message, FALSE);

    segv_service = "org.freedesktop.DBus.TestSuiteSegfaultService";
    flags = 0;
    if (!dbus_message_append_args (message,
                                   DBUS_TYPE_STRING, &segv_service,
                                   DBUS_TYPE_UINT32, &flags,
                                   DBUS_TYPE_INVALID))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    if (!dbus_connection_send (connection, message, &serial))
    {

```

```

        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);
    block_connection_until_message_from_bus (context, connection, "reply
to activating segfault service");
    bus_test_run_everything (context);

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");
        return TRUE;
    }

    retval = FALSE;

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                    "StartServiceByName", serial, connection);
        goto out;
    }

    verbose_message_received (connection, message);

    if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
    {
        if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
        {
            _dbus_warn ("Message has wrong sender %s\n",
                        dbus_message_get_sender (message) ?
                        dbus_message_get_sender (message) : "(none)");
            goto out;
        }

        if (dbus_message_is_error (message,
                                   DBUS_ERROR_NO_MEMORY))
        {
            ; /* good, this is a valid response */
        }
        else if (dbus_message_is_error (message,
                                       DBUS_ERROR_FAILED))
        {
            const char *servicehelper;
            servicehelper = bus_context_get_servicehelper (context);
            /* make sure this only happens with the launch helper */
            _dbus_assert (servicehelper != NULL);
        }
    }

```

```

        }
        else if (dbus_message_is_error (message,
DBUS_ERROR_SPAWN_CHILD_SIGNALED))
        {
            ; /* good, this is expected also */
        }
        else
        {
            warn_unexpected (connection, message, "not this error");

            goto out;
        }
    }
    else
    {
        _dbus_warn ("Did not expect to successfully activate segfault
service\n");
        goto out;
    }

    retval = TRUE;

out:
    if (message)
        dbus_message_unref (message);

    return retval;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_segfault_service_auto_start (BusContext      *context,
                                   DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;

    message = dbus_message_new_method_call
("org.freedesktop.DBus.TestSuiteSegfaultService",

"/org/freedesktop/TestSuite",

                                "org.freedesktop.TestSuite",
                                "Echo");

    if (message == NULL)
        return TRUE;

```

```

if (!dbus_connection_send (connection, message, &serial))
{
    dbus_message_unref (message);
    return TRUE;
}

dbus_message_unref (message);
message = NULL;

bus_test_run_everything (context);
block_connection_until_message_from_bus (context, connection, "reply
to Echo on segfault service");
bus_test_run_everything (context);

if (!dbus_connection_get_is_connected (connection))
{
    _dbus_verbose ("connection was disconnected\n");
    return TRUE;
}

retval = FALSE;

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                "Echo message (auto activation)", serial,
connection);
    goto out;
}

verbose_message_received (connection, message);

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
                    dbus_message_get_sender (message) ?
                    dbus_message_get_sender (message) : "(none)");
        goto out;
    }

    if (dbus_message_is_error (message,
                              DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
    else if (dbus_message_is_error (message,
DBUS_ERROR_SPAWN_CHILD_SIGNALED))
    {

```

```

        ; /* good, this is expected also */
    }
    else
    {
        warn_unexpected (connection, message, "not this error");

        goto out;
    }
}
else
{
    _dbus_warn ("Did not expect to successfully activate segfault
service\n");
    goto out;
}

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);

return retval;
}
#endif

#define TEST_ECHO_MESSAGE "Test echo message"
#define TEST_RUN_HELLO_FROM_SELF_MESSAGE "Test sending message to
self"

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_existent_hello_from_self (BusContext      *context,
                                DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    const char *text;

    message = dbus_message_new_method_call (EXISTENT_SERVICE_NAME,
"/org/freedesktop/TestSuite",
                                           "org.freedesktop.TestSuite",
                                           "RunHelloFromSelf");

    if (message == NULL)
        return TRUE;

    text = TEST_RUN_HELLO_FROM_SELF_MESSAGE;
    if (!dbus_message_append_args (message,

```



```

                                DBUS_TYPE_STRING, &text,
                                DBUS_TYPE_INVALID))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);

    /* Note: if this test is run in OOM mode, it will block when the bus
     * doesn't send a reply due to OOM.
     */
    block_connection_until_message_from_bus (context, connection, "reply
from running hello from self");

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Failed to pop message! Should have been reply from
RunHelloFromSelf message\n");
        return FALSE;
    }

    if (dbus_message_get_reply_serial (message) != serial)
    {
        _dbus_warn ("Wrong reply serial\n");
        dbus_message_unref (message);
        return FALSE;
    }

    dbus_message_unref (message);
    message = NULL;

    return TRUE;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_existent_ping (BusContext      *context,
                    DBusConnection *connection)
{

```

```

DBusMessage *message;
dbus_uint32_t serial;
message = dbus_message_new_method_call (EXISTENT_SERVICE_NAME,
"/org/freedesktop/TestSuite",
                                     "org.freedesktop.DBus.Peer",
                                     "Ping");

if (message == NULL)
    return TRUE;

if (!dbus_connection_send (connection, message, &serial))
{
    dbus_message_unref (message);
    return TRUE;
}

dbus_message_unref (message);
message = NULL;

bus_test_run_everything (context);

/* Note: if this test is run in OOM mode, it will block when the bus
 * doesn't send a reply due to OOM.
 */
block_connection_until_message_from_bus (context, connection, "reply
from running Ping");

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Failed to pop message! Should have been reply from
Ping message\n");
    return FALSE;
}

if (dbus_message_get_reply_serial (message) != serial)
{
    _dbus_warn ("Wrong reply serial\n");
    dbus_message_unref (message);
    return FALSE;
}

if (dbus_message_get_type (message) !=
DBUS_MESSAGE_TYPE_METHOD_RETURN)
{
    _dbus_warn ("Unexpected message return during Ping\n");
    dbus_message_unref (message);
    return FALSE;
}

dbus_message_unref (message);

```

```

message = NULL;

return TRUE;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_existent_get_machine_id (BusContext      *context,
                               DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    const char *machine_id;

    message = dbus_message_new_method_call (EXISTENT_SERVICE_NAME,
"/org/freedesktop/TestSuite",
                                           "org.freedesktop.DBus.Peer",
                                           "GetMachineId");

    if (message == NULL)
        return TRUE;

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);

    /* Note: if this test is run in OOM mode, it will block when the bus
     * doesn't send a reply due to OOM.
     */
    block_connection_until_message_from_bus (context, connection, "reply
from running GetMachineId");

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Failed to pop message! Should have been reply from
GetMachineId message\n");
        return FALSE;
    }

    if (dbus_message_get_reply_serial (message) != serial)
    {

```

```

        _dbus_warn ("Wrong reply serial\n");
        dbus_message_unref (message);
        return FALSE;
    }

    if (dbus_message_get_type (message) !=
        DBUS_MESSAGE_TYPE_METHOD_RETURN)
    {
        _dbus_warn ("Unexpected message return during GetMachineId\n");
        dbus_message_unref (message);
        return FALSE;
    }

    machine_id = NULL;
    if (!dbus_message_get_args (message, NULL, DBUS_TYPE_STRING,
        &machine_id, DBUS_TYPE_INVALID))
    {
        _dbus_warn ("Did not get a machine ID in reply to
        GetMachineId\n");
        dbus_message_unref (message);
        return FALSE;
    }

    if (machine_id == NULL || strlen (machine_id) != 32)
    {
        _dbus_warn ("Machine id looks bogus: '%s'\n", machine_id ?
        machine_id : "null");
        dbus_message_unref (message);
        return FALSE;
    }

    /* We can't check that the machine id is correct because during make
    check it is
    * just made up for each process separately
    */

    dbus_message_unref (message);
    message = NULL;

    return TRUE;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_existent_service_auto_start (BusContext      *context,
                                    DBusConnection *connection)
{
    DBusMessage *message;
    DBusMessage *base_service_message;
    dbus_uint32_t serial;

```

```

dbus_bool_t retval;
const char *base_service;
const char *text;

base_service_message = NULL;

message = dbus_message_new_method_call (EXISTENT_SERVICE_NAME,
"/org/freedesktop/TestSuite",
                                     "org.freedesktop.TestSuite",
                                     "Echo");

if (message == NULL)
    return TRUE;

text = TEST_ECHO_MESSAGE;
if (!dbus_message_append_args (message,
                               DBUS_TYPE_STRING, &text,
                               DBUS_TYPE_INVALID))
{
    dbus_message_unref (message);
    return TRUE;
}

if (!dbus_connection_send (connection, message, &serial))
{
    dbus_message_unref (message);
    return TRUE;
}

dbus_message_unref (message);
message = NULL;

bus_test_run_everything (context);

/* now wait for the message bus to hear back from the activated
 * service.
 */
block_connection_until_message_from_bus (context, connection, "reply
to Echo on existent service");
bus_test_run_everything (context);

if (!dbus_connection_get_is_connected (connection))
{
    _dbus_verbose ("connection was disconnected\n");
    return TRUE;
}

retval = FALSE;

message = pop_message_waiting_for_memory (connection);
if (message == NULL)

```

```

    {
        _dbus_warn ("Did not receive any messages after auto start %d on
%p\n",
                    serial, connection);
        goto out;
    }

    verbose_message_received (connection, message);
    _dbus_verbose (" (after sending %s)\n", "auto start");

    /* we should get zero or two ServiceOwnerChanged signals */
    if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_SIGNAL)
    {
        GotServiceInfo message_kind;

        if (!check_base_service_activated (context, connection,
                                            message, &base_service))
            goto out;

        base_service_message = message;
        message = NULL;

        /* We may need to block here for the test service to exit or
        finish up */
        block_connection_until_message_from_bus (context, connection,
        "service to exit");

        /* Should get a service creation notification for the activated
        * service name, or a service deletion on the base service name
        */
        message = dbus_connection_borrow_message (connection);
        if (message == NULL)
        {
            _dbus_warn ("No message after auto activation "
                        "(should be a service announcement)\n");
            dbus_connection_return_message (connection, message);
            message = NULL;
            goto out;
        }

        message_kind = check_got_service_info (message);

        dbus_connection_return_message (connection, message);
        message = NULL;

        switch (message_kind)
        {
            case GOT_SERVICE_CREATED:
                message = pop_message_waiting_for_memory (connection);
                if (message == NULL)
                {
                    _dbus_warn ("Failed to pop message we just put back! "

```

```

                                "should have been a NameOwnerChanged
(creation)\n");
        goto out;
    }

    /* Check that ServiceOwnerChanged (creation) was correctly
received */
    if (!check_service_auto_activated (context, connection,
EXISTENT_SERVICE_NAME,
                                base_service, message))
        goto out;

    dbus_message_unref (message);
    message = NULL;

    break;

case GOT_SERVICE_DELETED:
    {
        /* The service started up and got a base address, but then
        * failed to register under EXISTENT_SERVICE_NAME
        */
        CheckServiceOwnerChangedData socd;

        socd.expected_kind = SERVICE_DELETED;
        socd.expected_service_name = base_service;
        socd.failed = FALSE;
        socd.skip_connection = NULL;
        bus_test_clients_foreach
(check_service_owner_changed_foreach,
                                &socd);

        if (socd.failed)
            goto out;

        break;
    }

case GOT_ERROR:
case GOT_SOMETHING_ELSE:
    _dbus_warn ("Unexpected message after auto activation\n");
    goto out;
}
}

/* OK, now we've dealt with ServiceOwnerChanged signals, now should
* come the method reply (or error) from the initial method call
*/

/* Note: if this test is run in OOM mode, it will block when the bus
* doesn't send a reply due to OOM.
*/

```

```

    block_connection_until_message_from_bus (context, connection, "reply
from echo message after auto-activation");

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Failed to pop message! Should have been reply from
echo message\n");
        goto out;
    }

    if (dbus_message_get_reply_serial (message) != serial)
    {
        _dbus_warn ("Wrong reply serial\n");
        goto out;
    }

    dbus_message_unref (message);
    message = NULL;

    if (!check_existent_ping (context, connection))
        goto out;

    if (!check_existent_get_machine_id (context, connection))
        goto out;

    if (!check_existent_hello_from_self (context, connection))
        goto out;

    if (!check_send_exit_to_service (context, connection,
EXISTENT_SERVICE_NAME,
base_service))
        goto out;

    retval = TRUE;

out:
    if (message)
        dbus_message_unref (message);

    if (base_service_message)
        dbus_message_unref (base_service_message);

    return retval;
}

#define SERVICE_FILE_MISSING_NAME
"org.freedesktop.DBus.TestSuiteEchoServiceDotServiceFileDoesNotExist"

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */

```



```

static dbus_bool_t
check_launch_service_file_missing (BusContext      *context,
                                   DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;

    message = dbus_message_new_method_call (SERVICE_FILE_MISSING_NAME,
"/org/freedesktop/TestSuite",
                                           "org.freedesktop.TestSuite",
                                           "Echo");

    if (message == NULL)
        return TRUE;

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);
    block_connection_until_message_from_bus (context, connection, "reply
to service file missing should fail to auto-start");
    bus_test_run_everything (context);

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");
        return TRUE;
    }

    retval = FALSE;

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not receive a reply to %s %d on %p\n",
"Echo message (auto activation)", serial,
connection);
        goto out;
    }

    verbose_message_received (connection, message);

    if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
    {

```



```

{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;

    message = dbus_message_new_method_call (SERVICE_USER_MISSING_NAME,
"/org/freedesktop/TestSuite",
                                         "org.freedesktop.TestSuite",
                                         "Echo");

    if (message == NULL)
        return TRUE;

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);
    block_connection_until_message_from_bus (context, connection,
"reply to service which should fail to
auto-start (missing User)");
    bus_test_run_everything (context);

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_warn ("connection was disconnected\n");
        return TRUE;
    }

    retval = FALSE;

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not receive a reply to %s %d on %p\n",
"Echo message (auto activation)", serial,
connection);
        goto out;
    }

    verbose_message_received (connection, message);

    if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
    {
        if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
            {

```

```

        _dbus_warn ("Message has wrong sender %s\n",
                    dbus_message_get_sender (message) ?
                    dbus_message_get_sender (message) : "(none)");
    goto out;
}

if (dbus_message_is_error (message,
                            DBUS_ERROR_NO_MEMORY))
{
    ; /* good, this is a valid response */
}
else if (dbus_message_is_error (message,
                                DBUS_ERROR_SPAWN_FILE_INVALID))
{
    _dbus_verbose("got service file invalid\n");
    ; /* good, this is expected (only valid when using launch
helper) */
}
else
{
    warn_unexpected (connection, message, "not this error");

    goto out;
}
}
else
{
    _dbus_warn ("Did not expect to successfully auto-start missing
service\n");
    goto out;
}

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);

return retval;
}

#define SERVICE_EXEC_MISSING_NAME
"org.freedesktop.DBus.TestSuiteNoExec"

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_launch_service_exec_missing (BusContext      *context,
                                   DBusConnection *connection)
{
    DBusMessage *message;

```

```

dbus_uint32_t serial;
dbus_bool_t retval;

message = dbus_message_new_method_call (SERVICE_EXEC_MISSING_NAME,
"/org/freedesktop/TestSuite",
                                     "org.freedesktop.TestSuite",
                                     "Echo");

if (message == NULL)
    return TRUE;

if (!dbus_connection_send (connection, message, &serial))
{
    dbus_message_unref (message);
    return TRUE;
}

dbus_message_unref (message);
message = NULL;

bus_test_run_everything (context);
block_connection_until_message_from_bus (context, connection,
"reply to service which should fail to
auto-start (missing Exec)");
bus_test_run_everything (context);

if (!dbus_connection_get_is_connected (connection))
{
    _dbus_warn ("connection was disconnected\n");
    return TRUE;
}

retval = FALSE;

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive a reply to %s %d on %p\n",
"Echo message (auto activation)", serial,
connection);
    goto out;
}

verbose_message_received (connection, message);

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
dbus_message_get_sender (message) ?

```

```

        dbus_message_get_sender (message) : "(none)");
    goto out;
}

if (dbus_message_is_error (message,
                           DBUS_ERROR_NO_MEMORY))
{
    ; /* good, this is a valid response */
}
else if (dbus_message_is_error (message,
                               DBUS_ERROR_SERVICE_UNKNOWN))
{
    _dbus_verbose("could not activate as invalid service file
was not added\n");
    ; /* good, this is expected as we shouldn't have been added
to
        * the activation list with a missing Exec key */
}
else if (dbus_message_is_error (message,
                               DBUS_ERROR_SPAWN_FILE_INVALID))
{
    _dbus_verbose("got service file invalid\n");
    ; /* good, this is allowed, and is the message passed back
from the
        * launch helper */
}
else
{
    warn_unexpected (connection, message, "not this error");

    goto out;
}
}
else
{
    _dbus_warn ("Did not expect to successfully auto-start missing
service\n");
    goto out;
}
}

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);

return retval;
}

#define SERVICE_SERVICE_MISSING_NAME
"org.freedesktop.DBus.TestSuiteNoService"

```

```

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_launch_service_service_missing (BusContext      *context,
                                       DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;

    message = dbus_message_new_method_call
(SERVICE_SERVICE_MISSING_NAME,

"/org/freedesktop/TestSuite",

                                "org.freedesktop.TestSuite",
                                "Echo");

    if (message == NULL)
        return TRUE;

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);
    block_connection_until_message_from_bus (context, connection,
                                             "reply to service which should fail to
auto-start (missing Service)");
    bus_test_run_everything (context);

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_warn ("connection was disconnected\n");
        return TRUE;
    }

    retval = FALSE;

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                    "Echo message (auto activation)", serial,
connection);
        goto out;
    }
}

```

```

verbose_message_received (connection, message);

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
                    dbus_message_get_sender (message) ?
                    dbus_message_get_sender (message) : "(none)");
        goto out;
    }

    if (dbus_message_is_error (message,
                              DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
    else if (dbus_message_is_error (message,
                                    DBUS_ERROR_SERVICE_UNKNOWN))
    {
        _dbus_verbose("could not activate as invalid service file
was not added\n");
        ; /* good, this is expected as we shouldn't have been added
to
        * the activation list with a missing Exec key */
    }
    else if (dbus_message_is_error (message,
                                    DBUS_ERROR_SPAWN_FILE_INVALID))
    {
        _dbus_verbose("got service file invalid\n");
        ; /* good, this is allowed, and is the message passed back
from the
        * launch helper */
    }
    else
    {
        warn_unexpected (connection, message, "not this error");

        goto out;
    }
}
else
{
    _dbus_warn ("Did not expect to successfully auto-start missing
service\n");
    goto out;
}

retval = TRUE;

out:

```



```

    if (message)
        dbus_message_unref (message);

    return retval;
}

#define SHELL_FAIL_SERVICE_NAME
"org.freedesktop.DBus.TestSuiteShellEchoServiceFail"

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_shell_fail_service_auto_start (BusContext      *context,
                                      DBusConnection *connection)
{
    DBusMessage *message;
    dbus_uint32_t serial;
    dbus_bool_t retval;

    message = dbus_message_new_method_call (SHELL_FAIL_SERVICE_NAME,
"/org/freedesktop/TestSuite",
                                      "org.freedesktop.TestSuite",
                                      "Echo");

    if (message == NULL)
        return TRUE;

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);
    block_connection_until_message_from_bus (context, connection, "reply
to shell Echo on service which should fail to auto-start");
    bus_test_run_everything (context);

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");
        return TRUE;
    }

    retval = FALSE;

    message = pop_message_waiting_for_memory (connection);

```

```

if (message == NULL)
{
    _dbus_warn ("Did not receive a reply to %s %d on %p\n",
                "Echo message (auto activation)", serial,
connection);
    goto out;
}

verbose_message_received (connection, message);

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
                    dbus_message_get_sender (message) ?
                    dbus_message_get_sender (message) : "(none)");
        goto out;
    }

    if (dbus_message_is_error (message,
                              DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
    else if (dbus_message_is_error (message,
                                    DBUS_ERROR_INVALID_ARGS))
    {
        _dbus_verbose("got invalid args\n");
        ; /* good, this is expected also */
    }
    else
    {
        warn_unexpected (connection, message, "not this error");

        goto out;
    }
}
else
{
    _dbus_warn ("Did not expect to successfully auto-start shell
fail service\n");
    goto out;
}

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);

return retval;

```

```

}

#define SHELL_SUCCESS_SERVICE_NAME
"org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess"

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_shell_service_success_auto_start (BusContext      *context,
                                         DBusConnection *connection)
{
    DBusMessage *message;
    DBusMessage *base_service_message;
    dbus_uint32_t serial;
    dbus_bool_t retval;
    const char *base_service;
    const char *argv[7] = {NULL, NULL, NULL, NULL, NULL, NULL, NULL};

    base_service_message = NULL;

    message = dbus_message_new_method_call (SHELL_SUCCESS_SERVICE_NAME,
"/org/freedesktop/TestSuite",
                                         "org.freedesktop.TestSuite",
                                         "Echo");

    if (message == NULL)
        return TRUE;

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);

    /* now wait for the message bus to hear back from the activated
     * service.
     */
    block_connection_until_message_from_bus (context, connection, "reply
to Echo on shell success service");
    bus_test_run_everything (context);

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");
        return TRUE;
    }

```

```

    }

    retval = FALSE;

    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Did not receive any messages after auto start %d on
%p\n",
                    serial, connection);
        goto out;
    }

    verbose_message_received (connection, message);
    _dbus_verbose (" (after sending %s)\n", "auto start");

    /* we should get zero or two ServiceOwnerChanged signals */
    if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_SIGNAL)
    {
        GotServiceInfo message_kind;

        if (!check_base_service_activated (context, connection,
                                            message, &base_service))
            goto out;

        base_service_message = message;
        message = NULL;

        /* We may need to block here for the test service to exit or
        finish up */
        block_connection_until_message_from_bus (context, connection,
        "service to exit");

        /* Should get a service creation notification for the activated
        * service name, or a service deletion on the base service name
        */
        message = dbus_connection_borrow_message (connection);
        if (message == NULL)
        {
            _dbus_warn ("No message after auto activation "
                        "(should be a service announcement)\n");
            dbus_connection_return_message (connection, message);
            message = NULL;
            goto out;
        }

        message_kind = check_got_service_info (message);

        dbus_connection_return_message (connection, message);
        message = NULL;

        switch (message_kind)

```

```

{
case GOT_SERVICE_CREATED:
    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Failed to pop message we just put back! "
                    "should have been a NameOwnerChanged
(creation)\n");
        goto out;
    }

    /* Check that ServiceOwnerChanged (creation) was correctly
received */
    if (!check_service_auto_activated (context, connection,
SHELL_SUCCESS_SERVICE_NAME,
                                        base_service, message))
        goto out;

    dbus_message_unref (message);
    message = NULL;

    break;

case GOT_SERVICE_DELETED:
    {
        /* The service started up and got a base address, but then
        * failed to register under SHELL_SUCCESS_SERVICE_NAME
        */
        CheckServiceOwnerChangedData socd;

        socd.expected_kind = SERVICE_DELETED;
        socd.expected_service_name = base_service;
        socd.failed = FALSE;
        socd.skip_connection = NULL;
        bus_test_clients_foreach
(check_service_owner_changed_foreach,
                                        &socd);

        if (socd.failed)
            goto out;

        break;
    }

case GOT_ERROR:
case GOT_SOMETHING_ELSE:
    _dbus_warn ("Unexpected message after auto activation\n");
    goto out;
}
}

/* OK, now we've dealt with ServiceOwnerChanged signals, now should

```

```

* come the method reply (or error) from the initial method call
*/

/* Note: if this test is run in OOM mode, it will block when the bus
* doesn't send a reply due to OOM.
*/
block_connection_until_message_from_bus (context, connection, "reply
from echo message after auto-activation");

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Failed to pop message! Should have been reply from
echo message\n");
    goto out;
}

if (dbus_message_get_reply_serial (message) != serial)
{
    _dbus_warn ("Wrong reply serial\n");
    goto out;
}

if (!dbus_message_get_args (message, NULL,
                            DBUS_TYPE_STRING, &argv[0],
                            DBUS_TYPE_STRING, &argv[1],
                            DBUS_TYPE_STRING, &argv[2],
                            DBUS_TYPE_STRING, &argv[3],
                            DBUS_TYPE_STRING, &argv[4],
                            DBUS_TYPE_STRING, &argv[5],
                            DBUS_TYPE_STRING, &argv[6],
                            DBUS_TYPE_INVALID))
{
    _dbus_warn ("Error getting arguments from return\n");
    goto out;
}

/* don't worry about arg[0] as it may be different
depending on the path to the tests
*/
if (strcmp("-test", argv[1]) != 0)
{
    _dbus_warn ("Unexpected argv[1] in shell success service test
(expected: %s, got: %s)\n",
                "-test", argv[1]);
    goto out;
}

if (strcmp("that", argv[2]) != 0)
{
    _dbus_warn ("Unexpected argv[2] in shell success service test
(expected: %s, got: %s)\n",

```

```

        "that", argv[2]);
    goto out;
}

if (strcmp("we get", argv[3]) != 0)
{
    _dbus_warn ("Unexpected argv[3] in shell success service test
(expected: %s, got: %s)\n",
                "we get", argv[3]);
    goto out;
}

if (strcmp("back", argv[4]) != 0)
{
    _dbus_warn ("Unexpected argv[4] in shell success service test
(expected: %s, got: %s)\n",
                "back", argv[4]);
    goto out;
}

if (strcmp("--what", argv[5]) != 0)
{
    _dbus_warn ("Unexpected argv[5] in shell success service test
(expected: %s, got: %s)\n",
                "--what", argv[5]);
    goto out;
}

if (strcmp("we put in", argv[6]) != 0)
{
    _dbus_warn ("Unexpected argv[6] in shell success service test
(expected: %s, got: %s)\n",
                "we put in", argv[6]);
    goto out;
}

dbus_message_unref (message);
message = NULL;

if (!check_send_exit_to_service (context, connection,
                                SHELL_SUCCESS_SERVICE_NAME,
                                base_service))

    goto out;

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);

if (base_service_message)
    dbus_message_unref (base_service_message);

```

```

    return retval;
}

typedef struct
{
    Check1Func func;
    BusContext *context;
} Check1Data;

static dbus_bool_t
check_oom_check1_func (void *data)
{
    Check1Data *d = data;

    if (! (* d->func) (d->context))
        return FALSE;

    if (!check_no_leftovers (d->context))
    {
        _dbus_warn ("Messages were left over, should be covered by test
suite\n");
        return FALSE;
    }

    return TRUE;
}

static void
check1_try_iterations (BusContext *context,
                      const char *description,
                      Check1Func func)
{
    Check1Data d;

    d.func = func;
    d.context = context;

    if (!_dbus_test_oom_handling (description, check_oom_check1_func,
                                &d))
        _dbus_assert_not_reached ("test failed");
}

static dbus_bool_t
check_get_services (BusContext *context,
                   DBusConnection *connection,
                   const char *method,
                   char ***services,
                   int *len)
{
    DBusMessage *message;
    dbus_uint32_t serial;

```



```

dbus_bool_t retval;
DBusError error;
char **srvs;
int l;

retval = FALSE;
dbus_error_init (&error);
message = NULL;

message = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                       DBUS_PATH_DBUS,
                                       DBUS_INTERFACE_DBUS,
                                       method);

if (message == NULL)
    return TRUE;

if (!dbus_connection_send (connection, message, &serial))
{
    dbus_message_unref (message);
    return TRUE;
}

/* send our message */
bus_test_run_clients_loop (SEND_PENDING (connection));

dbus_message_unref (message);
message = NULL;

dbus_connection_ref (connection); /* because we may get disconnected
*/
block_connection_until_message_from_bus (context, connection, "reply
to ListActivatableNames/ListNames");

if (!dbus_connection_get_is_connected (connection))
{
    _dbus_verbose ("connection was disconnected\n");

    dbus_connection_unref (connection);

    return TRUE;
}

dbus_connection_unref (connection);

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive a reply to %s %d on %p\n",
               method, serial, connection);
    goto out;
}

```

```

verbose_message_received (connection, message);

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (dbus_message_is_error (message, DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
    else
    {
        warn_unexpected (connection, message, "not this error");

        goto out;
    }
}
else
{
    if (dbus_message_get_type (message) ==
DBUS_MESSAGE_TYPE_METHOD_RETURN)
    {
        ; /* good, expected */
    }
    else
    {
        warn_unexpected (connection, message,
                        "method_return for
ListActivatableNames/ListNames");

        goto out;
    }
}

retry_get_property:

    if (!dbus_message_get_args (message, &error,
                                DBUS_TYPE_ARRAY,
                                DBUS_TYPE_STRING,
                                &srvs, &l,
                                DBUS_TYPE_INVALID))
    {
        if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
        {
            _dbus_verbose ("no memory to list services by %s\n",
method);
            dbus_error_free (&error);
            _dbus_wait_for_memory ();
            goto retry_get_property;
        }
        else
        {
            _dbus_assert (dbus_error_is_set (&error));

```

```

        _dbus_warn ("Did not get the expected DBUS_TYPE_ARRAY from
%s\n", method);
        goto out;
    }
    } else {
        *services = srvs;
        *len = 1;
    }
}

if (!check_no_leftovers (context))
    goto out;

retval = TRUE;

out:
dbus_error_free (&error);

if (message)
    dbus_message_unref (message);

return retval;
}

/* returns TRUE if the correct thing happens,
 * but the correct thing may include OOM errors.
 */
static dbus_bool_t
check_list_services (BusContext      *context,
                    DBusConnection *connection)
{
    DBusMessage *message;
    DBusMessage *base_service_message;
    const char *base_service;
    dbus_uint32_t serial;
    dbus_bool_t retval;
    const char *existent = EXISTENT_SERVICE_NAME;
    dbus_uint32_t flags;
    char **services;
    int len;

    _dbus_verbose ("check_list_services for %p\n", connection);

    if (!check_get_services (context, connection,
"ListActivatableNames", &services, &len))
    {
        return TRUE;
    }

    if (!_dbus_string_array_contains ((const char **)services,
existent))
    {

```

```

        _dbus_warn ("Did not get the expected %s from
ListActivatableNames\n", existent);
        dbus_free_string_array (services);
        return FALSE;
    }

    dbus_free_string_array (services);

    base_service_message = NULL;

    message = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                           DBUS_PATH_DBUS,
                                           DBUS_INTERFACE_DBUS,
                                           "StartServiceByName");

    if (message == NULL)
        return TRUE;

    dbus_message_set_auto_start (message, FALSE);

    flags = 0;
    if (!dbus_message_append_args (message,
                                   DBUS_TYPE_STRING, &existent,
                                   DBUS_TYPE_UINT32, &flags,
                                   DBUS_TYPE_INVALID))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    if (!dbus_connection_send (connection, message, &serial))
    {
        dbus_message_unref (message);
        return TRUE;
    }

    dbus_message_unref (message);
    message = NULL;

    bus_test_run_everything (context);

    /* now wait for the message bus to hear back from the activated
     * service.
     */
    block_connection_until_message_from_bus (context, connection,
"activated service to connect");

    bus_test_run_everything (context);

    if (!dbus_connection_get_is_connected (connection))
    {
        _dbus_verbose ("connection was disconnected\n");
    }

```

```

    return TRUE;
}

retval = FALSE;

message = pop_message_waiting_for_memory (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive any messages after %s %d on %p\n",
               "StartServiceByName", serial, connection);
    goto out;
}

verbose_message_received (connection, message);
_dbus_verbose (" (after sending %s)\n", "StartServiceByName");

if (dbus_message_get_type (message) == DBUS_MESSAGE_TYPE_ERROR)
{
    if (!dbus_message_has_sender (message, DBUS_SERVICE_DBUS))
    {
        _dbus_warn ("Message has wrong sender %s\n",
                   dbus_message_get_sender (message) ?
                   dbus_message_get_sender (message) : "(none)");
        goto out;
    }

    if (dbus_message_is_error (message,
                              DBUS_ERROR_NO_MEMORY))
    {
        ; /* good, this is a valid response */
    }
    else if (dbus_message_is_error (message,
                                    DBUS_ERROR_SPAWN_CHILD_EXITED) ||
             dbus_message_is_error (message,
                                    DBUS_ERROR_SPAWN_CHILD_SIGNALED) ||
             dbus_message_is_error (message,
                                    DBUS_ERROR_SPAWN_EXEC_FAILED))
    {
        ; /* good, this is expected also */
    }
    else
    {
        _dbus_warn ("Did not expect error %s\n",
                   dbus_message_get_error_name (message));
        goto out;
    }
}
else
{
    GotServiceInfo message_kind;

    if (!check_base_service_activated (context, connection,

```

```

                                message, &base_service))
goto out;

base_service_message = message;
message = NULL;

/* We may need to block here for the test service to exit or
finish up */
block_connection_until_message_from_bus (context, connection,
"test service to exit or finish up");

message = dbus_connection_borrow_message (connection);
if (message == NULL)
{
    _dbus_warn ("Did not receive any messages after base service
creation notification\n");
    goto out;
}

message_kind = check_got_service_info (message);

dbus_connection_return_message (connection, message);
message = NULL;

switch (message_kind)
{
case GOT_SOMETHING_ELSE:
case GOT_ERROR:
case GOT_SERVICE_DELETED:
    _dbus_warn ("Unexpected message after ActivateService "
                "(should be an error or a service announcement)\n");
    goto out;

case GOT_SERVICE_CREATED:
    message = pop_message_waiting_for_memory (connection);
    if (message == NULL)
    {
        _dbus_warn ("Failed to pop message we just put back! "
                    "should have been a NameOwnerChanged (creation)\n");
        goto out;
    }

    if (!check_service_activated (context, connection,
EXISTENT_SERVICE_NAME,
                                base_service, message))
        goto out;

    dbus_message_unref (message);
    message = NULL;

    if (!check_no_leftovers (context))
    {

```

```

        _dbus_warn ("Messages were left over after successful
activation\n");
        goto out;
    }

    break;
}

if (!check_get_services (context, connection, "ListNames",
&services, &len))
{
    return TRUE;
}

if (!_dbus_string_array_contains ((const char **)services,
existent))
{
    _dbus_warn ("Did not get the expected %s from ListNames\n",
existent);
    goto out;
}

dbus_free_string_array (services);

if (!check_send_exit_to_service (context, connection,
EXISTENT_SERVICE_NAME, base_service))
    goto out;

retval = TRUE;

out:
if (message)
    dbus_message_unref (message);

if (base_service_message)
    dbus_message_unref (base_service_message);

return retval;
}

typedef struct
{
    Check2Func func;
    BusContext *context;
    DBusConnection *connection;
} Check2Data;

static dbus_bool_t
check_oom_check2_func (void *data)
{
    Check2Data *d = data;

```

```

    if (! (* d->func) (d->context, d->connection))
        return FALSE;

    if (!check_no_leftovers (d->context))
    {
        _dbus_warn ("Messages were left over, should be covered by test
suite\n");
        return FALSE;
    }

    return TRUE;
}

static void
check2_try_iterations (BusContext      *context,
                      DBusConnection *connection,
                      const char      *description,
                      Check2Func      func)
{
    Check2Data d;

    d.func = func;
    d.context = context;
    d.connection = connection;

    if (!_dbus_test_oom_handling (description, check_oom_check2_func,
                                &d))
    {
        _dbus_warn ("%s failed during oom\n", description);
        _dbus_assert_not_reached ("test failed");
    }
}

static dbus_bool_t
setenv_TEST_LAUNCH_HELPER_CONFIG(const DBusString *test_data_dir,
                                 const char      *filename)
{
    DBusString full;
    DBusString file;

    if (!_dbus_string_init (&full))
        return FALSE;

    if (!_dbus_string_copy (test_data_dir, 0, &full, 0))
    {
        _dbus_string_free (&full);
        return FALSE;
    }

    _dbus_string_init_const (&file, filename);

```



```

if (!_dbus_concat_dir_and_file (&full, &file))
{
    _dbus_string_free (&full);
    return FALSE;
}

_dbus_verbose ("Setting TEST_LAUNCH_HELPER_CONFIG to '%s'\n",
               _dbus_string_get_const_data (&full));

_dbus_setenv ("TEST_LAUNCH_HELPER_CONFIG",
             _dbus_string_get_const_data (&full));

_dbus_string_free (&full);

return TRUE;
}

static dbus_bool_t
bus_dispatch_test_conf (const DBusString *test_data_dir,
                       const char      *filename,
                       dbus_bool_t     use_launcher)
{
    BusContext *context;
    DBusConnection *foo;
    DBusConnection *bar;
    DBusConnection *baz;
    DBusError error;

    /* save the config name for the activation helper */
    if (!setenv_TEST_LAUNCH_HELPER_CONFIG (test_data_dir, filename))
        _dbus_assert_not_reached ("no memory setting
TEST_LAUNCH_HELPER_CONFIG");

    dbus_error_init (&error);

    context = bus_context_new_test (test_data_dir, filename);
    if (context == NULL)
        return FALSE;

    foo = dbus_connection_open_private (TEST_DEBUG_PIPE, &error);
    if (foo == NULL)
        _dbus_assert_not_reached ("could not alloc connection");

    if (!bus_setup_debug_client (foo))
        _dbus_assert_not_reached ("could not set up connection");

    spin_connection_until_authenticated (context, foo);

    if (!check_hello_message (context, foo))
        _dbus_assert_not_reached ("hello message failed");

    if (!check_double_hello_message (context, foo))

```

```

    _dbus_assert_not_reached ("double hello message failed");

if (!check_add_match_all (context, foo))
    _dbus_assert_not_reached ("AddMatch message failed");

bar = dbus_connection_open_private (TEST_DEBUG_PIPE, &error);
if (bar == NULL)
    _dbus_assert_not_reached ("could not alloc connection");

if (!bus_setup_debug_client (bar))
    _dbus_assert_not_reached ("could not set up connection");

spin_connection_until_authenticated (context, bar);

if (!check_hello_message (context, bar))
    _dbus_assert_not_reached ("hello message failed");

if (!check_add_match_all (context, bar))
    _dbus_assert_not_reached ("AddMatch message failed");

baz = dbus_connection_open_private (TEST_DEBUG_PIPE, &error);
if (baz == NULL)
    _dbus_assert_not_reached ("could not alloc connection");

if (!bus_setup_debug_client (baz))
    _dbus_assert_not_reached ("could not set up connection");

spin_connection_until_authenticated (context, baz);

if (!check_hello_message (context, baz))
    _dbus_assert_not_reached ("hello message failed");

if (!check_add_match_all (context, baz))
    _dbus_assert_not_reached ("AddMatch message failed");

#ifdef DBUS_WIN_FIXME
    _dbus_warn("TODO: testing of GetConnectionUnixUser message skipped
for now\n");
    _dbus_warn("TODO: testing of GetConnectionUnixProcessID message
skipped for now\n");
#else
    if (!check_get_connection_unix_user (context, baz))
        _dbus_assert_not_reached ("GetConnectionUnixUser message failed");

    if (!check_get_connection_unix_process_id (context, baz))
        _dbus_assert_not_reached ("GetConnectionUnixProcessID message
failed");
#endif

if (!check_list_services (context, baz))
    _dbus_assert_not_reached ("ListActivatableNames message failed");

```

```

    if (!check_no_leftovers (context))
    {
        _dbus_warn ("Messages were left over after setting up initial
connections\n");
        _dbus_assert_not_reached ("initial connection setup failed");
    }

    check1_try_iterations (context, "create_and_hello",
                           check_hello_connection);

    check2_try_iterations (context, foo,
"nonexistent_service_no_auto_start",
                           check_nonexistent_service_no_auto_start);

#ifdef DBUS_WIN_FIXME
    _dbus_warn("TODO: dispatch.c segfault_service_no_auto_start
test\n");
#else
    check2_try_iterations (context, foo,
"segfault_service_no_auto_start",
                           check_segfault_service_no_auto_start);
#endif

    check2_try_iterations (context, foo,
"existent_service_no_auto_start",
                           check_existent_service_no_auto_start);

    check2_try_iterations (context, foo,
"nonexistent_service_auto_start",
                           check_nonexistent_service_auto_start);

#ifdef DBUS_WIN_FIXME
    _dbus_warn("TODO: dispatch.c segfault_service_auto_start test\n");
#else
    /* only do the segfault test if we are not using the launcher */
    check2_try_iterations (context, foo, "segfault_service_auto_start",
                           check_segfault_service_auto_start);
#endif

    /* only do the shell fail test if we are not using the launcher */
    check2_try_iterations (context, foo,
"shell_fail_service_auto_start",
                           check_shell_fail_service_auto_start);

    /* specific to launcher */
    if (use_launcher)
        if (!check_launch_service_file_missing (context, foo))
            _dbus_assert_not_reached ("did not get service file not found
error");

#ifdef 0

```

```

    /* Note: need to resolve some issues with the testing code in order
to run
    * this in oom (handle that we sometimes don't get replies back from
the bus
    * when oom happens, without blocking the test).
    */
    check2_try_iterations (context, foo,
"existent_service_auto_auto_start",
                        check_existent_service_auto_start);
#endif

    if (!check_existent_service_auto_start (context, foo))
        _dbus_assert_not_reached ("existent service auto start failed");

    if (!check_shell_service_success_auto_start (context, foo))
        _dbus_assert_not_reached ("shell success service auto start
failed");

    _dbus_verbose ("Disconnecting foo, bar, and baz\n");

    kill_client_connection_unchecked (foo);
    kill_client_connection_unchecked (bar);
    kill_client_connection_unchecked (baz);

    bus_context_unref (context);

    return TRUE;
}

static dbus_bool_t
bus_dispatch_test_conf_fail (const DBusString *test_data_dir,
                            const char      *filename)
{
    BusContext *context;
    DBusConnection *foo;
    DBusError error;

    /* save the config name for the activation helper */
    if (!setenv_TEST_LAUNCH_HELPER_CONFIG (test_data_dir, filename))
        _dbus_assert_not_reached ("no memory setting
TEST_LAUNCH_HELPER_CONFIG");

    dbus_error_init (&error);

    context = bus_context_new_test (test_data_dir, filename);
    if (context == NULL)
        return FALSE;

    foo = dbus_connection_open_private (TEST_DEBUG_PIPE, &error);
    if (foo == NULL)
        _dbus_assert_not_reached ("could not alloc connection");

```

```

if (!bus_setup_debug_client (foo))
    _dbus_assert_not_reached ("could not set up connection");

spin_connection_until_authenticated (context, foo);

if (!check_hello_message (context, foo))
    _dbus_assert_not_reached ("hello message failed");

if (!check_double_hello_message (context, foo))
    _dbus_assert_not_reached ("double hello message failed");

if (!check_add_match_all (context, foo))
    _dbus_assert_not_reached ("AddMatch message failed");

/* this only tests the activation.c user check */
if (!check_launch_service_user_missing (context, foo))
    _dbus_assert_not_reached ("user missing did not trigger error");

/* this only tests the desktop.c exec check */
if (!check_launch_service_exec_missing (context, foo))
    _dbus_assert_not_reached ("exec missing did not trigger error");

/* this only tests the desktop.c service check */
if (!check_launch_service_service_missing (context, foo))
    _dbus_assert_not_reached ("service missing did not trigger
error");

    _dbus_verbose ("Disconnecting foo\n");

    kill_client_connection_unchecked (foo);

    bus_context_unref (context);

    return TRUE;
}

dbus_bool_t
bus_dispatch_test (const DBusString *test_data_dir)
{
    /* run normal activation tests */
    _dbus_verbose ("Normal activation tests\n");
    if (!bus_dispatch_test_conf (test_data_dir,
                                "valid-config-files/debug-allow-all.conf",
FALSE))
        return FALSE;

#ifdef DBUS_WIN
    _dbus_warn("Info: Launch helper activation tests skipped because
launch-helper is not supported yet\n");
#else
    /* run launch-helper activation tests */
    _dbus_verbose ("Launch helper activation tests\n");
#endif
}

```

```

    if (!bus_dispatch_test_conf (test_data_dir,
                                "valid-config-files-system/debug-allow-all-
pass.conf", TRUE))
        return FALSE;

    /* run select launch-helper activation tests on broken service files
    */
    if (!bus_dispatch_test_conf_fail (test_data_dir,
                                      "valid-config-files-system/debug-allow-
all-fail.conf"))
        return FALSE;
#endif

    return TRUE;
}

dbus_bool_t
bus_dispatch_shal_test (const DBusString *test_data_dir)
{
    BusContext *context;
    DBusConnection *foo;
    DBusError error;

    dbus_error_init (&error);

    /* Test SHA1 authentication */
    _dbus_verbose ("Testing SHA1 context\n");

    context = bus_context_new_test (test_data_dir,
                                    "valid-config-files/debug-allow-all-
shal.conf");
    if (context == NULL)
        return FALSE;

    foo = dbus_connection_open_private (TEST_DEBUG_PIPE, &error);
    if (foo == NULL)
        _dbus_assert_not_reached ("could not alloc connection");

    if (!bus_setup_debug_client (foo))
        _dbus_assert_not_reached ("could not set up connection");

    spin_connection_until_authenticated (context, foo);

    if (!check_hello_message (context, foo))
        _dbus_assert_not_reached ("hello message failed");

    if (!check_add_match_all (context, foo))
        _dbus_assert_not_reached ("addmatch message failed");

    if (!check_no_leftovers (context))
        {

```

```

        _dbus_warn ("Messages were left over after setting up initial
SHA-1 connection\n");
        _dbus_assert_not_reached ("initial connection setup failed");
    }

    check1_try_iterations (context, "create_and_hello_shal",
                           check_hello_connection);

    kill_client_connection_unchecked (foo);

    bus_context_unref (context);

    return TRUE;
}

#ifdef HAVE_UNIX_FD_PASSING

dbus_bool_t
bus_unix_fds_passing_test(const DBusString *test_data_dir)
{
    BusContext *context;
    DBusConnection *foo, *bar;
    DBusError error;
    DBusMessage *m;
    int one[2], two[2], x, y, z;
    char r;

    dbus_error_init (&error);

    context = bus_context_new_test (test_data_dir, "valid-config-
files/debug-allow-all.conf");
    if (context == NULL)
        _dbus_assert_not_reached ("could not alloc context");

    foo = dbus_connection_open_private (TEST_DEBUG_PIPE, &error);
    if (foo == NULL)
        _dbus_assert_not_reached ("could not alloc connection");

    if (!bus_setup_debug_client (foo))
        _dbus_assert_not_reached ("could not set up connection");

    spin_connection_until_authenticated (context, foo);

    if (!check_hello_message (context, foo))
        _dbus_assert_not_reached ("hello message failed");

    if (!check_add_match_all (context, foo))
        _dbus_assert_not_reached ("AddMatch message failed");

    bar = dbus_connection_open_private (TEST_DEBUG_PIPE, &error);
    if (bar == NULL)
        _dbus_assert_not_reached ("could not alloc connection");
}

```

```

if (!bus_setup_debug_client (bar))
    _dbus_assert_not_reached ("could not set up connection");

spin_connection_until_authenticated (context, bar);

if (!check_hello_message (context, bar))
    _dbus_assert_not_reached ("hello message failed");

if (!check_add_match_all (context, bar))
    _dbus_assert_not_reached ("AddMatch message failed");

if (!(m = dbus_message_new_signal("/", "a.b.c", "d")))
    _dbus_assert_not_reached ("could not alloc message");

if (!(_dbus_full_duplex_pipe(one, one+1, TRUE, &error)))
    _dbus_assert_not_reached("Failed to allocate pipe #1");

if (!(_dbus_full_duplex_pipe(two, two+1, TRUE, &error)))
    _dbus_assert_not_reached("Failed to allocate pipe #2");

if (!dbus_message_append_args(m,
                              DBUS_TYPE_UNIX_FD, one,
                              DBUS_TYPE_UNIX_FD, two,
                              DBUS_TYPE_UNIX_FD, two,
                              DBUS_TYPE_INVALID))
    _dbus_assert_not_reached("Failed to attach fds.");

if (!_dbus_close(one[0], &error))
    _dbus_assert_not_reached("Failed to close pipe #1 ");
if (!_dbus_close(two[0], &error))
    _dbus_assert_not_reached("Failed to close pipe #2 ");

if (!(dbus_connection_can_send_type(foo, DBUS_TYPE_UNIX_FD)))
    _dbus_assert_not_reached("Connection cannot do fd passing");

if (!(dbus_connection_can_send_type(bar, DBUS_TYPE_UNIX_FD)))
    _dbus_assert_not_reached("Connection cannot do fd passing");

if (!dbus_connection_send (foo, m, NULL))
    _dbus_assert_not_reached("Failed to send fds");

dbus_message_unref(m);

bus_test_run_clients_loop (SEND_PENDING (foo));

bus_test_run_everything (context);

block_connection_until_message_from_bus (context, foo, "unix fd
reception on foo");

if (!(m = pop_message_waiting_for_memory (foo)))

```



```

    _dbus_assert_not_reached("Failed to receive msg");

    if (!dbus_message_is_signal(m, "a.b.c", "d"))
        _dbus_assert_not_reached("bogus message received");

    dbus_message_unref(m);

    block_connection_until_message_from_bus (context, bar, "unix fd
reception on bar");

    if (!(m = pop_message_waiting_for_memory (bar)))
        _dbus_assert_not_reached("Failed to receive msg");

    if (!dbus_message_is_signal(m, "a.b.c", "d"))
        _dbus_assert_not_reached("bogus message received");

    if (!dbus_message_get_args(m,
                                &error,
                                DBUS_TYPE_UNIX_FD, &x,
                                DBUS_TYPE_UNIX_FD, &y,
                                DBUS_TYPE_UNIX_FD, &z,
                                DBUS_TYPE_INVALID))
        _dbus_assert_not_reached("Failed to parse fds.");

    dbus_message_unref(m);

    if (write(x, "X", 1) != 1)
        _dbus_assert_not_reached("Failed to write to pipe #1");
    if (write(y, "Y", 1) != 1)
        _dbus_assert_not_reached("Failed to write to pipe #2");
    if (write(z, "Z", 1) != 1)
        _dbus_assert_not_reached("Failed to write to pipe #2/2nd fd");

    if (!_dbus_close(x, &error))
        _dbus_assert_not_reached("Failed to close pipe #1/other side ");
    if (!_dbus_close(y, &error))
        _dbus_assert_not_reached("Failed to close pipe #2/other side ");
    if (!_dbus_close(z, &error))
        _dbus_assert_not_reached("Failed to close pipe #2/other size 2nd
fd ");

    if (read(one[1], &r, 1) != 1 || r != 'X')
        _dbus_assert_not_reached("Failed to read value from pipe.");
    if (read(two[1], &r, 1) != 1 || r != 'Y')
        _dbus_assert_not_reached("Failed to read value from pipe.");
    if (read(two[1], &r, 1) != 1 || r != 'Z')
        _dbus_assert_not_reached("Failed to read value from pipe.");

    if (!_dbus_close(one[1], &error))
        _dbus_assert_not_reached("Failed to close pipe #1 ");
    if (!_dbus_close(two[1], &error))
        _dbus_assert_not_reached("Failed to close pipe #2 ");

```

```

    _dbus_verbose ("Disconnecting foo\n");
    kill_client_connection_unchecked (foo);

    _dbus_verbose ("Disconnecting bar\n");
    kill_client_connection_unchecked (bar);

    bus_context_unref (context);

    return TRUE;
}
#endif

#endif /* DBUS_BUILD_TESTS */

File = dispatch.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* dispatch.h Message dispatcher
 *
 * Copyright (C) 2003 CodeFactory AB
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify
 * it under the terms of the GNU General Public License as published
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 * the Free Software Foundation; either version 2 of the License, or
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */

#ifndef BUS_DISPATCH_H
#define BUS_DISPATCH_H

#include <dbus/dbus.h>
#include "connection.h"

```

```

dbus_bool_t bus_dispatch_add_connection      (DBusConnection
*connection);
void         bus_dispatch_remove_connection (DBusConnection
*connection);
dbus_bool_t bus_dispatch_matches            (BusTransaction
*transaction,
                                           DBusConnection *sender,
                                           DBusConnection *recipient,
                                           DBusMessage      *message,
                                           DBusError        *error);

#endif /* BUS_DISPATCH_H */

```

File = Doxyfile

Doxyfile 0.1

```

#-----
-----
# General configuration options
#-----
-----

```

```

PROJECT_NAME           = D-Bus
PROJECT_NUMBER         = 1.6.8
OUTPUT_DIRECTORY      = doc/api
OUTPUT_LANGUAGE        = English
EXTRACT_ALL           = NO
EXTRACT_PRIVATE       = NO
EXTRACT_STATIC        = NO
HIDE_UNDOC_MEMBERS    = NO
HIDE_UNDOC_CLASSES    = NO
BRIEF_MEMBER_DESC     = YES
REPEAT_BRIEF          = YES
ALWAYS_DETAILED_SEC   = NO
FULL_PATH_NAMES       = NO
STRIP_FROM_PATH       =
INTERNAL_DOCS         = NO
STRIP_CODE_COMMENTS   = YES
CASE_SENSE_NAMES      = YES
SHORT_NAMES           = NO
HIDE_SCOPE_NAMES     = NO
VERBATIM_HEADERS      = YES
SHOW_INCLUDE_FILES    = YES
JAVADOC_AUTOBRIEF    = YES
INHERIT_DOCS          = YES
INLINE_INFO           = YES
SORT_MEMBER_DOCS     = YES
DISTRIBUTE_GROUP_DOC = NO
TAB_SIZE              = 8
GENERATE_TODOLIST     = YES

```

```

GENERATE_TESTLIST      = YES
GENERATE_BUGLIST      = YES
ALIASES                =
ENABLED_SECTIONS      =
MAX_INITIALIZER_LINES  = 30
OPTIMIZE_OUTPUT_FOR_C = YES
SHOW_USED_FILES       = YES
#-----
-----
# configuration options related to warning and progress messages
#-----
-----
QUIET                  = YES
WARNINGS               = YES
WARN_IF_UNDOCUMENTED  = YES
WARN_FORMAT            =
WARN_LOGFILE          =
#-----
-----
# configuration options related to the input files
#-----
-----
INPUT                  = ./dbus
FILE_PATTERNS         = *.c *.h
RECURSIVE             = YES
#EXCLUDE               = test

# If the value of the INPUT tag contains directories, you can use the
# EXCLUDE_PATTERNS tag to specify one or more wildcard patterns to
exclude
# certain files from those directories.

EXCLUDE_PATTERNS      = Makefile.* ChangeLog CHANGES CHANGES.* README
\
                      README.* *.png AUTHORS DESIGN DESIGN.*
*.desktop \
                      DESKTOP* COMMENTS HOWTO magic NOTES TODO
THANKS

# The EXAMPLE_PATH tag can be used to specify one or more files or
# directories that contain example code fragments that are included
(see
# the \include command).

EXAMPLE_PATH          =
EXAMPLE_PATTERNS     =
EXAMPLE_RECURSIVE    = NO
IMAGE_PATH           =
INPUT_FILTER         =
FILTER_SOURCE_FILES  = NO
#-----
-----

```

```

# configuration options related to source browsing
#-----
-----
SOURCE_BROWSER           = YES
INLINE_SOURCES          = NO
REFERENCED_BY_RELATION = YES
REFERENCES_RELATION     = YES
#-----
-----
# configuration options related to the alphabetical class index
#-----
-----
ALPHABETICAL_INDEX      = NO
COLS_IN_ALPHA_INDEX     = 5
IGNORE_PREFIX           =
#-----
-----
# configuration options related to the HTML output
#-----
-----
GENERATE_HTML           = YES
HTML_OUTPUT             =
HTML_HEADER             =
HTML_FOOTER             =
HTML_STYLESHEET         =
HTML_ALIGN_MEMBERS     = YES
GENERATE_HTMLHELP       = NO
GENERATE_CHI            = NO
BINARY_TOC              = NO
TOC_EXPAND              = NO
DISABLE_INDEX           = NO
ENUM_VALUES_PER_LINE    = 4
GENERATE_TREEVIEW       = NO
TREEVIEW_WIDTH          = 250
#-----
-----
# configuration options related to the LaTeX output
#-----
-----
GENERATE_LATEX          = NO
LATEX_OUTPUT            =
COMPACT_LATEX           = NO
PAPER_TYPE              = a4wide
EXTRA_PACKAGES          =
LATEX_HEADER            =
PDF_HYPERLINKS          = NO
USE_PDFLATEX            = NO
LATEX_BATCHMODE         = NO
#-----
-----
# configuration options related to the RTF output

```

```

#-----
-----
GENERATE_RTF          = NO
RTF_OUTPUT           =
COMPACT_RTF          = NO
RTF_HYPERLINKS      = NO
RTF_STYLESHEET_FILE  =
RTF_EXTENSIONS_FILE  =
#-----
-----
# configuration options related to the man page output
#-----
-----
GENERATE_MAN          = YES
MAN_OUTPUT           = man
MAN_EXTENSION        = .3dbus
MAN_LINKS            = YES
#-----
-----
# configuration options related to the XML output
#-----
-----
GENERATE_XML          = YES
#-----
-----
# Configuration options related to the preprocessor
#-----
-----
ENABLE_PREPROCESSING = YES
MACRO_EXPANSION      = YES
EXPAND_ONLY_PREDEF   = YES
SEARCH_INCLUDES      = YES
INCLUDE_PATH         =
INCLUDE_FILE_PATTERNS =
PREDEFINED           = "DBUS_BEGIN_DECLS="          \
                      "DBUS_END_DECLS="            \
                      "DOXYGEN_SHOULD_SKIP_THIS"   \
                      "DBUS_GNUC_DEPRECATED="      \
                      "_DBUS_DEFINE_GLOBAL_LOCK(name)=" \
                      "_DBUS_GNUC_PRINTF(from,to)="
SKIP_FUNCTION_MACROS = YES
#-----
-----
# Configuration::addtions related to external references
#-----
-----
TAGFILES              =
GENERATE_TAGFILE      =
ALLEXTERNALS          = NO
PERL_PATH             =
#-----
-----

```

```
# Configuration options related to the dot tool
#-----
-----
CLASS_DIAGRAMS           = YES
HAVE_DOT                 = NO
CLASS_GRAPH              = YES
COLLABORATION_GRAPH     = YES
TEMPLATE_RELATIONS      = YES
HIDE_UNDOC_RELATIONS    = YES
INCLUDE_GRAPH            = YES
INCLUDED_BY_GRAPH        = YES
GRAPHICAL_HIERARCHY     = YES
DOT_PATH                 =
DOTFILE_DIRS             =
MAX_DOT_GRAPH_WIDTH     = 640
MAX_DOT_GRAPH_HEIGHT    = 1024
GENERATE_LEGEND          = YES
DOT_CLEANUP              = YES
#-----
-----
# Configuration::addtions related to the search engine
#-----
-----
SEARCHENGINE             = NO
```

File = Doxyfile.cmake

```
# Doxyfile 0.1
#-----
-----
# General configuration options
#-----
-----
PROJECT_NAME             = D-Bus
PROJECT_NUMBER           = @VERSION@
OUTPUT_DIRECTORY        = api
OUTPUT_LANGUAGE          = English
EXTRACT_ALL              = NO
EXTRACT_PRIVATE          = NO
EXTRACT_STATIC           = NO
HIDE_UNDOC_MEMBERS      = NO
HIDE_UNDOC_CLASSES      = NO
BRIEF_MEMBER_DESC       = YES
REPEAT_BRIEF             = YES
ALWAYS_DETAILED_SEC     = NO
FULL_PATH_NAMES          = NO
STRIP_FROM_PATH          =
INTERNAL_DOCS            = NO
STRIP_CODE_COMMENTS     = YES
```

```

CASE_SENSE_NAMES      = YES
SHORT_NAMES           = NO
HIDE_SCOPE_NAMES     = NO
VERBATIM_HEADERS     = YES
SHOW_INCLUDE_FILES   = YES
JAVADOC_AUTOBRIEF   = YES
INHERIT_DOCS         = YES
INLINE_INFO          = YES
SORT_MEMBER_DOCS     = YES
DISTRIBUTE_GROUP_DOC = NO
TAB_SIZE              = 8
GENERATE_TODOLIST    = YES
GENERATE_TESTLIST    = YES
GENERATE_BUGLIST     = YES
ALIASES              =
ENABLED_SECTIONS     =
MAX_INITIALIZER_LINES = 30
OPTIMIZE_OUTPUT_FOR_C = YES
SHOW_USED_FILES      = YES
#-----
# configuration options related to warning and progress messages
#-----
#-----
QUIET                  = YES
WARNINGS               = YES
WARN_IF_UNDOCUMENTED  = YES
WARN_FORMAT            =
WARN_LOGFILE           =
#-----
# configuration options related to the input files
#-----
#-----
INPUT                  = @top_srcdir@/dbus
FILE_PATTERNS          = *.c *.h
RECURSIVE              = YES
#EXCLUDE               = test

# If the value of the INPUT tag contains directories, you can use the
# EXCLUDE_PATTERNS tag to specify one or more wildcard patterns to
exclude
# certain files from those directories.

EXCLUDE_PATTERNS      = Makefile.* ChangeLog CHANGES CHANGES.* README
\
                      README.* *.png AUTHORS DESIGN DESIGN.*
*.desktop \
                      DESKTOP* COMMENTS HOWTO magic NOTES TODO
THANKS

# The EXAMPLE_PATH tag can be used to specify one or more files or

```



```
# directories that contain example code fragments that are included
(see
# the \include command).
```

```
EXAMPLE_PATH           =
EXAMPLE_PATTERNS      =
EXAMPLE_RECURSIVE     = NO
IMAGE_PATH            =
INPUT_FILTER          =
FILTER_SOURCE_FILES   = NO
```

```
#-----
-----
```

```
# configuration options related to source browsing
```

```
#-----
-----
```

```
SOURCE_BROWSER        = YES
INLINE_SOURCES        = NO
REFERENCED_BY_RELATION = YES
REFERENCES_RELATION   = YES
```

```
#-----
-----
```

```
# configuration options related to the alphabetical class index
```

```
#-----
-----
```

```
ALPHABETICAL_INDEX    = NO
COLS_IN_ALPHA_INDEX   = 5
IGNORE_PREFIX         =
```

```
#-----
-----
```

```
# configuration options related to the HTML output
```

```
#-----
-----
```

```
GENERATE_HTML         = YES
HTML_OUTPUT           =
HTML_HEADER           =
HTML_FOOTER           =
HTML_STYLESHEET       =
HTML_ALIGN_MEMBERS    = YES
GENERATE_HTMLHELP     = NO
GENERATE_CHI          = NO
BINARY_TOC            = NO
TOC_EXPAND            = NO
DISABLE_INDEX         = NO
ENUM_VALUES_PER_LINE  = 4
GENERATE_TREEVIEW     = NO
TREEVIEW_WIDTH        = 250
```

```
#-----
-----
```

```
# configuration options related to the LaTeX output
```

```
#-----
-----
```

```
GENERATE_LATEX        = NO
```

```

LATEX_OUTPUT          =
COMPACT_LATEX         = NO
PAPER_TYPE            = a4wide
EXTRA_PACKAGES       =
LATEX_HEADER         =
PDF_HYPERLINKS       = NO
USE_PDFLATEX         = NO
LATEX_BATCHMODE      = NO
#-----
-----
# configuration options related to the RTF output
#-----
-----
GENERATE_RTF          = NO
RTF_OUTPUT           =
COMPACT_RTF          = NO
RTF_HYPERLINKS      = NO
RTF_STYLESHEET_FILE =
RTF_EXTENSIONS_FILE  =
#-----
-----
# configuration options related to the man page output
#-----
-----
GENERATE_MAN          = YES
MAN_OUTPUT           = man
MAN_EXTENSION        = .3dbus
MAN_LINKS            = YES
#-----
-----
# configuration options related to the XML output
#-----
-----
GENERATE_XML          = NO
#-----
-----
# Configuration options related to the preprocessor
#-----
-----
ENABLE_PREPROCESSING = YES
MACRO_EXPANSION      = YES
EXPAND_ONLY_PREDEF   = YES
SEARCH_INCLUDES      = YES
INCLUDE_PATH         =
INCLUDE_FILE_PATTERNS =
PREDEFINED            = "DBUS_BEGIN_DECLS=" \
                      "DBUS_END_DECLS=" \
                      "DOXYGEN_SHOULD_SKIP_THIS" \
                      "DBUS_GNUC_DEPRECATED=" \
                      "_DBUS_DEFINE_GLOBAL_LOCK(name)=" \
                      "_DBUS_GNUC_PRINTF(from,to)=" \
                      "DBUS_EXPORT="

```

```
SKIP_FUNCTION_MACROS = YES
#-----
# Configuration::addtions related to external references
#-----
#-----
TAGFILES =
GENERATE_TAGFILE =
ALLEXTERNALS = NO
PERL_PATH =
#-----
# Configuration options related to the dot tool
#-----
#-----
CLASS_DIAGRAMS = YES
HAVE_DOT = NO
CLASS_GRAPH = YES
COLLABORATION_GRAPH = YES
TEMPLATE_RELATIONS = YES
HIDE_UNDOC_RELATIONS = YES
INCLUDE_GRAPH = YES
INCLUDED_BY_GRAPH = YES
GRAPHICAL_HIERARCHY = YES
DOT_PATH =
DOTFILE_DIRS =
MAX_DOT_GRAPH_WIDTH = 640
MAX_DOT_GRAPH_HEIGHT = 1024
GENERATE_LEGEND = YES
DOT_CLEANUP = YES
#-----
# Configuration::addtions related to the search engine
#-----
#-----
SEARCHENGINE = NO

File = Doxyfile.in

# Doxyfile 0.1

#-----
# General configuration options
#-----
#-----
PROJECT_NAME = D-Bus
PROJECT_NUMBER = @VERSION@
OUTPUT_DIRECTORY = doc/api
OUTPUT_LANGUAGE = English
```

```

EXTRACT_ALL = NO
EXTRACT_PRIVATE = NO
EXTRACT_STATIC = NO
HIDE_UNDOC_MEMBERS = NO
HIDE_UNDOC_CLASSES = NO
BRIEF_MEMBER_DESC = YES
REPEAT_BRIEF = YES
ALWAYS_DETAILED_SEC = NO
FULL_PATH_NAMES = NO
STRIP_FROM_PATH =
INTERNAL_DOCS = NO
STRIP_CODE_COMMENTS = YES
CASE_SENSE_NAMES = YES
SHORT_NAMES = NO
HIDE_SCOPE_NAMES = NO
VERBATIM_HEADERS = YES
SHOW_INCLUDE_FILES = YES
JAVADOC_AUTOBRIEF = YES
INHERIT_DOCS = YES
INLINE_INFO = YES
SORT_MEMBER_DOCS = YES
DISTRIBUTE_GROUP_DOC = NO
TAB_SIZE = 8
GENERATE_TODOLIST = YES
GENERATE_TESTLIST = YES
GENERATE_BUGLIST = YES
ALIASES =
ENABLED_SECTIONS =
MAX_INITIALIZER_LINES = 30
OPTIMIZE_OUTPUT_FOR_C = YES
SHOW_USED_FILES = YES
#-----
-----
# configuration options related to warning and progress messages
#-----
-----
QUIET = YES
WARNINGS = YES
WARN_IF_UNDOCUMENTED = YES
WARN_FORMAT =
WARN_LOGFILE =
#-----
-----
# configuration options related to the input files
#-----
-----
INPUT = @top_srcdir@/dbus
FILE_PATTERNS = *.c *.h
RECURSIVE = YES
#EXCLUDE = test

# If the value of the INPUT tag contains directories, you can use the

```

```

# EXCLUDE_PATTERNS tag to specify one or more wildcard patterns to
exclude
# certain files from those directories.

EXCLUDE_PATTERNS      = Makefile.* ChangeLog CHANGES CHANGES.* README
\
                      README.* *.png AUTHORS DESIGN DESIGN.*
*.desktop \
                      DESKTOP* COMMENTS HOWTO magic NOTES TODO
THANKS

# The EXAMPLE_PATH tag can be used to specify one or more files or
# directories that contain example code fragments that are included
# (see
# the \include command).

EXAMPLE_PATH          =
EXAMPLE_PATTERNS      =
EXAMPLE_RECURSIVE     = NO
IMAGE_PATH            =
INPUT_FILTER          =
FILTER_SOURCE_FILES   = NO
#-----
-----
# configuration options related to source browsing
#-----
-----
SOURCE_BROWSER        = YES
INLINE_SOURCES        = NO
REFERENCED_BY_RELATION = YES
REFERENCES_RELATION   = YES
#-----
-----
# configuration options related to the alphabetical class index
#-----
-----
ALPHABETICAL_INDEX    = NO
COLS_IN_ALPHA_INDEX   = 5
IGNORE_PREFIX         =
#-----
-----
# configuration options related to the HTML output
#-----
-----
GENERATE_HTML         = YES
HTML_OUTPUT           =
HTML_HEADER           =
HTML_FOOTER           =
HTML_STYLESHEET       =
HTML_ALIGN_MEMBERS    = YES
GENERATE_HTMLHELP     = NO
GENERATE_CHI          = NO

```

```
BINARY_TOC                = NO
TOC_EXPAND                 = NO
DISABLE_INDEX              = NO
ENUM_VALUES_PER_LINE       = 4
GENERATE_TREEVIEW          = NO
TREEVIEW_WIDTH             = 250
#-----
# configuration options related to the LaTeX output
#-----
#-----
GENERATE_LATEX              = NO
LATEX_OUTPUT               =
COMPACT_LATEX              = NO
PAPER_TYPE                 = a4wide
EXTRA_PACKAGES             =
LATEX_HEADER               =
PDF_HYPERLINKS            = NO
USE_PDFLATEX               = NO
LATEX_BATCHMODE           = NO
#-----
# configuration options related to the RTF output
#-----
#-----
GENERATE_RTF                = NO
RTF_OUTPUT                 =
COMPACT_RTF                = NO
RTF_HYPERLINKS            = NO
RTF_STYLESHEET_FILE       =
RTF_EXTENSIONS_FILE       =
#-----
# configuration options related to the man page output
#-----
#-----
GENERATE_MAN                = YES
MAN_OUTPUT                 = man
MAN_EXTENSION              = .3dbus
MAN_LINKS                  = YES
#-----
# configuration options related to the XML output
#-----
#-----
GENERATE_XML                = YES
#-----
# Configuration options related to the preprocessor
#-----
#-----
ENABLE_PREPROCESSING       = YES
```

```

MACRO_EXPANSION          = YES
EXPAND_ONLY_PREDEF      = YES
SEARCH_INCLUDES         = YES
INCLUDE_PATH            =
INCLUDE_FILE_PATTERNS   =
PREDEFINED               = "DBUS_BEGIN_DECLS=" \
                          "DBUS_END_DECLS=" \
                          "DOXYGEN_SHOULD_SKIP_THIS" \
                          "DBUS_GNUC_DEPRECATED=" \
                          "_DBUS_DEFINE_GLOBAL_LOCK(name)=" \
                          "_DBUS_GNUC_PRINTF(from,to)="
SKIP_FUNCTION_MACROS    = YES
#-----
# Configuration::addtions related to external references
#-----
#-----
TAGFILES                 =
GENERATE_TAGFILE         =
ALLEXTERNALS            = NO
PERL_PATH                =
#-----
#-----
# Configuration options related to the dot tool
#-----
#-----
CLASS_DIAGRAMS          = YES
HAVE_DOT                = NO
CLASS_GRAPH             = YES
COLLABORATION_GRAPH     = YES
TEMPLATE_RELATIONS      = YES
HIDE_UNDOC_RELATIONS    = YES
INCLUDE_GRAPH           = YES
INCLUDED_BY_GRAPH       = YES
GRAPHICAL_HIERARCHY     = YES
DOT_PATH                =
DOTFILE_DIRS            =
MAX_DOT_GRAPH_WIDTH     = 640
MAX_DOT_GRAPH_HEIGHT    = 1024
GENERATE_LEGEND         = YES
DOT_CLEANUP             = YES
#-----
#-----
# Configuration::addtions related to the search engine
#-----
#-----
SEARCHENGINE            = NO

```

File = doxygen_to_devhelp.xsl

```

<xsl:stylesheet
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:fo="http://www.w3.org/1999/XSL/Format"
  version="1.0">

<xsl:output method="xml" version="1.0" indent="yes"/>

<xsl:param name="prefix"></xsl:param>

<xsl:template match="/">
  <book title="D-Bus: A system for interprocess communication"
        name="dbus"
        link="dbus-tutorial.html">
    <chapters>
      <sub name="Tutorial" link="{ $prefix }dbus-tutorial.html"/>
      <sub name="FAQ" link="{ $prefix }dbus-faq.html"/>
      <sub name="Specification" link="{ $prefix }dbus-
specification.html"/>
      <sub name="API Reference" link="{ $prefix }api/index.html"/>
    </chapters>

    <functions>
      <xsl:apply-templates
select="doxygenindex/compound[@kind='group']/member[@kind='function']"
/>
    </functions>
  </book>
</xsl:template>

<xsl:template match="member">
  <xsl:param name="name"><xsl:value-of select="name"/></xsl:param>
  <xsl:param name="refid"><xsl:value-of select="@refid"/></xsl:param>
  <xsl:param name="before"><xsl:value-of select="substring-
before($refid, '_1')"/></xsl:param>
  <xsl:param name="after"><xsl:value-of select="substring-
after($refid, '_1')"/></xsl:param>
  <xsl:param name="link"><xsl:value-of
select="$before"/>.html#<xsl:value-of select="$after"/></xsl:param>
  <xsl:if test="starts-with($name, 'dbus') or starts-with($name,
'DBus')">
    <xsl:if test="starts-with($refid, 'group__') and contains($refid,
'_1')">
      <function name="{ $name }" link="{ $prefix }api/{ $link }"/>
    </xsl:if>
  </xsl:if>
</xsl:template>

</xsl:stylesheet>

```

File = driver.c


```

dbus_bool_t
bus_driver_send_service_owner_changed (const char      *service_name,
                                       const char      *old_owner,
                                       const char      *new_owner,
                                       BusTransaction *transaction,
                                       DBusError      *error)
{
    DBusMessage *message;
    dbus_bool_t retval;
    const char *null_service;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    null_service = "";
    _dbus_verbose ("sending name owner changed: %s [%s -> %s]\n",
                  service_name,
                  old_owner ? old_owner : null_service,
                  new_owner ? new_owner : null_service);

    message = dbus_message_new_signal (DBUS_PATH_DBUS,
                                       DBUS_INTERFACE_DBUS,
                                       "NameOwnerChanged");

    if (message == NULL)
    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!dbus_message_set_sender (message, DBUS_SERVICE_DBUS))
        goto oom;

    if (!dbus_message_append_args (message,
                                   DBUS_TYPE_STRING, &service_name,
                                   DBUS_TYPE_STRING, old_owner ?
&old_owner : &null_service,
                                   DBUS_TYPE_STRING, new_owner ?
&new_owner : &null_service,
                                   DBUS_TYPE_INVALID))
        goto oom;

    _dbus_assert (dbus_message_has_signature (message, "sss"));

    retval = bus_dispatch_matches (transaction, NULL, NULL, message,
error);
    dbus_message_unref (message);

    return retval;

oom:
    dbus_message_unref (message);

```



```

        BusTransaction *transaction,
        DBusError      *error)
{
    DBusMessage *message;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    message = dbus_message_new_signal (DBUS_PATH_DBUS,
                                       DBUS_INTERFACE_DBUS,
                                       "NameAcquired");

    if (message == NULL)
    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!dbus_message_set_destination (message, bus_connection_get_name
(connection)) ||
        !dbus_message_append_args (message,
                                   DBUS_TYPE_STRING, &service_name,
                                   DBUS_TYPE_INVALID))
    {
        dbus_message_unref (message);
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!bus_transaction_send_from_driver (transaction, connection,
message))
    {
        dbus_message_unref (message);
        BUS_SET_OOM (error);
        return FALSE;
    }
    else
    {
        dbus_message_unref (message);
        return TRUE;
    }
}

static dbus_bool_t
create_unique_client_name (BusRegistry *registry,
                          DBusString  *str)
{
    /* We never want to use the same unique client name twice, because
     * we want to guarantee that if you send a message to a given unique
     * name, you always get the same application. So we use two numbers
     * for INT_MAX * INT_MAX combinations, should be pretty safe against
     * wraparound.
     */
}

```

```

/* FIXME these should be in BusRegistry rather than static vars */
static int next_major_number = 0;
static int next_minor_number = 0;
int len;

len = _dbus_string_get_length (str);

while (TRUE)
{
    /* start out with 1-0, go to 1-1, 1-2, 1-3,
     * up to 1-MAXINT, then 2-0, 2-1, etc.
     */
    if (next_minor_number <= 0)
    {
        next_major_number += 1;
        next_minor_number = 0;
        if (next_major_number <= 0)
            _dbus_assert_not_reached ("INT_MAX * INT_MAX clients were
added");
    }

    _dbus_assert (next_major_number > 0);
    _dbus_assert (next_minor_number >= 0);

    /* appname:MAJOR-MINOR */

    if (!_dbus_string_append (str, ":"))
        return FALSE;

    if (!_dbus_string_append_int (str, next_major_number))
        return FALSE;

    if (!_dbus_string_append (str, "."))
        return FALSE;

    if (!_dbus_string_append_int (str, next_minor_number))
        return FALSE;

    next_minor_number += 1;

    /* Check if a client with the name exists */
    if (bus_registry_lookup (registry, str) == NULL)
        break;

    /* drop the number again, try the next one. */
    _dbus_string_set_length (str, len);
}

return TRUE;
}

static dbus_bool_t

```

```

bus_driver_handle_hello (DBusConnection *connection,
                        BusTransaction *transaction,
                        DBusMessage    *message,
                        DBusError      *error)
{
    DBusString unique_name;
    BusService *service;
    dbus_bool_t retval;
    BusRegistry *registry;
    BusConnections *connections;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (bus_connection_is_active (connection))
    {
        /* We already handled an Hello message for this connection. */
        dbus_set_error (error, DBUS_ERROR_FAILED,
                      "Already handled an Hello message");
        return FALSE;
    }

    /* Note that when these limits are exceeded we don't disconnect the
     * connection; we just sort of leave it hanging there until it times
     * out or disconnects itself or is dropped due to the max number of
     * incomplete connections. It's even OK if the connection wants to
     * retry the hello message, we support that.
     */
    connections = bus_connection_get_connections (connection);
    if (!bus_connections_check_limits (connections, connection,
                                      error))
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        return FALSE;
    }

    if (!_dbus_string_init (&unique_name))
    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    retval = FALSE;

    registry = bus_connection_get_registry (connection);

    if (!create_unique_client_name (registry, &unique_name))
    {
        BUS_SET_OOM (error);
        goto out_0;
    }

    if (!bus_connection_complete (connection, &unique_name, error))

```

```

    {
        _dbus_assert_error_is_set (error);
        goto out_0;
    }

    if (!dbus_message_set_sender (message,
                                  bus_connection_get_name (connection)))
    {
        BUS_SET_OOM (error);
        goto out_0;
    }

    if (!bus_driver_send_welcome_message (connection, message,
                                          transaction, error))
        goto out_0;

    /* Create the service */
    service = bus_registry_ensure (registry,
                                   &unique_name, connection, 0,
transaction, error);
    if (service == NULL)
        goto out_0;

    _dbus_assert (bus_connection_is_active (connection));
    retval = TRUE;

out_0:
    _dbus_string_free (&unique_name);
    return retval;
}

static dbus_bool_t
bus_driver_send_welcome_message (DBusConnection *connection,
                                 DBusMessage     *hello_message,
                                 BusTransaction  *transaction,
                                 DBusError       *error)
{
    DBusMessage *welcome;
    const char *name;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    name = bus_connection_get_name (connection);
    _dbus_assert (name != NULL);

    welcome = dbus_message_new_method_return (hello_message);
    if (welcome == NULL)
    {
        BUS_SET_OOM (error);
        return FALSE;
    }
}

```

```

if (!dbus_message_append_args (welcome,
                               DBUS_TYPE_STRING, &name,
                               DBUS_TYPE_INVALID))
{
    dbus_message_unref (welcome);
    BUS_SET_OOM (error);
    return FALSE;
}

_dbus_assert (dbus_message_has_signature (welcome,
DBUS_TYPE_STRING_AS_STRING));

if (!bus_transaction_send_from_driver (transaction, connection,
welcome))
{
    dbus_message_unref (welcome);
    BUS_SET_OOM (error);
    return FALSE;
}
else
{
    dbus_message_unref (welcome);
    return TRUE;
}
}

static dbus_bool_t
bus_driver_handle_list_services (DBusConnection *connection,
                                BusTransaction *transaction,
                                DBusMessage *message,
                                DBusError *error)
{
    DBusMessage *reply;
    int len;
    char **services;
    BusRegistry *registry;
    int i;
    DBusMessageIter iter;
    DBusMessageIter sub;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    registry = bus_connection_get_registry (connection);

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)
    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!bus_registry_list_services (registry, &services, &len))

```



```

    {
        dbus_message_unref (reply);
        BUS_SET_OOM (error);
        return FALSE;
    }

dbus_message_iter_init_append (reply, &iter);

if (!dbus_message_iter_open_container (&iter, DBUS_TYPE_ARRAY,
                                       DBUS_TYPE_STRING_AS_STRING,
                                       &sub))
    {
        dbus_free_string_array (services);
        dbus_message_unref (reply);
        BUS_SET_OOM (error);
        return FALSE;
    }

{
    /* Include the bus driver in the list */
    const char *v_STRING = DBUS_SERVICE_DBUS;
    if (!dbus_message_iter_append_basic (&sub, DBUS_TYPE_STRING,
                                         &v_STRING))
        {
            dbus_free_string_array (services);
            dbus_message_unref (reply);
            BUS_SET_OOM (error);
            return FALSE;
        }
}

i = 0;
while (i < len)
    {
        if (!dbus_message_iter_append_basic (&sub, DBUS_TYPE_STRING,
                                             &services[i]))
            {
                dbus_free_string_array (services);
                dbus_message_unref (reply);
                BUS_SET_OOM (error);
                return FALSE;
            }
        ++i;
    }

dbus_free_string_array (services);

if (!dbus_message_iter_close_container (&iter, &sub))
    {
        dbus_message_unref (reply);
        BUS_SET_OOM (error);
        return FALSE;
    }

```

```

    }

    if (!bus_transaction_send_from_driver (transaction, connection,
reply))
    {
        dbus_message_unref (reply);
        BUS_SET_OOM (error);
        return FALSE;
    }
    else
    {
        dbus_message_unref (reply);
        return TRUE;
    }
}

static dbus_bool_t
bus_driver_handle_list_activatable_services (DBusConnection
*connection,
                                           BusTransaction *transaction,
                                           DBusMessage *message,
                                           DBusError *error)
{
    DBusMessage *reply;
    int len;
    char **services;
    BusActivation *activation;
    int i;
    DBusMessageIter iter;
    DBusMessageIter sub;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    activation = bus_connection_get_activation (connection);

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)
    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!bus_activation_list_services (activation, &services, &len))
    {
        dbus_message_unref (reply);
        BUS_SET_OOM (error);
        return FALSE;
    }

    dbus_message_iter_init_append (reply, &iter);

    if (!dbus_message_iter_open_container (&iter, DBUS_TYPE_ARRAY,

```

```

        DBUS_TYPE_STRING_AS_STRING,
        &sub))
    {
        dbus_free_string_array (services);
        dbus_message_unref (reply);
        BUS_SET_OOM (error);
        return FALSE;
    }

    {
        /* Include the bus driver in the list */
        const char *v_STRING = DBUS_SERVICE_DBUS;
        if (!dbus_message_iter_append_basic (&sub, DBUS_TYPE_STRING,
            &v_STRING))
            {
                dbus_free_string_array (services);
                dbus_message_unref (reply);
                BUS_SET_OOM (error);
                return FALSE;
            }
    }

    i = 0;
    while (i < len)
        {
            if (!dbus_message_iter_append_basic (&sub, DBUS_TYPE_STRING,
                &services[i]))
                {
                    dbus_free_string_array (services);
                    dbus_message_unref (reply);
                    BUS_SET_OOM (error);
                    return FALSE;
                }
            ++i;
        }

    dbus_free_string_array (services);

    if (!dbus_message_iter_close_container (&iter, &sub))
        {
            dbus_message_unref (reply);
            BUS_SET_OOM (error);
            return FALSE;
        }

    if (!bus_transaction_send_from_driver (transaction, connection,
reply))
        {
            dbus_message_unref (reply);
            BUS_SET_OOM (error);
            return FALSE;
        }
}

```

```

else
{
    dbus_message_unref (reply);
    return TRUE;
}
}

static dbus_bool_t
bus_driver_handle_acquire_service (DBusConnection *connection,
                                   BusTransaction *transaction,
                                   DBusMessage *message,
                                   DBusError *error)
{
    DBusMessage *reply;
    DBusString service_name;
    const char *name;
    dbus_uint32_t service_reply;
    dbus_uint32_t flags;
    dbus_bool_t retval;
    BusRegistry *registry;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    registry = bus_connection_get_registry (connection);

    if (!dbus_message_get_args (message, error,
                                DBUS_TYPE_STRING, &name,
                                DBUS_TYPE_UINT32, &flags,
                                DBUS_TYPE_INVALID))

        return FALSE;

    _dbus_verbose ("Trying to own name %s with flags 0x%x\n", name,
flags);

    retval = FALSE;
    reply = NULL;

    _dbus_string_init_const (&service_name, name);

    if (!bus_registry_acquire_service (registry, connection,
                                       &service_name, flags,
                                       &service_reply, transaction,
                                       error))

        goto out;

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)
    {
        BUS_SET_OOM (error);
        goto out;
    }
}

```

```

    if (!dbus_message_append_args (reply, DBUS_TYPE_UINT32,
&service_reply, DBUS_TYPE_INVALID))
    {
        BUS_SET_OOM (error);
        goto out;
    }

    if (!bus_transaction_send_from_driver (transaction, connection,
reply))
    {
        BUS_SET_OOM (error);
        goto out;
    }

    retval = TRUE;

out:
    if (reply)
        dbus_message_unref (reply);
    return retval;
}

static dbus_bool_t
bus_driver_handle_release_service (DBusConnection *connection,
                                   BusTransaction *transaction,
                                   DBusMessage *message,
                                   DBusError *error)
{
    DBusMessage *reply;
    DBusString service_name;
    const char *name;
    dbus_uint32_t service_reply;
    dbus_bool_t retval;
    BusRegistry *registry;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    registry = bus_connection_get_registry (connection);

    if (!dbus_message_get_args (message, error,
                                DBUS_TYPE_STRING, &name,
                                DBUS_TYPE_INVALID))
        return FALSE;

    _dbus_verbose ("Trying to release name %s\n", name);

    retval = FALSE;
    reply = NULL;

    _dbus_string_init_const (&service_name, name);

    if (!bus_registry_release_service (registry, connection,

```

```

                                &service_name, &service_reply,
                                transaction, error))

    goto out;

reply = dbus_message_new_method_return (message);
if (reply == NULL)
{
    BUS_SET_OOM (error);
    goto out;
}

if (!dbus_message_append_args (reply, DBUS_TYPE_UINT32,
&service_reply, DBUS_TYPE_INVALID))
{
    BUS_SET_OOM (error);
    goto out;
}

if (!bus_transaction_send_from_driver (transaction, connection,
reply))
{
    BUS_SET_OOM (error);
    goto out;
}

retval = TRUE;

out:
if (reply)
    dbus_message_unref (reply);
return retval;
}

static dbus_bool_t
bus_driver_handle_service_exists (DBusConnection *connection,
                                  BusTransaction *transaction,
                                  DBusMessage *message,
                                  DBusError *error)
{
    DBusMessage *reply;
    DBusString service_name;
    BusService *service;
    dbus_bool_t service_exists;
    const char *name;
    dbus_bool_t retval;
    BusRegistry *registry;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    registry = bus_connection_get_registry (connection);

    if (!dbus_message_get_args (message, error,

```



```

                                DBusError      *error)
{
    dbus_uint32_t flags;
    const char *name;
    dbus_bool_t retval;
    BusActivation *activation;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    activation = bus_connection_get_activation (connection);

    if (!dbus_message_get_args (message, error,
                                DBUS_TYPE_STRING, &name,
                                DBUS_TYPE_UINT32, &flags,
                                DBUS_TYPE_INVALID))
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        _dbus_verbose ("No memory to get arguments to
StartServiceByName\n");
        return FALSE;
    }

    retval = FALSE;

    if (!bus_activation_activate_service (activation, connection,
transaction, FALSE,
                                message, name, error))
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        _dbus_verbose ("bus_activation_activate_service() failed\n");
        goto out;
    }

    retval = TRUE;

out:
    return retval;
}

static dbus_bool_t
send_ack_reply (DBusConnection *connection,
                BusTransaction *transaction,
                DBusMessage *message,
                DBusError *error)
{
    DBusMessage *reply;

    if (dbus_message_get_no_reply (message))
        return TRUE;

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)

```



```

    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!bus_transaction_send_from_driver (transaction, connection,
reply))
    {
        BUS_SET_OOM (error);
        dbus_message_unref (reply);
        return FALSE;
    }

    dbus_message_unref (reply);

    return TRUE;
}

static dbus_bool_t
bus_driver_handle_update_activation_environment (DBusConnection
*connection,
                                                BusTransaction
*transaction,
                                                DBusMessage
*message,
                                                DBusError
*error)
{
    dbus_bool_t retval;
    BusActivation *activation;
    DBusMessageIter iter;
    DBusMessageIter dict_iter;
    DBusMessageIter dict_entry_iter;
    int array_type;
    int key_type;
    DBusList *keys, *key_link;
    DBusList *values, *value_link;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    activation = bus_connection_get_activation (connection);

    dbus_message_iter_init (message, &iter);

    /* The message signature has already been checked for us,
     * so let's just assert it's right.
     */
#ifdef DBUS_DISABLE_ASSERT
    {
        int msg_type = dbus_message_iter_get_arg_type (&iter);

        _dbus_assert (msg_type == DBUS_TYPE_ARRAY);
    }
#endif
}

```

```

    }
#endif

    dbus_message_iter_recurse (&iter, &dict_iter);

    retval = FALSE;

    /* Then loop through the sent dictionary, add the location of
     * the environment keys and values to lists. The result will
     * be in reverse order, so we don't have to constantly search
     * for the end of the list in a loop.
     */
    keys = NULL;
    values = NULL;
    while ((array_type = dbus_message_iter_get_arg_type (&dict_iter)) ==
    DBUS_TYPE_DICT_ENTRY)
    {
        dbus_message_iter_recurse (&dict_iter, &dict_entry_iter);

        while ((key_type = dbus_message_iter_get_arg_type
        (&dict_entry_iter)) == DBUS_TYPE_STRING)
        {
            char *key;
            char *value;
            int value_type;

            dbus_message_iter_get_basic (&dict_entry_iter, &key);
            dbus_message_iter_next (&dict_entry_iter);

            value_type = dbus_message_iter_get_arg_type
            (&dict_entry_iter);

            if (value_type != DBUS_TYPE_STRING)
                break;

            dbus_message_iter_get_basic (&dict_entry_iter, &value);

            if (!_dbus_list_append (&keys, key))
            {
                BUS_SET_OOM (error);
                break;
            }

            if (!_dbus_list_append (&values, value))
            {
                BUS_SET_OOM (error);
                break;
            }

            dbus_message_iter_next (&dict_entry_iter);
        }
    }

```

```

        if (key_type != DBUS_TYPE_INVALID)
            break;

        dbus_message_iter_next (&dict_iter);
    }

    if (array_type != DBUS_TYPE_INVALID)
        goto out;

    _dbus_assert (_dbus_list_get_length (&keys) == _dbus_list_get_length
(&values));

    key_link = keys;
    value_link = values;
    while (key_link != NULL)
    {
        const char *key;
        const char *value;

        key = key_link->data;
        value = value_link->data;

        if (!bus_activation_set_environment_variable (activation,
error))
            key, value,
        {
            _DBUS_ASSERT_ERROR_IS_SET (error);
            _dbus_verbose ("bus_activation_set_environment_variable()
failed\n");
            break;
        }
        key_link = _dbus_list_get_next_link (&keys, key_link);
        value_link = _dbus_list_get_next_link (&values, value_link);
    }

    /* FIXME: We can fail early having set only some of the environment
variables,
    * (because of OOM failure). It's sort of hard to fix and it
doesn't really
    * matter, so we're punting for now.
    */
    if (key_link != NULL)
        goto out;

    if (!send_ack_reply (connection, transaction,
message, error))
        goto out;

    retval = TRUE;

out:
    _dbus_list_clear (&keys);

```

```

    _dbus_list_clear (&values);
    return retval;
}

static dbus_bool_t
bus_driver_handle_add_match (DBusConnection *connection,
                             BusTransaction *transaction,
                             DBusMessage    *message,
                             DBusError     *error)
{
    BusMatchRule *rule;
    const char *text;
    DBusString str;
    BusMatchmaker *matchmaker;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    text = NULL;
    rule = NULL;

    if (bus_connection_get_n_match_rules (connection) >=
        bus_context_get_max_match_rules_per_connection
        (bus_transaction_get_context (transaction)))
    {
        dbus_set_error (error, DBUS_ERROR_LIMITS_EXCEEDED,
                       "Connection \"%s\" is not allowed to add more
match rules "
                       "(increase limits in configuration file if
required)",
                       bus_connection_is_active (connection) ?
                       bus_connection_get_name (connection) :
                       "(inactive)");
        goto failed;
    }

    if (!dbus_message_get_args (message, error,
                               DBUS_TYPE_STRING, &text,
                               DBUS_TYPE_INVALID))
    {
        _dbus_verbose ("No memory to get arguments to AddMatch\n");
        goto failed;
    }

    _dbus_string_init_const (&str, text);

    rule = bus_match_rule_parse (connection, &str, error);
    if (rule == NULL)
        goto failed;

    matchmaker = bus_connection_get_matchmaker (connection);

    if (!bus_matchmaker_add_rule (matchmaker, rule))

```

```

    {
        BUS_SET_OOM (error);
        goto failed;
    }

    if (!send_ack_reply (connection, transaction,
                        message, error))
    {
        bus_matchmaker_remove_rule (matchmaker, rule);
        goto failed;
    }

    bus_match_rule_unref (rule);

    return TRUE;

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    if (rule)
        bus_match_rule_unref (rule);
    return FALSE;
}

static dbus_bool_t
bus_driver_handle_remove_match (DBusConnection *connection,
                               BusTransaction *transaction,
                               DBusMessage *message,
                               DBusError *error)
{
    BusMatchRule *rule;
    const char *text;
    DBusString str;
    BusMatchmaker *matchmaker;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    text = NULL;
    rule = NULL;

    if (!dbus_message_get_args (message, error,
                               DBUS_TYPE_STRING, &text,
                               DBUS_TYPE_INVALID))
    {
        _dbus_verbose ("No memory to get arguments to RemoveMatch\n");
        goto failed;
    }

    _dbus_string_init_const (&str, text);

    rule = bus_match_rule_parse (connection, &str, error);
    if (rule == NULL)
        goto failed;
}

```

```

/* Send the ack before we remove the rule, since the ack is undone
 * on transaction cancel, but rule removal isn't.
 */
if (!send_ack_reply (connection, transaction,
                    message, error))
    goto failed;

matchmaker = bus_connection_get_matchmaker (connection);

if (!bus_matchmaker_remove_rule_by_value (matchmaker, rule, error))
    goto failed;

bus_match_rule_unref (rule);

return TRUE;

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    if (rule)
        bus_match_rule_unref (rule);
    return FALSE;
}

static dbus_bool_t
bus_driver_handle_get_service_owner (DBusConnection *connection,
                                     BusTransaction *transaction,
                                     DBusMessage *message,
                                     DBusError *error)
{
    const char *text;
    const char *base_name;
    DBusString str;
    BusRegistry *registry;
    BusService *service;
    DBusMessage *reply;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    registry = bus_connection_get_registry (connection);

    text = NULL;
    reply = NULL;

    if (! dbus_message_get_args (message, error,
                                DBUS_TYPE_STRING, &text,
                                DBUS_TYPE_INVALID))
        goto failed;

    _dbus_string_init_const (&str, text);
    service = bus_registry_lookup (registry, &str);
    if (service == NULL &&

```

```

    _dbus_string_equal_c_str (&str, DBUS_SERVICE_DBUS))
{
    /* ORG_FREEDESKTOP_DBUS owns itself */
    base_name = DBUS_SERVICE_DBUS;
}
else if (service == NULL)
{
    dbus_set_error (error,
                    DBUS_ERROR_NAME_HAS_NO_OWNER,
                    "Could not get owner of name '%s': no such
name", text);
    goto failed;
}
else
{
    base_name = bus_connection_get_name
(bus_service_get_primary_owners_connection (service));
    if (base_name == NULL)
    {
        /* FIXME - how is this error possible? */
        dbus_set_error (error,
                        DBUS_ERROR_FAILED,
                        "Could not determine unique name for '%s'",
text);
        goto failed;
    }
    _dbus_assert (*base_name == ':');
}

_dbus_assert (base_name != NULL);

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    goto oom;

if (! dbus_message_append_args (reply,
                                DBUS_TYPE_STRING, &base_name,
                                DBUS_TYPE_INVALID))
    goto oom;

if (! bus_transaction_send_from_driver (transaction, connection,
reply))
    goto oom;

dbus_message_unref (reply);

return TRUE;

oom:
    BUS_SET_OOM (error);

failed:

```

```

    _DBUS_ASSERT_ERROR_IS_SET (error);
    if (reply)
        dbus_message_unref (reply);
    return FALSE;
}

static dbus_bool_t
bus_driver_handle_list_queued_owners (DBusConnection *connection,
                                      BusTransaction *transaction,
                                      DBusMessage *message,
                                      DBusError *error)
{
    const char *text;
    DBusList *base_names;
    DBusList *link;
    DBusString str;
    BusRegistry *registry;
    BusService *service;
    DBusMessage *reply;
    DBusMessageIter iter, array_iter;
    char *dbus_service_name = DBUS_SERVICE_DBUS;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    registry = bus_connection_get_registry (connection);

    base_names = NULL;
    text = NULL;
    reply = NULL;

    if (! dbus_message_get_args (message, error,
                                DBUS_TYPE_STRING, &text,
                                DBUS_TYPE_INVALID))
        goto failed;

    _dbus_string_init_const (&str, text);
    service = bus_registry_lookup (registry, &str);
    if (service == NULL &&
        _dbus_string_equal_c_str (&str, DBUS_SERVICE_DBUS))
    {
        /* ORG_FREEDESKTOP_DBUS owns itself */
        if (! _dbus_list_append (&base_names, dbus_service_name))
            goto oom;
    }
    else if (service == NULL)
    {
        dbus_set_error (error,
                       DBUS_ERROR_NAME_HAS_NO_OWNER,
                       "Could not get owners of name '%s': no such
name", text);
        goto failed;
    }
}

```



```

else
{
    if (!bus_service_list_queued_owners (service,
                                         &base_names,
                                         error))

        goto failed;
}

_dbus_assert (base_names != NULL);

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    goto oom;

dbus_message_iter_init_append (reply, &iter);
if (!dbus_message_iter_open_container (&iter,
                                       DBUS_TYPE_ARRAY,
                                       DBUS_TYPE_STRING_AS_STRING,
                                       &array_iter))

    goto oom;

link = _dbus_list_get_first_link (&base_names);
while (link != NULL)
{
    char *uname;

    _dbus_assert (link->data != NULL);
    uname = (char *)link->data;

    if (!dbus_message_iter_append_basic (&array_iter,
                                         DBUS_TYPE_STRING,
                                         &uname))

        goto oom;

    link = _dbus_list_get_next_link (&base_names, link);
}

if (! dbus_message_iter_close_container (&iter, &array_iter))
    goto oom;

if (! bus_transaction_send_from_driver (transaction, connection,
reply))
    goto oom;

dbus_message_unref (reply);

return TRUE;

oom:
BUS_SET_OOM (error);

```

```

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    if (reply)
        dbus_message_unref (reply);

    if (base_names)
        _dbus_list_clear (&base_names);

    return FALSE;
}

static dbus_bool_t
bus_driver_handle_get_connection_unix_user (DBusConnection
*connection,
                                           BusTransaction
*transaction,
                                           DBusMessage    *message,
                                           DBusError      *error)
{
    const char *service;
    DBusString str;
    BusRegistry *registry;
    BusService *serv;
    DBusConnection *conn;
    DBusMessage *reply;
    unsigned long uid;
    dbus_uint32_t uid32;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    registry = bus_connection_get_registry (connection);

    service = NULL;
    reply = NULL;

    if (! dbus_message_get_args (message, error,
                                DBUS_TYPE_STRING, &service,
                                DBUS_TYPE_INVALID))
        goto failed;

    _dbus_verbose ("asked for UID of connection %s\n", service);

    _dbus_string_init_const (&str, service);
    serv = bus_registry_lookup (registry, &str);
    if (serv == NULL)
    {
        dbus_set_error (error,
                        DBUS_ERROR_NAME_HAS_NO_OWNER,
                        "Could not get UID of name '%s': no such name",
service);
        goto failed;
    }
}

```

```

conn = bus_service_get_primary_owners_connection (serv);

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    goto oom;

if (!dbus_connection_get_unix_user (conn, &uid))
{
    dbus_set_error (error,
                   DBUS_ERROR_FAILED,
                   "Could not determine UID for '%s'", service);
    goto failed;
}

uid32 = uid;
if (! dbus_message_append_args (reply,
                                DBUS_TYPE_UINT32, &uid32,
                                DBUS_TYPE_INVALID))

    goto oom;

if (! bus_transaction_send_from_driver (transaction, connection,
reply))
    goto oom;

dbus_message_unref (reply);

return TRUE;

oom:
BUS_SET_OOM (error);

failed:
_DBUS_ASSERT_ERROR_IS_SET (error);
if (reply)
    dbus_message_unref (reply);
return FALSE;
}

static dbus_bool_t
bus_driver_handle_get_connection_unix_process_id (DBusConnection
*connection,
                                                BusTransaction *transaction,
                                                DBusMessage *message,
                                                DBusError *error)
{
    const char *service;
    DBusString str;
    BusRegistry *registry;
    BusService *serv;
    DBusConnection *conn;
    DBusMessage *reply;

```

```

unsigned long pid;
dbus_uint32_t pid32;

_DBUS_ASSERT_ERROR_IS_CLEAR (error);

registry = bus_connection_get_registry (connection);

service = NULL;
reply = NULL;

if (! dbus_message_get_args (message, error,
                             DBUS_TYPE_STRING, &service,
                             DBUS_TYPE_INVALID))
    goto failed;

_dbus_verbose ("asked for PID of connection %s\n", service);

_dbus_string_init_const (&str, service);
serv = bus_registry_lookup (registry, &str);
if (serv == NULL)
{
    dbus_set_error (error,
                   DBUS_ERROR_NAME_HAS_NO_OWNER,
                   "Could not get PID of name '%s': no such name",
service);
    goto failed;
}

conn = bus_service_get_primary_owners_connection (serv);

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    goto oom;

if (!dbus_connection_get_unix_process_id (conn, &pid))
{
    dbus_set_error (error,
                   DBUS_ERROR_UNIX_PROCESS_ID_UNKNOWN,
                   "Could not determine PID for '%s'", service);
    goto failed;
}

pid32 = pid;
if (! dbus_message_append_args (reply,
                                DBUS_TYPE_UINT32, &pid32,
                                DBUS_TYPE_INVALID))
    goto oom;

if (! bus_transaction_send_from_driver (transaction, connection,
reply))
    goto oom;

```



```

        "Could not get audit session data for name '%s': no
such name", service);
    goto failed;
}

conn = bus_service_get_primary_owners_connection (serv);

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    goto oom;

if (!dbus_connection_get_adt_audit_session_data (conn, &data,
&data_size) || data == NULL)
{
    dbus_set_error (error,
                    DBUS_ERROR_ADT_AUDIT_DATA_UNKNOWN,
                    "Could not determine audit session data for
's'", service);
    goto failed;
}

if (! dbus_message_append_args (reply,
                                DBUS_TYPE_ARRAY, DBUS_TYPE_BYTE,
&data, data_size,
                                DBUS_TYPE_INVALID))

    goto oom;

if (! bus_transaction_send_from_driver (transaction, connection,
reply))
    goto oom;

dbus_message_unref (reply);

return TRUE;

oom:
    BUS_SET_OOM (error);

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    if (reply)
        dbus_message_unref (reply);
    return FALSE;
}

static dbus_bool_t
bus_driver_handle_get_connection_selinux_security_context
(DBusConnection *connection,
                                BusTransaction *transaction,
                                DBusMessage *message,
                                DBusError *error)
{

```

```

const char *service;
DBusString str;
BusRegistry *registry;
BusService *serv;
DBusConnection *conn;
DBusMessage *reply;
BusSELinuxID *context;

_DBUS_ASSERT_ERROR_IS_CLEAR (error);

registry = bus_connection_get_registry (connection);

service = NULL;
reply = NULL;

if (! dbus_message_get_args (message, error,
                             DBUS_TYPE_STRING, &service,
                             DBUS_TYPE_INVALID))
    goto failed;

_dbus_verbose ("asked for security context of connection %s\n",
service);

_dbus_string_init_const (&str, service);
serv = bus_registry_lookup (registry, &str);
if (serv == NULL)
{
    dbus_set_error (error,
                   DBUS_ERROR_NAME_HAS_NO_OWNER,
                   "Could not get security context of name '%s': no such
name", service);
    goto failed;
}

conn = bus_service_get_primary_owners_connection (serv);

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    goto oom;

context = bus_connection_get_selinux_id (conn);
if (!context)
{
    dbus_set_error (error,
                   DBUS_ERROR_SELINUX_SECURITY_CONTEXT_UNKNOWN,
                   "Could not determine security context for '%s'",
service);
    goto failed;
}

if (! bus_selinux_append_context (reply, context, error))
    goto failed;

```

```

    if (! bus_transaction_send_from_driver (transaction, connection,
reply))
        goto oom;

    dbus_message_unref (reply);

    return TRUE;

oom:
    BUS_SET_OOM (error);

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    if (reply)
        dbus_message_unref (reply);
    return FALSE;
}

static dbus_bool_t
bus_driver_handle_reload_config (DBusConnection *connection,
                                BusTransaction *transaction,
                                DBusMessage     *message,
                                DBusError       *error)
{
    BusContext *context;
    DBusMessage *reply;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    reply = NULL;

    context = bus_connection_get_context (connection);
    if (!bus_context_reload_config (context, error))
        goto failed;

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)
        goto oom;

    if (! bus_transaction_send_from_driver (transaction, connection,
reply))
        goto oom;

    dbus_message_unref (reply);
    return TRUE;

oom:
    BUS_SET_OOM (error);

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);

```



```

    if (reply)
        dbus_message_unref (reply);
    return FALSE;
}

static dbus_bool_t
bus_driver_handle_get_id (DBusConnection *connection,
                          BusTransaction *transaction,
                          DBusMessage *message,
                          DBusError *error)
{
    BusContext *context;
    DBusMessage *reply;
    DBusString uuid;
    const char *v_STRING;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (!_dbus_string_init (&uuid))
    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    reply = NULL;

    context = bus_connection_get_context (connection);
    if (!bus_context_get_id (context, &uuid))
        goto oom;

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)
        goto oom;

    v_STRING = _dbus_string_get_const_data (&uuid);
    if (!dbus_message_append_args (reply,
                                   DBUS_TYPE_STRING, &v_STRING,
                                   DBUS_TYPE_INVALID))
        goto oom;

    _dbus_assert (dbus_message_has_signature (reply, "s"));

    if (!bus_transaction_send_from_driver (transaction, connection,
                                           reply))
        goto oom;

    _dbus_string_free (&uuid);
    dbus_message_unref (reply);
    return TRUE;

oom:
    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

```

```

BUS_SET_OOM (error);

if (reply)
    dbus_message_unref (reply);
_dbus_string_free (&uuid);
return FALSE;
}

typedef struct
{
    const char *name;
    const char *in_args;
    const char *out_args;
    dbus_bool_t (* handler) (DBusConnection *connection,
                             BusTransaction *transaction,
                             DBusMessage *message,
                             DBusError *error);
} MessageHandler;

/* For speed it might be useful to sort this in order of
 * frequency of use (but doesn't matter with only a few items
 * anyhow)
 */
static const MessageHandler dbus_message_handlers[] = {
    { "Hello",
      "",
      DBUS_TYPE_STRING_AS_STRING,
      bus_driver_handle_hello },
    { "RequestName",
      DBUS_TYPE_STRING_AS_STRING DBUS_TYPE_UINT32_AS_STRING,
      DBUS_TYPE_UINT32_AS_STRING,
      bus_driver_handle_acquire_service },
    { "ReleaseName",
      DBUS_TYPE_STRING_AS_STRING,
      DBUS_TYPE_UINT32_AS_STRING,
      bus_driver_handle_release_service },
    { "StartServiceByName",
      DBUS_TYPE_STRING_AS_STRING DBUS_TYPE_UINT32_AS_STRING,
      DBUS_TYPE_UINT32_AS_STRING,
      bus_driver_handle_activate_service },
    { "UpdateActivationEnvironment",
      DBUS_TYPE_ARRAY_AS_STRING DBUS_DICT_ENTRY_BEGIN_CHAR_AS_STRING
      DBUS_TYPE_STRING_AS_STRING DBUS_TYPE_STRING_AS_STRING
      DBUS_DICT_ENTRY_END_CHAR_AS_STRING,
      "",
      bus_driver_handle_update_activation_environment },
    { "NameHasOwner",
      DBUS_TYPE_STRING_AS_STRING,
      DBUS_TYPE_BOOLEAN_AS_STRING,
      bus_driver_handle_service_exists },
    { "ListNames",

```

```

    "",
    DBUS_TYPE_ARRAY_AS_STRING DBUS_TYPE_STRING_AS_STRING,
    bus_driver_handle_list_services },
{ "ListActivatableNames",
    "",
    DBUS_TYPE_ARRAY_AS_STRING DBUS_TYPE_STRING_AS_STRING,
    bus_driver_handle_list_activatable_services },
{ "AddMatch",
    DBUS_TYPE_STRING_AS_STRING,
    "",
    bus_driver_handle_add_match },
{ "RemoveMatch",
    DBUS_TYPE_STRING_AS_STRING,
    "",
    bus_driver_handle_remove_match },
{ "GetNameOwner",
    DBUS_TYPE_STRING_AS_STRING,
    DBUS_TYPE_STRING_AS_STRING,
    bus_driver_handle_get_service_owner },
{ "ListQueuedOwners",
    DBUS_TYPE_STRING_AS_STRING,
    DBUS_TYPE_ARRAY_AS_STRING DBUS_TYPE_STRING_AS_STRING,
    bus_driver_handle_list_queued_owners },
{ "GetConnectionUnixUser",
    DBUS_TYPE_STRING_AS_STRING,
    DBUS_TYPE_UINT32_AS_STRING,
    bus_driver_handle_get_connection_unix_user },
{ "GetConnectionUnixProcessID",
    DBUS_TYPE_STRING_AS_STRING,
    DBUS_TYPE_UINT32_AS_STRING,
    bus_driver_handle_get_connection_unix_process_id },
{ "GetAdtAuditSessionData",
    DBUS_TYPE_STRING_AS_STRING,
    DBUS_TYPE_ARRAY_AS_STRING DBUS_TYPE_BYTE_AS_STRING,
    bus_driver_handle_get_adt_audit_session_data },
{ "GetConnectionSELinuxSecurityContext",
    DBUS_TYPE_STRING_AS_STRING,
    DBUS_TYPE_ARRAY_AS_STRING DBUS_TYPE_BYTE_AS_STRING,
    bus_driver_handle_get_connection_selinux_security_context },
{ "ReloadConfig",
    "",
    "",
    bus_driver_handle_reload_config },
{ "GetId",
    "",
    DBUS_TYPE_STRING_AS_STRING,
    bus_driver_handle_get_id },
{ NULL, NULL, NULL, NULL }
};

static dbus_bool_t bus_driver_handle_introspect (DBusConnection *,
    BusTransaction *, DBusMessage *, DBusError *);

```

```

static const MessageHandler introspectable_message_handlers[] = {
    { "Introspect", "", DBUS_TYPE_STRING_AS_STRING,
bus_driver_handle_introspect },
    { NULL, NULL, NULL, NULL }
};

#ifdef DBUS_ENABLE_STATS
static const MessageHandler stats_message_handlers[] = {
    { "GetStats", "", "a{sv}", bus_stats_handle_get_stats },
    { "GetConnectionStats", "s", "a{sv}",
bus_stats_handle_get_connection_stats },
    { NULL, NULL, NULL, NULL }
};
#endif

typedef struct {
    const char *name;
    const MessageHandler *message_handlers;
    const char *extra_introspection;
} InterfaceHandler;

/* These should ideally be sorted by frequency of use, although it
 * probably doesn't matter with this few items */
static InterfaceHandler interface_handlers[] = {
    { DBUS_INTERFACE_DBUS, dbus_message_handlers,
        "    <signal name=\"NameOwnerChanged\">\n"
        "        <arg type=\"s\"/>\n"
        "        <arg type=\"s\"/>\n"
        "        <arg type=\"s\"/>\n"
        "    </signal>\n"
        "    <signal name=\"NameLost\">\n"
        "        <arg type=\"s\"/>\n"
        "    </signal>\n"
        "    <signal name=\"NameAcquired\">\n"
        "        <arg type=\"s\"/>\n"
        "    </signal>\n" },
    { DBUS_INTERFACE_INTROSPECTABLE, introspectable_message_handlers,
NULL },
#ifdef DBUS_ENABLE_STATS
    { BUS_INTERFACE_STATS, stats_message_handlers, NULL },
#endif
    { NULL, NULL, NULL }
};

static dbus_bool_t
write_args_for_direction (DBusString *xml,
                        const char *signature,
                        dbus_bool_t in)
{
    DBusTypeReader typereader;
    DBusString sigstr;

```

```

int current_type;

_dbus_string_init_const (&sigstr, signature);
_dbus_type_reader_init_types_only (&typereader, &sigstr, 0);

while ((current_type = _dbus_type_reader_get_current_type
(&typereader)) != DBUS_TYPE_INVALID)
{
    const DBusString *subsig;
    int start, len;

    _dbus_type_reader_get_signature (&typereader, &subsig, &start,
&len);
    if (!_dbus_string_append_printf (xml, "          <arg
direction=\"%s\" type=\"%",
                                in ? "in" : "out"))
        goto oom;
    if (!_dbus_string_append_len (xml,
                                _dbus_string_get_const_data (subsig) + start,
                                len))
        goto oom;
    if (!_dbus_string_append (xml, "\"/>\n"))
        goto oom;

    _dbus_type_reader_next (&typereader);
}
return TRUE;
oom:
return FALSE;
}

dbus_bool_t
bus_driver_generate_introspect_string (DBusString *xml)
{
    const InterfaceHandler *ih;
    const MessageHandler *mh;

    if (!_dbus_string_append (xml,
DBUS_INTROSPECT_1_0_XML_DOCTYPE_DECL_NODE))
        return FALSE;
    if (!_dbus_string_append (xml, "<node>\n"))
        return FALSE;

    for (ih = interface_handlers; ih->name != NULL; ih++)
    {
        if (!_dbus_string_append_printf (xml, " <interface
name=\"%s\">\n",
                                        ih->name))
            return FALSE;

        for (mh = ih->message_handlers; mh->name != NULL; mh++)
            {

```

```

        if (!_dbus_string_append_printf (xml, "    <method
name=\"%s\">\n",
                                        mh->name))
            return FALSE;

        if (!write_args_for_direction (xml, mh->in_args, TRUE))
            return FALSE;

        if (!write_args_for_direction (xml, mh->out_args, FALSE))
            return FALSE;

        if (!_dbus_string_append (xml, "    </method>\n"))
            return FALSE;
    }

    if (ih->extra_introspection != NULL &&
        !_dbus_string_append (xml, ih->extra_introspection))
        return FALSE;

    if (!_dbus_string_append (xml, " </interface>\n"))
        return FALSE;
}

if (!_dbus_string_append (xml, "</node>\n"))
    return FALSE;

return TRUE;
}

static dbus_bool_t
bus_driver_handle_introspect (DBusConnection *connection,
                             BusTransaction *transaction,
                             DBusMessage *message,
                             DBusError *error)
{
    DBusString xml;
    DBusMessage *reply;
    const char *v_STRING;

    _dbus_verbose ("Introspect() on bus driver\n");

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    reply = NULL;

    if (! dbus_message_get_args (message, error,
                                DBUS_TYPE_INVALID))
    {
        _DBUS_ASSERT_ERROR_IS_SET (error);
        return FALSE;
    }
}

```

```

if (!_dbus_string_init (&xml))
{
    BUS_SET_OOM (error);
    return FALSE;
}

if (!bus_driver_generate_introspect_string (&xml))
    goto oom;

v_STRING = _dbus_string_get_const_data (&xml);

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    goto oom;

if (! dbus_message_append_args (reply,
                                DBUS_TYPE_STRING, &v_STRING,
                                DBUS_TYPE_INVALID))

    goto oom;

if (! bus_transaction_send_from_driver (transaction, connection,
reply))
    goto oom;

dbus_message_unref (reply);
_dbus_string_free (&xml);

return TRUE;

oom:
BUS_SET_OOM (error);

if (reply)
    dbus_message_unref (reply);

_dbus_string_free (&xml);

return FALSE;
}

dbus_bool_t
bus_driver_handle_message (DBusConnection *connection,
                           BusTransaction *transaction,
                           DBusMessage *message,
                           DBusError *error)
{
    const char *name, *interface;
    const InterfaceHandler *ih;
    const MessageHandler *mh;
    dbus_bool_t found_interface = FALSE;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

```

```

    if (dbus_message_is_signal (message,
"org.freedesktop.systemd1.Activator", "ActivationFailure"))
    {
        BusContext *context;

        context = bus_connection_get_context (connection);
        return
dbus_activation_systemd_failure(bus_context_get_activation(context),
message);
    }

    if (dbus_message_get_type (message) !=
DBUS_MESSAGE_TYPE_METHOD_CALL)
    {
        _dbus_verbose ("Driver got a non-method-call message,
ignoring\n");
        return TRUE; /* we just ignore this */
    }

    /* may be NULL, which means "any interface will do" */
    interface = dbus_message_get_interface (message);

    _dbus_assert (dbus_message_get_member (message) != NULL);

    name = dbus_message_get_member (message);

    _dbus_verbose ("Driver got a method call: %s\n", name);

    /* security checks should have kept this from getting here */
#ifdef DBUS_DISABLE_ASSERT
    {
        const char *sender = dbus_message_get_sender (message);

        _dbus_assert (sender != NULL || strcmp (name, "Hello") == 0);
    }
#endif

    for (ih = interface_handlers; ih->name != NULL; ih++)
    {
        if (interface != NULL && strcmp (interface, ih->name) != 0)
            continue;

        found_interface = TRUE;

        for (mh = ih->message_handlers; mh->name != NULL; mh++)
        {
            if (strcmp (mh->name, name) != 0)
                continue;

            _dbus_verbose ("Found driver handler for %s\n", name);

```



```

        if (!dbus_message_has_signature (message, mh->in_args))
        {
            _DBUS_ASSERT_ERROR_IS_CLEAR (error);
            _dbus_verbose ("Call to %s has wrong args (%s, expected
%s)\n",
                        name, dbus_message_get_signature
(message),
                        mh->in_args);

            dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                "Call to %s has wrong args (%s, expected
%s)\n",
                name, dbus_message_get_signature
(message),
                mh->in_args);
            _DBUS_ASSERT_ERROR_IS_SET (error);
            return FALSE;
        }

        if ((* mh->handler) (connection, transaction, message,
error))
        {
            _DBUS_ASSERT_ERROR_IS_CLEAR (error);
            _dbus_verbose ("Driver handler succeeded\n");
            return TRUE;
        }
        else
        {
            _DBUS_ASSERT_ERROR_IS_SET (error);
            _dbus_verbose ("Driver handler returned failure\n");
            return FALSE;
        }
    }

    _dbus_verbose ("No driver handler for message \"%s\"\n",
        name);

    dbus_set_error (error, found_interface ? DBUS_ERROR_UNKNOWN_METHOD :
DBUS_ERROR_UNKNOWN_INTERFACE,
        "%s does not understand message %s",
        DBUS_SERVICE_DBUS, name);

    return FALSE;
}

void
bus_driver_remove_connection (DBusConnection *connection)
{
    /* FIXME 1.0 Does nothing for now, should unregister the connection
    * with the bus driver.
    */
}

```



```

                                                                 DBusError      *error);
dbus_bool_t bus_driver_send_service_acquired (DBusConnection
*connection,
                                                                 const char
*service_name,
                                                                 BusTransaction
*transaction,
                                                                 DBusError      *error);
dbus_bool_t bus_driver_send_service_owner_changed (const char
*service_name,
                                                                 const char      *old_owner,
                                                                 const char      *new_owner,
                                                                 BusTransaction *transaction,
                                                                 DBusError      *error);
dbus_bool_t bus_driver_generate_introspect_string (DBusString *xml);

```

```
#endif /* BUS_DRIVER_H */
```

```
File = emptiness.message
```

```
# Empty arrays and strings
```

```

VALID_HEADER method_call
REQUIRED_FIELDS
ALIGN 8
END_LENGTH Header
START_LENGTH Body
TYPE STRING
INT32 0
BYTE 0 # Strings need to be NULL-terminated
TYPE ARRAY
TYPE BOOLEAN
INT32 0
TYPE ARRAY
TYPE INT32
INT32 0
TYPE ARRAY
TYPE UINT32
INT32 0
TYPE ARRAY
TYPE DOUBLE
INT32 0
TYPE ARRAY
TYPE BYTE
INT32 0
TYPE ARRAY
TYPE STRING
INT32 0

```

```

TYPE DICT
INT32 0

# A dict with empty arrays
TYPE DICT
LENGTH Dict
START_LENGTH Dict
STRING 'boolean_array'
TYPE ARRAY
TYPE BOOLEAN
INT32 0
STRING 'int32_array'
TYPE ARRAY
TYPE INT32
INT32 0
STRING 'uint32_array'
TYPE ARRAY
TYPE UINT32
INT32 0
STRING 'double_array'
TYPE ARRAY
TYPE DOUBLE
INT32 0
STRING 'byte_array'
TYPE ARRAY
TYPE BYTE
INT32 0
STRING 'string_array' }
TYPE ARRAY
TYPE STRING
INT32 0
END_LENGTH Dict

END_LENGTH Body

```

File = entities-1.conf

```

<!-- This config file contains XML entities -->
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <user>mybususer</user>
  <listen>unix:path=/foo/&lt;bar&gt;</listen>
  <listen>tcp:port=1234</listen>
  <includedir>basic.&#100;</includedir>
  <servicedir>/usr/&amp;share/foo</servicedir>
  <include ignore_missing="ye&#115;">nonexistent.conf&#110;</include>
  <policy context="&#100;efault">

```

```
    <allow user="*" />
  </policy>
</busconfig>
```

File = entities-2.conf

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
<include>entities-1.conf</include>
</busconfig>
```

File = entities.conf

```
<!-- This config file contains XML entities -->
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <user>mybususer</user>
  <listen>unix:path=/foo/&lt;bar&gt;</listen>
  <listen>tcp:port=1234</listen>
  <includedir>basic.&#100;</includedir>
  <servicedir>/usr/&amp;share/foo</servicedir>
  <include ignore_missing="ye&#115;">nonexistent.conf&#110;</include>
  <policy context="&#100;efault">
    <allow user="*" />
  </policy>
</busconfig>
```

File = error-mapping.c

```
/* Feature test for exported object methods raising errors
 *
 * Copyright © 2006-2010 Red Hat, Inc.
 * Copyright © 2006-2010 Collabora Ltd.
 * Copyright © 2006-2011 Nokia Corporation
 * Copyright © 2006 Steve FrÃ©cinaux
 *
 * Licensed under the Academic Free License version 2.1
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 * the Free Software Foundation; either version 2 of the License, or
```

```

* (at your option) any later version.
*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston,
* MA 02110-1301 USA
*/

#include <config.h>

#include <glib.h>
#include <gio/gio.h>

#include <dbus/dbus.h>
#include <dbus/dbus-glib.h>
#include <dbus/dbus-glib-lowlevel.h>

#include <string.h>

#include "my-object.h"
#include "test-service-glib-bindings.h"

/* my-object wants this to exist */
GMainLoop *loop = NULL;

typedef struct {
    GError *error;
    gchar *error_name;
    DBusGConnection *conn;
    DBusGProxy *proxy;
    GObject *object;
} Fixture;

#define assert_contains(haystack, needle) \
    assert_contains_impl (__FILE__, __LINE__, G_STRINGIFY (haystack), \
        haystack, \
            G_STRINGIFY (needle), needle)

static void
assert_contains_impl (const gchar *file,
    gint line,
    const gchar *haystack_desc,
    const gchar *haystack,
    const gchar *needle_desc,
    const gchar *needle)
{
    if (G_UNLIKELY (strstr (haystack, needle) == NULL))

```

```

    {
        g_error ("%s:%d: assertion failed: (%s) contains (%s): "
                "values are \"%s\", \"%s\"",
                file, line, haystack_desc, needle_desc, haystack, needle);
    }
}

static void
setup (Fixture *f,
      gpointer context)
{
    static gsize once = 0;

    dbus_g_type_specialized_init ();

    if (g_once_init_enter (&once))
    {
        /* this may only be called once */
        dbus_g_error_domain_register (MY_OBJECT_ERROR, NULL,
MY_TYPE_ERROR);

        g_once_init_leave (&once, 1);
    }

    f->conn = dbus_g_bus_get_private (DBUS_BUS_SESSION, NULL, &f-
>error);
    g_assert_no_error (f->error);
    g_assert (f->conn != NULL);

    f->object = g_object_new (MY_TYPE_OBJECT, NULL);
    g_assert (MY_IS_OBJECT (f->object));
    dbus_g_connection_register_g_object (f->conn,
"/com/example/Test/Object",
    f->object);

    f->proxy = dbus_g_proxy_new_for_name (f->conn,
    dbus_bus_get_unique_name (dbus_g_connection_get_connection (f-
>conn)),
    "/com/example/Test/Object",
    "org.freedesktop.DBus.GLib.Tests.MyObject");
    g_assert (f->proxy != NULL);
}

static void
throw_error_cb (DBusGProxy *proxy,
               GError *error,
               gpointer user_data)
{
    Fixture *f = user_data;

    g_assert (error != NULL);
    g_clear_error (&f->error);
}

```

```

    g_free (f->error_name);
    f->error = g_error_copy (error);

    if (g_error_matches (error, DBUS_GERROR,
        DBUS_GERROR_REMOTE_EXCEPTION))
        f->error_name = g_strdup (dbus_g_error_get_name (error));
    else
        f->error_name = NULL;
}

static void
test_async (Fixture *f,
            gconstpointer context)
{
    /* This is equivalent to test_simple but uses a method that's
    implemented
    * async at the service side - it's a different calling convention
    for the
    * service, but is indistinguishable here. */

    my_object_save_error ((MyObject *) f->object, MY_OBJECT_ERROR,
        MY_OBJECT_ERROR_FOO, "<foo>");

    if
    (!org_freedesktop_DBus_GLib_Tests_MyObject_async_throw_error_async (
        f->proxy, throw_error_cb, f))
        g_error ("Failed to start async AsyncThrowError call");

    while (f->error == NULL)
        g_main_context_iteration (NULL, TRUE);

    g_assert_error (f->error, DBUS_GERROR,
        DBUS_GERROR_REMOTE_EXCEPTION);
    g_assert_cmpstr (f->error_name, ==,
        "org.freedesktop.DBus.GLib.Tests.MyObject.Foo");
    assert_contains (f->error->message, "<foo>");
}

static void
test_simple (Fixture *f,
            gconstpointer context)
{
    my_object_save_error ((MyObject *) f->object, MY_OBJECT_ERROR,
        MY_OBJECT_ERROR_FOO, "<foo>");

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_throw_error_async (
        f->proxy, throw_error_cb, f))
        g_error ("Failed to start async ThrowError call");

    while (f->error == NULL)
        g_main_context_iteration (NULL, TRUE);
}

```



```

    g_assert_error (f->error, DBUS_GERROR,
DBUS_GERROR_REMOTE_EXCEPTION);
    g_assert_cmpstr (f->error_name, ==,
        "org.freedesktop.DBus.GLib.Tests.MyObject.Foo");
    assert_contains (f->error->message, "<foo>");
}

static void
test_builtin (Fixture *f,
              gconstpointer context)
{
    g_test_bug ("16776");

    my_object_save_error ((MyObject *) f->object, DBUS_GERROR,
        DBUS_GERROR_NOT_SUPPORTED, "<not supported>");

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_throw_error_async (
        f->proxy, throw_error_cb, f))
        g_error ("Failed to start async ThrowError call");

    while (f->error == NULL)
        g_main_context_iteration (NULL, TRUE);

    g_assert_error (f->error, DBUS_GERROR, DBUS_GERROR_NOT_SUPPORTED);
    assert_contains (f->error->message, "<not supported>");
}

static void
test_multi_word (Fixture *f,
                 gconstpointer context)
{
    /* no bug#, but this is a regression test for commit 3d69cfeab177e
    */

    my_object_save_error ((MyObject *) f->object, MY_OBJECT_ERROR,
        MY_OBJECT_ERROR_MULTI_WORD, "this method's error has a hyphen");

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_throw_error_async (
        f->proxy, throw_error_cb, f))
        g_error ("Failed to start async ThrowError call");

    while (f->error == NULL)
        g_main_context_iteration (NULL, TRUE);

    g_assert_error (f->error, DBUS_GERROR,
DBUS_GERROR_REMOTE_EXCEPTION);
    g_assert_cmpstr (f->error_name, ==,
        "org.freedesktop.DBus.GLib.Tests.MyObject.MultiWord");
    assert_contains (f->error->message, "this method's error has a
hyphen");
}

```

```

static void
test_underscore (Fixture *f,
                 gconstpointer context)
{
    g_test_bug ("30274");

    my_object_save_error ((MyObject *) f->object, MY_OBJECT_ERROR,
                          MY_OBJECT_ERROR_UNDER_SCORE, "this method's error has an
underscore");

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_throw_error_async (
        f->proxy, throw_error_cb, f))
        g_error ("Failed to start async ThrowError call");

    while (f->error == NULL)
        g_main_context_iteration (NULL, TRUE);

    g_assert_error (f->error, DBUS_GERROR,
                   DBUS_GERROR_REMOTE_EXCEPTION);
    g_assert_cmpstr (f->error_name, ==,
                    "org.freedesktop.DBus.GLib.Tests.MyObject.Under_score");
    assert_contains (f->error->message, "this method's error has an
underscore");
}

```

```

static void
test_unregistered (Fixture *f,
                  gconstpointer context)
{
    g_test_bug ("27799");

    my_object_save_error ((MyObject *) f->object, G_IO_ERROR,
                          G_IO_ERROR_NOT_INITIALIZED,
                          "dbus-glib does not know about this error domain");

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_throw_error_async (
        f->proxy, throw_error_cb, f))
        g_error ("Failed to start async ThrowError call");

    while (f->error == NULL)
        g_main_context_iteration (NULL, TRUE);

    g_assert_error (f->error, DBUS_GERROR,
                   DBUS_GERROR_REMOTE_EXCEPTION);
    assert_contains (f->error->message,
                    "dbus-glib does not know about this error domain");
}

```

```

static void
teardown (Fixture *f,
         gconstpointer context G_GNUC_UNUSED)
{

```

```

g_free (f->error_name);

g_clear_error (&f->error);

if (f->proxy != NULL)
{
    g_object_unref (f->proxy);
    f->proxy = NULL;
}

if (f->object != NULL)
{
    g_object_unref (f->object);
    f->object = NULL;
}

if (f->conn != NULL)
{
    dbus_connection_close (dbus_g_connection_get_connection (f-
>conn));
    dbus_g_connection_unref (f->conn);
    f->conn = NULL;
}
}

int
main (int argc,
      char **argv)
{
    g_test_init (&argc, &argv, NULL);
    g_test_bug_base ("https://bugs.freedesktop.org/show_bug.cgi?id=");

    g_type_init ();

    g_test_add ("/error-mapping/async", Fixture, NULL, setup,
test_async,
    teardown);
    g_test_add ("/error-mapping/builtin", Fixture, NULL, setup,
test_builtin,
    teardown);
    g_test_add ("/error-mapping/multi-word", Fixture, NULL, setup,
test_multi_word, teardown);
    g_test_add ("/error-mapping/simple", Fixture, NULL, setup,
test_simple,
    teardown);
    g_test_add ("/error-mapping/underscore", Fixture, NULL, setup,
test_underscore, teardown);
    g_test_add ("/error-mapping/unregistered", Fixture, NULL, setup,
test_unregistered, teardown);

    return g_test_run ();
}

```

```

File = example-client.c

#include <config.h>

#include <dbus/dbus-glib.h>
#include <stdio.h>
#include <stdlib.h>

static void lose (const char *fmt, ...) G_GNUC_NORETURN G_GNUC_PRINTF
(1, 2);
static void lose_gerror (const char *prefix, GError *error)
G_GNUC_NORETURN;

static void
lose (const char *str, ...)
{
    va_list args;

    va_start (args, str);

    vfprintf (stderr, str, args);
    fputc ('\n', stderr);

    va_end (args);

    exit (1);
}

static void
lose_gerror (const char *prefix, GError *error)
{
    lose ("%s: %s", prefix, error->message);
}

static void
print_hash_value (gpointer key, gpointer val, gpointer data)
{
    printf ("%s -> %s\n", (char *) key, (char *) val);
}

int
main (int argc, char **argv)
{
    DBusGConnection *bus;
    DBusGProxy *remote_object;
    DBusGProxy *remote_object_introspectable;
    GError *error = NULL;
    char **reply_list;
    char **reply_ptr;

```

```

GValueArray *hello_reply_struct;
GHashTable *hello_reply_dict;
char *introspect_data;
guint i;

g_type_init ();

{
    GLogLevelFlags fatal_mask;

    fatal_mask = g_log_set_always_fatal (G_LOG_FATAL_MASK);
    fatal_mask |= G_LOG_LEVEL_WARNING | G_LOG_LEVEL_CRITICAL;
    g_log_set_always_fatal (fatal_mask);
}

bus = dbus_g_bus_get (DBUS_BUS_SESSION, &error);
if (!bus)
    lose_gerror ("Couldn't connect to session bus", error);

remote_object = dbus_g_proxy_new_for_name (bus,
                                           "org.designfu.SampleService",
                                           "/SomeObject",
                                           "org.designfu.SampleInterface");

if (!dbus_g_proxy_call (remote_object, "HelloWorld", &error,
                        G_TYPE_STRING, "Hello from example-client.c!",
G_TYPE_INVALID,
                        G_TYPE_STRV, &reply_list, G_TYPE_INVALID))
    lose_gerror ("Failed to complete HelloWorld", error);

if (!dbus_g_proxy_call (remote_object, "GetTuple", &error,
                        G_TYPE_INVALID,
                        G_TYPE_VALUE_ARRAY, &hello_reply_struct,
G_TYPE_INVALID))
    lose_gerror ("Failed to complete GetTuple", error);

if (!dbus_g_proxy_call (remote_object, "GetDict", &error,
                        G_TYPE_INVALID,
                        DBUS_TYPE_G_STRING_STRING_HASHTABLE,
&hello_reply_dict, G_TYPE_INVALID))
    lose_gerror ("Failed to complete GetDict", error);

printf ("reply_list: ");
for (reply_ptr = reply_list; *reply_ptr; reply_ptr++)
    printf ("\\"%s\\" ", *reply_ptr);
printf ("\n");
g_strfreev (reply_list);

for (i = 0; i < hello_reply_struct->n_values; i++)
    {
        GValue strval = { 0, };

```

```

        g_value_init (&strval, G_TYPE_STRING);
        if (!g_value_transform (g_value_array_get_nth
(hello_reply_struct, i), &strval))
            g_value_set_static_string (&strval, "(couldn't transform to
string)");
        g_print ("%s: %s\n", g_type_name (G_VALUE_TYPE
(g_value_array_get_nth (hello_reply_struct, i))),
                g_value_get_string (&strval));
    }
    g_value_array_free (hello_reply_struct);
    printf ("\n");

    g_hash_table_foreach (hello_reply_dict, print_hash_value, NULL);
    g_hash_table_destroy (hello_reply_dict);

    remote_object_introspectable = dbus_g_proxy_new_for_name (bus,
"org.designfu.SampleService",
                                                    "/SomeObject",
"org.freedesktop.DBus.Introspectable");
    if (!dbus_g_proxy_call (remote_object_introspectable, "Introspect",
&error,
                            G_TYPE_INVALID,
                            G_TYPE_STRING, &introspect_data, G_TYPE_INVALID))
        lose_gerror ("Failed to complete Introspect", error);
    printf ("%s", introspect_data);
    g_free (introspect_data);

    g_object_unref (G_OBJECT (remote_object_introspectable));
    g_object_unref (G_OBJECT (remote_object));

    exit(0);
}

```

File = example-service.c

```
#include <config.h>
```

```
#include <dbus/dbus-glib.h>
```

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
static void lose (const char *fmt, ...) G_GNUC_NORETURN G_GNUC_PRINTF
(1, 2);
```

```
static void lose_gerror (const char *prefix, GError *error)
G_GNUC_NORETURN;
```

```
static void
```

```

lose (const char *str, ...)
{
    va_list args;

    va_start (args, str);

    vfprintf (stderr, str, args);
    fputc ('\n', stderr);

    va_end (args);

    exit (1);
}

static void
lose_gerror (const char *prefix, GError *error)
{
    lose ("%s: %s", prefix, error->message);
}

typedef struct SomeObject SomeObject;
typedef struct SomeObjectClass SomeObjectClass;

GType some_object_get_type (void);

struct SomeObject
{
    GObject parent;
};

struct SomeObjectClass
{
    GObjectClass parent;
};

#define SOME_TYPE_OBJECT (some_object_get_type ())
#define SOME_OBJECT(object) (G_TYPE_CHECK_INSTANCE_CAST
((object), SOME_TYPE_OBJECT, SomeObject))
#define SOME_OBJECT_CLASS(klass) (G_TYPE_CHECK_CLASS_CAST
((klass), SOME_TYPE_OBJECT, SomeObjectClass))
#define SOME_IS_OBJECT(object) (G_TYPE_CHECK_INSTANCE_TYPE
((object), SOME_TYPE_OBJECT))
#define SOME_IS_OBJECT_CLASS(klass) (G_TYPE_CHECK_CLASS_TYPE
((klass), SOME_TYPE_OBJECT))
#define SOME_OBJECT_GET_CLASS(obj) (G_TYPE_INSTANCE_GET_CLASS
((obj), SOME_TYPE_OBJECT, SomeObjectClass))

G_DEFINE_TYPE(SomeObject, some_object, G_TYPE_OBJECT)

gboolean some_object_hello_world (SomeObject *obj, const char
*hello_message, char ***ret, GError **error);

```

```

gboolean some_object_get_tuple (SomeObject *obj, GValueArray **ret,
GError **error);
gboolean some_object_get_dict (SomeObject *obj, GHashTable **ret,
GError **error);

#include "example-service-glue.h"

static void
some_object_init (SomeObject *obj)
{
}

static void
some_object_class_init (SomeObjectClass *klass)
{
}

gboolean
some_object_hello_world (SomeObject *obj, const char *hello_message,
char ***ret, GError **error)
{
    printf ("%s\n", hello_message);
    *ret = g_new (char *, 3);
    (*ret)[0] = g_strdup ("Hello");
    (*ret)[1] = g_strdup (" from example-service.c");
    (*ret)[2] = NULL;

    return TRUE;
}

gboolean
some_object_get_tuple (SomeObject *obj, GValueArray **ret, GError
**error)
{
    *ret = g_value_array_new (6);
    g_value_array_prepend (*ret, NULL);
    g_value_init (g_value_array_get_nth (*ret, 0), G_TYPE_STRING);
    g_value_set_string (g_value_array_get_nth (*ret, 0), "hello");
    g_value_array_prepend (*ret, NULL);
    g_value_init (g_value_array_get_nth (*ret, 0), G_TYPE_UINT);
    g_value_set_uint (g_value_array_get_nth (*ret, 0), 42);

    return TRUE;
}

gboolean
some_object_get_dict (SomeObject *obj, GHashTable **ret, GError
**error)
{
    *ret = g_hash_table_new (g_str_hash, g_str_equal);
    g_hash_table_insert (*ret, "first", "Hello Dict");
    g_hash_table_insert (*ret, "second", " from example-service.c");
}

```



```

    return TRUE;
}

int
main (int argc, char **argv)
{
    DBusGConnection *bus;
    DBusGProxy *bus_proxy;
    GError *error = NULL;
    SomeObject *obj;
    GMainLoop *mainloop;
    guint request_name_result;

    g_type_init ();

    {
        GLogLevelFlags fatal_mask;

        fatal_mask = g_log_set_always_fatal (G_LOG_FATAL_MASK);
        fatal_mask |= G_LOG_LEVEL_WARNING | G_LOG_LEVEL_CRITICAL;
        g_log_set_always_fatal (fatal_mask);
    }

    dbus_g_object_type_install_info (SOME_TYPE_OBJECT,
&dbus_glib_some_object_object_info);

    mainloop = g_main_loop_new (NULL, FALSE);

    bus = dbus_g_bus_get (DBUS_BUS_SESSION, &error);
    if (!bus)
        lose_gerror ("Couldn't connect to session bus", error);

    bus_proxy = dbus_g_proxy_new_for_name (bus, "org.freedesktop.DBus",
"/org/freedesktop/DBus",
"org.freedesktop.DBus");

    if (!dbus_g_proxy_call (bus_proxy, "RequestName", &error,
G_TYPE_STRING, "org.designfu.SampleService",
G_TYPE_UINT, 0,
G_TYPE_INVALID,
G_TYPE_UINT, &request_name_result,
G_TYPE_INVALID))
        lose_gerror ("Failed to acquire org.designfu.SampleService",
error);

    obj = g_object_new (SOME_TYPE_OBJECT, NULL);

    dbus_g_connection_register_g_object (bus, "/SomeObject", G_OBJECT
(obj));

    printf ("service running\n");
}

```

```
g_main_loop_run (mainloop);  
  
exit (0);  
}
```

File = example-service.xml

```
<?xml version="1.0" encoding="UTF-8" ?>  
  
<node name="/">  
  <interface name="org.designfu.SampleInterface">  
    <method name="HelloWorld">  
      <arg type="s"/>  
      <arg type="as" direction="out"/>  
    </method>  
  
    <method name="GetTuple">  
      <arg type="(ss)" direction="out" />  
    </method>  
  
    <method name="GetDict">  
      <arg type="a{ss}" direction="out"/>  
    </method>  
  
  </interface>  
</node>
```

File = example-signal-emitter.c

```
#include <config.h>  
  
#include <dbus/dbus-glib.h>  
#include <stdio.h>  
#include <stdlib.h>  
  
static void lose (const char *fmt, ...) G_GNUC_NORETURN G_GNUC_PRINTF  
(1, 2);  
static void lose_gerror (const char *prefix, GError *error)  
G_GNUC_NORETURN;  
  
static void  
lose (const char *str, ...)  
{  
  va_list args;  
  
  va_start (args, str);  
  
  vfprintf (stderr, str, args);
```

```

    fputc ('\n', stderr);

    va_end (args);

    exit (1);
}

static void
lose_gerror (const char *prefix, GError *error)
{
    lose ("%s: %s", prefix, error->message);
}

typedef struct TestObject TestObject;
typedef struct TestObjectClass TestObjectClass;

GType test_object_get_type (void);

struct TestObject
{
    GObject parent;
};

struct TestObjectClass
{
    GObjectClass parent;
};

enum
{
    HELLO_SIGNAL,
    LAST_SIGNAL
};

static guint signals[LAST_SIGNAL] = { 0 };

#define TEST_TYPE_OBJECT          (test_object_get_type ())
#define TEST_OBJECT(object)      (G_TYPE_CHECK_INSTANCE_CAST
((object), TEST_TYPE_OBJECT, TestObject))
#define TEST_OBJECT_CLASS(klass) (G_TYPE_CHECK_CLASS_CAST
((klass), TEST_TYPE_OBJECT, TestObjectClass))
#define TEST_IS_OBJECT(object)   (G_TYPE_CHECK_INSTANCE_TYPE
((object), TEST_TYPE_OBJECT))
#define TEST_IS_OBJECT_CLASS(klass) (G_TYPE_CHECK_CLASS_TYPE
((klass), TEST_TYPE_OBJECT))
#define TEST_OBJECT_GET_CLASS(obj) (G_TYPE_INSTANCE_GET_CLASS
((obj), TEST_TYPE_OBJECT, TestObjectClass))

G_DEFINE_TYPE(TestObject, test_object, G_TYPE_OBJECT)

gboolean test_object_emit_hello_signal (TestObject *obj, GError
**error);

```



```

        "org.freedesktop.DBus");

if (!dbus_g_proxy_call (bus_proxy, "RequestName", &error,
                        G_TYPE_STRING, "org.designfu.TestService",
                        G_TYPE_UINT, 0,
                        G_TYPE_INVALID,
                        G_TYPE_UINT, &request_name_result,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to acquire org.designfu.TestService", error);

obj = g_object_new (TEST_TYPE_OBJECT, NULL);

dbus_g_connection_register_g_object (bus,
"/org/designfu/TestService/object", G_OBJECT (obj));

printf ("test service running\n");

g_main_loop_run (mainloop);

exit (0);
}

```

File = example-signal-emitter.xml

```

<?xml version="1.0" encoding="UTF-8" ?>

<node name="/">
  <interface name="org.designfu.TestService">

    <method name="emitHelloSignal">
      </method>

    <!-- Mark the signal as exported -->
    <signal name="HelloSignal"/>

  </interface>
</node>

```

File = example-signal-recipient.c

```

#include <config.h>

#include <dbus/dbus-glib.h>
#include <stdio.h>
#include <stdlib.h>

static void lose (const char *fmt, ...) G_GNUC_NORETURN G_GNUC_PRINTF
(1, 2);

```

```

static void lose_gerror (const char *prefix, GError *error)
G_GNUC_NORETURN;

static void
lose (const char *str, ...)
{
    va_list args;

    va_start (args, str);

    vfprintf (stderr, str, args);
    fputc ('\n', stderr);

    va_end (args);

    exit (1);
}

static void
lose_gerror (const char *prefix, GError *error)
{
    lose ("%s: %s", prefix, error->message);
}

static gboolean
emit_signal (gpointer arg)
{
    DBusGProxy *proxy = arg;

    dbus_g_proxy_call_no_reply (proxy, "emitHelloSignal",
G_TYPE_INVALID);
    return TRUE;
}

static void
hello_signal_handler (DBusGProxy *proxy, const char *hello_string,
gpointer user_data)
{
    printf ("Received signal and it says: %s\n", hello_string);
}

int
main (int argc, char **argv)
{
    DBusGConnection *bus;
    DBusGProxy *remote_object;
    GError *error = NULL;
    GMainLoop *mainloop;

    g_type_init ();

    mainloop = g_main_loop_new (NULL, FALSE);

```

```

bus = dbus_g_bus_get (DBUS_BUS_SESSION, &error);
if (!bus)
    lose_gerror ("Couldn't connect to session bus", error);

/* We use _for_name_owner in order to track this particular service
 * instance, which lets us receive signals.
 */
remote_object = dbus_g_proxy_new_for_name (bus,
                                           "org.designfu.TestService",
                                           "/org/designfu/TestService/object",
                                           "org.designfu.TestService");

if (!remote_object)
    lose_gerror ("Failed to get name owner", error);

/* IMPORTANT:
 *
 * Note because this signal's signature is VOID__STRING, we do not
 * need to register a marshaller, since there is a builtin one.
 * However for other signatures, you must generate a marshaller,
 * then call dbus_g_object_register_marshaller.  It would look like
 * this:
 *
 * dbus_g_object_register_marshaller
(g_cclosure_marshal_VOID__STRING, G_TYPE_NONE, G_TYPE_STRING,
G_TYPE_INVALID);
 *
 */

/* Tell DBus what the type signature of the signal callback is; this
 * allows us to sanity-check incoming messages before invoking the
 * callback.  You need to do this once for each proxy you create,
 * not every time you want to connect to the signal.
 */
dbus_g_proxy_add_signal (remote_object, "HelloSignal",
G_TYPE_STRING, G_TYPE_INVALID);

/* Actually connect to the signal.  Note you can call
 * dbus_g_proxy_connect_signal multiple times for one invocation of
 * dbus_g_proxy_add_signal.
 */
dbus_g_proxy_connect_signal (remote_object, "HelloSignal",
G_CALLBACK (hello_signal_handler),
                        NULL, NULL);

g_timeout_add (2000, emit_signal, remote_object);

g_main_loop_run (mainloop);

exit (0);
}

```

```

File = expirelist.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* expirelist.c List of items that expire
 *
 * Copyright (C) 2003 Red Hat, Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
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 * it under the terms of the GNU General Public License as published
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 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */

#include <config.h>
#include "expirelist.h"
#include "test.h"
#include <dbus/dbus-internals.h>
#include <dbus/dbus-mainloop.h>
#include <dbus/dbus-timeout.h>

struct BusExpireList
{
    DBusList      *items; /**< List of BusExpireItem */
    DBusTimeout   *timeout;
    DBusLoop      *loop;
    BusExpireFunc expire_func;
    void          *data;
    int           expire_after; /**< Expire after milliseconds
(thousandths) */
};

static dbus_bool_t expire_timeout_handler (void *data);

BusExpireList*

```



```

bus_expire_list_new (DBusLoop      *loop,
                    int            expire_after,
                    BusExpireFunc  expire_func,
                    void           *data)
{
    BusExpireList *list;

    list = dbus_new0 (BusExpireList, 1);
    if (list == NULL)
        return NULL;

    list->expire_func = expire_func;
    list->data = data;
    list->loop = loop;
    list->expire_after = expire_after;

    list->timeout = _dbus_timeout_new (100, /* irrelevant */
                                     expire_timeout_handler,
                                     list, NULL);

    if (list->timeout == NULL)
        goto failed;

    _dbus_timeout_set_enabled (list->timeout, FALSE);

    if (!_dbus_loop_add_timeout (list->loop, list->timeout))
        goto failed;

    return list;

failed:
    if (list->timeout)
        _dbus_timeout_unref (list->timeout);

    dbus_free (list);

    return NULL;
}

void
bus_expire_list_free (BusExpireList *list)
{
    _dbus_assert (list->items == NULL);

    _dbus_loop_remove_timeout (list->loop, list->timeout);

    _dbus_timeout_unref (list->timeout);

    dbus_free (list);
}

void
bus_expire_timeout_set_interval (DBusTimeout *timeout,

```

```

                                int          next_interval)
{
    if (next_interval >= 0)
    {
        _dbus_timeout_set_interval (timeout,
                                    next_interval);
        _dbus_timeout_set_enabled (timeout, TRUE);

        _dbus_verbose ("Enabled an expire timeout with interval %d\n",
                        next_interval);
    }
    else if (dbus_timeout_get_enabled (timeout))
    {
        _dbus_timeout_set_enabled (timeout, FALSE);

        _dbus_verbose ("Disabled an expire timeout\n");
    }
    else
        _dbus_verbose ("No need to disable this expire timeout\n");
}

void
bus_expire_list_recheck_immediately (BusExpireList *list)
{
    _dbus_verbose ("setting interval on expire list to 0 for immediate
recheck\n");

    bus_expire_timeout_set_interval (list->timeout, 0);
}

static int
do_expiration_with_monotonic_time (BusExpireList *list,
                                   long            tv_sec,
                                   long            tv_usec)
{
    DBusList *link;
    int next_interval, min_wait_time, items_to_expire;

    next_interval = -1;
    min_wait_time = 3600 * 1000; /* this is reset anyway if used */
    items_to_expire = 0;

    link = _dbus_list_get_first_link (&list->items);
    while (link != NULL)
    {
        DBusList *next = _dbus_list_get_next_link (&list->items, link);
        double elapsed;
        BusExpireItem *item;

        item = link->data;

        elapsed = ELAPSED_MILLISECONDS SINCE (item->added_tv_sec,

```

```

item->added_tv_usec,
tv_sec, tv_usec);

if (((item->added_tv_sec == 0) && (item->added_tv_usec == 0)) ||
    ((list->expire_after > 0) && (elapsed >= (double) list-
>expire_after)))
{
    _dbus_verbose ("Expiring an item %p\n", item);

    /* If the expire function fails, we just end up expiring
    * this item next time we walk through the list. This would
    * be an indeterminate time normally, so we set up the
    * next_interval to be "shortly" (just enough to avoid
    * a busy loop)
    */
    if (!(* list->expire_func) (list, link, list->data))
    {
        next_interval = _dbus_get_oom_wait ();
        break;
    }
}
else if (list->expire_after > 0)
{
    double to_wait;

    items_to_expire = 1;
    to_wait = (double) list->expire_after - elapsed;
    if (min_wait_time > to_wait)
        min_wait_time = to_wait;
}

link = next;
}

if (next_interval < 0 && items_to_expire)
    next_interval = min_wait_time;

return next_interval;
}

static void
bus_expirelist_expire (BusExpireList *list)
{
    int next_interval;

    next_interval = -1;

    if (list->items != NULL)
    {
        long tv_sec, tv_usec;

        _dbus_get_monotonic_time (&tv_sec, &tv_usec);

```

```

        next_interval = do_expiration_with_monotonic_time (list, tv_sec,
tv_usec);
    }

    bus_expire_timeout_set_interval (list->timeout, next_interval);
}

static dbus_bool_t
expire_timeout_handler (void *data)
{
    BusExpireList *list = data;

    _dbus_verbose ("Running\n");

    /* note that this may remove the timeout */
    bus_expirelist_expire (list);

    return TRUE;
}

void
bus_expire_list_remove_link (BusExpireList *list,
                             DBusList      *link)
{
    _dbus_list_remove_link (&list->items, link);
}

dbus_bool_t
bus_expire_list_remove (BusExpireList *list,
                       BusExpireItem *item)
{
    return _dbus_list_remove (&list->items, item);
}

void
bus_expire_list_unlink (BusExpireList *list,
                       DBusList      *link)
{
    _dbus_list_unlink (&list->items, link);
}

dbus_bool_t
bus_expire_list_add (BusExpireList *list,
                    BusExpireItem *item)
{
    dbus_bool_t ret;

    ret = _dbus_list_prepend (&list->items, item);
    if (ret && !dbus_timeout_get_enabled (list->timeout))
        bus_expire_timeout_set_interval (list->timeout, 0);
}

```

```

    return ret;
}

void
bus_expire_list_add_link (BusExpireList *list,
                          DBusList      *link)
{
    _dbus_assert (link->data != NULL);

    _dbus_list_prepend_link (&list->items, link);

    if (!dbus_timeout_get_enabled (list->timeout))
        bus_expire_timeout_set_interval (list->timeout, 0);
}

DBusList*
bus_expire_list_get_first_link (BusExpireList *list)
{
    return _dbus_list_get_first_link (&list->items);
}

DBusList*
bus_expire_list_get_next_link (BusExpireList *list,
                               DBusList      *link)
{
    return _dbus_list_get_next_link (&list->items, link);
}

dbus_bool_t
bus_expire_list_contains_item (BusExpireList *list,
                               BusExpireItem *item)
{
    return _dbus_list_find_last (&list->items, item) != NULL;
}

#ifdef DBUS_BUILD_TESTS

typedef struct
{
    BusExpireItem item;
    int expire_count;
} TestExpireItem;

static dbus_bool_t
test_expire_func (BusExpireList *list,
                 DBusList      *link,
                 void           *data)
{
    TestExpireItem *t;

    t = (TestExpireItem*) link->data;

```

```

    t->expire_count += 1;

    return TRUE;
}

static void
time_add_milliseconds (long *tv_sec,
                      long *tv_usec,
                      int  milliseconds)
{
    *tv_sec = *tv_sec + milliseconds / 1000;
    *tv_usec = *tv_usec + milliseconds * 1000;
    if (*tv_usec >= 1000000)
    {
        *tv_usec -= 1000000;
        *tv_sec += 1;
    }
}

dbus_bool_t
bus_expire_list_test (const DBusString *test_data_dir)
{
    DBusLoop *loop;
    BusExpireList *list;
    long tv_sec, tv_usec;
    long tv_sec_not_expired, tv_usec_not_expired;
    long tv_sec_expired, tv_usec_expired;
    long tv_sec_past, tv_usec_past;
    TestExpireItem *item;
    int next_interval;
    dbus_bool_t result = FALSE;

    loop = _dbus_loop_new ();
    _dbus_assert (loop != NULL);

#define EXPIRE_AFTER 100

    list = bus_expire_list_new (loop, EXPIRE_AFTER,
                               test_expire_func, NULL);
    _dbus_assert (list != NULL);

    _dbus_get_monotonic_time (&tv_sec, &tv_usec);

    tv_sec_not_expired = tv_sec;
    tv_usec_not_expired = tv_usec;
    time_add_milliseconds (&tv_sec_not_expired,
                          &tv_usec_not_expired, EXPIRE_AFTER - 1);

    tv_sec_expired = tv_sec;
    tv_usec_expired = tv_usec;
    time_add_milliseconds (&tv_sec_expired,

```

```

        &tv_usec_expired, EXPIRE_AFTER);

tv_sec_past = tv_sec - 1;
tv_usec_past = tv_usec;

item = dbus_new0 (TestExpireItem, 1);

if (item == NULL)
    goto oom;

item->item.added_tv_sec = tv_sec;
item->item.added_tv_usec = tv_usec;
if (!bus_expire_list_add (list, &item->item))
    _dbus_assert_not_reached ("out of memory");

next_interval =
    do_expiration_with_monotonic_time (list, tv_sec_not_expired,
                                       tv_usec_not_expired);
_dbus_assert (item->expire_count == 0);
_dbus_verbose ("next_interval = %d\n", next_interval);
_dbus_assert (next_interval == 1);

next_interval =
    do_expiration_with_monotonic_time (list, tv_sec_expired,
                                       tv_usec_expired);
_dbus_assert (item->expire_count == 1);
_dbus_verbose ("next_interval = %d\n", next_interval);
_dbus_assert (next_interval == -1);

next_interval =
    do_expiration_with_monotonic_time (list, tv_sec_past,
                                       tv_usec_past);
_dbus_assert (item->expire_count == 1);
_dbus_verbose ("next_interval = %d\n", next_interval);
_dbus_assert (next_interval == 1000 + EXPIRE_AFTER);

bus_expire_list_remove (list, &item->item);
dbus_free (item);

bus_expire_list_free (list);
_dbus_loop_unref (loop);

result = TRUE;

oom:
    return result;
}

#endif /* DBUS_BUILD_TESTS */

```

```

File = expirelist.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* expirelist.h List of stuff that expires
 *
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modify
 * it under the terms of the GNU General Public License as published
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 * (at your option) any later version.
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */

#ifndef BUS_EXPIRE_LIST_H
#define BUS_EXPIRE_LIST_H

#include <dbus/dbus.h>
#include <dbus/dbus-list.h>
#include <dbus/dbus-mainloop.h>

typedef struct BusExpireList BusExpireList;
typedef struct BusExpireItem BusExpireItem;

typedef dbus_bool_t (* BusExpireFunc) (BusExpireList *list,
                                       DBusList *link,
                                       void *data);

/* embed this in a child expire item struct */
struct BusExpireItem
{
    long added_tv_sec; /**< Time we were added (seconds component) */
    long added_tv_usec; /**< Time we were added (microsec component) */
};

```



```

BusExpireList* bus_expire_list_new          (DBusLoop
*loop,                                     int
expire_after,                             BusExpireFunc
expire_func,                               void
*data);
void      bus_expire_list_free              (BusExpireList
*list);
void      bus_expire_list_recheck_immediately (BusExpireList
*list);
void      bus_expire_list_remove_link      (BusExpireList
*list,                                     DBusList
*link);
dbus_bool_t bus_expire_list_remove        (BusExpireList
*list,                                     BusExpireItem
*item);
DBusList* bus_expire_list_get_first_link   (BusExpireList
*list);
DBusList* bus_expire_list_get_next_link    (BusExpireList
*list,                                     DBusList
*link);
dbus_bool_t bus_expire_list_add           (BusExpireList
*list,                                     BusExpireItem
*item);
void      bus_expire_list_add_link        (BusExpireList
*list,                                     DBusList
*link);
dbus_bool_t bus_expire_list_contains_item  (BusExpireList
*list,                                     BusExpireItem
*item);
void      bus_expire_list_unlink         (BusExpireList
*list,                                     DBusList
*link);

/* this macro and function are semi-related utility functions, not
really part of the
* BusExpireList API
*/

#define ELAPSED_MILLISECONDS_SINCE(orig_tv_sec, orig_tv_usec, \
now_tv_sec, now_tv_usec) \
(((double) (now_tv_sec) - (double) (orig_tv_sec)) * 1000.0 + \
((double) (now_tv_usec) - (double) (orig_tv_usec)) / 1000.0)

```

```
void bus_expire_timeout_set_interval (DBusTimeout *timeout,
                                      int          next_interval);
```

```
#endif /* BUS_EXPIRE_LIST_H */
```

```
File = external-failed.auth-script
```

```
## this tests that auth of type EXTERNAL without credentials will fail
```

```
SERVER
NO_CREDENTIALS
## verify that prior to doing anything, we haven't authed as anyone
EXPECT_HAVE_NO_CREDENTIALS
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND REJECTED
EXPECT_STATE WAITING_FOR_INPUT
## verify that we still haven't authed as anyone
EXPECT_HAVE_NO_CREDENTIALS
```

```
File = external-root.auth-script
```

```
## this tests we can auth EXTERNAL as ourselves, with root credentials
```

```
UNIX_ONLY
SERVER
ROOT_CREDENTIALS
## 30 is ASCII '0' in hex
SEND 'AUTH EXTERNAL 30'
EXPECT_COMMAND OK
EXPECT_STATE WAITING_FOR_INPUT
SEND 'BEGIN'
EXPECT_STATE AUTHENTICATED
```

```
File = external-silly.auth-script
```

```
## this tests we can't auth if socket reports silly credentials but we
ask for our own uid
```

```
SERVER
## verify that prior to doing anything, we haven't authed as anyone
EXPECT_HAVE_NO_CREDENTIALS
SILLY_CREDENTIALS
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND REJECTED
EXPECT_STATE WAITING_FOR_INPUT
```

```
## verify that we still haven't authed as anyone
EXPECT_HAVE_NO_CREDENTIALS
```

```
File = external-successful.auth-script
```

```
## this tests a successful auth of type EXTERNAL
```

```
SERVER
## verify that prior to doing anything, we haven't authed as anyone
EXPECT_HAVE_NO_CREDENTIALS
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND OK
EXPECT_STATE WAITING_FOR_INPUT
SEND 'BEGIN'
EXPECT_STATE AUTHENTICATED
## verify that we now have some credentials
EXPECT_HAVE_SOME_CREDENTIALS
```

```
File = extra-bytes.auth-script
```

```
## this tests that we have the expected extra bytes at the end
```

```
SERVER
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND OK
EXPECT_STATE WAITING_FOR_INPUT
SEND 'BEGIN\r\nHello'
EXPECT_STATE AUTHENTICATED_WITH_UNUSED_BYTES
EXPECT_UNUSED 'Hello\r\n'
EXPECT_STATE AUTHENTICATED
```

```
File = fail-after-n-attempts.auth-script
```

```
## this tests that after retrying too often we fail
```

```
SERVER
NO_CREDENTIALS
```

```
# 1
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND REJECTED
EXPECT_STATE WAITING_FOR_INPUT
```

```
# 2
SEND 'AUTH EXTERNAL USERID_HEX'
```

```
EXPECT_COMMAND REJECTED
EXPECT_STATE WAITING_FOR_INPUT
```

```
# 3
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND REJECTED
EXPECT_STATE WAITING_FOR_INPUT
```

```
# 4
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND REJECTED
EXPECT_STATE WAITING_FOR_INPUT
```

```
# 5
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND REJECTED
EXPECT_STATE WAITING_FOR_INPUT
```

```
# 6
SEND 'AUTH EXTERNAL USERID_HEX'
EXPECT_COMMAND REJECTED
EXPECT_STATE NEED_DISCONNECT
```

```
File = fallback.auth-script
```

```
## this tests that a client can fallback to a secondary auth mech
```

```
CLIENT
```

```
## Will try EXTERNAL by default first without first calling AUTH
alone.
```

```
EXPECT_COMMAND AUTH
SEND 'REJECTED EXTERNAL DBUS_COOKIE_SHA1 DBUS_TEST_NONEXISTENT_MECH'
```

```
## And this time we get DBUS_COOKIE_SHA1
```

```
EXPECT_COMMAND AUTH
## of course real DBUS_COOKIE_SHA1 would not send this here...
SEND 'OK 1234deadbeef'
```

```
EXPECT_COMMAND BEGIN
EXPECT_STATE AUTHENTICATED
```

```
File = file-boilerplate.c
```

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* FILENAME BRIEF FILE DESCRIPTION
```

```
*
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#ifndef DBUS_FOO_H
#define DBUS_FOO_H

#endif /* DBUS_FOO_H */
```

```
File = FindDoxygen.cmake
```

```
find_program(DOXYGEN_EXECUTABLE NAMES doxygen DOC "doxygen
executable")
mark_as_advanced(DOXYGEN_EXECUTABLE)
```

```
File = FindGLIB.cmake
```

```
# - Try to find the GLIB library
# Once done this will define
#
# GLIB_FOUND - system has GLIB
# GLIB_INCLUDES - the GLIB include directories
# GLIB_LIBRARIES - The libraries needed to use GLIB
```

```
if (WIN32)
```

```
INCLUDE(MacroGetenvWinPath)
```

```

MACRO_GETENV_WIN_PATH(_program_FILES_DIR PROGRAMFILES)

FIND_PATH(GLIB_INCLUDE_DIR glib.h
  ${_program_FILES_DIR}/glib/include/glib-2.0
)

# search for GLIB in the default install directory for applications
(default of (n)make install)
FIND_LIBRARY(GLIB_LIBRARY NAMES glib-2.0
  PATHS
  ${_program_FILES_DIR}/glib/lib
)

if (GLIB_LIBRARY AND GLIB_INCLUDE_DIR)
  set(GLIB_FOUND TRUE)
  set(CMAKE_INCLUDE_PATH ${CMAKE_INCLUDE_PATH} ${GLIB_INCLUDES})
  set(CMAKE_LIBRARY_PATH ${CMAKE_LIBRARY_PATH} ${GLIB_LIBRARIES})

endif (GLIB_LIBRARY AND GLIB_INCLUDE_DIR)

if (GLIB_FOUND)
  if (NOT GLIB_FIND_QUIETLY)
    message(STATUS "Found GLIB: ${GLIB_LIBRARY}")
  endif (NOT GLIB_FIND_QUIETLY)
else (GLIB_FOUND)
  if (GLIB_FIND_REQUIRED)
    message(FATAL_ERROR "Could NOT find GLIB library")
  endif (GLIB_FIND_REQUIRED)
endif (GLIB_FOUND)

endif (WIN32)

File = FindLibExpat.cmake

# - Try to find LIBEXPAT
# Once done this will define
#
# LIBEXPAT_FOUND - system has LIBEXPAT
# LIBEXPAT_INCLUDE_DIR - the LIBEXPAT include directory
# LIBEXPAT_LIBRARIES - the libraries needed to use LIBEXPAT
# LIBEXPAT_DEFINITIONS - Compiler switches required for using
LIBEXPAT

if (LIBEXPAT_INCLUDE_DIR AND LIBEXPAT_LIBRARIES)

  # in cache already
  SET(LIBEXPAT_FOUND TRUE)

```

```

else (LIBEXPAT_INCLUDE_DIR AND LIBEXPAT_LIBRARIES)

  IF (WIN32)
    file(TO_CMAKE_PATH "$ENV{PROGRAMFILES}" _progFiles)
    find_FILE(LIBEXPAT_DIR expat Source/lib/expat.h
              PATHS
              "${_progFiles}"
            )
    if (LIBEXPAT_DIR)
      set (_LIBEXPATIncDir ${LIBEXPAT_DIR}/Source/lib)
      set (_LIBEXPATLinkDir ${LIBEXPAT_DIR}/libs)
    endif (LIBEXPAT_DIR)
  ELSE (WIN32)
    # use pkg-config to get the directories and then use these
values
    # in the FIND_PATH() and FIND_LIBRARY() calls
    INCLUDE(UsePkgConfig)
    PKGCONFIG(LIBEXPAT-2.0 _LIBEXPATIncDir _LIBEXPATLinkDir
              _LIBEXPATLinkFlags _LiIconvCflags)
    SET(LIBEXPAT_DEFINITIONS ${_LIBEXPATCflags})
  ENDIF (WIN32)

  FIND_PATH(LIBEXPAT_INCLUDE_DIR expat.h
            PATHS
            ${_LIBEXPATIncDir}
            PATH_SUFFIXES LIBEXPAT
          )

  FIND_LIBRARY(LIBEXPAT_LIBRARIES NAMES expat libexpat
              PATHS
              ${_LIBEXPATLinkDir}
            )

  if (LIBEXPAT_INCLUDE_DIR AND LIBEXPAT_LIBRARIES)
    set(LIBEXPAT_FOUND TRUE)
  endif (LIBEXPAT_INCLUDE_DIR AND LIBEXPAT_LIBRARIES)

  if (LIBEXPAT_FOUND)
    if (NOT LIBEXPAT_FIND_QUIETLY)
      message(STATUS "Found libexpat: ${LIBEXPAT_LIBRARIES}")
    endif (NOT LIBEXPAT_FIND_QUIETLY)
  else (LIBEXPAT_FOUND)
    if (LIBEXPAT_FIND_REQUIRED)
      message(SEND_ERROR "Could NOT find libexpat")
    endif (LIBEXPAT_FIND_REQUIRED)
  endif (LIBEXPAT_FOUND)

  MARK_AS_ADVANCED(LIBEXPAT_INCLUDE_DIR LIBEXPAT_LIBRARIES)

endif (LIBEXPAT_INCLUDE_DIR AND LIBEXPAT_LIBRARIES)

```

```

File = FindLibIconv.cmake

# - Try to find LibIconv
# Once done this will define
#
# LIBICONV_FOUND - system has LibIconv
# LIBICONV_INCLUDE_DIR - the LibIconv include directory
# LIBICONV_LIBRARIES - the libraries needed to use LibIconv
# LIBICONV_DEFINITIONS - Compiler switches required for using
LibIconv

if (LIBICONV_INCLUDE_DIR AND LIBICONV_LIBRARIES)

    # in cache already
    SET(LIBICONV_FOUND TRUE)

else (LIBICONV_INCLUDE_DIR AND LIBICONV_LIBRARIES)

    IF (NOT WIN32)
        MESSAGE(FATAL_ERROR "Please set this to the correct values!")
        # use pkg-config to get the directories and then use these
values
        # in the FIND_PATH() and FIND_LIBRARY() calls
        INCLUDE(UsePkgConfig)
        PKGCONFIG(libiconv-1.9 _LibIconvIncDir _LibIconvLinkDir
_LibIconvLinkFlags _LiIconvCflags)
        SET(LIBICONV_DEFINITIONS ${_LibIconvCflags})
    ENDIF (NOT WIN32)

    FIND_PATH(LIBICONV_INCLUDE_DIR iconv.h
        PATHS
        ${_LibIconvIncDir}
        PATH_SUFFIXES libiconv
    )

    FIND_LIBRARY(LIBICONV_LIBRARIES NAMES iconv libiconv
        PATHS
        ${_LibIconvLinkDir}
    )

    if (LIBICONV_INCLUDE_DIR AND LIBICONV_LIBRARIES)
        set(LIBICONV_FOUND TRUE)
    endif (LIBICONV_INCLUDE_DIR AND LIBICONV_LIBRARIES)

    if (LIBICONV_FOUND)
        if (NOT LibIconv_FIND_QUIETLY)
            message(STATUS "Found LibIconv: ${LIBICONV_LIBRARIES}")
        endif (NOT LibIconv_FIND_QUIETLY)
    else (LIBICONV_FOUND)
        if (LibIconv_FIND_REQUIRED)
            message(SEND_ERROR "Could NOT find LibIconv")
        endif (LibIconv_FIND_REQUIRED)
    endif (LIBICONV_FOUND)

```



```

        endif (LibIconv_FIND_REQUIRED)
    endif (LIBICONV_FOUND)

    MARK_AS_ADVANCED(LIBICONV_INCLUDE_DIR LIBICONV_LIBRARIES)

endif (LIBICONV_INCLUDE_DIR AND LIBICONV_LIBRARIES)

File = glib-2.0.m4

# Configure paths for GLIB
# Owen Taylor      1997-2001

dnl AM_PATH_GLIB_2_0([MINIMUM-VERSION, [ACTION-IF-FOUND [, ACTION-IF-
NOT-FOUND [, MODULES]]]])
dnl Test for GLIB, and define GLIB_CFLAGS and GLIB_LIBS, if gmodule,
gobject,
dnl gthread, or gio is specified in MODULES, pass to pkg-config
dnl
AC_DEFUN([AM_PATH_GLIB_2_0],
[
dnl
dnl Get the cflags and libraries from pkg-config
dnl
AC_ARG_ENABLE(glibtest, [ --disable-glibtest      do not try to
compile and run a test GLIB program],
, enable_glibtest=yes)

pkg_config_args=glib-2.0
for module in . $4
do
    case "$module" in
        gmodule)
            pkg_config_args="$pkg_config_args gmodule-2.0"
            ;;
        gmodule-no-export)
            pkg_config_args="$pkg_config_args gmodule-no-export-2.0"
            ;;
        gobject)
            pkg_config_args="$pkg_config_args gobject-2.0"
            ;;
        gthread)
            pkg_config_args="$pkg_config_args gthread-2.0"
            ;;
        gio*)
            pkg_config_args="$pkg_config_args $module-2.0"
            ;;
    esac
done

PKG_PROG_PKG_CONFIG([0.16])

```

```

no_glib=""

if test "x$PKG_CONFIG" = x ; then
    no_glib=yes
    PKG_CONFIG=no
fi

min_glib_version=ifelse([$1], ,2.0.0,$1)
AC_MSG_CHECKING(for GLIB - version >= $min_glib_version)

if test x$PKG_CONFIG != xno ; then
    ## don't try to run the test against uninstalled libtool libs
    if $PKG_CONFIG --uninstalled $pkg_config_args; then
        echo "Will use uninstalled version of GLib found in
PKG_CONFIG_PATH"
        enable_glibtest=no
    fi

    if $PKG_CONFIG --atleast-version $min_glib_version
$pkg_config_args; then
        :
    else
        no_glib=yes
    fi
fi

if test x"$no_glib" = x ; then
    GLIB_GENMARSHAL=`$PKG_CONFIG --variable=glib_genmarshal glib-2.0`
    GOBJECT_QUERY=`$PKG_CONFIG --variable=gobject_query glib-2.0`
    GLIB_MKENUMS=`$PKG_CONFIG --variable=glib_mkenums glib-2.0`
    GLIB_COMPILE_RESOURCES=`$PKG_CONFIG --
variable=glib_compile_resources gio-2.0`

    GLIB_CFLAGS=`$PKG_CONFIG --cflags $pkg_config_args`
    GLIB_LIBS=`$PKG_CONFIG --libs $pkg_config_args`
    glib_config_major_version=`$PKG_CONFIG --modversion glib-2.0 | \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\1/'`
    glib_config_minor_version=`$PKG_CONFIG --modversion glib-2.0 | \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\2/'`
    glib_config_micro_version=`$PKG_CONFIG --modversion glib-2.0 | \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\3/'`
    if test "x$enable_glibtest" = "xyes" ; then
        ac_save_CFLAGS="$CFLAGS"
        ac_save_LIBS="$LIBS"
        CFLAGS="$CFLAGS $GLIB_CFLAGS"
        LIBS="$GLIB_LIBS $LIBS"
    fi
fi
dnl
dnl Now check if the installed GLIB is sufficiently new. (Also sanity
dnl checks the results of pkg-config to some extent)
dnl
    rm -f conf.glibtest
    AC_TRY_RUN([

```

```

#include <glib.h>
#include <stdio.h>
#include <stdlib.h>

int
main ()
{
    unsigned int major, minor, micro;
    char *tmp_version;

    fclose (fopen ("conf.glibtest", "w"));

    /* HP/UX 9 (%@#!) writes to sscanf strings */
    tmp_version = g_strdup("$min_glib_version");
    if (sscanf(tmp_version, "%u.%u.%u", &major, &minor, &micro) != 3) {
        printf("%s, bad version string\n", "$min_glib_version");
        exit(1);
    }

    if ((glib_major_version != $glib_config_major_version) ||
        (glib_minor_version != $glib_config_minor_version) ||
        (glib_micro_version != $glib_config_micro_version))
    {
        printf("\n*** 'pkg-config --modversion glib-2.0' returned
%d.%d.%d, but GLIB (%d.%d.%d)\n",
            $glib_config_major_version, $glib_config_minor_version,
            $glib_config_micro_version,
            glib_major_version, glib_minor_version,
            glib_micro_version);
        printf ("*** was found! If pkg-config was correct, then it is
best\n");
        printf ("*** to remove the old version of GLib. You may also be
able to fix the error\n");
        printf ("*** by modifying your LD_LIBRARY_PATH enviroment
variable, or by editing\n");
        printf ("*** /etc/ld.so.conf. Make sure you have run ldconfig if
that is\n");
        printf ("*** required on your system.\n");
        printf ("*** If pkg-config was wrong, set the environment
variable PKG_CONFIG_PATH\n");
        printf ("*** to point to the correct configuration files\n");
    }
    else if ((glib_major_version != GLIB_MAJOR_VERSION) ||
            (glib_minor_version != GLIB_MINOR_VERSION) ||
            (glib_micro_version != GLIB_MICRO_VERSION))
    {
        printf ("*** GLIB header files (version %d.%d.%d) do not
match\n",
            GLIB_MAJOR_VERSION, GLIB_MINOR_VERSION, GLIB_MICRO_VERSION);
        printf ("*** library (version %d.%d.%d)\n",
            glib_major_version, glib_minor_version, glib_micro_version);
    }
}

```

```

else
{
    if ((glib_major_version > major) ||
        ((glib_major_version == major) && (glib_minor_version >
minor)) ||
        ((glib_major_version == major) && (glib_minor_version ==
minor) && (glib_micro_version >= micro)))
    {
        return 0;
    }
    else
    {
        printf("\n*** An old version of GLIB (%u.%u.%u) was found.\n",
glib_major_version, glib_minor_version,
glib_micro_version);
        printf("*** You need a version of GLIB newer than %u.%u.%u.
The latest version of\n",
major, minor, micro);
        printf("*** GLIB is always available from
ftp://ftp.gtk.org.\n");
        printf("***\n");
        printf("*** If you have already installed a sufficiently new
version, this error\n");
        printf("*** probably means that the wrong copy of the pkg-
config shell script is\n");
        printf("*** being found. The easiest way to fix this is to
remove the old version\n");
        printf("*** of GLIB, but you can also set the PKG_CONFIG
environment to point to the\n");
        printf("*** correct copy of pkg-config. (In this case, you
will have to\n");
        printf("*** modify your LD_LIBRARY_PATH enviroment variable,
or edit /etc/ld.so.conf\n");
        printf("*** so that the correct libraries are found at run-
time))\n");
    }
}
return 1;
}
],, no_glib=yes,[echo $ac_n "cross compiling; assumed OK... $ac_c"]
CFLAGS="$ac_save_CFLAGS"
LIBS="$ac_save_LIBS"
fi
fi
if test "x$no_glib" = x ; then
    AC_MSG_RESULT(yes (version
$glib_config_major_version.$glib_config_minor_version.$glib_config_mic
ro_version))
    ifelse([$2], , :, [$2])
else
    AC_MSG_RESULT(no)
    if test "$PKG_CONFIG" = "no" ; then

```

```

    echo "*** A new enough version of pkg-config was not found."
    echo "*** See http://www.freedesktop.org/software/pkgconfig/"
else
    if test -f conf.glibtest ; then
        :
    else
        echo "*** Could not run GLIB test program, checking why..."
        ac_save_CFLAGS="$CFLAGS"
        ac_save_LIBS="$LIBS"
        CFLAGS="$CFLAGS $GLIB_CFLAGS"
        LIBS="$LIBS $GLIB_LIBS"
        AC_TRY_LINK([
#include <glib.h>
#include <stdio.h>
], [ return ((glib_major_version) || (glib_minor_version) ||
(glib_micro_version)); ],
        [ echo "*** The test program compiled, but did not run. This
usually means"
        echo "*** that the run-time linker is not finding GLIB or
finding the wrong"
        echo "*** version of GLIB. If it is not finding GLIB, you'll
need to set your"
        echo "*** LD_LIBRARY_PATH environment variable, or edit
/etc/ld.so.conf to point"
        echo "*** to the installed location Also, make sure you
have run ldconfig if that"
        echo "*** is required on your system"
        echo "****"
        echo "*** If you have an old version installed, it is best
to remove it, although"
        echo "*** you may also be able to get things to work by
modifying LD_LIBRARY_PATH" ],
        [ echo "*** The test program failed to compile or link. See
the file config.log for the"
        echo "*** exact error that occurred. This usually means GLIB
is incorrectly installed.])
        CFLAGS="$ac_save_CFLAGS"
        LIBS="$ac_save_LIBS"
    fi
fi
GLIB_CFLAGS=""
GLIB_LIBS=""
GLIB_GENMARSHAL=""
GOBJECT_QUERY=""
GLIB_MKENUMS=""
GLIB_COMPILE_RESOURCES=""
ifelse([$3], , :, [$3])
fi
AC_SUBST(GLIB_CFLAGS)
AC_SUBST(GLIB_LIBS)
AC_SUBST(GLIB_GENMARSHAL)
AC_SUBST(GOBJECT_QUERY)

```

```
AC_SUBST(GLIB_MKENUMS)
AC_SUBST(GLIB_COMPILE_RESOURCES)
rm -f conf.glibtest
])
```

```
File = glib-2.0.m4.~1~
```

```
# Configure paths for GLIB
# Owen Taylor      1997-2001
```

```
dnl AM_PATH_GLIB_2_0([MINIMUM-VERSION, [ACTION-IF-FOUND [, ACTION-IF-
NOT-FOUND [, MODULES]]]])
dnl Test for GLIB, and define GLIB_CFLAGS and GLIB_LIBS, if gmodule,
gobject,
dnl gthread, or gio is specified in MODULES, pass to pkg-config
dnl
AC_DEFUN([AM_PATH_GLIB_2_0],
[dnl
dnl Get the cflags and libraries from pkg-config
dnl
AC_ARG_ENABLE(glibtest, [ --disable-glibtest      do not try to
compile and run a test GLIB program],
, enable_glibtest=yes)
```

```
pkg_config_args=glib-2.0
for module in . $4
do
  case "$module" in
    gmodule)
      pkg_config_args="$pkg_config_args gmodule-2.0"
      ;;
    gmodule-no-export)
      pkg_config_args="$pkg_config_args gmodule-no-export-2.0"
      ;;
    gobject)
      pkg_config_args="$pkg_config_args gobject-2.0"
      ;;
    gthread)
      pkg_config_args="$pkg_config_args gthread-2.0"
      ;;
    gio*)
      pkg_config_args="$pkg_config_args $module-2.0"
      ;;
  esac
done

PKG_PROG_PKG_CONFIG([0.16])

no_glib=""
```

```

if test "x$PKG_CONFIG" = x ; then
    no_glib=yes
    PKG_CONFIG=no
fi

min_glib_version=ifelse([$1], ,2.0.0,$1)
AC_MSG_CHECKING(for GLIB - version >= $min_glib_version)

if test x$PKG_CONFIG != xno ; then
    ## don't try to run the test against uninstalled libtool libs
    if $PKG_CONFIG --uninstalled $pkg_config_args; then
        echo "Will use uninstalled version of GLib found in
PKG_CONFIG_PATH"
        enable_glibtest=no
    fi

    if $PKG_CONFIG --atleast-version $min_glib_version
$pkg_config_args; then
        :
    else
        no_glib=yes
    fi
fi

if test x"$no_glib" = x ; then
    GLIB_GENMARSHAL=`$PKG_CONFIG --variable=glib_genmarshal glib-2.0`
    GOBJECT_QUERY=`$PKG_CONFIG --variable=gobject_query glib-2.0`
    GLIB_MKENUMS=`$PKG_CONFIG --variable=glib_mkenums glib-2.0`
    GLIB_COMPILE_RESOURCES=`$PKG_CONFIG --
variable=glib_compile_resources gio-2.0`

    GLIB_CFLAGS=`$PKG_CONFIG --cflags $pkg_config_args`
    GLIB_LIBS=`$PKG_CONFIG --libs $pkg_config_args`
    glib_config_major_version=`$PKG_CONFIG --modversion glib-2.0 | \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\1/'`
    glib_config_minor_version=`$PKG_CONFIG --modversion glib-2.0 | \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\2/'`
    glib_config_micro_version=`$PKG_CONFIG --modversion glib-2.0 | \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\3/'`
    if test "x$enable_glibtest" = "xyes" ; then
        ac_save_CFLAGS="$CFLAGS"
        ac_save_LIBS="$LIBS"
        CFLAGS="$CFLAGS $GLIB_CFLAGS"
        LIBS="$GLIB_LIBS $LIBS"
    fi
fi
dnl
dnl Now check if the installed GLIB is sufficiently new. (Also sanity
dnl checks the results of pkg-config to some extent)
dnl
    rm -f conf.glibtest
    AC_TRY_RUN([
#include <glib.h>
#include <stdio.h>

```

```

#include <stdlib.h>

int
main ()
{
    unsigned int major, minor, micro;
    char *tmp_version;

    fclose (fopen ("conf.glibtest", "w"));

    /* HP/UX 9 (%@#!) writes to sscanf strings */
    tmp_version = g_strdup("$min_glib_version");
    if (sscanf(tmp_version, "%u.%u.%u", &major, &minor, &micro) != 3) {
        printf("%s, bad version string\n", "$min_glib_version");
        exit(1);
    }

    if ((glib_major_version != $glib_config_major_version) ||
        (glib_minor_version != $glib_config_minor_version) ||
        (glib_micro_version != $glib_config_micro_version))
    {
        printf("\n*** 'pkg-config --modversion glib-2.0' returned
%d.%d.%d, but GLIB (%d.%d.%d)\n",
            $glib_config_major_version, $glib_config_minor_version,
            $glib_config_micro_version,
            glib_major_version, glib_minor_version,
            glib_micro_version);
        printf ("*** was found! If pkg-config was correct, then it is
best\n");
        printf ("*** to remove the old version of GLib. You may also be
able to fix the error\n");
        printf("*** by modifying your LD_LIBRARY_PATH enviroment
variable, or by editing\n");
        printf("*** /etc/ld.so.conf. Make sure you have run ldconfig if
that is\n");
        printf("*** required on your system.\n");
        printf("*** If pkg-config was wrong, set the environment
variable PKG_CONFIG_PATH\n");
        printf("*** to point to the correct configuration files\n");
    }
    else if ((glib_major_version != GLIB_MAJOR_VERSION) ||
            (glib_minor_version != GLIB_MINOR_VERSION) ||
            (glib_micro_version != GLIB_MICRO_VERSION))
    {
        printf("*** GLIB header files (version %d.%d.%d) do not
match\n",
            GLIB_MAJOR_VERSION, GLIB_MINOR_VERSION, GLIB_MICRO_VERSION);
        printf("*** library (version %d.%d.%d)\n",
            glib_major_version, glib_minor_version, glib_micro_version);
    }
    else
    {

```



```

        if ((glib_major_version > major) ||
            ((glib_major_version == major) && (glib_minor_version >
minor)) ||
            ((glib_major_version == major) && (glib_minor_version ==
minor) && (glib_micro_version >= micro)))
        {
            return 0;
        }
        else
        {
            printf("\n*** An old version of GLIB (%u.%u.%u) was found.\n",
glib_major_version, glib_minor_version,
glib_micro_version);
            printf("*** You need a version of GLIB newer than %u.%u.%u.
The latest version of\n",
                major, minor, micro);
            printf("*** GLIB is always available from
ftp://ftp.gtk.org.\n");
            printf("***\n");
            printf("*** If you have already installed a sufficiently new
version, this error\n");
            printf("*** probably means that the wrong copy of the pkg-
config shell script is\n");
            printf("*** being found. The easiest way to fix this is to
remove the old version\n");
            printf("*** of GLIB, but you can also set the PKG_CONFIG
environment to point to the\n");
            printf("*** correct copy of pkg-config. (In this case, you
will have to\n");
            printf("*** modify your LD_LIBRARY_PATH enviroment variable,
or edit /etc/ld.so.conf\n");
            printf("*** so that the correct libraries are found at run-
time))\n");
        }
    }
    return 1;
}
],, no_glib=yes,[echo $ac_n "cross compiling; assumed OK... $ac_c"]
    CFLAGS="$ac_save_CFLAGS"
    LIBS="$ac_save_LIBS"
fi
fi
if test "x$no_glib" = x ; then
    AC_MSG_RESULT(yes (version
$glib_config_major_version.$glib_config_minor_version.$glib_config_mic
ro_version))
    ifelse([$2], , :, [$2])
else
    AC_MSG_RESULT(no)
    if test "$PKG_CONFIG" = "no" ; then
        echo "*** A new enough version of pkg-config was not found."
        echo "*** See http://www.freedesktop.org/software/pkgconfig/"
    fi
fi

```

```

else
  if test -f conf.glibtest ; then
    :
  else
    echo "*** Could not run GLIB test program, checking why..."
    ac_save_CFLAGS="$CFLAGS"
    ac_save_LIBS="$LIBS"
    CFLAGS="$CFLAGS $GLIB_CFLAGS"
    LIBS="$LIBS $GLIB_LIBS"
    AC_TRY_LINK([
#include <glib.h>
#include <stdio.h>
], [ return ((glib_major_version) || (glib_minor_version) ||
(glib_micro_version)); ],
    [ echo "*** The test program compiled, but did not run. This
usually means"
    echo "*** that the run-time linker is not finding GLIB or
finding the wrong"
    echo "*** version of GLIB. If it is not finding GLIB, you'll
need to set your"
    echo "*** LD_LIBRARY_PATH environment variable, or edit
/etc/ld.so.conf to point"
    echo "*** to the installed location Also, make sure you
have run ldconfig if that"
    echo "*** is required on your system"
    echo "****"
    echo "*** If you have an old version installed, it is best
to remove it, although"
    echo "*** you may also be able to get things to work by
modifying LD_LIBRARY_PATH" ],
    [ echo "*** The test program failed to compile or link. See
the file config.log for the"
    echo "*** exact error that occurred. This usually means GLIB
is incorrectly installed."])
    CFLAGS="$ac_save_CFLAGS"
    LIBS="$ac_save_LIBS"
  fi
fi
GLIB_CFLAGS=""
GLIB_LIBS=""
GLIB_GENMARSHAL=""
GOBJECT_QUERY=""
GLIB_MKENUMS=""
GLIB_COMPILE_RESOURCES=""
ifelse([$3], , :, [$3])
fi
AC_SUBST(GLIB_CFLAGS)
AC_SUBST(GLIB_LIBS)
AC_SUBST(GLIB_GENMARSHAL)
AC_SUBST(GOBJECT_QUERY)
AC_SUBST(GLIB_MKENUMS)
AC_SUBST(GLIB_COMPILE_RESOURCES)

```

```
rm -f conf.glibtest
])
```

```
File = glib-gettext.m4
```

```
# Copyright (C) 1995-2002 Free Software Foundation, Inc.
# Copyright (C) 2001-2003,2004 Red Hat, Inc.
#
# This file is free software, distributed under the terms of the GNU
# General Public License. As a special exception to the GNU General
# Public License, this file may be distributed as part of a program
# that contains a configuration script generated by Autoconf, under
# the same distribution terms as the rest of that program.
#
# This file can be copied and used freely without restrictions. It
can
# be used in projects which are not available under the GNU Public
License
# but which still want to provide support for the GNU gettext
functionality.
#
# Macro to add for using GNU gettext.
# Ulrich Drepper <drepper@cygnus.com>, 1995, 1996
#
# Modified to never use included libintl.
# Owen Taylor <otaylor@redhat.com>, 12/15/1998
#
# Major rework to remove unused code
# Owen Taylor <otaylor@redhat.com>, 12/11/2002
#
# Added better handling of ALL_LINGUAS from GNU gettext version
# written by Bruno Haible, Owen Taylor <otaylor@redhat.com> 5/30/2002
#
# Modified to require ngettext
# Matthias Clasen <mclasen@redhat.com> 08/06/2004
#
# We need this here as well, since someone might use autoconf-2.5x
# to configure GLib then an older version to configure a package
# using AM_GLIB_GNU_GETTEXT
AC_PREREQ(2.53)
```

```
dn1
dn1 We go to great lengths to make sure that aclocal won't
dn1 try to pull in the installed version of these macros
dn1 when running aclocal in the glib directory.
dn1
m4_copy([AC_DEFUN],[glib_DEFUN])
m4_copy([AC_REQUIRE],[glib_REQUIRE])
dn1
dn1 At the end, if we're not within glib, we'll define the public
```

```
dnl definitions in terms of our private definitions.
dnl
```

```
# GLIB_LC_MESSAGES
```

```
#-----
```

```
glib_DEFUN([GLIB_LC_MESSAGES],
  [AC_CHECK_HEADERS([locale.h])
   if test $ac_cv_header_locale_h = yes; then
     AC_CACHE_CHECK([for LC_MESSAGES], am_cv_val_LC_MESSAGES,
       [AC_TRY_LINK([#include <locale.h>], [return LC_MESSAGES],
         am_cv_val_LC_MESSAGES=yes, am_cv_val_LC_MESSAGES=no)])
   if test $am_cv_val_LC_MESSAGES = yes; then
     AC_DEFINE(HAVE_LC_MESSAGES, 1,
       [Define if your <locale.h> file defines LC_MESSAGES.])
   fi
 fi])
```

```
# GLIB_PATH_PROG_WITH_TEST
```

```
#-----
```

```
dnl GLIB_PATH_PROG_WITH_TEST(VARIABLE, PROG-TO-CHECK-FOR,
dnl TEST-PERFORMED-ON-FOUND_PROGRAM [, VALUE-IF-NOT-FOUND [, PATH]])
glib_DEFUN([GLIB_PATH_PROG_WITH_TEST],
[# Extract the first word of "$2", so it can be a program name with
args.
set dummy $2; ac_word=[${2}
AC_MSG_CHECKING([for $ac_word])
AC_CACHE_VAL(ac_cv_path_$1,
[case "[$]$1" in
  /*)
  ac_cv_path_$1="[$]$1" # Let the user override the test with a path.
  ;;
  *)
  IFS="$IFS= "; ac_save_ifs="$IFS"; IFS="$IFS:"
  for ac_dir in ifelse([$5], , $PATH, [$5]); do
    test -z "$ac_dir" && ac_dir=.
    if test -f $ac_dir/$ac_word; then
      if [$3]; then
        ac_cv_path_$1="$ac_dir/$ac_word"
        break
      fi
    fi
  done
  IFS="$ac_save_ifs"
dnl If no 4th arg is given, leave the cache variable unset,
dnl so AC_PATH_PROGS will keep looking.
ifelse([$4], , , [ test -z "[$]ac_cv_path_$1" && ac_cv_path_$1="$4"
])dnl
  ;;
esac])dnl
$1="$ac_cv_path_$1"
if test ifelse([$4], , [-n "[$]$1"], ["[$]$1" != "$4"]); then
  AC_MSG_RESULT([[$]$1])
```

```

else
  AC_MSG_RESULT(no)
fi
AC_SUBST($1)dn1
])

# GLIB_WITH-NLS
#-----
glib_DEFUN([GLIB_WITH-NLS],
  dn1 NLS is obligatory
  [USE-NLS=yes
    AC_SUBST(USE-NLS)

    gt_cv_have_gettext=no

    CATOBJEXT=NONE
    XGETTEXT=:
    INTLLIBS=

    AC_CHECK_HEADER(libintl.h,
      [gt_cv_func_dgettext_libintl="no"
        libintl_extra_libs=""]

      #
      # First check in libc
      #
      AC_CACHE_CHECK([for ngettext in libc], gt_cv_func_ngettext_libc,
        [AC_TRY_LINK([
#include <libintl.h>
],
      [return !ngettext (""," ", 1)],
      gt_cv_func_ngettext_libc=yes,
      gt_cv_func_ngettext_libc=no)
        ])

      if test "$gt_cv_func_ngettext_libc" = "yes" ; then
        AC_CACHE_CHECK([for dgettext in libc],
gt_cv_func_dgettext_libc,
          [AC_TRY_LINK([
#include <libintl.h>
],
            [return !dgettext (""," ")],
            gt_cv_func_dgettext_libc=yes,
            gt_cv_func_dgettext_libc=no)
          ])
      fi

      if test "$gt_cv_func_ngettext_libc" = "yes" ; then
        AC_CHECK_FUNCS(bind_textdomain_codeset)
      fi

      #

```

```

# If we don't have everything we want, check in libintl
#
if test "$gt_cv_func_dgettext_libc" != "yes" \
  || test "$gt_cv_func_ngettext_libc" != "yes" \
  || test "$ac_cv_func_bind_textdomain_codeset" != "yes" ; then

  AC_CHECK_LIB(intl, bindtextdomain,
    [AC_CHECK_LIB(intl, ngettext,
      [AC_CHECK_LIB(intl, dgettext,
        gt_cv_func_dgettext_libintl=yes)])])

if test "$gt_cv_func_dgettext_libintl" != "yes" ; then
  AC_MSG_CHECKING([if -liconv is needed to use gettext])
  AC_MSG_RESULT([])
  AC_CHECK_LIB(intl, ngettext,
    [AC_CHECK_LIB(intl, dcgettext,
      [gt_cv_func_dgettext_libintl=yes
        libintl_extra_libs=-liconv],
      :,-liconv)],
    :,-liconv)
fi

#
# If we found libintl, then check in it for
bind_textdomain_codeset();
# we'll prefer libc if neither have bind_textdomain_codeset(),
# and both have dgettext and ngettext
#
if test "$gt_cv_func_dgettext_libintl" = "yes" ; then
  glib_save_LIBS="$LIBS"
  LIBS="$LIBS -lintl $libintl_extra_libs"
  unset ac_cv_func_bind_textdomain_codeset
  AC_CHECK_FUNCS(bind_textdomain_codeset)
  LIBS="$glib_save_LIBS"

  if test "$ac_cv_func_bind_textdomain_codeset" = "yes" ; then
    gt_cv_func_dgettext_libc=no
  else
    if test "$gt_cv_func_dgettext_libc" = "yes" \
      && test "$gt_cv_func_ngettext_libc" = "yes"; then
      gt_cv_func_dgettext_libintl=no
    fi
  fi
fi

if test "$gt_cv_func_dgettext_libc" = "yes" \
  || test "$gt_cv_func_dgettext_libintl" = "yes"; then
  gt_cv_have_gettext=yes
fi

if test "$gt_cv_func_dgettext_libintl" = "yes"; then

```

```

    INTLLIBS="-lintl $libintl_extra_libs"
fi

if test "$gt_cv_have_gettext" = "yes"; then
AC_DEFINE(HAVE_GETTEXT,1,
  [Define if the GNU gettext() function is already present or
preinstalled.])
GLIB_PATH_PROG_WITH_TEST(MSGFMT, msgfmt,
  [test -z "`$ac_dir/$ac_word -h 2>&1 | grep 'dv '`"], no)dnl
if test "$MSGFMT" != "no"; then
  glib_save_LIBS="$LIBS"
  LIBS="$LIBS $INTLLIBS"
  AC_CHECK_FUNCS(dcgettext)
  MSGFMT_OPTS=
  AC_MSG_CHECKING([if msgfmt accepts -c])
  GLIB_RUN_PROG([$MSGFMT -c -o /dev/null],[
msgid ""
msgstr ""
"Content-Type: text/plain; charset=UTF-8\n"
"Project-Id-Version: test 1.0\n"
"PO-Revision-Date: 2007-02-15 12:01+0100\n"
"Last-Translator: test <foo@bar.xx>\n"
"Language-Team: C <LL@li.org>\n"
"MIME-Version: 1.0\n"
"Content-Transfer-Encoding: 8bit\n"
], [MSGFMT_OPTS=-c; AC_MSG_RESULT([yes])], [AC_MSG_RESULT([no])])
  AC_SUBST(MSGFMT_OPTS)
  AC_PATH_PROG(GMSGFMT, gmsgfmt, $MSGFMT)
  GLIB_PATH_PROG_WITH_TEST(XGETTEXT, xgettext,
    [test -z "`$ac_dir/$ac_word -h 2>&1 | grep '(HELP) '`"], :)
  AC_TRY_LINK([extern int _nl_msg_cat_cntr;
    return _nl_msg_cat_cntr],
    [CATOBJEXT=.gmo
      DATADIRNAME=share],
    [case $host in
*-*-solaris*)
dnl On Solaris, if bind_textdomain_codeset is in libc,
dnl GNU format message catalog is always supported,
dnl since both are added to the libc all together.
dnl Hence, we'd like to go with DATADIRNAME=share and
dnl and CATOBJEXT=.gmo in this case.
      AC_CHECK_FUNC(bind_textdomain_codeset,
        [CATOBJEXT=.gmo
          DATADIRNAME=share],
        [CATOBJEXT=.mo
          DATADIRNAME=lib])
      ;;
*-*-openbsd*)
CATOBJEXT=.mo
      DATADIRNAME=share
      ;;
*)

```

```

        CATOBJEXT=.mo
        DATADIRNAME=lib
        ;;
    esac])
    LIBS="$glib_save_LIBS"
    INSTOBJEXT=.mo
else
    gt_cv_have_gettext=no
fi
fi
])

if test "$gt_cv_have_gettext" = "yes" ; then
    AC_DEFINE(ENABLE_NLS, 1,
        [always defined to indicate that i18n is enabled])
fi

dnl Test whether we really found GNU xgettext.
if test "$XGETTEXT" != ":"; then
    dnl If it is not GNU xgettext we define it as : so that the
    dnl Makefiles still can work.
    if $XGETTEXT --omit-header /dev/null 2> /dev/null; then
        : ;
    else
        AC_MSG_RESULT(
            [found xgettext program is not GNU xgettext; ignore it])
        XGETTEXT=":"
    fi
fi

# We need to process the po/ directory.
POSUB=po

AC_OUTPUT_COMMANDS(
    [case "$CONFIG_FILES" in *po/Makefile.in*)
        sed -e "/POTFILES =/r po/POTFILES" po/Makefile.in >
po/Makefile
    esac])

dnl These rules are solely for the distribution goal. While doing
this
dnl we only have to keep exactly one list of the available
catalogs
dnl in configure.ac.
for lang in $ALL_LINGUAS; do
    GMOFILES="$GMOFILES $lang.gmo"
    POFILES="$POFILES $lang.po"
done

dnl Make all variables we use known to autoconf.
AC_SUBST(CATALOGS)
AC_SUBST(CATOBJEXT)

```



```

AC_SUBST(DATADIRNAME)
AC_SUBST(GMOFILES)
AC_SUBST(INSTOBJEXT)
AC_SUBST(INTLLIBS)
AC_SUBST(PO_IN_DATADIR_TRUE)
AC_SUBST(PO_IN_DATADIR_FALSE)
AC_SUBST(POFILES)
AC_SUBST(POSUB)
])

# AM_GLIB_GNU_GETTEXT
# -----
# Do checks necessary for use of gettext. If a suitable implementation
# of gettext is found in either in libintl or in the C library,
# it will set INTLLIBS to the libraries needed for use of gettext
# and AC_DEFINE() HAVE_GETTEXT and ENABLE_NLS. (The shell variable
# gt_cv_have_gettext will be set to "yes".) It will also call
AC_SUBST()
# on various variables needed by the Makefile.in.in installed by
# glib-gettextize.
dnl
glib_DEFUN([GLIB_GNU_GETTEXT],
  [AC_REQUIRE([AC_PROG_CC])dnl
  AC_REQUIRE([AC_HEADER_STDC])dnl

  GLIB_LC_MESSAGES
  GLIB_WITH-NLS

  if test "$gt_cv_have_gettext" = "yes"; then
    if test "x$ALL_LINGUAS" = "x"; then
      LINGUAS=
    else
      AC_MSG_CHECKING(for catalogs to be installed)
      NEW_LINGUAS=
      for presentlang in $ALL_LINGUAS; do
        useit=no
        if test "%UNSET%" != "${LINGUAS-%UNSET%}"; then
          desiredlanguages="$LINGUAS"
        else
          desiredlanguages="$ALL_LINGUAS"
        fi
        for desiredlang in $desiredlanguages; do
          # Use the presentlang catalog if desiredlang is
          # a. equal to presentlang, or
          # b. a variant of presentlang (because in this case,
          # presentlang can be used as a fallback for messages
          # which are not translated in the desiredlang
          catalog).
          case "$desiredlang" in
            "$presentlang"*) useit=yes;;
          esac
        done
      done
    fi
  fi
]

```

```

        if test $useit = yes; then
            NEW_LINGUAS="$NEW_LINGUAS $presentlang"
        fi
    done
    LINGUAS=$NEW_LINGUAS
    AC_MSG_RESULT($LINGUAS)
fi

dnl Construct list of names of catalog files to be constructed.
if test -n "$LINGUAS"; then
    for lang in $LINGUAS; do CATALOGS="$CATALOGS $lang$CATOBJEXT";
done
fi

dnl If the AC_CONFIG_AUX_DIR macro for autoconf is used we possibly
dnl find the mkinstalldirs script in another subdir but
($top_srcdir).
dnl Try to locate is.
MKINSTALLDIRS=
if test -n "$ac_aux_dir"; then
    MKINSTALLDIRS="$ac_aux_dir/mkinstalldirs"
fi
if test -z "$MKINSTALLDIRS"; then
    MKINSTALLDIRS="\$(top_srcdir)/mkinstalldirs"
fi
AC_SUBST(MKINSTALLDIRS)

dnl Generate list of files to be processed by xgettext which will
dnl be included in po/Makefile.
test -d po || mkdir po
if test "x$srcdir" != "x."; then
    if test "x`echo $srcdir | sed 's@/.*@@" = "x"; then
        posrcprefix="$srcdir/"
    else
        posrcprefix="../$srcdir/"
    fi
else
    posrcprefix="../"
fi
rm -f po/POTFILES
sed -e "/^#/d" -e "/^\$/d" -e "s,.*,    $posrcprefix& \\\\"," -e
"\$s/\(.*\) \\\\",/1/" \
    < $srcdir/po/POTFILES.in > po/POTFILES
])

# AM_GLIB_DEFINE_LOCALEDIR(VARIABLE)
# -----
# Define VARIABLE to the location where catalog files will
# be installed by po/Makefile.
glib_DEFUN([GLIB_DEFINE_LOCALEDIR],
[glib_REQUIRE([GLIB_GNU_GETTEXT])dnl

```

```

glib_save_prefix="$prefix"
glib_save_exec_prefix="$exec_prefix"
glib_save_datarootdir="$datarootdir"
test "x$prefix" = xNONE && prefix=$ac_default_prefix
test "x$exec_prefix" = xNONE && exec_prefix=$prefix
datarootdir=`eval echo "${datarootdir}"`
if test "x$CATOBJEXT" = "x.mo" ; then
  localedir=`eval echo "${libdir}/locale"`
else
  localedir=`eval echo "${datadir}/locale"`
fi
prefix="$glib_save_prefix"
exec_prefix="$glib_save_exec_prefix"
datarootdir="$glib_save_datarootdir"
AC_DEFINE_UNQUOTED($1, "$localedir",
  [Define the location where the catalogs will be installed])
])

dnl
dnl Now the definitions that aclocal will find
dnl
ifdef(glib_configure_ac, [], [
AC_DEFUN([AM_GLIB_GNU_GETTEXT], [GLIB_GNU_GETTEXT($@)])
AC_DEFUN([AM_GLIB_DEFINE_LOCALEDIR], [GLIB_DEFINE_LOCALEDIR($@)])
])dnl

# GLIB_RUN_PROG(PROGRAM, TEST-FILE, [ACTION-IF-PASS], [ACTION-IF-
FAIL])
#
# Create a temporary file with TEST-FILE as its contents and pass the
# file name to PROGRAM. Perform ACTION-IF-PASS if PROGRAM exits with
# 0 and perform ACTION-IF-FAIL for any other exit status.
AC_DEFUN([GLIB_RUN_PROG],
[cat >confptest.foo <<_ACEOF
$2
_ACEOF
if AC_RUN_LOG([$1 confptest.foo]); then
  m4_ifval([$3], [$3], [:])
m4_ifvaln([$4], [else $4])dnl
echo "$as_me: failed input was:" >&AS_MESSAGE_LOG_FD
sed 's/^\| /' confptest.foo >&AS_MESSAGE_LOG_FD
fi])

```

File = glib-gettext.m4.~1~

```

# Copyright (C) 1995-2002 Free Software Foundation, Inc.
# Copyright (C) 2001-2003,2004 Red Hat, Inc.
#
# This file is free software, distributed under the terms of the GNU

```

```

# General Public License.  As a special exception to the GNU General
# Public License, this file may be distributed as part of a program
# that contains a configuration script generated by Autoconf, under
# the same distribution terms as the rest of that program.
#
# This file can be copied and used freely without restrictions.  It
can
# be used in projects which are not available under the GNU Public
License
# but which still want to provide support for the GNU gettext
functionality.
#
# Macro to add for using GNU gettext.
# Ulrich Drepper <drepper@cygnus.com>, 1995, 1996
#
# Modified to never use included libintl.
# Owen Taylor <otaylor@redhat.com>, 12/15/1998
#
# Major rework to remove unused code
# Owen Taylor <otaylor@redhat.com>, 12/11/2002
#
# Added better handling of ALL_LINGUAS from GNU gettext version
# written by Bruno Haible, Owen Taylor <otaylor@redhat.com> 5/30/3002
#
# Modified to require ngettext
# Matthias Clasen <mclasen@redhat.com> 08/06/2004
#
# We need this here as well, since someone might use autoconf-2.5x
# to configure GLib then an older version to configure a package
# using AM_GLIB_GNU_GETTEXT
AC_PREREQ(2.53)

dnl
dnl We go to great lengths to make sure that aclocal won't
dnl try to pull in the installed version of these macros
dnl when running aclocal in the glib directory.
dnl
m4_copy([AC_DEFUN],[glib_DEFUN])
m4_copy([AC_REQUIRE],[glib_REQUIRE])
dnl
dnl At the end, if we're not within glib, we'll define the public
dnl definitions in terms of our private definitions.
dnl

# GLIB_LC_MESSAGES
#-----
glib_DEFUN([GLIB_LC_MESSAGES],
  [AC_CHECK_HEADERS([locale.h])
   if test $ac_cv_header_locale_h = yes; then
     AC_CACHE_CHECK([for LC_MESSAGES], am_cv_val_LC_MESSAGES,
       [AC_TRY_LINK([#include <locale.h>], [return LC_MESSAGES],
         am_cv_val_LC_MESSAGES=yes, am_cv_val_LC_MESSAGES=no)])

```

```

    if test $am_cv_val_LC_MESSAGES = yes; then
        AC_DEFINE(HAVE_LC_MESSAGES, 1,
            [Define if your <locale.h> file defines LC_MESSAGES.])
    fi
fi])

# GLIB_PATH_PROG_WITH_TEST
#-----
dnl GLIB_PATH_PROG_WITH_TEST(VARIABLE, PROG-TO-CHECK-FOR,
dnl TEST-PERFORMED-ON-FOUND_PROGRAM [, VALUE-IF-NOT-FOUND [, PATH]])
glib_DEFUN([GLIB_PATH_PROG_WITH_TEST],
[# Extract the first word of "$2", so it can be a program name with
args.
set dummy $2; ac_word=[$]2
AC_MSG_CHECKING([for $ac_word])
AC_CACHE_VAL(ac_cv_path_$1,
[case "[$]$1" in
  /*)
    ac_cv_path_$1="[$]$1" # Let the user override the test with a path.
  ;;
  *)
    IFS="{IFS=  }"; ac_save_ifs="$IFS"; IFS="{IFS}:"
    for ac_dir in ifelse([$5], , $PATH, [$5]); do
        test -z "$ac_dir" && ac_dir=.
        if test -f $ac_dir/$ac_word; then
            if [$3]; then
                ac_cv_path_$1="$ac_dir/$ac_word"
                break
            fi
        fi
    done
    IFS="$ac_save_ifs"
dnl If no 4th arg is given, leave the cache variable unset,
dnl so AC_PATH_PROGS will keep looking.
ifelse([$4], , , [ test -z "[$]ac_cv_path_$1" && ac_cv_path_$1="$4"
])dnl
  ;;
esac])dnl
$1="$ac_cv_path_$1"
if test ifelse([$4], , [-n "[$]$1"], ["[$]$1" != "$4"]); then
    AC_MSG_RESULT([$]$1)
else
    AC_MSG_RESULT(no)
fi
AC_SUBST($1)dnl
])

# GLIB_WITH-NLS
#-----
glib_DEFUN([GLIB_WITH-NLS],
dnl NLS is obligatory
[USE-NLS=yes

```

```

AC_SUBST(USE-NLS)

gt_cv_have_gettext=no

CATOBJEXT=NONE
XGETTEXT=:
INTLLIBS=

AC_CHECK_HEADER(libintl.h,
[gt_cv_func_dgettext_libintl="no"
 libintl_extra_libs=""]

#
# First check in libc
#
AC_CACHE_CHECK([for ngettext in libc], gt_cv_func_ngettext_libc,
[AC_TRY_LINK([
#include <libintl.h>
],
[return !ngettext (""," ", 1)],
gt_cv_func_ngettext_libc=yes,
gt_cv_func_ngettext_libc=no)
])

if test "$gt_cv_func_ngettext_libc" = "yes" ; then
AC_CACHE_CHECK([for dgettext in libc],
gt_cv_func_dgettext_libc,
[AC_TRY_LINK([
#include <libintl.h>
],
[return !dgettext (""," ")],
gt_cv_func_dgettext_libc=yes,
gt_cv_func_dgettext_libc=no)
])
fi

if test "$gt_cv_func_ngettext_libc" = "yes" ; then
AC_CHECK_FUNCS(bind_textdomain_codeset)
fi

#
# If we don't have everything we want, check in libintl
#
if test "$gt_cv_func_dgettext_libc" != "yes" \
|| test "$gt_cv_func_ngettext_libc" != "yes" \
|| test "$ac_cv_func_bind_textdomain_codeset" != "yes" ; then

AC_CHECK_LIB(intl, bindtextdomain,
[AC_CHECK_LIB(intl, ngettext,
[AC_CHECK_LIB(intl, dgettext,
gt_cv_func_dgettext_libintl=yes)]])])

```

```

if test "$gt_cv_func_dgettext_libintl" != "yes" ; then
  AC_MSG_CHECKING([if -liconv is needed to use gettext])
  AC_MSG_RESULT([])
  AC_CHECK_LIB(intl, ngettext,
    [AC_CHECK_LIB(intl, dcgettext,
      [gt_cv_func_dgettext_libintl=yes
       libintl_extra_libs=-liconv],
      :, -liconv)],
    :, -liconv)
fi

#
# If we found libintl, then check in it for
bind_textdomain_codeset();
# we'll prefer libc if neither have bind_textdomain_codeset(),
# and both have dgettext and ngettext
#
if test "$gt_cv_func_dgettext_libintl" = "yes" ; then
  glib_save_LIBS="$LIBS"
  LIBS="$LIBS -lintl $libintl_extra_libs"
  unset ac_cv_func_bind_textdomain_codeset
  AC_CHECK_FUNCS(bind_textdomain_codeset)
  LIBS="$glib_save_LIBS"

  if test "$ac_cv_func_bind_textdomain_codeset" = "yes" ; then
    gt_cv_func_dgettext_libc=no
  else
    if test "$gt_cv_func_dgettext_libc" = "yes" \
      && test "$gt_cv_func_ngettext_libc" = "yes"; then
      gt_cv_func_dgettext_libintl=no
    fi
  fi
fi
fi

if test "$gt_cv_func_dgettext_libc" = "yes" \
|| test "$gt_cv_func_dgettext_libintl" = "yes"; then
  gt_cv_have_gettext=yes
fi

if test "$gt_cv_func_dgettext_libintl" = "yes"; then
  INTLLIBS="-lintl $libintl_extra_libs"
fi

if test "$gt_cv_have_gettext" = "yes"; then
AC_DEFINE(HAVE_GETTEXT,1,
  [Define if the GNU gettext() function is already present or
preinstalled.])
GLIB_PATH_PROG_WITH_TEST(MSGFMT, msgfmt,
  [test -z "`$ac_dir/$ac_word -h 2>&1 | grep 'dv '`"], no)dnl
if test "$MSGFMT" != "no"; then
  glib_save_LIBS="$LIBS"

```

```

        LIBS="$LIBS $INTLLIBS"
        AC_CHECK_FUNCS(dcgettext)
        MSGFMT_OPTS=
        AC_MSG_CHECKING([if msgfmt accepts -c])
        GLIB_RUN_PROG([$MSGFMT -c -o /dev/null],[
msgid ""
msgstr ""
"Content-Type: text/plain; charset=UTF-8\n"
"Project-Id-Version: test 1.0\n"
"PO-Revision-Date: 2007-02-15 12:01+0100\n"
"Last-Translator: test <foo@bar.xx>\n"
"Language-Team: C <LL@li.org>\n"
"MIME-Version: 1.0\n"
"Content-Transfer-Encoding: 8bit\n"
], [MSGFMT_OPTS=-c; AC_MSG_RESULT([yes])], [AC_MSG_RESULT([no])])
        AC_SUBST(MSGFMT_OPTS)
        AC_PATH_PROG(GMSGFMT, gmsgfmt, $MSGFMT)
        GLIB_PATH_PROG_WITH_TEST(XGETTEXT, xgettext,
        [test -z "`$ac_dir/$ac_word -h 2>&l | grep '(HELP)'`"], :)
        AC_TRY_LINK([extern int _nl_msg_cat_cntr;
        return _nl_msg_cat_cntr],
        [CATOBJEXT=.gmo
        DATADIRNAME=share],
        [case $host in
        *-*-solaris*)
        dnl On Solaris, if bind_textdomain_codeset is in libc,
        dnl GNU format message catalog is always supported,
        dnl since both are added to the libc all together.
        dnl Hence, we'd like to go with DATADIRNAME=share and
        dnl and CATOBJEXT=.gmo in this case.
        AC_CHECK_FUNC(bind_textdomain_codeset,
        [CATOBJEXT=.gmo
        DATADIRNAME=share],
        [CATOBJEXT=.mo
        DATADIRNAME=lib])
        ;;
        *-*-openbsd*)
        CATOBJEXT=.mo
        DATADIRNAME=share
        ;;
        *)
        CATOBJEXT=.mo
        DATADIRNAME=lib
        ;;
        esac])
        LIBS="$glib_save_LIBS"
        INSTOBJEXT=.mo
    else
        gt_cv_have_gettext=no
    fi
fi
])

```



```

if test "$gt_cv_have_gettext" = "yes" ; then
  AC_DEFINE(ENABLE_NLS, 1,
    [always defined to indicate that i18n is enabled])
fi

dnl Test whether we really found GNU xgettext.
if test "$XGETTEXT" != ":"; then
  dnl If it is not GNU xgettext we define it as : so that the
  dnl Makefiles still can work.
  if $XGETTEXT --omit-header /dev/null 2> /dev/null; then
    : ;
  else
    AC_MSG_RESULT(
      [found xgettext program is not GNU xgettext; ignore it])
    XGETTEXT=":"
  fi
fi

# We need to process the po/ directory.
POSUB=po

AC_OUTPUT_COMMANDS(
  [case "$CONFIG_FILES" in *po/Makefile.in*)
    sed -e "/POTFILES =/r po/POTFILES" po/Makefile.in >
po/Makefile
    esac])

dnl These rules are solely for the distribution goal. While doing
this
dnl we only have to keep exactly one list of the available
catalogs
dnl in configure.ac.
for lang in $ALL_LINGUAS; do
  GMOFILES="$GMOFILES $lang.gmo"
  POFILES="$POFILES $lang.po"
done

dnl Make all variables we use known to autoconf.
AC_SUBST(CATALOGS)
AC_SUBST(CATOBJEXT)
AC_SUBST(DATADIRNAME)
AC_SUBST(GMOFILES)
AC_SUBST(INSTOBJEXT)
AC_SUBST(INTLLIBS)
AC_SUBST(PO_IN_DATADIR_TRUE)
AC_SUBST(PO_IN_DATADIR_FALSE)
AC_SUBST(POFILES)
AC_SUBST(POSUB)
])

# AM_GLIB_GNU_GETTEXT

```

```

# -----
# Do checks necessary for use of gettext. If a suitable implementation
# of gettext is found in either in libintl or in the C library,
# it will set INTLLIBS to the libraries needed for use of gettext
# and AC_DEFINE() HAVE_GETTEXT and ENABLE_NLS. (The shell variable
# gt_cv_have_gettext will be set to "yes".) It will also call
AC_SUBST()
# on various variables needed by the Makefile.in.in installed by
# glib-gettextize.
dnl
glib_DEFUN([GLIB_GNU_GETTEXT],
  [AC_REQUIRE([AC_PROG_CC])dnl
  AC_REQUIRE([AC_HEADER_STDC])dnl

  GLIB_LC_MESSAGES
  GLIB_WITH-NLS

  if test "$gt_cv_have_gettext" = "yes"; then
    if test "x$ALL_LINGUAS" = "x"; then
      LINGUAS=
    else
      AC_MSG_CHECKING(for catalogs to be installed)
      NEW_LINGUAS=
      for presentlang in $ALL_LINGUAS; do
        useit=no
        if test "%UNSET%" != "${LINGUAS-%UNSET%}"; then
          desiredlanguages="$LINGUAS"
        else
          desiredlanguages="$ALL_LINGUAS"
        fi
        for desiredlang in $desiredlanguages; do
          # Use the presentlang catalog if desiredlang is
          #   a. equal to presentlang, or
          #   b. a variant of presentlang (because in this case,
          #       presentlang can be used as a fallback for messages
          #       which are not translated in the desiredlang
catalog).
          case "$desiredlang" in
            "$presentlang"*) useit=yes;;
          esac
        done
        if test $useit = yes; then
          NEW_LINGUAS="$NEW_LINGUAS $presentlang"
        fi
      done
      LINGUAS=$NEW_LINGUAS
      AC_MSG_RESULT($LINGUAS)
    fi

    dnl Construct list of names of catalog files to be constructed.
    if test -n "$LINGUAS"; then

```

```

        for lang in $LINGUAS; do CATALOGS="$CATALOGS $lang$CATOBJEXT";
done
    fi
    fi

    dnl If the AC_CONFIG_AUX_DIR macro for autoconf is used we possibly
    dnl find the mkinstalldirs script in another subdir but
($top_srcdir).
    dnl Try to locate is.
    MKINSTALLDIRS=
    if test -n "$ac_aux_dir"; then
        MKINSTALLDIRS="$ac_aux_dir/mkinstalldirs"
    fi
    if test -z "$MKINSTALLDIRS"; then
        MKINSTALLDIRS="\$(top_srcdir)/mkinstalldirs"
    fi
    AC_SUBST(MKINSTALLDIRS)

    dnl Generate list of files to be processed by xgettext which will
    dnl be included in po/Makefile.
    test -d po || mkdir po
    if test "x$srcdir" != "x."; then
        if test "x`echo $srcdir | sed 's@/.*@'`" = "x"; then
            posrcprefix="$srcdir/"
        else
            posrcprefix="../$srcdir/"
        fi
    else
        posrcprefix="../"
    fi
    rm -f po/POTFILES
    sed -e "/^#/d" -e "/^$/d" -e "s,.*,      $posrcprefix& \\\\", " -e
"\$s/\(.*\) \\\\", \1/" \
        < $srcdir/po/POTFILES.in > po/POTFILES
])

# AM_GLIB_DEFINE_LOCALEDIR(VARIABLE)
# -----
# Define VARIABLE to the location where catalog files will
# be installed by po/Makefile.
glib_DEFUN([GLIB_DEFINE_LOCALEDIR],
[glib_REQUIRE([GLIB_GNU_GETTEXT])dnl
glib_save_prefix="$prefix"
glib_save_exec_prefix="$exec_prefix"
glib_save_datarootdir="$datarootdir"
test "x$prefix" = xNONE && prefix=$ac_default_prefix
test "x$exec_prefix" = xNONE && exec_prefix=$prefix
datarootdir=`eval echo "${datarootdir}"`
if test "x$CATOBJEXT" = "x.mo" ; then
    localedir=`eval echo "${libdir}/locale"`
else
    localedir=`eval echo "${datadir}/locale"`

```

```

fi
prefix="$glib_save_prefix"
exec_prefix="$glib_save_exec_prefix"
datarootdir="$glib_save_datarootdir"
AC_DEFINE_UNQUOTED($1, "$localedir",
  [Define the location where the catalogs will be installed])
])

dnl
dnl Now the definitions that aclocal will find
dnl
dnl
ifdef(glib_configure_ac, [], [
AC_DEFUN([AM_GLIB_GNU_GETTEXT], [GLIB_GNU_GETTEXT($@)])
AC_DEFUN([AM_GLIB_DEFINE_LOCALEDIR], [GLIB_DEFINE_LOCALEDIR($@)])
])dnl

# GLIB_RUN_PROG(PROGRAM, TEST-FILE, [ACTION-IF-PASS], [ACTION-IF-
FAIL])
#
# Create a temporary file with TEST-FILE as its contents and pass the
# file name to PROGRAM. Perform ACTION-IF-PASS if PROGRAM exits with
# 0 and perform ACTION-IF-FAIL for any other exit status.
AC_DEFUN([GLIB_RUN_PROG],
[cat >conftest.foo <<_ACEOF
$2
_ACEOF
if AC_RUN_LOG([$1 conftest.foo]); then
  m4_ifval([$3], [$3], [:])
m4_ifvaln([$4], [else $4])dnl
echo "$as_me: failed input was:" >&AS_MESSAGE_LOG_FD
sed 's/^/| /' conftest.foo >&AS_MESSAGE_LOG_FD
fi])

```

File = gsettings.m4

```

dnl GLIB_GSETTINGS
dnl Defines GSETTINGS_SCHEMAS_INSTALL which controls whether
dnl the schema should be compiled
dnl

AC_DEFUN([GLIB_GSETTINGS],
[
  m4_pattern_allow([AM_V_GEN])
  AC_ARG_ENABLE(schemas-compile,
    AS_HELP_STRING([--disable-schemas-compile],
      [Disable regeneration of
gschemas.compiled on install]),
    [case ${enableval} in
      yes) GSETTINGS_DISABLE_SCHEMAS_COMPILE="" ;;

```

```

        no) GSETTINGS_DISABLE_SCHEMAS_COMPILE="1" ;;
        *) AC_MSG_ERROR([bad value ${enableval} for --
enable-schemas-compile]) ;;
    esac])
AC_SUBST([GSETTINGS_DISABLE_SCHEMAS_COMPILE])
PKG_PROG_PKG_CONFIG([0.16])
AC_SUBST(gsettingsschemadir, [${datadir}/glib-2.0/schemas])
if test x$cross_compiling != xyes; then
    GLIB_COMPILE_SCHEMAS=`$PKG_CONFIG --variable glib_compile_schemas
gio-2.0`
else
    AC_PATH_PROG(GLIB_COMPILE_SCHEMAS, glib-compile-schemas)
fi
AC_SUBST(GLIB_COMPILE_SCHEMAS)
if test "x$GLIB_COMPILE_SCHEMAS" = "x"; then
    ifelse([$2],,[AC_MSG_ERROR([glib-compile-schemas not
found.])],[2])
else
    ifelse([$1],,[:],[$1])
fi

GSETTINGS_RULES='
.PHONY : uninstall-gsettings-schemas install-gsettings-schemas clean-
gsettings-schemas

mostlyclean-am: clean-gsettings-schemas

gsettings__enum_file = $(addsuffix
.enums.xml,$(gsettings_ENUM_NAMESPACE))

%.gschema.valid: %.gschema.xml $(gsettings__enum_file)
    $(AM_V_GEN) if test -f "$<"; then d=; else d="$(srcdir)"/"; fi;
$(GLIB_COMPILE_SCHEMAS) --strict --dry-run $(addprefix --schema-
file=,$(gsettings__enum_file)) --schema-file=${d}$< && touch [$]@

all-am: $(gsettings_SCHEMAS:.xml=.valid)
uninstall-am: uninstall-gsettings-schemas
install-data-am: install-gsettings-schemas

.SECONDARY: $(gsettings_SCHEMAS)

install-gsettings-schemas: $(gsettings_SCHEMAS)
$(gsettings__enum_file)
    @$(NORMAL_INSTALL)
    if test -n "$^"; then \
        test -z "$(gsettingsschemadir)" || $(MKDIR_P)
"$$(DESTDIR)$(gsettingsschemadir)"; \
        $(INSTALL_DATA) $^ "$(DESTDIR)$(gsettingsschemadir)"; \
        test -n "$(GSETTINGS_DISABLE_SCHEMAS_COMPILE)$(DESTDIR)" ||
$(GLIB_COMPILE_SCHEMAS) $(gsettingsschemadir); \
    fi

```

```

uninstall-gsettings-schemas:
    @$(NORMAL_UNINSTALL)
    @list='\'$(gsettings_SCHEMAS) $(gsettings__enum_file)'\'; test
-n "$(gsettingsschemadir)" || list=; \
    files=`for p in $$list; do echo $$p; done | sed -e
'\''s|^.*//|\''\''`; \
    test -n "$$files" || exit 0; \
    echo " ( cd '\''$(DESTDIR)$(gsettingsschemadir)'\'' && rm -f"
$$files ")"; \
    cd "$(DESTDIR)$(gsettingsschemadir)" && rm -f $$files
    test -n "$(GSETTINGS_DISABLE_SCHEMAS_COMPILE)$(DESTDIR)" ||
$(GLIB_COMPILE_SCHEMAS) $(gsettingsschemadir)

```

```

clean-gsettings-schemas:
    rm -f $(gsettings_SCHEMAS:.xml=.valid) $(gsettings__enum_file)

```

```

ifdef gsettings_ENUM_NAMESPACE
$(gsettings__enum_file): $(gsettings_ENUM_FILES)
    $(AM_V_GEN) glib-mkenums --comments '\''<!-- @comment@ -->\'' --
fhead "<schemalist>" --vhead " <@type@
id='\''$(gsettings_ENUM_NAMESPACE).@EnumName@'\''>" --vprod "
<value nick='\''@valuenick@'\'' value='\''@valuenum@'\''/>" --vtail "
</@type@>" --ftail "</schemalist>" [$]^ > [$]@.tmp && mv [$]@.tmp [$]@
endif

```

```

'
    _GSETTINGS_SUBST(GSETTINGS_RULES)
])

```

```

dnl _GSETTINGS_SUBST(VARIABLE)
dnl Abstract macro to do either _AM_SUBST_NOTMAKE or AC_SUBST
AC_DEFUN([_GSETTINGS_SUBST],
[
AC_SUBST([$1])
m4_ifdef([_AM_SUBST_NOTMAKE], [_AM_SUBST_NOTMAKE([$1)])]
]
)

```

File = gsettings.m4.~1~

```

dnl GLIB_GSETTINGS
dnl Defines GSETTINGS_SCHEMAS_INSTALL which controls whether
dnl the schema should be compiled
dnl

```

```

AC_DEFUN([GLIB_GSETTINGS],
[
    m4_pattern_allow([AM_V_GEN])
    AC_ARG_ENABLE(schemas-compile,
        AS_HELP_STRING([--disable-schemas-compile],

```

```

                                [Disable regeneration of
gschemas.compiled on install]),
                                [case ${enableval} in
                                    yes) GSETTINGS_DISABLE_SCHEMAS_COMPILE="" ;;
                                    no)  GSETTINGS_DISABLE_SCHEMAS_COMPILE="1" ;;
                                    *) AC_MSG_ERROR([bad value ${enableval} for --
enable-schemas-compile]) ;;
                                esac])
AC_SUBST([GSETTINGS_DISABLE_SCHEMAS_COMPILE])
PKG_PROG_PKG_CONFIG([0.16])
AC_SUBST(gsettingsschemadir, [${datadir}/glib-2.0/schemas])
if test x${cross_compiling} != xyess; then
    GLIB_COMPILE_SCHEMAS=`$PKG_CONFIG --variable glib_compile_schemas
gio-2.0`
else
    AC_PATH_PROG(GLIB_COMPILE_SCHEMAS, glib-compile-schemas)
fi
AC_SUBST(GLIB_COMPILE_SCHEMAS)
if test "x$GLIB_COMPILE_SCHEMAS" = "x"; then
    ifelse([$2],,,[AC_MSG_ERROR([glib-compile-schemas not
found.])],[$2])
else
    ifelse([$1],,[:],[$1])
fi

GSETTINGS_RULES='
.PHONY : uninstall-gsettings-schemas install-gsettings-schemas clean-
gsettings-schemas

mostlyclean-am: clean-gsettings-schemas

gsettings__enum_file = $(addsuffix
.enums.xml,$(gsettings_ENUM_NAMESPACE))

%.gschema.valid: %.gschema.xml $(gsettings__enum_file)
    $(AM_V_GEN) if test -f "$<"; then d=; else d="$(srcdir)"/"; fi;
$(GLIB_COMPILE_SCHEMAS) --strict --dry-run $(addprefix --schema-
file=,$(gsettings__enum_file)) --schema-file=${d}$< && touch [${}@

all-am: $(gsettings_SCHEMAS:.xml=.valid)
uninstall-am: uninstall-gsettings-schemas
install-data-am: install-gsettings-schemas

.SECONDARY: $(gsettings_SCHEMAS)

install-gsettings-schemas: $(gsettings_SCHEMAS)
$(gsettings__enum_file)
    @$(NORMAL_INSTALL)
    if test -n "$^"; then \
        test -z "$(gsettingsschemadir)" || $(MKDIR_P)
"$$(DESTDIR)$(gsettingsschemadir)"; \
        $(INSTALL_DATA) $^ "$(DESTDIR)$(gsettingsschemadir)"; \

```

```

        test -n "$(GSETTINGS_DISABLE_SCHEMAS_COMPILE)$ (DESTDIR)" ||
$(GLIB_COMPILE_SCHEMAS) $(gsettingsschemadir); \
fi

```

```

uninstall-gsettings-schemas:

```

```

    @$(NORMAL_UNINSTALL)
    @list='\'$(gsettings_SCHEMAS) $(gsettings__enum_file)'\''; test
-n "$(gsettingsschemadir)" || list=; \
    files=`for p in $$list; do echo $$p; done | sed -e
'\''s|^\.*/|\'\''; \
    test -n "$$files" || exit 0; \
    echo " ( cd '\''$(DESTDIR)$ (gsettingsschemadir)'\'' && rm -f"
$$files ")"; \
    cd "$(DESTDIR)$ (gsettingsschemadir)" && rm -f $$files
    test -n "$(GSETTINGS_DISABLE_SCHEMAS_COMPILE)$ (DESTDIR)" ||
$(GLIB_COMPILE_SCHEMAS) $(gsettingsschemadir)

```

```

clean-gsettings-schemas:

```

```

    rm -f $(gsettings_SCHEMAS:.xml=.valid) $(gsettings__enum_file)

```

```

ifdef gsettings_ENUM_NAMESPACE

```

```

$(gsettings__enum_file): $(gsettings_ENUM_FILES)
    $(AM_V_GEN) glib-mkenums --comments '\''<!-- @comment@ -->'\' --
fhead "<schemalist>" --vhead " <@type@
id='\'$(gsettings_ENUM_NAMESPACE).@EnumName@'\'>" --vprod "
<value nick='\'@valuenick@'\' value='\'@valuenum@'\'/>" --vtail "
</@type@>" --ftail "</schemalist>" [$]^ > [$]@.tmp && mv [$]@.tmp [$]@
endif
'
    _GSETTINGS_SUBST(GSETTINGS_RULES)
])

```

```

dnl _GSETTINGS_SUBST(VARIABLE)

```

```

dnl Abstract macro to do either _AM_SUBST_NOTMAKE or AC_SUBST
AC_DEFUN([_GSETTINGS_SUBST],
[
AC_SUBST([$1])
m4_ifdef([_AM_SUBST_NOTMAKE], [_AM_SUBST_NOTMAKE([$1)])
]
)

```

```

File = gtk-doc.m4

```

```

dnl -*- mode: autoconf -*-

```

```

# serial 1

```

```

dnl Usage:

```

```

dnl   GTK_DOC_CHECK([minimum-gtk-doc-version])
AC_DEFUN([GTK_DOC_CHECK],

```



```

[
AC_REQUIRE([PKG_PROG_PKG_CONFIG])
AC_BEFORE([AC_PROG_LIBTOOL],[\$0])dnl setup libtool first
AC_BEFORE([AM_PROG_LIBTOOL],[\$0])dnl setup libtool first

dnl check for tools we added during development
AC_PATH_PROG([GTKDOC_CHECK],[gtkdoc-check])
AC_PATH_PROGS([GTKDOC_REBASE],[gtkdoc-rebase],[true])
AC_PATH_PROG([GTKDOC_MKPDF],[gtkdoc-mkpdf])

dnl for overriding the documentation installation directory
AC_ARG_WITH([html-dir],
  AS_HELP_STRING([--with-html-dir=PATH], [path to installed docs]),,
  [with_html_dir='${datadir}/gtk-doc/html'])
HTML_DIR="$with_html_dir"
AC_SUBST([HTML_DIR])

dnl enable/disable documentation building
AC_ARG_ENABLE([gtk-doc],
  AS_HELP_STRING([--enable-gtk-doc],
    [use gtk-doc to build documentation
[[default=no]]]),,
  [enable_gtk_doc=no])

if test x$enable_gtk_doc = xyes; then
  ifelse([$1],[],
    [PKG_CHECK_EXISTS([gtk-doc],,
      AC_MSG_ERROR([gtk-doc not installed and --
enable-gtk-doc requested]))],
    [PKG_CHECK_EXISTS([gtk-doc >= $1],,
      AC_MSG_ERROR([You need to have gtk-doc >= $1
installed to build $PACKAGE_NAME]))])
  dnl don't check for glib if we build glib
  if test "x$PACKAGE_NAME" != "xglib"; then
    dnl don't fail if someone does not have glib
    PKG_CHECK_MODULES(GTKDOC_DEPS, glib-2.0 >= 2.10.0 gobject-2.0
>= 2.10.0,,)
  fi
fi

AC_MSG_CHECKING([whether to build gtk-doc documentation])
AC_MSG_RESULT($enable_gtk_doc)

dnl enable/disable output formats
AC_ARG_ENABLE([gtk-doc-html],
  AS_HELP_STRING([--enable-gtk-doc-html],
    [build documentation in html format
[[default=yes]]]),,
  [enable_gtk_doc_html=yes])
AC_ARG_ENABLE([gtk-doc-pdf],
  AS_HELP_STRING([--enable-gtk-doc-pdf],

```

```

                                [build documentation in pdf format
[[default=no]]),,
    [enable_gtk_doc_pdf=no])

if test -z "$GTKDOC_MKPDF"; then
    enable_gtk_doc_pdf=no
fi

AM_CONDITIONAL([ENABLE_GTK_DOC], [test x$enable_gtk_doc = xyes])
AM_CONDITIONAL([GTK_DOC_BUILD_HTML], [test x$enable_gtk_doc_html =
xyes])
AM_CONDITIONAL([GTK_DOC_BUILD_PDF], [test x$enable_gtk_doc_pdf =
xyes])
AM_CONDITIONAL([GTK_DOC_USE_LIBTOOL], [test -n "$LIBTOOL"])
AM_CONDITIONAL([GTK_DOC_USE_REBASE], [test -n "$GTKDOC_REBASE"])
])

```

File = gtk-doc.m4.~1~

dnl -*- mode: autoconf -*-

serial 1

dnl Usage:

dnl GTK_DOC_CHECK([minimum-gtk-doc-version])

AC_DEFUN([GTK_DOC_CHECK],

[

AC_REQUIRE([PKG_PROG_PKG_CONFIG])

AC_BEFORE([AC_PROG_LIBTOOL],[\${0}])dnl setup libtool first

AC_BEFORE([AM_PROG_LIBTOOL],[\${0}])dnl setup libtool first

AC_PATH_PROG([GTKDOC_CHECK],[gtkdoc-check])

AC_PATH_PROGS([GTKDOC_REBASE],[gtkdoc-rebase],[true])

AC_PATH_PROG([GTKDOC_MKPDF],[gtkdoc-mkpdf])

AC_ARG_WITH([html-dir],

AS_HELP_STRING([--with-html-dir=PATH], [path to installed docs]),,

[with_html_dir='\${datadir}/gtk-doc/html'])

HTML_DIR="\$with_html_dir"

AC_SUBST([HTML_DIR])

AC_ARG_ENABLE([gtk-doc],

AS_HELP_STRING([--enable-gtk-doc],

[use gtk-doc to build documentation

[[default=no]]),,

[enable_gtk_doc=no])

if test x\$enable_gtk_doc = xyes; then

```

    AC_MSG_ERROR([gtk-doc requested but only gtk-doc-stub is
installed])
fi

AC_MSG_CHECKING([whether to build gtk-doc documentation])
AC_MSG_RESULT([no])

AC_ARG_ENABLE([gtk-doc-html],
    AS_HELP_STRING([--enable-gtk-doc-html],
        [build documentation in html format
[[default=yes]]]),,
    [enable_gtk_doc_html=yes])
AC_ARG_ENABLE([gtk-doc-pdf],
    AS_HELP_STRING([--enable-gtk-doc-pdf],
        [build documentation in pdf format
[[default=no]]]),,
    [enable_gtk_doc_pdf=no])

AM_CONDITIONAL([ENABLE_GTK_DOC], [false])
AM_CONDITIONAL([GTK_DOC_BUILD_HTML], [false])
AM_CONDITIONAL([GTK_DOC_BUILD_PDF], [false])
AM_CONDITIONAL([GTK_DOC_USE_LIBTOOL], [false])
AM_CONDITIONAL([GTK_DOC_USE_REBASE], [false])
])

```

File = gtk-doc.m4.~2~

```
dnl -*- mode: autoconf -*-
```

```
# serial 1
```

```
dnl Usage:
```

```
dnl   GTK_DOC_CHECK([minimum-gtk-doc-version])
```

```
AC_DEFUN([GTK_DOC_CHECK],
```

```
[
```

```
    AC_REQUIRE([PKG_PROG_PKG_CONFIG])
```

```
    AC_BEFORE([AC_PROG_LIBTOOL],[$0])dnl setup libtool first
```

```
    AC_BEFORE([AM_PROG_LIBTOOL],[$0])dnl setup libtool first
```

```
    AC_PATH_PROG([GTKDOC_CHECK],[gtkdoc-check])
```

```
    AC_PATH_PROGS([GTKDOC_REBASE],[gtkdoc-rebase],[true])
```

```
    AC_PATH_PROG([GTKDOC_MKPDF],[gtkdoc-mkpdf])
```

```
    AC_ARG_WITH([html-dir],
```

```
        AS_HELP_STRING([--with-html-dir=PATH], [path to installed docs]),,
```

```
        [with_html_dir='${datadir}/gtk-doc/html'])
```

```
    HTML_DIR="$with_html_dir"
```

```
    AC_SUBST([HTML_DIR])
```

```
    AC_ARG_ENABLE([gtk-doc],
```

```

    AS_HELP_STRING([--enable-gtk-doc],
                  [use gtk-doc to build documentation
[[default=no]]]),,
    [enable_gtk_doc=no])

    if test x$enable_gtk_doc = xyes; then
        AC_MSG_ERROR([gtk-doc requested but only gtk-doc-stub is
installed])
    fi

    AC_MSG_CHECKING([whether to build gtk-doc documentation])
    AC_MSG_RESULT([no])

    AC_ARG_ENABLE([gtk-doc-html],
        AS_HELP_STRING([--enable-gtk-doc-html],
                        [build documentation in html format
[[default=yes]]]),,
        [enable_gtk_doc_html=yes])
    AC_ARG_ENABLE([gtk-doc-pdf],
        AS_HELP_STRING([--enable-gtk-doc-pdf],
                        [build documentation in pdf format
[[default=no]]]),,
        [enable_gtk_doc_pdf=no])

    AM_CONDITIONAL([ENABLE_GTK_DOC], [false])
    AM_CONDITIONAL([GTK_DOC_BUILD_HTML], [false])
    AM_CONDITIONAL([GTK_DOC_BUILD_PDF], [false])
    AM_CONDITIONAL([GTK_DOC_USE_LIBTOOL], [false])
    AM_CONDITIONAL([GTK_DOC_USE_REBASE], [false])
])

```

File = gtk-doc.make

```
# -*- mode: makefile -*-
```

```
#####
# Everything below here is generic #
#####
```

```

if GTK_DOC_USE_LIBTOOL
GTKDOC_CC = $(LIBTOOL) --tag=CC --mode=compile $(CC) $(INCLUDES)
$(GTKDOC_DEPS_CFLAGS) $(AM_CPPFLAGS) $(CPPFLAGS) $(AM_CFLAGS)
$(CFLAGS)
GTKDOC_LD = $(LIBTOOL) --tag=CC --mode=link $(CC) $(GTKDOC_DEPS_LIBS)
$(AM_CFLAGS) $(CFLAGS) $(AM_LDFLAGS) $(LDFLAGS)
GTKDOC_RUN = $(LIBTOOL) --mode=execute
else
GTKDOC_CC = $(CC) $(INCLUDES) $(GTKDOC_DEPS_CFLAGS) $(AM_CPPFLAGS)
$(CPPFLAGS) $(AM_CFLAGS) $(CFLAGS)

```

```

GTKDOC_LD = $(CC) $(GTKDOC_DEPS_LIBS) $(AM_CFLAGS) $(CFLAGS)
$(AM_LDFLAGS) $(LDFLAGS)
GTKDOC_RUN =
endif

# We set GPATH here; this gives us semantics for GNU make
# which are more like other make's VPATH, when it comes to
# whether a source that is a target of one rule is then
# searched for in VPATH/GPATH.
#
GPATH = $(srcdir)

TARGET_DIR=$(HTML_DIR)/$(DOC_MODULE)

SETUP_FILES = \
    $(content_files) \
    $(DOC_MAIN_SGML_FILE) \
    $(DOC_MODULE)-sections.txt \
    $(DOC_MODULE)-overrides.txt

EXTRA_DIST = \
    $(HTML_IMAGES) \
    $(SETUP_FILES)

DOC_STAMPS=setup-build.stamp scan-build.stamp tmpl-build.stamp sgml-
build.stamp \
    html-build.stamp pdf-build.stamp \
    tmpl.stamp sgml.stamp html.stamp pdf.stamp

SCANOBJ_FILES = \
    $(DOC_MODULE).args \
    $(DOC_MODULE).hierarchy \
    $(DOC_MODULE).interfaces \
    $(DOC_MODULE).prerequisites \
    $(DOC_MODULE).signals

REPORT_FILES = \
    $(DOC_MODULE)-undocumented.txt \
    $(DOC_MODULE)-undeclared.txt \
    $(DOC_MODULE)-unused.txt

CLEANFILES = $(SCANOBJ_FILES) $(REPORT_FILES) $(DOC_STAMPS)

if ENABLE_GTK_DOC
if GTK_DOC_BUILD_HTML
HTML_BUILD_STAMP=html-build.stamp
else
HTML_BUILD_STAMP=
endif
if GTK_DOC_BUILD_PDF
PDF_BUILD_STAMP=pdf-build.stamp
else

```

```

PDF_BUILD_STAMP=
endif

all-local: $(HTML_BUILD_STAMP) $(PDF_BUILD_STAMP)
else
all-local:
endif

docs: $(HTML_BUILD_STAMP) $(PDF_BUILD_STAMP)

$(REPORT_FILES): sgml-build.stamp

#### setup ####

setup-build.stamp:
    -@if test "$(abs_srcdir)" != "$(abs_builddir)" ; then \
        echo ' DOC   Preparing build'; \
        files=`echo $(SETUP_FILES) $(expand_content_files)
$(DOC_MODULE).types`; \
        if test "x$$files" != "x" ; then \
            for file in $$files ; do \
                test -f $(abs_srcdir)/$$file && \
                    cp -pu $(abs_srcdir)/$$file $(abs_builddir)/ ||
true; \
                done; \
            fi; \
            test -d $(abs_srcdir)/tmpl && \
                { cp -rp $(abs_srcdir)/tmpl $(abs_builddir)/; \
                  chmod -R u+w $(abs_builddir)/tmpl; } \
            fi
    @touch setup-build.stamp

#### scan ####

scan-build.stamp: $(HFILE_GLOB) $(CFILE_GLOB)
    @echo ' DOC   Scanning header files'
    @_source_dir='' ; \
    for i in $(DOC_SOURCE_DIR) ; do \
        _source_dir="$$({_source_dir} --source-dir=$$i" ; \
    done ; \
    gtkdoc-scan --module=$(DOC_MODULE) --ignore-headers="$(IGNORE_HFILES)" $$({_source_dir} $(SCAN_OPTIONS)
$(EXTRA_HFILES)
    @if grep -l '^.*$$' $(DOC_MODULE).types > /dev/null 2>&1 ; then
\
        echo " DOC   Introspecting gobjects"; \
        scanobj_options=""; \
        gtkdoc-scangobj 2>&1 --help | grep >/dev/null "\-\\-verbose";
\
        if test "$(?)" = "0"; then \
            if test "x$(V)" = "x1"; then \
                scanobj_options="--verbose"; \

```

```

        fi; \
    fi; \
    CC="$(GTKDOC_CC)" LD="$(GTKDOC_LD)" RUN="$(GTKDOC_RUN)"
CFLAGS="$(GTKDOC_CFLAGS) $(CFLAGS)" LDFLAGS="$(GTKDOC_LIBS)
$(LDFLAGS)" \
    gtkdoc-scangobj $(SCANGOBJ_OPTIONS) $$scanobj_options --
module=$(DOC_MODULE); \
    else \
        for i in $(SCANOBJ_FILES) ; do \
            test -f $$i || touch $$i ; \
        done \
    fi
    @touch scan-build.stamp

$(DOC_MODULE)-decl.txt $(SCANOBJ_FILES) $(DOC_MODULE)-sections.txt
$(DOC_MODULE)-overrides.txt: scan-build.stamp
    @true

#### templates ####

tmpl-build.stamp: setup-build.stamp $(DOC_MODULE)-decl.txt
$(SCANOBJ_FILES) $(DOC_MODULE)-sections.txt $(DOC_MODULE)-
overrides.txt
    @echo ' DOC Rebuilding template files'
    @gtkdoc-mktmpl --module=$(DOC_MODULE) $(MKTMPPL_OPTIONS)
    @if test "$(abs_srcdir)" != "$(abs_builddir)" ; then \
        if test -w $(abs_srcdir) ; then \
            cp -rp $(abs_builddir)/tmpl $(abs_srcdir)/; \
        fi \
    fi
    @touch tmpl-build.stamp

tmpl.stamp: tmpl-build.stamp
    @true

$(srcdir)/tmpl/*.sgml:
    @true

#### xml ####

sgml-build.stamp: tmpl.stamp $(DOC_MODULE)-sections.txt
$(srcdir)/tmpl/*.sgml $(expand_content_files)
    @echo ' DOC Building XML'
    @-chmod -R u+w $(srcdir)
    @_source_dir='' ; \
    for i in $(DOC_SOURCE_DIR) ; do \
        _source_dir="$$${_source_dir} --source-dir=$$i" ; \
    done ; \
    gtkdoc-mkdb --module=$(DOC_MODULE) --output-format=xml --expand-
content-files="$(expand_content_files)" --main-sgml-
file=$(DOC_MAIN_SGML_FILE) $$${_source_dir} $(MKDB_OPTIONS)
    @touch sgml-build.stamp

```

```
sgml.stamp: sgml-build.stamp
    @true
```

```
#### html ####
```

```
html-build.stamp: sgml.stamp $(DOC_MAIN_SGML_FILE) $(content_files)
    @echo ' DOC Building HTML'
    @rm -rf html
    @mkdir html
    @mkhtml_options=""; \
    gtkdoc-mkhtml 2>&1 --help | grep >/dev/null "\-verbose"; \
    if test "$(?)" = "0"; then \
        if test "x$(V)" = "x1"; then \
            mkhtml_options="$${mkhtml_options} --verbose"; \
        fi; \
    fi; \
    gtkdoc-mkhtml 2>&1 --help | grep >/dev/null "\-path"; \
    if test "$(?)" = "0"; then \
        mkhtml_options="$${mkhtml_options} --path=\"$(abs_srcdir)\"; \
    fi; \
    cd html && gtkdoc-mkhtml $${mkhtml_options} $(MKHTML_OPTIONS)
$(DOC_MODULE) ../$(DOC_MAIN_SGML_FILE)
    -@test "x$(HTML_IMAGES)" = "x" || \
    for file in $(HTML_IMAGES) ; do \
        if test -f $(abs_srcdir)/$$file ; then \
            cp $(abs_srcdir)/$$file $(abs_builddir)/html; \
        fi; \
        if test -f $(abs_builddir)/$$file ; then \
            cp $(abs_builddir)/$$file $(abs_builddir)/html; \
        fi; \
    done;
    @echo ' DOC Fixing cross-references'
    @gtkdoc-fixxref --module=$(DOC_MODULE) --module-dir=html --html-dir=$(HTML_DIR) $(FIXXREF_OPTIONS)
    @touch html-build.stamp
```

```
#### pdf ####
```

```
pdf-build.stamp: sgml.stamp $(DOC_MAIN_SGML_FILE) $(content_files)
    @echo ' DOC Building PDF'
    @rm -f $(DOC_MODULE).pdf
    @mkpdf_options=""; \
    gtkdoc-mkpdf 2>&1 --help | grep >/dev/null "\-verbose"; \
    if test "$(?)" = "0"; then \
        if test "x$(V)" = "x1"; then \
            mkpdf_options="$${mkpdf_options} --verbose"; \
        fi; \
    fi; \
    if test "x$(HTML_IMAGES)" != "x"; then \
        for img in $(HTML_IMAGES); do \
            part=`dirname $$img`; \
```



```

        echo $$mkpdf_options | grep >/dev/null "\-\-imgdir=$$part ";
\
        if test $$? != 0; then \
            mkpdf_options="$$mkpdf_options --imgdir=$$part"; \
        fi; \
    done; \
fi; \
gtkdoc-mkpdf --path="$(abs_srcdir)" $$mkpdf_options $(DOC_MODULE)
$(DOC_MAIN_SGML_FILE) $(MKPDF_OPTIONS)
@touch pdf-build.stamp

#####

clean-local:
    @rm -f *~ *.bak
    @rm -rf .libs

distclean-local:
    @rm -rf xml html $(REPORT_FILES) $(DOC_MODULE).pdf \
        $(DOC_MODULE)-decl-list.txt $(DOC_MODULE)-decl.txt
    @if test "$(abs_srcdir)" != "$(abs_builddir)" ; then \
        rm -f $(SETUP_FILES) $(expand_content_files)
$(DOC_MODULE).types; \
        rm -rf tmp; \
    fi

maintainer-clean-local: clean
    @rm -rf xml html

install-data-local:
    @installfiles=`echo $(builddir)/html/*`; \
    if test "$$installfiles" = '$(builddir)/html/*'; \
    then echo 1>&2 'Nothing to install' ; \
    else \
        if test -n "$(DOC_MODULE_VERSION)"; then \
            installdir="$(DESTDIR)$(TARGET_DIR)-$(DOC_MODULE_VERSION)"; \
        else \
            installdir="$(DESTDIR)$(TARGET_DIR)"; \
        fi; \
        $(mkinstalldirs) $$installdir ; \
        for i in $$installfiles; do \
            echo ' $(INSTALL_DATA) '$$i ; \
            $(INSTALL_DATA) $$i $$installdir; \
        done; \
        if test -n "$(DOC_MODULE_VERSION)"; then \
            mv -f $$installdir/$(DOC_MODULE).devhelp2 \
                $$installdir/$(DOC_MODULE)-
$(DOC_MODULE_VERSION).devhelp2; \
        fi; \
        $(GTKDOC_REBASE) --relative --dest-dir=$(DESTDIR) --html-
dir=$$installdir; \
    fi

```

```

uninstall-local:
    @if test -n "$(DOC_MODULE_VERSION)"; then \
        installdir="$(DESTDIR)$ (TARGET_DIR) -$(DOC_MODULE_VERSION)"; \
    else \
        installdir="$(DESTDIR)$ (TARGET_DIR)"; \
    fi; \
    rm -rf $$ {installdir}

#
# Require gtk-doc when making dist
#
if ENABLE_GTK_DOC
dist-check-gtkdoc:
else
dist-check-gtkdoc:
    @echo "*** gtk-doc must be installed and enabled in order to make
dist"
    @false
endif

dist-hook: dist-check-gtkdoc dist-hook-local
    @mkdir $(distdir)/tmpl
    @mkdir $(distdir)/html
    @cp ./tmpl/*.sgml $(distdir)/tmpl
    @cp ./html/* $(distdir)/html
    @cp ./$(DOC_MODULE).pdf $(distdir)/
    @cp ./$(DOC_MODULE).types $(distdir)/
    @cp ./$(DOC_MODULE)-sections.txt $(distdir)/
    @cd $(distdir) && rm -f $(DISTCLEANFILES)
    @$ (GTKDOC_REBASE) --online --relative --html-dir=$(distdir)/html

.PHONY : dist-hook-local docs

```

File = HACKING

The mainline git tree for this code is at
[git://anongit.freedesktop.org/git/dbus/dbus-glib](https://anongit.freedesktop.org/git/dbus/dbus-glib).

= Creating changes =

Be sure to match the existing code style (Emacs: "gnu").

If you are making major changes which you wish to be incorporated upstream,
please do as small commits to your local git tree, so there is a good history of your changes.

When you consider changes ready for merging to mainline, use "git-format-patch" or otherwise generate diffs. Post those diffs

to a new bug at <http://bugs.freedesktop.org>, project DBus, component GLib.

For nontrivial changes *please* try to extend the test suite to cover it. The test infrastructure is in test/core/, and currently there are a lot of tests in the single file test/core/test-dbus-glib.c. Extending this file is suggested (in the future we would like to break this file up).

Run "make check" to run the test suite.

= Committing =

If applying a patch from someone else that created them via "git-format-patch", you can use "git-am -s" to apply. Otherwise apply the patch and then use "git commit --author ..."

Regardless:

== Nontrivial changes ==

Nontrivial patches should always go through Bugzilla for peer review, so you should have a bug number. The commit should be of the form:

Bug XXXXXX: Single line summary here

- * dbus/filename.c: Why I changed this.
- * dbus/otherfile.c: Why I changed this.

== Trivial changes ==

Just use a single line summary, like:

Fix typo in NEWS

= Making a release =

DBus-Glib now uses an even-stable odd-development release numbering system. The current number in configure.ac should be odd.

To make a release (please replace use of 0.76 with the new version)

- * make
- * make distcheck
- * edit configure.ac, change version to even (e.g. 0.75 -> 0.76)
- * also in configure.ac, update LT_CURRENT, LT_REVISION and LT_AGE
- * ./autogen.sh
- * make
- * make distcheck
- * sign the tarball (or use: make dbus-glib-0.76.tar.gz.asc)
- * make maintainer-upload-release

```
* git commit -m "Release"
* git tag -a dbus-glib_0.76
* edit configure.ac, change version to odd (e.g. 0.76 -> 0.77)
* git commit -m "Bump version for development"
* Update the wiki:
http://www.freedesktop.org/wiki/Software/DBusBindings
* Announce the release on the mailing list, summarizing notable
changes.
```

NEWS is unmaintained.

File = HACKING.~1~

The guidelines in this file are the ideals; it's better to send a not-fully-following-guidelines patch than no patch at all, though. We can always polish it up.

Mailing list

===

The D-Bus mailing list is dbus@lists.freedesktop.org; discussion of patches, etc. should go there.

Security

===

Most of D-Bus is security sensitive. Guidelines related to that:

- avoid `memcpy()`, `sprintf()`, `strlen()`, `snprintf`, `strlcat()`, `strstr()`, `strtok()`, or any of this stuff. Use `DBusString`. If `DBusString` doesn't have the feature you need, add it to `DBusString`.

There are some exceptions, for example if your strings are just used to index a hash table and you don't do any parsing/modification of them, perhaps `DBusString` is wasteful and wouldn't help much. But definitely if you're doing any parsing, reallocation, etc. use `DBusString`.

- do not include system headers outside of `dbus-memory.c`, `dbus-sysdeps.c`, and other places where they are already included. This gives us one place to audit all external dependencies on features in `libc`, etc.
- do not use `libc` features that are "complicated" and may contain security holes. For example, you probably shouldn't try to use `regcomp()` to compile an untrusted regular expression. Regular expressions are just too complicated, and there are many different `libc`'s out there.

- we need to design the message bus daemon (and any similar features) to use limited privileges, run in a chroot jail, and so on.

<http://vsftpd.beasts.org/> has other good security suggestions.

Coding Style

===

- The C library uses GNU coding conventions, with GLib-like extensions (e.g. lining up function arguments). The Qt wrapper uses KDE coding conventions.
- Write docs for all non-static functions and structs and so on. try "doxygen Doxyfile" prior to commit and be sure there are no warnings printed.
- All external interfaces (network protocols, file formats, etc.) should have documented specifications sufficient to allow an alternative implementation to be written. Our implementation should be strict about specification compliance (should not for example heuristically parse a file and accept not-well-formed data). Avoiding heuristics is also important for security reasons; if it looks funny, ignore it (or exit, or disconnect).

Development

===

D-Bus uses Git as its version control system. The main repository is hosted at git.freedesktop.org/dbus/dbus. To clone D-Bus, execute the following command:

```
git clone git://git.freedesktop.org/dbus/dbus
```

OR

```
git clone git.freedesktop.org:dbus/dbus
```

The latter form is the one that allows pushing, but it also requires an SSH account on the server. The former form allows anonymous checkouts.

D-Bus development happens in two branches in parallel: the current stable branch, with an even minor number (like 1.0, 1.2 and 1.4), and the next development branch, with the next odd number.

The stable branch is named after the version number itself (dbus-1.2, dbus-1.4), whereas the development branch is simply known as "master".

When making a change to D-Bus, do the following:

- check out the earliest branch of D-Bus that makes sense to have your change in. If it's a bugfix, it's normally the current stable branch; if it's a feature, it's normally the "master" branch. If you have an important security fix, you may want to apply to older

branches too.

- for large changes:
 - if you're developing a new, large feature, it's recommended to create a new branch and do your development there. Publish your branch at a suitable place and ask others to help you develop and test it. Once your feature is considered finalised, you may merge it into the "master" branch.
- for small changes:
 - . make your change to the source code
 - . execute tests to guarantee that you're not introducing a regression. For that, execute: `make check` (if possible, add a new test to check the fix you're introducing)
 - . commit your change using `"git commit"` in the commit message, write a short sentence describing what you did in the first line. Then write a longer description in the next paragraph(s).
 - . repeat the previous steps if necessary to have multiple commits
- extract your patches and send to the D-Bus mailing list for review or post them to the D-Bus Bugzilla, attaching them to a bug report. To extract the patches, execute:
`git format-patch origin/master`
- once your code has been reviewed, you may push it to the Git server:
 - `git push origin my-branch:remote`
 - OR
 - `git push origin dbus-X.Y`
 - OR
 - `git push origin master`
 - (consult the Git manual to know which command applies)
- (Optional) if you've not worked on "master", merge your changes to that branch. If you've worked on an earlier branch than the current stable, merge your changes upwards towards the stable branch, then from there into "master".
 - . execute: `git checkout master`
 - . ensure that you have the latest "master" from the server, update if you don't
 - . execute: `git merge dbus-X.Y`
 - . if you have any conflicts, resolve them, `git add` the conflicted files and then `git commit`
 - . push the "master" branch to the server as well

Executing this merge is recommended, but not necessary for all changes. You should do this step if your bugfix is critical for the development in "master", or if you suspect that conflicts will arise (you're usually the best person to resolve conflicts introduced by

your own code), or if it has been too long since the last merge.

Making a release

===

To make a release of D-Bus, do the following:

- check out a fresh copy from Git
- verify that the libtool versioning/library soname is changed if it needs to be, or not changed if not
- update the file NEWS based on the git history
- verify that the version number of dbus-specification.xml is changed if it needs to be; if changes have been made, update the release date in that file
- update the AUTHORS file with "make update-authors" if necessary
- the version number should have major.minor.micro, even if micro is 0, i.e. "1.0.0" and "1.2.0" not "1.0"/"1.2"; the micro version should be even for releases, and odd for intermediate snapshots
- "make distcheck" (DO NOT just "make dist" - pass the check!)
- if make distcheck fails, fix it.
- once distcheck succeeds, "git commit -a". This is the version of the tree that corresponds exactly to the released tarball.
- tag the tree with "git tag -s -m 'Released X.Y.Z' dbus-X.Y.Z" where X.Y.Z is the version of the release. If you can't sign then simply created an unsigned annotated tag:
"git tag -a -m 'Released X.Y.Z' dbus-X.Y.Z".
- bump the version number up in configure.ac (so the micro version is odd),
and commit it. Make sure you do this *after* tagging the previous release! The idea is that git has a newer version number than anything released. Similarly, bump the version number of dbus-specification.xml and set the release date to "(not finalized)".
- merge the branch you've released to the chronologically-later branch (usually "master"). You'll probably have to fix a merge conflict in configure.ac (the version number).
- push your changes and the tag to the central repository with
git push origin master dbus-X.Y dbus-X.Y.Z

- scp your tarball to freedesktop.org server and copy it to
`dbus.freedesktop.org:/srv/dbus.freedesktop.org/www/releases/dbus/dbus-X.Y.Z.tar.gz`.
This should be possible if you're in group "dbus"
- Update the online documentation with ``make -C doc maintainer-upload-docs``.
- update the wiki page <http://www.freedesktop.org/Software/dbus> by adding the new release under the Download heading. Then, cut the link and changelog for the previous that was there.
- update the wiki page <http://www.freedesktop.org/Software/DbusReleaseArchive> pasting the previous release. Note that bullet points for each of the changelog items must be indented three more spaces to conform to the formatting of the other releases there.
- post to `dbus@lists.freedesktop.org` announcing the release.

Making a ".0" stable release

===

We create a branch for each stable release. The branch name should be `dbus-X.Y` which is a branch that has releases versioned `X.Y.Z`; changes on a stable branch should be limited to significant bug fixes.

Because we won't make minor changes like keeping up with the latest deprecations on a stable branch, stable branches should turn off the gcc warning for deprecated declarations (e.g. see commit `4ebb275ab7`).

Be extra-careful not to merge master (or any branch based on master) into a stable branch.

To branch:

```
git branch dbus-X.Y
```

and upload the branch tag to the server:

```
git push origin dbus-X.Y
```

To develop in this branch:

```
git checkout dbus-X.Y
```

Environment variables

===

These are the environment variables that are used by the D-Bus client library

DBUS_VERBOSE=1

Turns on printing verbose messages. This only works if D-Bus has been compiled with `--enable-verbose-mode`

DBUS_MALLOC_FAIL_NTH=n

Can be set to a number, causing every nth call to `dbus_alloc` or `dbus_realloc` to fail. This only works if D-Bus has been compiled with `--enable-tests`.

DBUS_MALLOC_FAIL_GREATER_THAN=n

Can be set to a number, causing every call to `dbus_alloc` or `dbus_realloc` to fail if the number of bytes to be allocated is greater than the specified number. This only works if D-Bus has been compiled with `--enable-tests`.

DBUS_TEST_MALLOC_FAILURES=n

Many of the D-Bus tests will run over and over, once for each malloc involved in the test. Each run will fail a different malloc, plus some number of mallocs following that malloc (because a fair number of bugs only happen if two or more mallocs fail in a row, e.g. error recovery that itself involves malloc). This env variable sets the number of mallocs to fail.

Here's why you care: If set to 0, then the malloc checking is skipped, which makes the test suite a heck of a lot faster. Just run with this env variable unset before you commit.

Tests

===

These are the test programs that are built if dbus is compiled using `--enable-tests`.

dbus/dbus-test

This is the main unit test program that tests all aspects of the D-Bus client library.

dbus/bus-test

This is the unit test program for the message bus.

test/break-loader

A test that tries to break the message loader by passing it randomly created invalid messages.

test/name-test/*

This is a suite of programs which are run with a temporary session bus.

If your test involves multiple processes communicating, your best bet is to add a test in here.

"make check" runs all the deterministic test programs (i.e. not break-loader).

"make lcov-check" is available if you configure with --enable-compiler-coverage and gives a complete report on test suite coverage.

Patches

===

Please file them at <http://bugzilla.freedesktop.org> under component dbus, and also post to the mailing list for discussion. The commit rules are:

- for fixes that don't affect API or protocol, they can be committed if any one qualified reviewer other than patch author reviews and approves
- for fixes that do affect API or protocol, two people in the reviewer group have to review and approve the commit, and posting to the list is definitely mandatory
- if there's a live unresolved controversy about a change, don't commit it while the argument is still raging.
- at their discretion, members of the reviewer group may also commit branches/patches under these conditions:
 - the branch does not add or change API, ABI or wire-protocol
 - the branch solves a known problem and is covered by the regression tests
 - there are no objections from the rest of the review group within a week of the patches being attached to Bugzilla
 - the committer gets a positive review on Bugzilla from someone they consider qualified to review the change (e.g. a colleague with D-Bus experience; not necessarily a member of the reviewer group)
- regardless of reviews, to commit a patch:
 - make check must pass
 - the test suite must be extended to cover the new code as much as reasonably feasible (see Tests above)
 - the patch has to follow the portability, security, and style guidelines
 - the patch should as much as reasonable do one thing, not many unrelated changesNo reviewer should approve a patch without these attributes, and failure on these points is grounds for reverting the patch.

The reviewer group that can approve patches:

Havoc Pennington <hp@pobox.net>
Michael Meeks <michael.meeks@novell.com>
Alexander Larsson <alexl@redhat.com>
Zack Rusin <zack@kde.org>
Joe Shaw <joe@assbarn.com>
Mikael Hallendal <micke@imendio.com>
Richard Hult <richard@imendio.com>
Owen Fraser-Green <owen@discobabe.net>
Olivier Andrieu <oliv__a@users.sourceforge.net>
Colin Walters <walters@verbum.org>
Thiago Macieira <thiago@kde.org>
John Palmieri <johnp@redhat.com>
Scott James Remnant <scott@netsplit.com>
Will Thompson <will.thompson@collabora.co.uk>
Simon McVittie <simon.mcvittie@collabora.co.uk>
David Zeuthen <davidz@redhat.com>

File = home.png

%PNG

-

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```
€3ç_KKKt: jµ_•J...$Ip¾¼_ò<'İsâ8Æ{•÷_ f«»' z' Ôjµ_ (MÓQ7u$², _ fffBú.éƒE™Ö•;À
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$¼ëv»çŸÁ«0_____KRó²_oÃ0¼ß16999™jú_sssT*_Ěx...vá•vp
>_Â+%À_°_<7³ŸWô~_¿_   õâ:™2_____IEND@B`_,
```

File = incoming-limit.conf

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-Bus Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <!-- Our well-known bus type, don't change this -->
  <type>session</type>
  <listen>unix:tmpdir=/tmp</listen>

  <policy context="default">
    <!-- Allow everything to be sent -->
    <allow send_destination="*" eavesdrop="true"/>
    <!-- Allow everything to be received -->
    <allow eavesdrop="true"/>
    <!-- Allow anyone to own anything -->
    <allow own="*" />
  </policy>

  <limit name="max_incoming_bytes">1</limit>
</busconfig>
```

File = index.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>D-Bus GLib bindings - Reference Manual</title>
<meta name="generator" content="DocBook XSL Stylesheets V1.76.1">
<link rel="home" href="index.html" title="D-Bus GLib bindings -
Reference Manual">
<link rel="next" href="ch01.html" title="Introduction">
<meta name="generator" content="GTK-Doc V1.18 (XML mode)">
<link rel="stylesheet" href="style.css" type="text/css">
</head>
<body bgcolor="white" text="black" link="#0000FF" vlink="#840084"
alink="#0000FF">
<div class="book">
<div class="titlepage">
<div>
<div><table class="navigation" id="top" width="100%" cellpadding="2"
cellspacing="0"><tr><th valign="middle"><p class="title">D-Bus GLib
bindings - Reference Manual</p></th></tr></table></div>
```

```
<div><p class="releaseinfo">for version 0.100.2
</p></div>
</div>
<hr>
</div>
<div class="toc"><dl>
<dt><span class="chapter"><a
href="ch01.html">Introduction</a></span></dt>
<dt><span class="chapter"><a href="ch02.html">API
Reference</a></span></dt>
<dd><dl>
<dt><span class="sect1"><a href="ch02.html#api-overview">API for using
D-BUS with GLib</a></span></dt>
<dt>
<span class="refentrytitle"><a href="dbus-glib-
DBusGConnection.html">DBusGConnection</a></span><span
class="refpurpose"> â€” DBus Connection</span>
</dt>
<dt>
<span class="refentrytitle"><a href="dbus-glib-DBus-GObject-related-
functions.html">DBus GObject related functions</a></span><span
class="refpurpose"> â€” Exporting a <a
href="http://library.gnome.org/devel/gobject/unstable/gobject-The-
Base-Object-Type.html#GObject"><span class="type">GObject</span></a>
remotely</span>
</dt>
<dt>
<span class="refentrytitle"><a href="dbus-glib-
DBusGMessage.html">DBusGMessage</a></span><span class="refpurpose">
â€” DBus Message</span>
</dt>
<dt>
<span class="refentrytitle"><a href="dbus-glib-
DBusGMethod.html">DBusGMethod</a></span><span class="refpurpose"> â€”
GMethod Info &amp; Invocation</span>
</dt>
<dt>
<span class="refentrytitle"><a href="dbus-glib-
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<br>
<a href="dbus-tutorial.html">D-Bus Tutorial</a>
<br>
<br>

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  <br>
<a href="dbus-faq.html">D-Bus FAQ</a>
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  <br>
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<ANCHOR id="dbus-g-type-struct-set-member" href="dbus-glib/dbus-glib-Specializable-GType-System.html#dbus-g-type-struct-set-member">
<ANCHOR id="dbus-g-type-struct-get" href="dbus-glib/dbus-glib-Specializable-GType-System.html#dbus-g-type-struct-get">
<ANCHOR id="dbus-g-type-struct-set" href="dbus-glib/dbus-glib-Specializable-GType-System.html#dbus-g-type-struct-set">

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<ANCHOR id="dbus-glib-DBus-GLib-low-level.synopsis" href="dbus-glib/dbus-glib-DBus-GLib-low-level.html#dbus-glib-DBus-GLib-low-level.synopsis">

```
<ANCHOR id="dbus-glib-DBus-GLib-low-level.description" href="dbus-glib/dbus-glib-DBus-GLib-low-level.html#dbus-glib-DBus-GLib-low-level.description">
<ANCHOR id="dbus-glib-DBus-GLib-low-level.details" href="dbus-glib/dbus-glib-DBus-GLib-low-level.html#dbus-glib-DBus-GLib-low-level.details">
<ANCHOR id="dbus-set-g-error" href="dbus-glib/dbus-glib-DBus-GLib-low-level.html#dbus-set-g-error">
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<ANCHOR id="dbus-connection-get-g-connection" href="dbus-glib/dbus-glib-DBus-GLib-low-level.html#dbus-connection-get-g-connection">
<ANCHOR id="dbus-server-setup-with-g-main" href="dbus-glib/dbus-glib-DBus-GLib-low-level.html#dbus-server-setup-with-g-main">
<ANCHOR id="DBUS-TYPE-CONNECTION:CAPS" href="dbus-glib/dbus-glib-DBus-GLib-low-level.html#DBUS-TYPE-CONNECTION:CAPS">
<ANCHOR id="DBUS-TYPE-MESSAGE:CAPS" href="dbus-glib/dbus-glib-DBus-GLib-low-level.html#DBUS-TYPE-MESSAGE:CAPS">
<ANCHOR id="dbus-binding-tool" href="dbus-glib/dbus-binding-tool.html">
```

File = INSTALL

```
DBus GLib Installation
=====
```

```
Quick start
=====
```

DBus uses GNU AutoTools for its build system, thus the basic install procedure can be summarized as:

```
./configure --prefix=/usr
make
su make install
```

The configure script will automatically determine whether to try and build bindings for GLib, Qt, Qt3, Python and Mono based on what tools are installed on the host system. The default build behaviour can be overridden using the --enable-XXX/--disable-XXX arguments to configure.

A typical scenario in which it is desirable to override automatic detection, is during packaging of binary builds, where a predictable dependancy chain is required. For more details on GNU AutoTools installation, consult the generic instructions later in this document

```
External software dependancies
=====
```

Requisite:

- GLib >= 2.6

Optional:

- gtk-doc (for API documentation)

=====

The rest of this document contains the generic GNU AutoTools install instructions....

Basic Installation

=====

These are generic installation instructions.

The ``configure'` shell script attempts to guess correct values for various system-dependent variables used during compilation. It uses those values to create a ``Makefile'` in each directory of the package. It may also create one or more ``.h'` files containing system-dependent definitions. Finally, it creates a shell script ``config.status'` that you can run in the future to recreate the current configuration, a file

``config.cache'` that saves the results of its tests to speed up reconfiguring, and a file ``config.log'` containing compiler output (useful mainly for debugging ``configure'`).

If you need to do unusual things to compile the package, please try to figure out how ``configure'` could check whether to do them, and mail diffs or instructions to the address given in the ``README'` so they can be considered for the next release. If at some point ``config.cache'` contains results you don't want to keep, you may remove or edit it.

The file ``configure.in'` is used to create ``configure'` by a program called ``autoconf'`. You only need ``configure.in'` if you want to change it or regenerate ``configure'` using a newer version of ``autoconf'`.

The simplest way to compile this package is:

1. ``cd'` to the directory containing the package's source code and type

``../configure'` to configure the package for your system. If you're

using ``csh'` on an old version of System V, you might need to type ``sh ./configure'` instead to prevent ``csh'` from trying to execute ``configure'` itself.

Running ``configure'` takes awhile. While running, it prints some messages telling which features it is checking for.

2. Type ``make'` to compile the package.

3. Optionally, type ``make check'` to run any self-tests that come with the package.
4. Type ``make install'` to install the programs and any data files and documentation.
5. You can remove the program binaries and object files from the source code directory by typing ``make clean'`. To also remove the files that ``configure'` created (so you can compile the package for a different kind of computer), type ``make distclean'`. There is also a ``make maintainer-clean'` target, but that is intended mainly for the package's developers. If you use it, you may have to get all sorts of other programs in order to regenerate files that came with the distribution.

Compilers and Options =====

Some systems require unusual options for compilation or linking that the ``configure'` script does not know about. You can give ``configure'` initial values for variables by setting them in the environment. Using a Bourne-compatible shell, you can do that on the command line like this:

```
CC=c89 CFLAGS=-O2 LIBS=-lposix ./configure
```

Or on systems that have the ``env'` program, you can do it like this:

```
env CPPFLAGS=-I/usr/local/include LDFLAGS=-s ./configure
```

Compiling For Multiple Architectures =====

You can compile the package for more than one kind of computer at the same time, by placing the object files for each architecture in their own directory. To do this, you must use a version of ``make'` that supports the ``VPATH'` variable, such as GNU ``make'`. ``cd'` to the directory where you want the object files and executables to go and run the ``configure'` script. ``configure'` automatically checks for the source code in the directory that ``configure'` is in and in ``..'.`

If you have to use a ``make'` that does not support the ``VPATH'` variable, you have to compile the package for one architecture at a time

in the source code directory. After you have installed the package for one architecture, use ``make distclean'` before reconfiguring for another architecture.

Installation Names =====

By default, ``make install'` will install the package's files in ``/usr/local/bin'`, ``/usr/local/man'`, etc. You can specify an installation prefix other than ``/usr/local'` by giving ``configure'` the option ``--prefix=PATH'`.

You can specify separate installation prefixes for architecture-specific files and architecture-independent files. If you give ``configure'` the option ``--exec-prefix=PATH'`, the package will use `PATH` as the prefix for installing programs and libraries. Documentation and other data files will still use the regular prefix.

In addition, if you use an unusual directory layout you can give options like ``--bindir=PATH'` to specify different values for particular kinds of files. Run ``configure --help'` for a list of the directories you can set and what kinds of files go in them.

If the package supports it, you can cause programs to be installed with an extra prefix or suffix on their names by giving ``configure'` the option ``--program-prefix=PREFIX'` or ``--program-suffix=SUFFIX'`.

Optional Features =====

Some packages pay attention to ``--enable-FEATURE'` options to ``configure'`, where `FEATURE` indicates an optional part of the package. They may also pay attention to ``--with-PACKAGE'` options, where `PACKAGE` is something like ``gnu-as'` or ``x'` (for the X Window System). The ``README'` should mention any ``--enable-'` and ``--with-'` options that the package recognizes.

For packages that use the X Window System, ``configure'` can usually find the X include and library files automatically, but if it doesn't, you can use the ``configure'` options ``--x-includes=DIR'` and ``--x-libraries=DIR'` to specify their locations.

Specifying the System Type =====

There may be some features ``configure'` can not figure out automatically, but needs to determine by the type of host the package

will run on. Usually `configure` can figure that out, but if it prints a message saying it can not guess the host type, give it the `--host=TYPE` option. TYPE can either be a short name for the system type, such as `sun4`, or a canonical name with three fields:
CPU-COMPANY-SYSTEM

See the file `config.sub` for the possible values of each field. If `config.sub` isn't included in this package, then this package doesn't need to know the host type.

If you are building compiler tools for cross-compiling, you can also use the `--target=TYPE` option to select the type of system they will produce code for and the `--build=TYPE` option to select the type of system on which you are compiling the package.

Sharing Defaults

=====

If you want to set default values for `configure` scripts to share, you can create a site shell script called `config.site` that gives default values for variables like `CC`, `cache_file`, and `prefix`. `configure` looks for `PREFIX/share/config.site` if it exists, then `PREFIX/etc/config.site` if it exists. Or, you can set the `CONFIG_SITE` environment variable to the location of the site script. A warning: not all `configure` scripts look for a site script.

Operation Controls

=====

`configure` recognizes the following options to control how it operates.

`--cache-file=FILE`

Use and save the results of the tests in FILE instead of `./config.cache`. Set FILE to `/dev/null` to disable caching, for debugging `configure`.

`--help`

Print a summary of the options to `configure`, and exit.

`--quiet`

`--silent`

`-q`

Do not print messages saying which checks are being made. To suppress all normal output, redirect it to `/dev/null` (any error messages will still be shown).

`--srcdir=DIR`

Look for the package's source code in directory DIR. Usually

`configure' can determine that directory automatically.

`--version'

Print the version of Autoconf used to generate the `configure' script, and exit.

`configure' also accepts some other, not widely useful, options.

File = INSTALL.~1~

DBus Installation =====

Quick start =====

DBus could be build with GNU AutoTools or with cmake for its build system, thus the basic install procedure can be summarized as:

with autotools:

```
./configure --prefix=/usr
make
su make install
```

The configure script will automatically determine whether to try and build bindings for GLib, Qt, Qt3, Python and Mono based on what tools are installed on the host system. The default build behaviour can be overridden using the --enable-XXX/--disable-XXX arguments to configure.

A typical scenario in which it is desirable to override automatic detection, is during packaging of binary builds, where a predictable dependancy chain is required. For more details on GNU AutoTools installation, consult the generic instructions later in this document

with cmake:

```
mkdir dbus-build-dir
cd dbus-build-dir
cmake -G <makefile-generator-name> [-D<option>] <dbus-src-root>/cmake
make
make install
```

cmake will automatically determine whether to build some features based on what tools and/or libraries are installed on the host system. The default build behaviour can be overridden using the -DENABLE_<XXX> arguments to cmake.

A typical scenario in which it is desirable to override automatic detection, is during packaging of binary builds, where a predictable

dependency chain is required. For more details on cmake installation, consult <http://www.cmake.org/cmake/help/help.html>.

External software dependancies =====

The only fundamental requirement to build DBus is an XML parser, however, there are a number of other software packages which (if present) will enhance functionality.

Core library -----

Requisite:

- Gettext
- expat or libxml-2

NB, expat is the recommended XML parser because it has more robust handling of OOM conditions.

Optional:

- libselinux (for SELinux integration)
- dnotify (for automatic service file reload)
- doxygen (for API documentation)
- xmlto or meinproc4 (for Spec & other XML documentation)

=====

The rest of this document contains the generic GNU AutoTools install instructions....

Basic Installation =====

These are generic installation instructions.

The ``configure'` shell script attempts to guess correct values for various system-dependent variables used during compilation. It uses those values to create a ``Makefile'` in each directory of the package. It may also create one or more ``.h'` files containing system-dependent definitions. Finally, it creates a shell script ``config.status'` that you can run in the future to recreate the current configuration, a file ``config.cache'` that saves the results of its tests to speed up reconfiguring, and a file ``config.log'` containing compiler output (useful mainly for debugging ``configure'`).

If you need to do unusual things to compile the package, please try to figure out how ``configure'` could check whether to do them, and mail diffs or instructions to the address given in the ``README'` so they can

be considered for the next release. If at some point `config.cache` contains results you don't want to keep, you may remove or edit it.

The file `configure.in` is used to create `configure` by a program called `autoconf`. You only need `configure.in` if you want to change it or regenerate `configure` using a newer version of `autoconf`.

The simplest way to compile this package is:

1. `cd` to the directory containing the package's source code and type
`./configure` to configure the package for your system. If you're using `csh` on an old version of System V, you might need to type `sh ./configure` instead to prevent `csh` from trying to execute `configure` itself.

Running `configure` takes awhile. While running, it prints some messages telling which features it is checking for.

2. Type `make` to compile the package.
3. Optionally, type `make check` to run any self-tests that come with the package.
4. Type `make install` to install the programs and any data files and documentation.
5. You can remove the program binaries and object files from the source code directory by typing `make clean`. To also remove the files that `configure` created (so you can compile the package for a different kind of computer), type `make distclean`. There is also a `make maintainer-clean` target, but that is intended mainly for the package's developers. If you use it, you may have to get all sorts of other programs in order to regenerate files that came with the distribution.

Compilers and Options =====

Some systems require unusual options for compilation or linking that the `configure` script does not know about. You can give `configure` initial values for variables by setting them in the environment. Using a Bourne-compatible shell, you can do that on the command line like this:

```
CC=c89 CFLAGS=-O2 LIBS=-lposix ./configure
```

Or on systems that have the ``env'` program, you can do it like this:
`env CPPFLAGS=-I/usr/local/include LDFLAGS=-s ./configure`

Compiling For Multiple Architectures

```
=====
```

You can compile the package for more than one kind of computer at the same time, by placing the object files for each architecture in their own directory. To do this, you must use a version of ``make'` that supports the ``VPATH'` variable, such as GNU ``make'`. ``cd'` to the directory where you want the object files and executables to go and run the ``configure'` script. ``configure'` automatically checks for the source code in the directory that ``configure'` is in and in ``..'`.`

If you have to use a ``make'` that does not support the ``VPATH'` variable, you have to compile the package for one architecture at a time in the source code directory. After you have installed the package for one architecture, use ``make distclean'` before reconfiguring for another architecture.

Installation Names

```
=====
```

By default, ``make install'` will install the package's files in ``/usr/local/bin'`, ``/usr/local/man'`, etc. You can specify an installation prefix other than ``/usr/local'` by giving ``configure'` the option ``--prefix=PATH'`.

You can specify separate installation prefixes for architecture-specific files and architecture-independent files. If you give ``configure'` the option ``--exec-prefix=PATH'`, the package will use `PATH` as the prefix for installing programs and libraries. Documentation and other data files will still use the regular prefix.

In addition, if you use an unusual directory layout you can give options like ``--bindir=PATH'` to specify different values for particular kinds of files. Run ``configure --help'` for a list of the directories you can set and what kinds of files go in them.

If the package supports it, you can cause programs to be installed with an extra prefix or suffix on their names by giving ``configure'` the option ``--program-prefix=PREFIX'` or ``--program-suffix=SUFFIX'`.

Optional Features

=====

Some packages pay attention to `--enable-FEATURE` options to `configure`, where `FEATURE` indicates an optional part of the package. They may also pay attention to `--with-PACKAGE` options, where `PACKAGE` is something like `gnu-as` or `x` (for the X Window System). The `README` should mention any `--enable-` and `--with-` options that the package recognizes.

For packages that use the X Window System, `configure` can usually find the X include and library files automatically, but if it doesn't, you can use the `configure` options `--x-includes=DIR` and `--x-libraries=DIR` to specify their locations.

Specifying the System Type

=====

There may be some features `configure` can not figure out automatically, but needs to determine by the type of host the package will run on. Usually `configure` can figure that out, but if it prints

a message saying it can not guess the host type, give it the `--host=TYPE` option. `TYPE` can either be a short name for the system type, such as `sun4`, or a canonical name with three fields:
CPU-COMPANY-SYSTEM

See the file `config.sub` for the possible values of each field. If `config.sub` isn't included in this package, then this package doesn't need to know the host type.

If you are building compiler tools for cross-compiling, you can also use the `--target=TYPE` option to select the type of system they will produce code for and the `--build=TYPE` option to select the type of system on which you are compiling the package.

Sharing Defaults

=====

If you want to set default values for `configure` scripts to share, you can create a site shell script called `config.site` that gives default values for variables like `CC`, `cache_file`, and `prefix`. `configure` looks for `PREFIX/share/config.site` if it exists, then `PREFIX/etc/config.site` if it exists. Or, you can set the `CONFIG_SITE` environment variable to the location of the site script. A warning: not all `configure` scripts look for a site script.

Operation Controls

=====

`configure' recognizes the following options to control how it operates.

`--cache-file=FILE'

Use and save the results of the tests in FILE instead of `./config.cache'. Set FILE to `/dev/null' to disable caching, for debugging `configure'.

`--help'

Print a summary of the options to `configure', and exit.

`--quiet'

`--silent'

`-q'

Do not print messages saying which checks are being made. To suppress all normal output, redirect it to `/dev/null' (any error messages will still be shown).

`--srcdir=DIR'

Look for the package's source code in directory DIR. Usually `configure' can determine that directory automatically.

`--version'

Print the version of Autoconf used to generate the `configure' script, and exit.

`configure' also accepts some other, not widely useful, options.

File = interfaces-test.service

[D-BUS Service]

Name=org.freedesktop.DBus.GLib.Test.Interfaces

Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-glib/0.100.2-r0/dbus-glib-0.100.2/test/interfaces/test-service

File = interfaces-test.service.in

[D-BUS Service]

Name=org.freedesktop.DBus.GLib.Test.Interfaces

Exec=@TEST_INTERFACES_SERVICE_BINARY@

File = introspect.dtd

<!-- DTD for D-Bus Introspection data -->

```

<!-- (C) 2005-02-02 David A. Wheeler; released under the D-Bus
licenses,
        GNU GPL version 2 (or greater) and AFL 1.1 (or greater) -->

<!-- see D-Bus specification for documentation -->

<!ELEMENT node (node|interface)*>
<!ATTLIST node name CDATA #IMPLIED>

<!ELEMENT interface (method|signal|property|annotation)*>
<!ATTLIST interface name CDATA #REQUIRED>

<!ELEMENT method (arg|annotation)*>
<!ATTLIST method name CDATA #REQUIRED>

<!ELEMENT signal (arg|annotation)*>
<!ATTLIST signal name CDATA #REQUIRED>

<!ELEMENT arg EMPTY>
<!ATTLIST arg name CDATA #IMPLIED>
<!ATTLIST arg type CDATA #REQUIRED>
<!-- Method arguments SHOULD include "direction",
        while signal and error arguments SHOULD not (since there's no
point).
        The DTD format can't express that subtlety. -->
<!ATTLIST arg direction (in|out) "in">

<!-- AKA "attribute" -->
<!ELEMENT property (annotation)*>
<!ATTLIST property name CDATA #REQUIRED>
<!ATTLIST property type CDATA #REQUIRED>
<!ATTLIST property access (read|write|readwrite) #REQUIRED>

<!ELEMENT annotation EMPTY> <!-- Generic metadata -->
<!ATTLIST annotation name CDATA #REQUIRED>
<!ATTLIST annotation value CDATA #REQUIRED>

```

File = introspect.xsl

```

<?xml version="1.0" encoding="ISO-8859-15"?>
<xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
xmlns="http://www.w3.org/1999/xhtml">

```

```

<!--
Copyright (C) 2005 Lennart Poettering.

```

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This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

-->

<!-- \$Id\$ -->

```
<xsl:output method="xml" version="1.0" encoding="iso-8859-15" doctype-
public "-//W3C//DTD XHTML 1.0 Strict//EN" doctype-
system="http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd"
indent="yes"/>
```

```
<xsl:template match="/">
```

```
<html>
```

```
<head>
```

```
<title>DBUS Introspection data</title>
```

```
<style type="text/css">
```

```
body { color: black; background-color: white }
```

```
h1 { font-family: sans-serif }
```

```
ul { list-style-type: none; margin-bottom: 10px }
```

```
li { font-family: sans-serif }
```

```
.keyword { font-style: italic }
```

```
.type { font-weight: bold }
```

```
.symbol { font-family: monospace }
```

```
.interface { padding: 10px; margin: 10px }
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<xsl:for-each select="node/interface">
```

```
<div class="interface">
```

```
<h1>
```

```
<span class="keyword">interface</span><xsl:text>
```

```
</xsl:text>
```

```
<span class="symbol"><xsl:value-of select="@name"/></span>
```

```
</h1>
```

```
<ul>
```

```
<xsl:apply-templates select="annotation"/>
```

```

        <xsl:for-each select="method|signal|property">
            <li>
                <span class="keyword"><xsl:value-of
select="name() "/></span>
                <xsl:text> </xsl:text>
                <span class="symbol"><xsl:value-of
select="@name"/></span>

                <ul>
                    <xsl:apply-templates select="annotation"/>
                    <xsl:for-each select="arg">
                        <li>
                            <span class="keyword">
                                <xsl:choose>
                                    <xsl:when test="@direction != &quot;&quot;">
                                        <xsl:value-of select="@direction"/>
                                    </xsl:when>
                                    <xsl:when test="name(..) =
&quot;signal&quot;">
                                        out
                                    </xsl:when>
                                    <xsl:otherwise>
                                        in
                                    </xsl:otherwise>
                                </xsl:choose>
                            </span>

                            <xsl:text> </xsl:text>

                            <span class="type"><xsl:value-of
select="@type"/></span><xsl:text> </xsl:text>
                            <span class="symbol"><xsl:value-of
select="@name"/></span><xsl:text> </xsl:text>
                        </li>
                    </xsl:for-each>
                </ul>

            </li>
        </xsl:for-each>

    </ul>
</div>
</xsl:for-each>
</body>
</html>
</xsl:template>

<xsl:template match="annotation">
    <li>
        <span class="keyword">annotation</span>

```

```
    <code><xsl:value-of select="@name"/></code><xsl:text> =
</xsl:text>
    <code><xsl:value-of select="@value"/></code>
  </li>
</xsl:template>

</xsl:stylesheet>
```

File = invalid-annotated-node.xml

```
<?xml version="1.0"?><!-- ex:set et ts=2: -->
<node name="/org/freedesktop/DBus/GLib/Test/Interfaces">
  <annotation name="com.example.Invalid" value="not allowed here!"/>

  <interface
name="org.freedesktop.DBus.GLib.Test.Interfaces.Annotated">
  <annotation name="org.freedesktop.DBus.GLib.CSymbol"
value="test_annotated"/>
  </interface>
</node>
```

File = invalid-command-client.auth-script

```
## this tests that receiving a nonexistent command is handled properly
## by a client
```

```
CLIENT
EXPECT_COMMAND AUTH
SEND 'NONEXISTENT_COMMAND foo bar baz blah blah'
EXPECT_COMMAND ERROR
EXPECT_STATE WAITING_FOR_INPUT
```

File = invalid-command.auth-script

```
## this tests that receiving a nonexistent command is handled properly
## by a server
```

```
SERVER
SEND 'NONEXISTENT_COMMAND foo bar baz blah blah'
EXPECT_COMMAND ERROR
EXPECT_STATE WAITING_FOR_INPUT
```

File = invalid-hex-encoding.auth-script

```
## this tests an invalid hex encoding followed by successful
authentication
```

```
SERVER
SEND 'AUTH EXTERNAL willy'
EXPECT_COMMAND ERROR
EXPECT_STATE WAITING_FOR_INPUT
```

```
File = invalid-nested-annotation.xml
```

```
<?xml version="1.0"?><!-- ex:set et ts=2: -->
<node name="/org/freedesktop/DBus/GLib/Test/Interfaces">
  <interface
name="org.freedesktop.DBus.GLib.Test.Interfaces.Annotated">
  <annotation name="org.freedesktop.DBus.GLib.CSymbol"
value="test_annotated">
  <annotation name="com.example.Invalid" value="can't nest
annotations"/>
  </annotation>
</interface>
</node>
```

```
File = invalid-usage.c
```

```
/* Manual test for various invalid usages which should not crash us
(in order
 * to be nice to fallible programmers), unless checks have been
disabled (in
 * which case, you asked for it, you got it).
 *
 * Copyright © 2006-2010 Red Hat, Inc.
 * Copyright © 2006-2010 Collabora Ltd.
 * Copyright © 2006-2011 Nokia Corporation
 * Copyright © 2006 Steve Francia
 *
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 * it under the terms of the GNU General Public License as published
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 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
```

```

*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston,
* MA 02110-1301 USA
*/

#include <config.h>

#include <glib.h>

#include <dbus/dbus.h>
#include <dbus/dbus-glib.h>
#include <dbus/dbus-glib-lowlevel.h>

#include <string.h>

#include "my-object.h"
#include "test-service-glib-bindings.h"

/* my-object wants this to exist */
GMainLoop *loop = NULL;

typedef struct {
    GError *error;
    DBusGConnection *conn;
    DBusGProxy *proxy;
    DBusGProxy *proxy_for_self;
    GObject *object;
} Fixture;

static void
setup (Fixture *f,
      gconstpointer context)
{
    /* this test is all about (mostly critical) warnings, so don't crash
    out on
    * programming errors */
    g_setenv ("DBUS_FATAL_WARNINGS", "0", TRUE);
    g_log_set_always_fatal (G_LOG_LEVEL_ERROR);

    dbus_g_type_specialized_init ();

    /* This is a bug: you're not meant to register any domain more than
    * once. It shouldn't crash, though. */
    dbus_g_error_domain_register (MY_OBJECT_ERROR, NULL, MY_TYPE_ERROR);

    f->conn = dbus_g_bus_get_private (DBUS_BUS_SESSION, NULL, &f-
    >error);
    g_assert_no_error (f->error);
    g_assert (f->conn != NULL);

```



```

f->proxy = dbus_g_proxy_new_for_name (f->conn, "com.example.Test",
    "/com/example/Test/Object", "com.example.Test.Fallible");
g_assert (f->proxy != NULL);

f->object = g_object_new (MY_TYPE_OBJECT, NULL);
g_assert (MY_IS_OBJECT (f->object));
dbus_g_connection_register_g_object (f->conn,
"/com/example/Test/Object",
    f->object);

f->proxy_for_self = dbus_g_proxy_new_for_name (f->conn,
    dbus_bus_get_unique_name (dbus_g_connection_get_connection (f-
>conn)),
    "/com/example/Test/Object",
"org.freedesktop.DBus.GLib.Tests.MyObject");
g_assert (f->proxy_for_self != NULL);
}

static void
test_invalid_gtype (Fixture *f,
    gconstpointer context)
{
    /* G_TYPE_GTYPE is not handled by the dbus-glib type system (and
would make
    * no sense anyway) */
    dbus_g_proxy_call_no_reply (f->proxy, "Fail",
        G_TYPE_GTYPE, G_TYPE_STRING,
        G_TYPE_INVALID);
}

static void
test_invalid_utf8 (Fixture *f,
    gconstpointer context)
{
    g_test_bug ("30171");

    /* This provokes a libdbus warning, which is fatal-by-default */
    dbus_g_proxy_call_no_reply (f->proxy, "Fail",
        G_TYPE_STRING, "\xfe\xfe\xfe",
        G_TYPE_INVALID);
}

static void
test_invalid_bool (Fixture *f,
    gconstpointer context)
{
    g_test_bug ("30171");

    /* This provokes a libdbus warning, which is fatal-by-default */
    dbus_g_proxy_call_no_reply (f->proxy, "Fail",
        G_TYPE_BOOLEAN, (gboolean) (-42),
        G_TYPE_INVALID);
}

```

```

}

static void
test_invalid_path (Fixture *f,
                  gconstpointer context)
{
    g_test_bug ("30171");

    /* This provokes a libdbus warning, which is fatal-by-default */
    dbus_g_proxy_call_no_reply (f->proxy, "Fail",
                                DBUS_TYPE_G_OBJECT_PATH, "$%#!",
                                G_TYPE_INVALID);
}

static void
test_invalid_utf8s (Fixture *f,
                   gconstpointer context)
{
    gchar *bad_strings[] = { "\xfe\xfe\xfe", NULL };
    GStrv bad_strv = bad_strings;

    g_test_bug ("30171");

    /* This provokes a libdbus warning, which is fatal-by-default */
    dbus_g_proxy_call_no_reply (f->proxy, "Fail",
                                G_TYPE_STRV, bad_strv,
                                G_TYPE_INVALID);
}

static void
test_invalid_bools (Fixture *f,
                   gconstpointer context)
{
    GArray *array;
    gboolean maybe = (gboolean) (-23);

    g_test_bug ("30171");

    array = g_array_new (FALSE, FALSE, sizeof (gboolean));

    g_array_append_val (array, maybe);

    /* This provokes a libdbus warning, which is fatal-by-default */
    dbus_g_proxy_call_no_reply (f->proxy, "Fail",
                                dbus_g_type_get_collection ("GArray", G_TYPE_BOOLEAN), array,
                                G_TYPE_INVALID);

    g_array_free (array, TRUE);
}

static void
test_invalid_paths (Fixture *f,

```

```

    gconstpointer context)
{
    GPtrArray *array;

    g_test_bug ("30171");

    array = g_ptr_array_new ();
    g_ptr_array_add (array, "bees");

    /* This provokes a libdbus warning, which is fatal-by-default */
    dbus_g_proxy_call_no_reply (f->proxy, "Fail",
        dbus_g_type_get_collection ("GPtrArray",
DBUS_TYPE_G_OBJECT_PATH), array,
        G_TYPE_INVALID);

    g_ptr_array_free (array, TRUE);
}

static void
throw_error_cb (DBusGProxy *proxy,
    GError *error,
    gpointer user_data)
{
    GError **error_out = user_data;

    g_assert (error != NULL);
    *error_out = g_error_copy (error);
}

static void
test_error_out_of_range (Fixture *f,
    gconstpointer context)
{
    GError *error = NULL;

    g_test_bug ("40151");

    /* This is a bug: -1 isn't a valid code for the domain. */
    my_object_save_error ((MyObject *) f->object, MY_OBJECT_ERROR, -1,
        "stop being so negative");

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_throw_error_async (
        f->proxy_for_self, throw_error_cb, &error))
        g_error ("Failed to start async ThrowError call");

    while (error == NULL)
        g_main_context_iteration (NULL, TRUE);

    g_assert_error (error, DBUS_GERROR, DBUS_GERROR_REMOTE_EXCEPTION);
    g_clear_error (&error);

    /* This is a bug: 666 isn't a valid code for the domain. */

```

```

my_object_save_error ((MyObject *) f->object, MY_OBJECT_ERROR, 666,
    "demonic possession detected");

if (!org_freedesktop_DBus_GLib_Tests_MyObject_throw_error_async (
    f->proxy_for_self, throw_error_cb, &error))
    g_error ("Failed to start async ThrowError call");

while (error == NULL)
    g_main_context_iteration (NULL, TRUE);

g_assert_error (error, DBUS_GERROR, DBUS_GERROR_REMOTE_EXCEPTION);
g_clear_error (&error);
}

static void
test_error_domain_0 (Fixture *f,
    gconstpointer context)
{
    /* This throws an error with domain 0 and code 0, which makes no
    sense.
    * It's programmer error, really: g_error_new() would be critical if
    given
    * the same domain and code. See GNOME#660371.
    *
    * This was added for fd.o #27799, but there's a difference between
    * "this is an error domain, but not one registered with dbus-glib"
    and
    * "this isn't even an error domain". */
    g_test_bug ("27799");

    if
(!org_freedesktop_DBus_GLib_Tests_MyObject_throw_unregistered_error_as
ync (
    f->proxy_for_self, throw_error_cb, f))
        g_error ("Failed to start async ThrowUnregisteredError call");

    while (f->error == NULL)
        g_main_context_iteration (NULL, TRUE);

    g_assert_error (f->error, DBUS_GERROR,
DBUS_GERROR_REMOTE_EXCEPTION);
}

static void
teardown (Fixture *f,
    gconstpointer context G_GNUC_UNUSED)
{
    g_clear_error (&f->error);

    if (f->proxy != NULL)
    {
        g_object_unref (f->proxy);
    }
}

```

```

    f->proxy = NULL;
}

if (f->object != NULL)
{
    g_object_unref (f->object);
    f->object = NULL;
}

if (f->proxy_for_self != NULL)
{
    g_object_unref (f->proxy_for_self);
    f->proxy_for_self = NULL;
}

if (f->conn != NULL)
{
    dbus_connection_close (dbus_g_connection_get_connection (f-
>conn));
    dbus_g_connection_unref (f->conn);
    f->conn = NULL;
}
}

int
main (int argc,
      char **argv)
{
    g_test_init (&argc, &argv, NULL);
    g_test_bug_base ("https://bugs.freedesktop.org/show_bug.cgi?id=");

    g_type_init ();

    g_test_add ("/invalid/gtype", Fixture, NULL, setup,
test_invalid_gtype,
teardown);
    g_test_add ("/invalid/utf8", Fixture, NULL, setup,
test_invalid_utf8,
teardown);
    g_test_add ("/invalid/bool", Fixture, NULL, setup,
test_invalid_bool,
teardown);
    g_test_add ("/invalid/path", Fixture, NULL, setup,
test_invalid_path,
teardown);
    g_test_add ("/invalid/utf8s", Fixture, NULL, setup,
test_invalid_utf8s,
teardown);
    g_test_add ("/invalid/bools", Fixture, NULL, setup,
test_invalid_bools,
teardown);
}

```

```

    g_test_add ("/invalid/paths", Fixture, NULL, setup,
test_invalid_paths,
    teardown);
    g_test_add ("/invalid/error/out-of-range", Fixture, NULL, setup,
    test_error_out_of_range, teardown);
    g_test_add ("/invalid/error/domain-0", Fixture, NULL, setup,
    test_error_domain_0, teardown);

    return g_test_run ();
}

```

File = lcov.am

```

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# Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA

```

lcov-reset:

```
    lcov --directory @top_srcdir@ --zerocounters
```

lcov-report:

```

    lcov --directory @top_srcdir@ --capture \
        --output-file @top_builddir@/lcov.info.tmp
    lcov --directory @top_srcdir@ --output-file
@top_builddir@/lcov.info \
        --remove @top_builddir@/lcov.info.tmp '*-scan.c'
    rm @top_builddir@/lcov.info.tmp
    $(mkdir_p) @top_builddir@/lcov.html

```

```
git_commit=`GIT_DIR=@top_srcdir@/.git git log -1 --
pretty=format:%h 2>/dev/null`; \
genhtml --title "@PACKAGE_STRING@ $$git_commit" \
--output-directory @top_builddir@/lcov.html lcov.info
@echo
@echo 'lcov report can be found in:'
@echo 'file://@abs_top_builddir@/lcov.html/index.html'
@echo
```

```
lcov-check:
$(MAKE) lcov-reset
$(MAKE) check $(LCOV_CHECK_ARGS)
$(MAKE) lcov-report
```

```
## vim:set ft=automake:
```

File = left.png

%PNG

—

IHDR _____ àw=ø _____ bKGD_ÿ_ÿ_ÿ ¼\$" _____ pHYs__

_____ ÖÝ~ü _____ tIME

Ö _____ 1&¹³ [(_____ XIDATxœµ•!OĂP_EiÛ*_ ^%ŠID%~_êŠ~"ÄÖ"p_æ'ö _____ Å□~`s_Ü-•¥rKf-
' ,râ h- _mi-ÇIžz}÷Ü_Iûæ-_.pÛö\`` `xä<

^1#?_1·[², _H-#¯×k<ï#Žc_p%\'_AUx[·S³7-
_n6_ũ¾_âr¹BèõzE%+'s_ 'žE1³°ö"²æÅj@_œ-N_L\$Ýαiª0


```
¿5/ð}¿²\E_#žKIo¥Í"$a0_újPd□FfEbŠkIê_„□<æA_h>ÝW¶lC'_'?`tk;|/□t*I»ÝN«ÔÊ
Zø^`Eÿ•4ë÷ûšN$ŕ]×@ çJÒÌó<<'½À`"Ú•t»Ýú
€_à`±xà°î1__@p'æ€,d½÷□Z')høÖÚK-   ^$V_?%Å]€-
+³L'sgU□K_à"ÿw5â_3O_·_Üò_____IEND@B`,
```

File = libxml.m4

```
# Configure paths for LIBXML2
# Mike Hommey 2004-06-19
# use CPPFLAGS instead of CFLAGS
# Toshio Kuratomi 2001-04-21
# Adapted from:
# Configure paths for GLIB
# Owen Taylor      97-11-3

dnl AM_PATH_XML2([MINIMUM-VERSION, [ACTION-IF-FOUND [, ACTION-IF-NOT-
FOUND]])
dnl Test for XML, and define XML_CPPFLAGS and XML_LIBS
dnl
AC_DEFUN([AM_PATH_XML2],[
AC_ARG_WITH(xml-prefix,
            [ --with-xml-prefix=PREFIX Prefix where libxml is
installed (optional)],
            xml_config_prefix="$withval", xml_config_prefix="")
AC_ARG_WITH(xml-exec-prefix,
            [ --with-xml-exec-prefix=PREFIX Exec prefix where libxml is
installed (optional)],
            xml_config_exec_prefix="$withval",
xml_config_exec_prefix="")
AC_ARG_ENABLE(xmltest,
            [ --disable-xmltest      Do not try to compile and run
a test LIBXML program],,
            enable_xmltest=yes)

if test x$xml_config_exec_prefix != x ; then
  xml_config_args="$xml_config_args"
  if test x${XML2_CONFIG+set} != xset ; then
    XML2_CONFIG=$xml_config_exec_prefix/bin/xml2-config
  fi
fi
if test x$xml_config_prefix != x ; then
  xml_config_args="$xml_config_args --prefix=$xml_config_prefix"
  if test x${XML2_CONFIG+set} != xset ; then
    XML2_CONFIG=$xml_config_prefix/bin/xml2-config
  fi
fi

AC_PATH_PROG(XML2_CONFIG, xml2-config, no)
min_xml_version=ifelse([$1], ,2.0.0,[$1])
AC_MSG_CHECKING(for libxml - version >= $min_xml_version)
no_xml=""
```

```

if test "$XML2_CONFIG" = "no" ; then
    no_xml=yes
else
    XML_CPPFLAGS=`$XML2_CONFIG $xml_config_args --cflags`
    XML_LIBS=`$XML2_CONFIG $xml_config_args --libs`
    xml_config_major_version=`$XML2_CONFIG $xml_config_args --version
| \
        sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\1/'`
    xml_config_minor_version=`$XML2_CONFIG $xml_config_args --version
| \
        sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\2/'`
    xml_config_micro_version=`$XML2_CONFIG $xml_config_args --version
| \
        sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\3/'`
    if test "x$enable_xmltest" = "xyes" ; then
        ac_save_CPPFLAGS="$CPPFLAGS"
        ac_save_LIBS="$LIBS"
        CPPFLAGS="$CPPFLAGS $XML_CPPFLAGS"
        LIBS="$XML_LIBS $LIBS"
dnl
dnl Now check if the installed libxml is sufficiently new.
dnl (Also sanity checks the results of xml2-config to some extent)
dnl
        rm -f conf.xmltest
        AC_TRY_RUN([
#include <stdlib.h>
#include <stdio.h>
#include <string.h>
#include <libxml/xmlversion.h>

int
main()
{
    int xml_major_version, xml_minor_version, xml_micro_version;
    int major, minor, micro;
    char *tmp_version;

    system("touch conf.xmltest");

    /* Capture xml2-config output via autoconf/configure variables */
    /* HP/UX 9 (%@#!) writes to sscanf strings */
    tmp_version = (char *)strdup("$min_xml_version");
    if (sscanf(tmp_version, "%d.%d.%d", &major, &minor, &micro) != 3) {
        printf("%s, bad version string from xml2-config\n",
"$min_xml_version");
        exit(1);
    }
    free(tmp_version);

    /* Capture the version information from the header files */
    tmp_version = (char *)strdup(LIBXML_DOTTED_VERSION);

```

```

    if (sscanf(tmp_version, "%d.%d.%d", &xml_major_version,
&xml_minor_version, &xml_micro_version) != 3) {
        printf("%s, bad version string from libxml includes\n",
"LIBXML_DOTTED_VERSION");
        exit(1);
    }
    free(tmp_version);

/* Compare xml2-config output to the libxml headers */
if ((xml_major_version != $xml_config_major_version) ||
    (xml_minor_version != $xml_config_minor_version) ||
    (xml_micro_version != $xml_config_micro_version))
{
    printf("*** libxml header files (version %d.%d.%d) do not
match\n",
        xml_major_version, xml_minor_version, xml_micro_version);
    printf("*** xml2-config (version %d.%d.%d)\n",
        $xml_config_major_version, $xml_config_minor_version,
$xml_config_micro_version);
    return 1;
}
/* Compare the headers to the library to make sure we match */
/* Less than ideal -- doesn't provide us with return value feedback,
* only exits if there's a serious mismatch between header and
library.
*/
LIBXML_TEST_VERSION;

/* Test that the library is greater than our minimum version */
if ((xml_major_version > major) ||
    ((xml_major_version == major) && (xml_minor_version > minor))
||
    ((xml_major_version == major) && (xml_minor_version == minor)
&&
    (xml_micro_version >= micro)))
{
    return 0;
}
else
{
    printf("\n*** An old version of libxml (%d.%d.%d) was
found.\n",
        xml_major_version, xml_minor_version,
xml_micro_version);
    printf("*** You need a version of libxml newer than %d.%d.%d.
The latest version of\n",
        major, minor, micro);
    printf("*** libxml is always available from
ftp://ftp.xmlsoft.org.\n");
    printf("****\n");
    printf("*** If you have already installed a sufficiently new
version, this error\n");

```

```

        printf("*** probably means that the wrong copy of the xml2-
config shell script is\n");
        printf("*** being found. The easiest way to fix this is to
remove the old version\n");
        printf("*** of LIBXML, but you can also set the XML2_CONFIG
environment to point to the\n");
        printf("*** correct copy of xml2-config. (In this case, you
will have to\n");
        printf("*** modify your LD_LIBRARY_PATH enviroment variable,
or edit /etc/ld.so.conf\n");
        printf("*** so that the correct libraries are found at run-
time)\n");
    }
    return 1;
}
],, no_xml=yes,[echo $ac_n "cross compiling; assumed OK... $ac_c"])
    CPPFLAGS="$ac_save_CPPFLAGS"
    LIBS="$ac_save_LIBS"
fi
fi

if test "x$no_xml" = x ; then
    AC_MSG_RESULT(yes (version
$xml_config_major_version.$xml_config_minor_version.$xml_config_micro_
version))
    ifelse([$2], , :, [$2])
else
    AC_MSG_RESULT(no)
    if test "$XML2_CONFIG" = "no" ; then
        echo "*** The xml2-config script installed by LIBXML could not
be found"
        echo "*** If libxml was installed in PREFIX, make sure
PREFIX/bin is in"
        echo "*** your path, or set the XML2_CONFIG environment
variable to the"
        echo "*** full path to xml2-config."
    else
        if test -f conf.xmltest ; then
            :
        else
            echo "*** Could not run libxml test program, checking
why..."
            CPPFLAGS="$CPPFLAGS $XML_CPPFLAGS"
            LIBS="$LIBS $XML_LIBS"
            AC_TRY_LINK([
#include <libxml/xmlversion.h>
#include <stdio.h>
], [ LIBXML_TEST_VERSION; return 0; ],
[ echo "*** The test program compiled, but did not run. This
usually means"
        echo "*** that the run-time linker is not finding LIBXML or
finding the wrong"

```

```

        echo "*** version of LIBXML. If it is not finding LIBXML,
you'll need to set your"
        echo "*** LD_LIBRARY_PATH environment variable, or edit
/etc/ld.so.conf to point"
        echo "*** to the installed location Also, make sure you
have run ldconfig if that"
        echo "*** is required on your system"
        echo "****"
        echo "*** If you have an old version installed, it is best
to remove it, although"
        echo "*** you may also be able to get things to work by
modifying LD_LIBRARY_PATH" ],
    [ echo "*** The test program failed to compile or link. See
the file config.log for the"
        echo "*** exact error that occurred. This usually means
LIBXML was incorrectly installed"
        echo "*** or that you have moved LIBXML since it was
installed. In the latter case, you"
        echo "*** may want to edit the xml2-config script:
$xml2_CONFIG" ])
        CPPFLAGS="$ac_save_CPPFLAGS"
        LIBS="$ac_save_LIBS"
    fi
fi

XML_CPPFLAGS=""
XML_LIBS=""
ifelse([$3], , :, [$3])
fi
AC_SUBST(XML_CPPFLAGS)
AC_SUBST(XML_LIBS)
rm -f conf.xmltest
])

```

File = libxml.m4.~1~

```

# Configure paths for LIBXML2
# Mike Hommey 2004-06-19
# use CPPFLAGS instead of CFLAGS
# Toshio Kuratomi 2001-04-21
# Adapted from:
# Configure paths for GLIB
# Owen Taylor      97-11-3

```

```

dnl AM_PATH_XML2([MINIMUM-VERSION, [ACTION-IF-FOUND [, ACTION-IF-NOT-
FOUND]])
dnl Test for XML, and define XML_CPPFLAGS and XML_LIBS
dnl
AC_DEFUN([AM_PATH_XML2],[
AC_ARG_WITH(xml-prefix,

```

```

        [ --with-xml-prefix=PFX Prefix where libxml is
installed (optional)],
        xml_config_prefix="$withval", xml_config_prefix=""
AC_ARG_WITH(xml-exec-prefix,
        [ --with-xml-exec-prefix=PFX Exec prefix where libxml is
installed (optional)],
        xml_config_exec_prefix="$withval",
xml_config_exec_prefix="")
AC_ARG_ENABLE(xmltest,
        [ --disable-xmltest Do not try to compile and run
a test LIBXML program],,
        enable_xmltest=yes)

if test x$xml_config_exec_prefix != x ; then
xml_config_args="$xml_config_args"
if test x${XML2_CONFIG+set} != xset ; then
XML2_CONFIG=$xml_config_exec_prefix/bin/xml2-config
fi
fi
if test x$xml_config_prefix != x ; then
xml_config_args="$xml_config_args --prefix=$xml_config_prefix"
if test x${XML2_CONFIG+set} != xset ; then
XML2_CONFIG=$xml_config_prefix/bin/xml2-config
fi
fi

AC_PATH_PROG(XML2_CONFIG, xml2-config, no)
min_xml_version=ifelse([$1], ,2.0.0,[$1])
AC_MSG_CHECKING(for libxml - version >= $min_xml_version)
no_xml=""
if test "$XML2_CONFIG" = "no" ; then
no_xml=yes
else
XML_CPPFLAGS=`$XML2_CONFIG $xml_config_args --cflags`
XML_LIBS=`$XML2_CONFIG $xml_config_args --libs`
xml_config_major_version=`$XML2_CONFIG $xml_config_args --version
| \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\1/'`
xml_config_minor_version=`$XML2_CONFIG $xml_config_args --version
| \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\2/'`
xml_config_micro_version=`$XML2_CONFIG $xml_config_args --version
| \
sed 's/\([[0-9]]*\)\.\([[0-9]]*\)\.\([[0-9]]*\)/\3/'`
if test "x$enable_xmltest" = "xyes" ; then
ac_save_CPPFLAGS="$CPPFLAGS"
ac_save_LIBS="$LIBS"
CPPFLAGS="$CPPFLAGS $XML_CPPFLAGS"
LIBS="$XML_LIBS $LIBS"
dnl
dnl Now check if the installed libxml is sufficiently new.
dnl (Also sanity checks the results of xml2-config to some extent)

```

```

dnl
    rm -f conf.xmltest
    AC_TRY_RUN([
#include <stdlib.h>
#include <stdio.h>
#include <string.h>
#include <libxml/xmlversion.h>

int
main()
{
    int xml_major_version, xml_minor_version, xml_micro_version;
    int major, minor, micro;
    char *tmp_version;

    system("touch conf.xmltest");

    /* Capture xml2-config output via autoconf/configure variables */
    /* HP/UX 9 (%@#!) writes to sscanf strings */
    tmp_version = (char *)strdup("$min_xml_version");
    if (sscanf(tmp_version, "%d.%d.%d", &major, &minor, &micro) != 3) {
        printf("%s, bad version string from xml2-config\n",
"$min_xml_version");
        exit(1);
    }
    free(tmp_version);

    /* Capture the version information from the header files */
    tmp_version = (char *)strdup(LIBXML_DOTTED_VERSION);
    if (sscanf(tmp_version, "%d.%d.%d", &xml_major_version,
&xml_minor_version, &xml_micro_version) != 3) {
        printf("%s, bad version string from libxml includes\n",
"LIBXML_DOTTED_VERSION");
        exit(1);
    }
    free(tmp_version);

    /* Compare xml2-config output to the libxml headers */
    if ((xml_major_version != $xml_config_major_version) ||
        (xml_minor_version != $xml_config_minor_version) ||
        (xml_micro_version != $xml_config_micro_version))
    {
        printf("*** libxml header files (version %d.%d.%d) do not
match\n",
            xml_major_version, xml_minor_version, xml_micro_version);
        printf("*** xml2-config (version %d.%d.%d)\n",
            $xml_config_major_version, $xml_config_minor_version,
$xml_config_micro_version);
        return 1;
    }
    /* Compare the headers to the library to make sure we match */
    /* Less than ideal -- doesn't provide us with return value feedback,

```

```

    * only exits if there's a serious mismatch between header and
    library.
    */
    LIBXML_TEST_VERSION;

    /* Test that the library is greater than our minimum version */
    if ((xml_major_version > major) ||
        ((xml_major_version == major) && (xml_minor_version > minor))
    ||
        ((xml_major_version == major) && (xml_minor_version == minor)
    &&
        (xml_micro_version >= micro))
    {
        return 0;
    }
    else
    {
        printf("\n*** An old version of libxml (%d.%d.%d) was
found.\n",
                xml_major_version, xml_minor_version,
xml_micro_version);
        printf("*** You need a version of libxml newer than %d.%d.%d.
The latest version of\n",
                major, minor, micro);
        printf("*** libxml is always available from
ftp://ftp.xmlsoft.org.\n");
        printf("***\n");
        printf("*** If you have already installed a sufficiently new
version, this error\n");
        printf("*** probably means that the wrong copy of the xml2-
config shell script is\n");
        printf("*** being found. The easiest way to fix this is to
remove the old version\n");
        printf("*** of LIBXML, but you can also set the XML2_CONFIG
environment to point to the\n");
        printf("*** correct copy of xml2-config. (In this case, you
will have to\n");
        printf("*** modify your LD_LIBRARY_PATH enviroment variable,
or edit /etc/ld.so.conf\n");
        printf("*** so that the correct libraries are found at run-
time))\n");
    }
    return 1;
}
],, no_xml=yes, [echo $ac_n "cross compiling; assumed OK... $ac_c"])
    CPPFLAGS="$ac_save_CPPFLAGS"
    LIBS="$ac_save_LIBS"
fi
fi

if test "x$no_xml" = x ; then

```



```

        AC_MSG_RESULT(yes (version
$xml_config_major_version.$xml_config_minor_version.$xml_config_micro_
version))
        ifelse([$2], , :, [$2])
    else
        AC_MSG_RESULT(no)
        if test "$XML2_CONFIG" = "no" ; then
            echo "*** The xml2-config script installed by LIBXML could not
be found"
            echo "*** If libxml was installed in PREFIX, make sure
PREFIX/bin is in"
            echo "*** your path, or set the XML2_CONFIG environment
variable to the"
            echo "*** full path to xml2-config."
        else
            if test -f conf.xmltest ; then
                :
            else
                echo "*** Could not run libxml test program, checking
why..."
                CPPFLAGS="$CPPFLAGS $XML_CPPFLAGS"
                LIBS="$LIBS $XML_LIBS"
                AC_TRY_LINK([
#include <libxml/xmlversion.h>
#include <stdio.h>
],
        [ LIBXML_TEST_VERSION; return 0; ],
        [ echo "*** The test program compiled, but did not run. This
usually means"
            echo "*** that the run-time linker is not finding LIBXML or
finding the wrong"
            echo "*** version of LIBXML. If it is not finding LIBXML,
you'll need to set your"
            echo "*** LD_LIBRARY_PATH environment variable, or edit
/etc/ld.so.conf to point"
            echo "*** to the installed location Also, make sure you
have run ldconfig if that"
            echo "*** is required on your system"
            echo ""
            echo "*** If you have an old version installed, it is best
to remove it, although"
            echo "*** you may also be able to get things to work by
modifying LD_LIBRARY_PATH" ],
        [ echo "*** The test program failed to compile or link. See
the file config.log for the"
            echo "*** exact error that occurred. This usually means
LIBXML was incorrectly installed"
            echo "*** or that you have moved LIBXML since it was
installed. In the latter case, you"
            echo "*** may want to edit the xml2-config script:
$xml2_CONFIG" ])
                CPPFLAGS="$ac_save_CPPFLAGS"
                LIBS="$ac_save_LIBS"

```

```

        fi
    fi

    XML_CPPFLAGS=""
    XML_LIBS=""
    ifelse([$3], , :, [$3])
fi
AC_SUBST(XML_CPPFLAGS)
AC_SUBST(XML_LIBS)
rm -f conf.xmltest
])

```

File = local-namespace.message

```

## a message that is in the org.freedesktop.Local. namespace and thus
## invalid

```

```

## VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call

```

```

HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.DBus.Local'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'Disconnected'
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/foo'

```

```

ALIGN 8
END_LENGTH Header

```

```

START_LENGTH Body
END_LENGTH Body

```

File = lots-of-arguments.message

```

# Message with lots of different argument types

```

```

VALID_HEADER method_call
REQUIRED_FIELDS
ALIGN 8
END_LENGTH Header
START_LENGTH Body
TYPE NIL
TYPE BYTE
BYTE 42

```

```

TYPE INT32
INT32 0x12345678
TYPE UINT32
UINT32 0x8765432
TYPE DOUBLE
DOUBLE 3.141592653589
TYPE STRING
STRING 'This is a string'
TYPE ARRAY
TYPE BOOLEAN
BOOLEAN_ARRAY { true, false, false, true, false }
TYPE ARRAY
TYPE INT32
INT32_ARRAY { 1, -2, 3, -4, 5, -6, 7, -8, 9, -10 }
TYPE ARRAY
TYPE UINT32
UINT32_ARRAY { 11, 12, 314, 1911, 57692, 1237, 2834 }
TYPE ARRAY
TYPE DOUBLE
DOUBLE_ARRAY { 0.1, 0.2, 3.1415926, 2.7183, 10.0, 9.99 }
TYPE ARRAY
TYPE STRING
STRING_ARRAY { 'Hello', 'This', 'Is', 'A', 'String', 'Array!' }
TYPE CUSTOM
STRING 'named type'
BYTE_ARRAY { 'b', 'i', 'n', 'a', 'r', 'y', 'd', 'a', 't', 'a' }

TYPE ARRAY
TYPE DICT
LENGTH Array
START_LENGTH Array

LENGTH Dict1
START_LENGTH Dict1
STRING 'key1'
TYPE INT32
INT32 0x12345678
STRING 'key2'
TYPE UINT32
UINT32 0x8765432
END_LENGTH Dict1

LENGTH Dict2
START_LENGTH Dict2
STRING 'key1'
TYPE INT32
INT32 0x12345678
STRING 'key2'
TYPE UINT32
UINT32 0x8765432
END_LENGTH Dict2

```

END_LENGTH Array

END_LENGTH Body

File = ltmain.sh

```
# libtool (GNU libtool) 2.4.2
# Written by Gordon Matzigkeit <gord@gnu.ai.mit.edu>, 1996

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# 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

# Usage: $progname [OPTION]... [MODE-ARG]...
#
# Provide generalized library-building support services.
#
#       --config                show all configuration variables
#       --debug                enable verbose shell tracing
#  -n, --dry-run                display commands without modifying any
files
#       --features                display basic configuration information
and exit
#       --mode=MODE            use operation mode MODE
```

```

#      --preserve-dup-deps  don't remove duplicate dependency
libraries
#      --quiet, --silent    don't print informational messages
#      --no-quiet, --no-silent
#
#                          print informational messages (default)
#      --no-warn            don't display warning messages
#      --tag=TAG            use configuration variables from tag TAG
#  -v, --verbose            print more informational messages than
default
#      --no-verbose        don't print the extra informational
messages
#      --version            print version information
#  -h, --help, --help-all  print short, long, or detailed help
message
#
# MODE must be one of the following:
#
#      clean                remove files from the build directory
#      compile              compile a source file into a libtool
object
#      execute              automatically set library path, then run
a program
#      finish               complete the installation of libtool
libraries
#      install              install libraries or executables
#      link                 create a library or an executable
#      uninstall            remove libraries from an installed
directory
#
# MODE-ARGS vary depending on the MODE.  When passed as first option,
# `--mode=MODE' may be abbreviated as `MODE' or a unique abbreviation
of that.
# Try `$progname --help --mode=MODE' for a more detailed description
of MODE.
#
# When reporting a bug, please describe a test case to reproduce it
and
# include the following information:
#
#      host-triplet:        $host
#      shell:               $SHELL
#      compiler:            $LTCC
#      compiler flags:      $LTCCFLAGS
#      linker:              $LD (gnu? $with_gnu_ld)
#      $progname:           (GNU libtool) 2.4.2
#      automake:            $automake_version
#      autoconf:            $autoconf_version
#
# Report bugs to <bug-libtool@gnu.org>.
# GNU libtool home page: <http://www.gnu.org/software/libtool/>.
# General help using GNU software: <http://www.gnu.org/gethelp/>.

```

```

PROGRAM=libtool
PACKAGE=libtool
VERSION=2.4.2
TIMESTAMP=""
package_revision=1.3337

# Be Bourne compatible
if test -n "${ZSH_VERSION+set}" && (emulate sh) >/dev/null 2>&1; then
  emulate sh
  NULLCMD=:
  # Zsh 3.x and 4.x performs word splitting on ${1+"$@"}, which
  # is contrary to our usage.  Disable this feature.
  alias -g '${1+"$@"}'='"$@"'
  setopt NO_GLOB_SUBST
else
  case `(set -o) 2>/dev/null` in *posix*) set -o posix;; esac
fi
BIN_SH=xpg4; export BIN_SH # for Tru64
DUALCASE=1; export DUALCASE # for MKS sh

# A function that is used when there is no print builtin or printf.
func_fallback_echo ()
{
  eval 'cat <<_LTECHO_EOF'
  $1
  _LTECHO_EOF'
}

# NLS nuisances: We save the old values to restore during execute
mode.
lt_user_locale=
lt_safe_locale=
for lt_var in LANG LANGUAGE LC_ALL LC_CTYPE LC_COLLATE LC_MESSAGES
do
  eval "if test \"\${$lt_var+set}\" = set; then
    save_$lt_var=\${$lt_var}
    $lt_var=C
    export $lt_var
    lt_user_locale=\"\$lt_var=\\\$save_\$lt_var; \$lt_user_locale\"
    lt_safe_locale=\"\$lt_var=C; \$lt_safe_locale\"
  fi"
done
LC_ALL=C
LANGUAGE=C
export LANGUAGE LC_ALL

$lt_unset CDPATH

# Work around backward compatibility issue on IRIX 6.5. On IRIX 6.4+,
sh

```

```

# is ksh but when the shell is invoked as "sh" and the current value
of
# the _XPG environment variable is not equal to 1 (one), the special
# positional parameter $0, within a function call, is the name of the
# function.
progpach="$0"

: ${CP="cp -f"}
test "${ECHO+set}" = set || ECHO=${as_echo-'printf %s\n'}
: ${EGREP="egrep"}
: ${FGREP="fgrep"}
: ${GREP="grep"}
: ${LN_S="ln -s"}
: ${MAKE="make"}
: ${MKDIR="mkdir"}
: ${MV="mv -f"}
: ${RM="rm -f"}
: ${SED="sed"}
: ${SHELL="${CONFIG_SHELL-/bin/sh}"}
: ${Xsed="$SED -e 1s/^X//"}

# Global variables:
EXIT_SUCCESS=0
EXIT_FAILURE=1
EXIT_MISMATCH=63 # $? = 63 is used to indicate version mismatch to
missing.
EXIT_SKIP=77 # $? = 77 is used to indicate a skipped test to
automake.

exit_status=$EXIT_SUCCESS

# Make sure IFS has a sensible default
lt_nl='
'
IFS=" $lt_nl"

dirname="s,/[^/]*$,,"
basename="s,^.*/,,"

# func_dirname file append nondir_replacement
# Compute the dirname of FILE. If nonempty, add APPEND to the result,
# otherwise set result to NONDIR_REPLACEMENT.
func_dirname ()
{
    func_dirname_result=`$ECHO "${1}" | $SED "$dirname" `
    if test "X$func_dirname_result" = "X${1}"; then
        func_dirname_result="${3}"
    else
        func_dirname_result="$func_dirname_result${2}"
    fi
}

```

```

} # func_dirname may be replaced by extended shell implementation

# func_basename file
func_basename ()
{
    func_basename_result=`$ECHO "${1}" | $SED "$basename"`
} # func_basename may be replaced by extended shell implementation

# func_dirname_and_basename file append nondir_replacement
# perform func_basename and func_dirname in a single function
# call:
#   dirname: Compute the dirname of FILE. If nonempty,
#             add APPEND to the result, otherwise set result
#             to NONDIR_REPLACEMENT.
#             value returned in "$func_dirname_result"
#   basename: Compute filename of FILE.
#             value returned in "$func_basename_result"
# Implementation must be kept synchronized with func_dirname
# and func_basename. For efficiency, we do not delegate to
# those functions but instead duplicate the functionality here.
func_dirname_and_basename ()
{
    # Extract subdirectory from the argument.
    func_dirname_result=`$ECHO "${1}" | $SED -e "$dirname"`
    if test "X$func_dirname_result" = "X${1}"; then
        func_dirname_result="${3}"
    else
        func_dirname_result="$func_dirname_result${2}"
    fi
    func_basename_result=`$ECHO "${1}" | $SED -e "$basename"`
} # func_dirname_and_basename may be replaced by extended shell
implementation

# func_stripname prefix suffix name
# strip PREFIX and SUFFIX off of NAME.
# PREFIX and SUFFIX must not contain globbing or regex special
# characters, hashes, percent signs, but SUFFIX may contain a leading
# dot (in which case that matches only a dot).
# func_stripname suffix prefix name
func_stripname ()
{
    case ${2} in
        .*) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%\\\\\\${2}\\$%"`;;
        *) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%${2}\\$%"`;;
    esac
} # func_stripname may be replaced by extended shell implementation

```



```

# These SED scripts presuppose an absolute path with a trailing slash.
pathcar='s,^\([^\]*\) .*$, \1, '
pathcdr='s,^\([^\]*,, '
removedotparts=':dotsl
                s@/\./@/g
                t dotsl
                s,/\.$,/, '
collapseslashes='s@/\{1,\}@/g'
finalslash='s,/*$,/, '

# func_normal_abspath PATH
# Remove doubled-up and trailing slashes, "." path components,
# and cancel out any ".." path components in PATH after making
# it an absolute path.
#         value returned in "$func_normal_abspath_result"
func_normal_abspath ()
{
    # Start from root dir and reassemble the path.
    func_normal_abspath_result=
    func_normal_abspath_tpath=$1
    func_normal_abspath_altnamespace=
    case $func_normal_abspath_tpath in
        "")
            # Empty path, that just means $cwd.
            func_stripname '' '/' "`pwd`"
            func_normal_abspath_result=$func_stripname_result
            return
        ;;
        # The next three entries are used to spot a run of precisely
        # two leading slashes without using negated character classes;
        # we take advantage of case's first-match behaviour.
        //*)
            # Unusual form of absolute path, do nothing.
        ;;
        /*)
            # Not necessarily an ordinary path; POSIX reserves leading '//'
            # and for example Cygwin uses it to access remote file shares
            # over CIFS/SMB, so we conserve a leading double slash if found.
            func_normal_abspath_altnamespace=/
        ;;
        /*)
            # Absolute path, do nothing.
        ;;
        *)
            # Relative path, prepend $cwd.
            func_normal_abspath_tpath=`pwd`/$func_normal_abspath_tpath
        ;;
    esac
    # Cancel out all the simple stuff to save iterations. We also want
    # the path to end with a slash for ease of parsing, so make sure
    # there is one (and only one) here.

```

```

func_normal_abspath_tpath=`$ECHO "$func_normal_abspath_tpath" | $SED
\
    -e "$removedotparts" -e "$collapseslashes" -e "$finalslash"`
while ;; do
    # Processed it all yet?
    if test "$func_normal_abspath_tpath" = / ; then
        # If we ascended to the root using ".." the result may be empty
now.
        if test -z "$func_normal_abspath_result" ; then
            func_normal_abspath_result=/
        fi
        break
    fi
    func_normal_abspath_tcomponent=`$ECHO "$func_normal_abspath_tpath"
| $SED \
    -e "$pathcar"`
    func_normal_abspath_tpath=`$ECHO "$func_normal_abspath_tpath" |
$SED \
    -e "$pathcdr"`
    # Figure out what to do with it
    case $func_normal_abspath_tcomponent in
        "")
            # Trailing empty path component, ignore it.
            ;;
        ..)
            # Parent dir; strip last assembled component from result.
            func_dirname "$func_normal_abspath_result"
            func_normal_abspath_result=$func_dirname_result
            ;;
        *)
            # Actual path component, append it.

func_normal_abspath_result=$func_normal_abspath_result/$func_normal_ab
spath_tcomponent
            ;;
    esac
done
# Restore leading double-slash if one was found on entry.

func_normal_abspath_result=$func_normal_abspath_altnamespace$func_norm
al_abspath_result
}

# func_relative_path SRCDIR DSTDIR
# generates a relative path from SRCDIR to DSTDIR, with a trailing
# slash if non-empty, suitable for immediately appending a filename
# without needing to append a separator.
#           value returned in "$func_relative_path_result"
func_relative_path ()
{
    func_relative_path_result=
    func_normal_abspath "$1"
}

```

```

func_relative_path_tlibdir=$func_normal_abspath_result
func_normal_abspath "$2"
func_relative_path_tbindir=$func_normal_abspath_result

# Ascend the tree starting from libdir
while ;; do
  # check if we have found a prefix of bindir
  case $func_relative_path_tbindir in
    $func_relative_path_tlibdir)
      # found an exact match
      func_relative_path_tcancelled=
      break
      ;;
    $func_relative_path_tlibdir*)
      # found a matching prefix
      func_stripname "$func_relative_path_tlibdir" ''
"$func_relative_path_tbindir"
      func_relative_path_tcancelled=$func_stripname_result
      if test -z "$func_relative_path_result"; then
        func_relative_path_result=.
      fi
      break
      ;;
    *)
      func_dirname $func_relative_path_tlibdir
      func_relative_path_tlibdir=${func_dirname_result}
      if test "x$func_relative_path_tlibdir" = x ; then
        # Have to descend all the way to the root!
        func_relative_path_result=../$func_relative_path_result
        func_relative_path_tcancelled=$func_relative_path_tbindir
        break
      fi
      func_relative_path_result=../$func_relative_path_result
      ;;
  esac
done

# Now calculate path; take care to avoid doubling-up slashes.
func_stripname '/' '/' "$func_relative_path_result"
func_relative_path_result=$func_stripname_result
func_stripname '/' '/' "$func_relative_path_tcancelled"
if test "x$func_stripname_result" != x ; then

func_relative_path_result=${func_relative_path_result}/${func_stripnam
e_result}
fi

# Normalisation. If bindir is libdir, return empty string,
# else relative path ending with a slash; either way, target
# file name can be directly appended.
if test ! -z "$func_relative_path_result"; then
  func_stripname './' '' "$func_relative_path_result/"

```

```

    func_relative_path_result=$func_stripname_result
fi
}

# The name of this program:
func_dirname_and_basename "$progpath"
progname=$func_basename_result

# Make sure we have an absolute path for reexecution:
case $progpath in
  [\\/]*|[A-Za-z]:\\*) ;;
  *[/\]*)
    progdir=$func_dirname_result
    progdir=`cd "$progdir" && pwd`
    progpath="$progdir/$progname"
    ;;
  *)
    save_IFS="$IFS"
    IFS=${PATH_SEPARATOR-:}
    for progdir in $PATH; do
      IFS="$save_IFS"
      test -x "$progdir/$progname" && break
    done
    IFS="$save_IFS"
    test -n "$progdir" || progdir=`pwd`
    progpath="$progdir/$progname"
    ;;
esac

# Sed substitution that helps us do robust quoting.  It backslashifies
# metacharacters that are still active within double-quoted strings.
Xsed="${SED}" -e 1s/^X//
sed_quote_subst='s/\([\"$\\]\)/\\\1/g'

# Same as above, but do not quote variable references.
double_quote_subst='s/\([\"$\\]\)/\\\1/g'

# Sed substitution that turns a string into a regex matching for the
# string literally.
sed_make_literal_regex='s, [], [^$\\*\/], \\&, g'

# Sed substitution that converts a w32 file name or path
# which contains forward slashes, into one that contains
# (escaped) backslashes.  A very naive implementation.
lt_sed_naive_backslashify='s|\\\\\\*|\\\\|g;s|/|\\\\|g;s|\\\\|\\\\\\\\|g'

# Re-`\\` parameter expansions in output of double_quote_subst that
# were
# `\\`-ed in input to the same.  If an odd number of `\\` preceded a `$`
# in input to double_quote_subst, that `$` was protected from
# expansion.
# Since each input `\\` is now two `\\`s, look for any number of runs of

```

```

# four '\\'s followed by two '\\'s and then a '$'. '\\' that '$'.
bs='\\'
bs2='\\\\'
bs4='\\\\\\\\'
dollar='\$'
sed_double_backslash="\
s/$bs4/&\\
/g
s/^\$bs2$dollar/$bs&/
s/\\([^\$bs]\\\\)\$bs2$dollar/\\1\$bs2$bs$dollar/g
s/\\n//g"

# Standard options:
opt_dry_run=false
opt_help=false
opt_quiet=false
opt_verbose=false
opt_warning=:

# func_echo arg...
# Echo program name prefixed message, along with the current mode
# name if it has been set yet.
func_echo ()
{
    $ECHO "$progname: ${opt_mode+$opt_mode: }$"
}

# func_verbose arg...
# Echo program name prefixed message in verbose mode only.
func_verbose ()
{
    $opt_verbose && func_echo ${1+"$@"}

    # A bug in bash halts the script if the last line of a function
    # fails when set -e is in force, so we need another command to
    # work around that:
    :
}

# func_echo_all arg...
# Invoke $ECHO with all args, space-separated.
func_echo_all ()
{
    $ECHO "$*"
}

# func_error arg...
# Echo program name prefixed message to standard error.
func_error ()
{
    $ECHO "$progname: ${opt_mode+$opt_mode: }" ${1+"$@"} 1>&2
}

```

```

# func_warning arg...
# Echo program name prefixed warning message to standard error.
func_warning ()
{
    $opt_warning && $ECHO "$progname: ${opt_mode+$opt_mode: }warning:
"${1+"$@"} 1>&2

    # bash bug again:
    :
}

# func_fatal_error arg...
# Echo program name prefixed message to standard error, and exit.
func_fatal_error ()
{
    func_error "${1+"$@"}
    exit $EXIT_FAILURE
}

# func_fatal_help arg...
# Echo program name prefixed message to standard error, followed by
# a help hint, and exit.
func_fatal_help ()
{
    func_error "${1+"$@"}
    func_fatal_error "$help"
}
help="Try \`${progname} --help' for more information." ## default

# func_grep expression filename
# Check whether EXPRESSION matches any line of FILENAME, without
output.
func_grep ()
{
    $GREP "$1" "$2" >/dev/null 2>&1
}

# func_mkdir_p directory-path
# Make sure the entire path to DIRECTORY-PATH is available.
func_mkdir_p ()
{
    my_directory_path="$1"
    my_dir_list=

    if test -n "$my_directory_path" && test "$opt_dry_run" != ":";
then
        # Protect directory names starting with '-'
        case $my_directory_path in

```

```

    -*) my_directory_path="./$my_directory_path" ;;
esac

# While some portion of DIR does not yet exist...
while test ! -d "$my_directory_path"; do
    # ...make a list in topmost first order. Use a colon
delimited
    # list incase some portion of path contains whitespace.
    my_dir_list="$my_directory_path:$my_dir_list"

    # If the last portion added has no slash in it, the list is
done
    case $my_directory_path in */*) ;; *) break ;; esac

    # ...otherwise throw away the child directory and loop
    my_directory_path=`$ECHO "$my_directory_path" | $SED -e
"$dirname" `
done
    my_dir_list=`$ECHO "$my_dir_list" | $SED 's,:*$,,'`

    save_mkdir_p_IFS="$IFS"; IFS=':'
    for my_dir in $my_dir_list; do
IFS="$save_mkdir_p_IFS"
        # mkdir can fail with a `File exist' error if two processes
        # try to create one of the directories concurrently. Don't
        # stop in that case!
        $MKDIR "$my_dir" 2>/dev/null || :
    done
    IFS="$save_mkdir_p_IFS"

    # Bail out if we (or some other process) failed to create a
directory.
    test -d "$my_directory_path" || \
        func_fatal_error "Failed to create \`$1'"
fi
}

# func_mktempdir [string]
# Make a temporary directory that won't clash with other running
# libtool processes, and avoids race conditions if possible. If
# given, STRING is the basename for that directory.
func_mktempdir ()
{
    my_template="{TMPDIR-/tmp}/${1-$progname}"

    if test "$opt_dry_run" = ":"; then
        # Return a directory name, but don't create it in dry-run mode
        my_tmpdir="{my_template}-$$"
    else

        # If mktemp works, use that first and foremost

```

```

my_tmpdir=`mktemp -d "${my_template}-XXXXXXXX" 2>/dev/null`

if test ! -d "$my_tmpdir"; then
  # Failing that, at least try and use $RANDOM to avoid a race
  my_tmpdir="${my_template}-${RANDOM-0}$$"

  save_mktempdir_umask=`umask`
  umask 0077
  $MKDIR "$my_tmpdir"
  umask $save_mktempdir_umask
fi

# If we're not in dry-run mode, bomb out on failure
test -d "$my_tmpdir" || \
  func_fatal_error "cannot create temporary directory
\`$my_tmpdir\""
fi

$ECHO "$my_tmpdir"
}

# func_quote_for_eval arg
# Aesthetically quote ARG to be eval'd later.
# This function returns two values: FUNC_QUOTE_FOR_EVAL_RESULT
# is double-quoted, suitable for a subsequent eval, whereas
# FUNC_QUOTE_FOR_EVAL_UNQUOTED_RESULT has merely all characters
# which are still active within double quotes backslashified.
func_quote_for_eval ()
{
  case $1 in
    *[\`\\\`\"\\$]*)
      func_quote_for_eval_unquoted_result=`$ECHO "$1" | $SED
"$sed_quote_subst"` ;;
    *)
      func_quote_for_eval_unquoted_result="$1" ;;
  esac

  case $func_quote_for_eval_unquoted_result in
    # Double-quote args containing shell metacharacters to delay
    # word splitting, command substitution and and variable
    # expansion for a subsequent eval.
    # Many Bourne shells cannot handle close brackets correctly
    # in scan sets, so we specify it separately.
    *[[\~\#\^\&\*\(\)\{\}\|\;\<\>\?\'\ \ ]*|*|""])
      func_quote_for_eval_result="\`"$func_quote_for_eval_unquoted_result\`"
      ;;
    *)
      func_quote_for_eval_result="$func_quote_for_eval_unquoted_result"
      ;;
  esac
}

```



```

}

# func_quote_for_expand arg
# Aesthetically quote ARG to be evaled later; same as above,
# but do not quote variable references.
func_quote_for_expand ()
{
    case $1 in
        *[\$\`\"' ]*)
            my_arg=`$ECHO "$1" | $SED \
                -e "$double_quote_subst" -e "$sed_double_backslash"` ;;
        *)
            my_arg="$1" ;;
    esac

    case $my_arg in
        # Double-quote args containing shell metacharacters to delay
        # word splitting and command substitution for a subsequent eval.
        # Many Bourne shells cannot handle close brackets correctly
        # in scan sets, so we specify it separately.
        *[\[\~\#\^\&\*\(\)\{\}\|\|;\;<\>\?\'\ \ ]*|*|"")
            my_arg="\ "$my_arg"
            ;;
    esac

    func_quote_for_expand_result="$my_arg"
}

# func_show_eval cmd [fail_exp]
# Unless opt_silent is true, then output CMD.  Then, if opt_dryrun is
# not true, evaluate CMD.  If the evaluation of CMD fails, and
# FAIL_EXP
# is given, then evaluate it.
func_show_eval ()
{
    my_cmd="$1"
    my_fail_exp="${2-}"

    ${opt_silent-false} || {
        func_quote_for_expand "$my_cmd"
        eval "func_echo $func_quote_for_expand_result"
    }

    if ${opt_dry_run-false}; then ;; else
        eval "$my_cmd"
        my_status=$?
        if test "$my_status" -eq 0; then ;; else
            eval "(exit $my_status); $my_fail_exp"
        fi
    fi
}

```

```

}

# func_show_eval_locale cmd [fail_exp]
# Unless opt_silent is true, then output CMD.  Then, if opt_dryrun is
# not true, evaluate CMD.  If the evaluation of CMD fails, and
FAIL_EXP
# is given, then evaluate it.  Use the saved locale for evaluation.
func_show_eval_locale ()
{
    my_cmd="$1"
    my_fail_exp="${2-:}"

    ${opt_silent-false} || {
        func_quote_for_expand "$my_cmd"
        eval "func_echo $func_quote_for_expand_result"
    }

    if ${opt_dry_run-false}; then ;; else
        eval "$lt_user_locale
            $my_cmd"
        my_status=$?
        eval "$lt_safe_locale"
        if test "$my_status" -eq 0; then ;; else
            eval "(exit $my_status); $my_fail_exp"
        fi
    fi
}

# func_tr_sh
# Turn $1 into a string suitable for a shell variable name.
# Result is stored in $func_tr_sh_result.  All characters
# not in the set a-zA-Z0-9_ are replaced with '_'.  Further,
# if $1 begins with a digit, a '_' is prepended as well.
func_tr_sh ()
{
    case $1 in
        [0-9]* | *[^a-zA-Z0-9_]*)
            func_tr_sh_result=`$ECHO "$1" | $SED 's/^\([0-9]\)/_\1/; s/[^a-zA-Z0-9_]/_/g'`
            ;;
        * )
            func_tr_sh_result=$1
            ;;
    esac
}

# func_version
# Echo version message to standard output and exit.
func_version ()
{

```

```

$opt_debug

$SED -n '/(C)/!b go
:more
/\./!{
    N
    s/\n# / /
    b more
}
:go
/^# '$PROGRAM' (GNU /,/# warranty; / {
    s/^# //
s/^# *$//
    s/\((C)\)[ 0-9,-]*\([ 1-9][0-9]*\)/\1\2/
    p
}' < "$prospath"
exit $?
}

# func_usage
# Echo short help message to standard output and exit.
func_usage ()
{
    $opt_debug

    $SED -n '/^# Usage: /,/^# *.*--help/ {
        s/^# //
        s/^# *$//
        s/\$progname/'$progname'/
        p
    }' < "$prospath"
    echo
    $ECHO "run \"\$progname --help | more' for full usage"
    exit $?
}

# func_help [NOEXIT]
# Echo long help message to standard output and exit,
# unless 'noexit' is passed as argument.
func_help ()
{
    $opt_debug

    $SED -n '/^# Usage: /,/# Report bugs to/ {
        :print
        s/^# //
        s/^# *$//
        s*\$progname*'$progname'*
        s*\$host*'"$host"*
        s*\$SHELL*'"$SHELL"*
        s*\$LTCC*'"$LTCC"*
        s*\$LTCCFLAGS*'"$LTCCFLAGS"*
    }
}

```

```

        s*\$LD*'"$LD"'*
        s/\$with_gnu_ld/'"$with_gnu_ld"/
        s/\$automake_version/'"$({AUTOMAKE-automake} --version)
2>/dev/null |$SED 1q`"/
        s/\$autoconf_version/'"$({AUTOCONF-autoconf} --version)
2>/dev/null |$SED 1q`"/
        p
        d
    }
    /^# .* home page:/b print
    /^# General help using/b print
    ' < "$progp"
ret=$?
if test -z "$1"; then
    exit $ret
fi
}

# func_missing_arg argname
# Echo program name prefixed message to standard error and set global
# exit_cmd.
func_missing_arg ()
{
    $opt_debug

    func_error "missing argument for $1."
    exit_cmd=exit
}

# func_split_short_opt shortopt
# Set func_split_short_opt_name and func_split_short_opt_arg shell
# variables after splitting SHORTOPT after the 2nd character.
func_split_short_opt ()
{
    my_sed_short_opt='1s/^\(..\).*$/\1/;q'
    my_sed_short_rest='1s/^\(..\)(.*)$/\1/;q'

    func_split_short_opt_name=`$ECHO "$1" | $SED "$my_sed_short_opt"`
    func_split_short_opt_arg=`$ECHO "$1" | $SED "$my_sed_short_rest"`
} # func_split_short_opt may be replaced by extended shell
implementation

# func_split_long_opt longopt
# Set func_split_long_opt_name and func_split_long_opt_arg shell
# variables after splitting LONGOPT at the '=' sign.
func_split_long_opt ()
{
    my_sed_long_opt='1s/^\(--[^\=]*\)=.*/\1/;q'
    my_sed_long_arg='1s/^\--[^\=]*=/'
}

```

```

    func_split_long_opt_name=`$ECHO "$1" | $SED "$my_sed_long_opt"`
    func_split_long_opt_arg=`$ECHO "$1" | $SED "$my_sed_long_arg"`
} # func_split_long_opt may be replaced by extended shell
implementation

exit_cmd=:

magic="%%MAGIC variable%%"
magic_exe="%%MAGIC EXE variable%%"

# Global variables.
nonopt=
preserve_args=
lo2o="s/\\.lo\\$/.${objext}/"
o2lo="s/\\.\\${objext}\\$/.lo/"
extracted_archives=
extracted_serial=0

# If this variable is set in any of the actions, the command in it
# will be execed at the end. This prevents here-documents from being
# left over by shells.
exec_cmd=

# func_append var value
# Append VALUE to the end of shell variable VAR.
func_append ()
{
    eval "${1}=\${${1}}\${2}"
} # func_append may be replaced by extended shell implementation

# func_append_quoted var value
# Quote VALUE and append to the end of shell variable VAR, separated
# by a space.
func_append_quoted ()
{
    func_quote_for_eval "${2}"
    eval "${1}=\${${1}} \\${func_quote_for_eval_result}"
} # func_append_quoted may be replaced by extended shell
implementation

# func_arith arithmetic-term...
func_arith ()
{
    func_arith_result=`expr "${@}"`
} # func_arith may be replaced by extended shell implementation

```

```

# func_len string
# STRING may not start with a hyphen.
func_len ()
{
    func_len_result=`expr "${1}" : ".*" 2>/dev/null || echo
$max_cmd_len`
} # func_len may be replaced by extended shell implementation

# func_lo2o object
func_lo2o ()
{
    func_lo2o_result=`$ECHO "${1}" | $SED "$lo2o"`
} # func_lo2o may be replaced by extended shell implementation

# func_xform libobj-or-source
func_xform ()
{
    func_xform_result=`$ECHO "${1}" | $SED 's/\.[^.]*$/./lo/'`
} # func_xform may be replaced by extended shell implementation

# func_fatal_configuration arg...
# Echo program name prefixed message to standard error, followed by
# a configuration failure hint, and exit.
func_fatal_configuration ()
{
    func_error ${1+"$@"}
    func_error "See the $PACKAGE documentation for more information."
    func_fatal_error "Fatal configuration error."
}

# func_config
# Display the configuration for all the tags in this script.
func_config ()
{
    re_begincf='^# ### BEGIN LIBTOOL'
    re_endcf='^# ### END LIBTOOL'

    # Default configuration.
    $SED "1,/$re_begincf CONFIG/d;/$re_endcf CONFIG/,\$d" <
"$proppath"

    # Now print the configurations for the tags.
    for tagname in $taglist; do
        $SED -n "/$re_begincf TAG CONFIG: $tagname\$/,$re_endcf TAG
CONFIG: $tagname\$/p" < "$proppath"
    done

    exit $?
}

```

```

}

# func_features
# Display the features supported by this script.
func_features ()
{
    echo "host: $host"
    if test "$build_libtool_libs" = yes; then
        echo "enable shared libraries"
    else
        echo "disable shared libraries"
    fi
    if test "$build_old_libs" = yes; then
        echo "enable static libraries"
    else
        echo "disable static libraries"
    fi

    exit $?
}

# func_enable_tag tagname
# Verify that TAGNAME is valid, and either flag an error and exit, or
# enable the TAGNAME tag.  We also add TAGNAME to the global $taglist
# variable here.
func_enable_tag ()
{
    # Global variable:
    tagname="$1"

    re_begincf="^# ### BEGIN LIBTOOL TAG CONFIG: $tagname\$"
    re_endcf="^# ### END LIBTOOL TAG CONFIG: $tagname\$"
    sed_extractcf="/$re_begincf/,/$re_endcf/p"

    # Validate tagname.
    case $tagname in
        *[_A-Za-z0-9,/]*)
            func_fatal_error "invalid tag name: $tagname"
            ;;
    esac

    # Don't test for the "default" C tag, as we know it's
    # there but not specially marked.
    case $tagname in
        CC) ;;
        *)
            if $GREP "$re_begincf" "$proppath" >/dev/null 2>&1; then
                taglist="$taglist $tagname"

            # Evaluate the configuration.  Be careful to quote the path
            # and the sed script, to avoid splitting on whitespace, but
            # also don't use non-portable quotes within backquotes within

```

```

    # quotes we have to do it in 2 steps:
    extractedcf=`$SED -n -e "$sed_extractcf" < "$progpath"`
    eval "$extractedcf"
    else
    func_error "ignoring unknown tag $tagname"
    fi
    ;;
esac
}

# func_check_version_match
# Ensure that we are using m4 macros, and libtool script from the same
# release of libtool.
func_check_version_match ()
{
    if test "$package_revision" != "$macro_revision"; then
        if test "$VERSION" != "$macro_version"; then
            if test -z "$macro_version"; then
                cat >&2 <<_LT_EOF
$progname: Version mismatch error.  This is $PACKAGE $VERSION, but the
$progname: definition of this LT_INIT comes from an older release.
$progname: You should recreate aclocal.m4 with macros from $PACKAGE
$VERSION
$progname: and run autoconf again.
_LT_EOF
            else
                cat >&2 <<_LT_EOF
$progname: Version mismatch error.  This is $PACKAGE $VERSION, but the
$progname: definition of this LT_INIT comes from $PACKAGE
$macro_version.
$progname: You should recreate aclocal.m4 with macros from $PACKAGE
$VERSION
$progname: and run autoconf again.
_LT_EOF
            fi
        else
            cat >&2 <<_LT_EOF
$progname: Version mismatch error.  This is $PACKAGE $VERSION,
revision $package_revision,
$progname: but the definition of this LT_INIT comes from revision
$macro_revision.
$progname: You should recreate aclocal.m4 with macros from revision
$package_revision
$progname: of $PACKAGE $VERSION and run autoconf again.
_LT_EOF
            fi

            exit $EXIT_MISMATCH
        fi
    }
}

```



```

# Shorthand for --mode=foo, only valid as the first argument
case $1 in
clean|clea|cle|cl)
    shift; set dummy --mode clean ${1+"$@"}; shift
    ;;
compile|compil|compi|comp|com|co|c)
    shift; set dummy --mode compile ${1+"$@"}; shift
    ;;
execute|execut|execu|exec|exe|ex|e)
    shift; set dummy --mode execute ${1+"$@"}; shift
    ;;
finish|finis|fini|fin|fi|f)
    shift; set dummy --mode finish ${1+"$@"}; shift
    ;;
install|instal|insta|inst|ins|in|i)
    shift; set dummy --mode install ${1+"$@"}; shift
    ;;
link|lin|li|l)
    shift; set dummy --mode link ${1+"$@"}; shift
    ;;
uninstall|uninstal|uninsta|uninst|unins|unin|uni|un|u)
    shift; set dummy --mode uninstall ${1+"$@"}; shift
    ;;
esac

# Option defaults:
opt_debug=:
opt_dry_run=false
opt_config=false
opt_preserve_dup_deps=false
opt_features=false
opt_finish=false
opt_help=false
opt_help_all=false
opt_silent=:
opt_warning=:
opt_verbose=:
opt_silent=false
opt_verbose=false

# Parse options once, thoroughly.  This comes as soon as possible in
the
# script to make things like `--version' happen as quickly as we can.
{
    # this just eases exit handling
    while test $# -gt 0; do
        opt="$1"
        shift
        case $opt in

```

```

--debug|-x)      opt_debug='set -x'
                 func_echo "enabling shell trace mode"
                 $opt_debug
                 ;;
--dry-run|--dryrun|-n)
                 opt_dry_run=:
                 ;;
--config)
                 opt_config=:
func_config
                 ;;
--dlopen|-dlopen)
                 optarg="$1"
                 opt_dlopen="${opt_dlopen+$opt_dlopen
}$optarg"
                 shift
                 ;;
--preserve-dup-deps)
                 opt_preserve_dup_deps=:
                 ;;
--features)
                 opt_features=:
func_features
                 ;;
--finish)
                 opt_finish=:
set dummy --mode finish ${1+"$@"}; shift
                 ;;
--help)
                 opt_help=:
                 ;;
--help-all)
                 opt_help_all=:
opt_help=': help-all'
                 ;;
--mode)
                 test $# = 0 && func_missing_arg $opt && break
                 optarg="$1"
                 opt_mode="$optarg"
case $optarg in
  # Valid mode arguments:
  clean|compile|execute|finish|install|link|relink|uninstall) ;;

  # Catch anything else as an error
  *) func_error "invalid argument for $opt"
     exit_cmd=exit
     break
  ;;
esac
                 shift
                 ;;
--no-silent|--no-quiet)

```

```

                opt_silent=false
func_append preserve_args " $opt"
                ;;
                --no-warning|--no-warn)
                opt_warning=false
func_append preserve_args " $opt"
                ;;
                --no-verbose)
                opt_verbose=false
func_append preserve_args " $opt"
                ;;
                --silent|--quiet)
                opt_silent=:
func_append preserve_args " $opt"
                opt_verbose=false
                ;;
                --verbose|-v)
                opt_verbose=:
func_append preserve_args " $opt"
opt_silent=false
                ;;
                --tag)
                test $# = 0 && func_missing_arg $opt && break
                optarg="$1"
                opt_tag="$optarg"
func_append preserve_args " $opt $optarg"
func_enable_tag "$optarg"
                shift
                ;;

                -\?|-h)          func_usage          ;;
                --help)          func_help           ;;
                --version)       func_version        ;;

# Separate optargs to long options:
--*==*)
                func_split_long_opt "$opt"
                set dummy "$func_split_long_opt_name"
"$func_split_long_opt_arg" ${1+"$@"}
                shift
                ;;

# Separate non-argument short options:
-\?*|-h*|-n*|-v*)
                func_split_short_opt "$opt"
                set dummy "$func_split_short_opt_name" "$func_split_short_opt_arg"
"$func_split_short_opt_arg" ${1+"$@"}
                shift
                ;;

                --)          break          ;;
                -*)         func_fatal_help "unrecognized option `'$opt'" ;;

```

```

        *)          set dummy "$opt" ${1+"$@"}; shift; break ;;
    esac
done

# Validate options:

# save first non-option argument
if test "$#" -gt 0; then
    nonopt="$opt"
    shift
fi

# preserve --debug
test "$opt_debug" = : || func_append preserve_args " --debug"

case $host in
    *cygwin* | *mingw* | *pw32* | *cegcc*)
        # don't eliminate duplications in $postdeps and $predeps
        opt_duplicate_compiler_generated_deps=:
        ;;
    *)
        opt_duplicate_compiler_generated_deps=$opt_preserve_dup_deps
        ;;
esac

$opt_help || {
    # Sanity checks first:
    func_check_version_match

    if test "$build_libtool_libs" != yes && test "$build_old_libs" !=
yes; then
        func_fatal_configuration "not configured to build any kind of
library"
    fi

    # Darwin sucks
    eval std_shrext="\$shrext_cmds\"

    # Only execute mode is allowed to have -dlopen flags.
    if test -n "$opt_dlopen" && test "$opt_mode" != execute; then
        func_error "unrecognized option \`-dlopen'"
        $ECHO "$help" 1>&2
        exit $EXIT_FAILURE
    fi

    # Change the help message to a mode-specific one.
    generic_help="$help"
    help="Try \`$progname --help --mode=$opt_mode' for more
information."
}

```

```

# Bail if the options were screwed
$exit_cmd $EXIT_FAILURE
}

## ----- ##
##   Main.   ##
## ----- ##

# func_lalib_p file
# True iff FILE is a libtool `.la' library or `.lo' object file.
# This function is only a basic sanity check; it will hardly flush out
# determined imposters.
func_lalib_p ()
{
    test -f "$1" &&
        $SED -e 4q "$1" 2>/dev/null \
            | $GREP "^# Generated by .*$PACKAGE" > /dev/null 2>&1
}

# func_lalib_unsafe_p file
# True iff FILE is a libtool `.la' library or `.lo' object file.
# This function implements the same check as func_lalib_p without
# resorting to external programs. To this end, it redirects stdin and
# closes it afterwards, without saving the original file descriptor.
# As a safety measure, use it only where a negative result would be
# fatal anyway. Works if `file' does not exist.
func_lalib_unsafe_p ()
{
    lalib_p=no
    if test -f "$1" && test -r "$1" && exec 5<&0 <"$1"; then
        for lalib_p_1 in 1 2 3 4
        do
            read lalib_p_line
            case "$lalib_p_line" in
                \#\ Generated\ by\ *$PACKAGE* ) lalib_p=yes; break;;
            esac
        done
        exec 0<&5 5<&-
    fi
    test "$lalib_p" = yes
}

# func_ltwrapper_script_p file
# True iff FILE is a libtool wrapper script
# This function is only a basic sanity check; it will hardly flush out
# determined imposters.
func_ltwrapper_script_p ()
{
    func_lalib_p "$1"
}

```

```

}

# func_ltwrapper_executable_p file
# True iff FILE is a libtool wrapper executable
# This function is only a basic sanity check; it will hardly flush out
# determined imposters.
func_ltwrapper_executable_p ()
{
    func_ltwrapper_exec_suffix=
    case $1 in
        *.exe) ;;
        *) func_ltwrapper_exec_suffix=.exe ;;
    esac
    $GREP "$magic_exe" "$1$func_ltwrapper_exec_suffix" >/dev/null 2>&1
}

# func_ltwrapper_scriptname file
# Assumes file is an ltwrapper_executable
# uses $file to determine the appropriate filename for a
# temporary ltwrapper_script.
func_ltwrapper_scriptname ()
{
    func_dirname_and_basename "$1" "" "."
    func_stripname ' ' '.exe' "$func_basename_result"

func_ltwrapper_scriptname_result="$func_dirname_result/$objdir/${func_
stripname_result}_ltshwrapper"
}

# func_ltwrapper_p file
# True iff FILE is a libtool wrapper script or wrapper executable
# This function is only a basic sanity check; it will hardly flush out
# determined imposters.
func_ltwrapper_p ()
{
    func_ltwrapper_script_p "$1" || func_ltwrapper_executable_p "$1"
}

# func_execute_cmds commands fail_cmd
# Execute tilde-delimited COMMANDS.
# If FAIL_CMD is given, eval that upon failure.
# FAIL_CMD may read-access the current command in variable CMD!
func_execute_cmds ()
{
    $opt_debug
    save_ifs=$IFS; IFS='~'
    for cmd in $1; do
        IFS=$save_ifs
        eval cmd=\ "$cmd\"
        func_show_eval "$cmd" "${2-:}"
    done
}

```

```

    IFS=$save_ifs
}

# func_source file
# Source FILE, adding directory component if necessary.
# Note that it is not necessary on cygwin/mingw to append a dot to
# FILE even if both FILE and FILE.exe exist: automatic-append-.exe
# behavior happens only for exec(3), not for open(2)! Also, sourcing
# `FILE.' does not work on cygwin managed mounts.
func_source ()
{
    $opt_debug
    case $1 in
        /* | *\*) . "$1" ;;
        *) . "./$1" ;;
    esac
}

# func_resolve_sysroot PATH
# Replace a leading = in PATH with a sysroot. Store the result into
# func_resolve_sysroot_result
func_resolve_sysroot ()
{
    func_resolve_sysroot_result=$1
    case $func_resolve_sysroot_result in
        =*)
            func_stripname '=' '' "$func_resolve_sysroot_result"
            func_resolve_sysroot_result=$lt_sysroot$func_stripname_result
            ;;
    esac
}

# func_replace_sysroot PATH
# If PATH begins with the sysroot, replace it with = and
# store the result into func_replace_sysroot_result.
func_replace_sysroot ()
{
    case "$lt_sysroot:$1" in
        ?*:"$lt_sysroot"*)
            func_stripname "$lt_sysroot" '' "$1"
            func_replace_sysroot_result="=$func_stripname_result"
            ;;
        *)
            # Including no sysroot.
            func_replace_sysroot_result=$1
            ;;
    esac
}

# func_infer_tag arg

```

```

# Infer tagged configuration to use if any are available and
# if one wasn't chosen via the "--tag" command line option.
# Only attempt this if the compiler in the base compile
# command doesn't match the default compiler.
# arg is usually of the form 'gcc ...'
func_infer_tag ()
{
    $opt_debug
    if test -n "$available_tags" && test -z "$tagname"; then
        CC_quoted=
        for arg in $CC; do
            func_append_quoted CC_quoted "$arg"
        done
        CC_expanded=`func_echo_all $CC`
        CC_quoted_expanded=`func_echo_all $CC_quoted`
        case $@ in
            # Blanks in the command may have been stripped by the calling
shell,
            # but not from the CC environment variable when configure was
run.
            " $CC "*" | "$CC "*" | " $CC_expanded "*" | "$CC_expanded "*" | \
            " $CC_quoted"* | "$CC_quoted "*" | " $CC_quoted_expanded "*" |
"$CC_quoted_expanded "*" ) ;;
            # Blanks at the start of $base_compile will cause this to fail
            # if we don't check for them as well.
            *)
                for z in $available_tags; do
                    if $GREP "^# ### BEGIN LIBTOOL TAG CONFIG: $z$" < "$progp" >
/dev/null; then
                        # Evaluate the configuration.
                        eval "`$SED -n -e '/^# ### BEGIN LIBTOOL TAG CONFIG:
'$z'$/,/^# ### END LIBTOOL TAG CONFIG: '$z'$/p' < $progp`"
                        CC_quoted=
                        for arg in $CC; do
                            # Double-quote args containing other shell metacharacters.
                            func_append_quoted CC_quoted "$arg"
                        done
                        CC_expanded=`func_echo_all $CC`
                        CC_quoted_expanded=`func_echo_all $CC_quoted`
                        case "$@" in
                            " $CC "*" | "$CC "*" | " $CC_expanded "*" | "$CC_expanded "*" | \
                            " $CC_quoted"* | "$CC_quoted "*" | " $CC_quoted_expanded "*" |
"$CC_quoted_expanded "*" )
                                # The compiler in the base compile command matches
                                # the one in the tagged configuration.
                                # Assume this is the tagged configuration we want.
                                tagname=$z
                                break
                            ;;
                        esac
                    fi
                done
            done
        done
    fi
done

```



```

# If $tagname still isn't set, then no tagged configuration
# was found and let the user know that the "--tag" command
# line option must be used.
if test -z "$tagname"; then
    func_echo "unable to infer tagged configuration"
    func_fatal_error "specify a tag with `--tag'"
# else
#     func_verbose "using $tagname tagged configuration"
fi
;;
esac
fi
}

```

```

# func_write_libtool_object output_name pic_name nonpic_name
# Create a libtool object file (analogous to a ".la" file),
# but don't create it if we're doing a dry run.
func_write_libtool_object ()
{
    write_libobj=${1}
    if test "$build_libtool_libs" = yes; then
        write_lobj=\`${2}\`
    else
        write_lobj=none
    fi

    if test "$build_old_libs" = yes; then
        write_oldobj=\`${3}\`
    else
        write_oldobj=none
    fi

    $opt_dry_run || {
        cat >${write_libobj}T <<EOF
# $write_libobj - a libtool object file
# Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION
#
# Please DO NOT delete this file!
# It is necessary for linking the library.

# Name of the PIC object.
pic_object=$write_lobj

# Name of the non-PIC object
non_pic_object=$write_oldobj

EOF
        $MV "${write_libobj}T" "${write_libobj}"
    }
}

```

```

#####
# FILE NAME AND PATH CONVERSION HELPER FUNCTIONS #
#####

# func_convert_core_file_wine_to_w32 ARG
# Helper function used by file name conversion functions when $build
is *nix,
# and $host is mingw, cygwin, or some other w32 environment. Relies on
a
# correctly configured wine environment available, with the winepath
program
# in $build's $PATH.
#
# ARG is the $build file name to be converted to w32 format.
# Result is available in $func_convert_core_file_wine_to_w32_result,
and will
# be empty on error (or when ARG is empty)
func_convert_core_file_wine_to_w32 ()
{
    $opt_debug
    func_convert_core_file_wine_to_w32_result="$1"
    if test -n "$1"; then
        # Unfortunately, winepath does not exit with a non-zero error
code, so we
        # are forced to check the contents of stdout. On the other hand,
if the
        # command is not found, the shell will set an exit code of 127 and
print
        # *an error message* to stdout. So we must check for both error
code of
        # zero AND non-empty stdout, which explains the odd construction:
        func_convert_core_file_wine_to_w32_tmp=`winepath -w "$1"
2>/dev/null`
        if test "$?" -eq 0 && test -n
"${func_convert_core_file_wine_to_w32_tmp}"; then
            func_convert_core_file_wine_to_w32_result=`$ECHO
"$func_convert_core_file_wine_to_w32_tmp" |
            $SED -e "$lt_sed_naive_backslashify"`
        else
            func_convert_core_file_wine_to_w32_result=
        fi
    fi
}
# end: func_convert_core_file_wine_to_w32

# func_convert_core_path_wine_to_w32 ARG
# Helper function used by path conversion functions when $build is
*nix, and

```

```

# $host is mingw, cygwin, or some other w32 environment. Relies on a
correctly
# configured wine environment available, with the winepath program in
$build's
# $PATH. Assumes ARG has no leading or trailing path separator
characters.
#
# ARG is path to be converted from $build format to win32.
# Result is available in $func_convert_core_path_wine_to_w32_result.
# Unconvertible file (directory) names in ARG are skipped; if no
directory names
# are convertible, then the result may be empty.
func_convert_core_path_wine_to_w32 ()
{
    $opt_debug
    # unfortunately, winepath doesn't convert paths, only file names
    func_convert_core_path_wine_to_w32_result=""
    if test -n "$1"; then
        oldIFS=$IFS
        IFS=:
        for func_convert_core_path_wine_to_w32_f in $1; do
            IFS=$oldIFS
            func_convert_core_file_wine_to_w32
"$func_convert_core_path_wine_to_w32_f"
            if test -n "$func_convert_core_file_wine_to_w32_result" ; then
                if test -z "$func_convert_core_path_wine_to_w32_result"; then

func_convert_core_path_wine_to_w32_result="$func_convert_core_file_wine_to_w32_result"
                else
                    func_append func_convert_core_path_wine_to_w32_result
";$func_convert_core_file_wine_to_w32_result"
                fi
            fi
        done
        IFS=$oldIFS
    fi
}
# end: func_convert_core_path_wine_to_w32

# func_cygpath ARGS...
# Wrapper around calling the cygpath program via LT_CYGPATH. This is
used when
# when (1) $build is *nix and Cygwin is hosted via a wine environment;
or (2)
# $build is MSYS and $host is Cygwin, or (3) $build is Cygwin. In case
(1) or
# (2), returns the Cygwin file name or path in func_cygpath_result
(input
# file name or path is assumed to be in w32 format, as previously
converted

```

```

# from $build's *nix or MSYS format). In case (3), returns the w32
file name
# or path in func_cygpath_result (input file name or path is assumed
to be in
# Cygwin format). Returns an empty string on error.
#
# ARGS are passed to cygpath, with the last one being the file name or
path to
# be converted.
#
# Specify the absolute *nix (or w32) name to cygpath in the LT_CYGPATH
# environment variable; do not put it in $PATH.
func_cygpath ()
{
    $opt_debug
    if test -n "$LT_CYGPATH" && test -f "$LT_CYGPATH"; then
        func_cygpath_result=`$LT_CYGPATH "$@" 2>/dev/null`
        if test "$?" -ne 0; then
            # on failure, ensure result is empty
            func_cygpath_result=
        fi
    else
        func_cygpath_result=
        func_error "LT_CYGPATH is empty or specifies non-existent file:
`$LT_CYGPATH'"
        fi
    }
#end: func_cygpath

# func_convert_core_msys_to_w32 ARG
# Convert file name or path ARG from MSYS format to w32 format.
Return
# result in func_convert_core_msys_to_w32_result.
func_convert_core_msys_to_w32 ()
{
    $opt_debug
    # awkward: cmd appends spaces to result
    func_convert_core_msys_to_w32_result=`( cmd //c echo "$1" )
2>/dev/null |
    $SED -e 's/[ ]*$//' -e "$lt_sed_naive_backslashify"`
}
#end: func_convert_core_msys_to_w32

# func_convert_file_check ARG1 ARG2
# Verify that ARG1 (a file name in $build format) was converted to
$host
# format in ARG2. Otherwise, emit an error message, but continue
(resetting
# func_to_host_file_result to ARG1).
func_convert_file_check ()

```

```

{
  $opt_debug
  if test -z "$2" && test -n "$1" ; then
    func_error "Could not determine host file name corresponding to"
    func_error "  \`${1}'"
    func_error "Continuing, but uninstalled executables may not work."
    # Fallback:
    func_to_host_file_result="$1"
  fi
}
# end func_convert_file_check

# func_convert_path_check FROM_PATHSEP TO_PATHSEP FROM_PATH TO_PATH
# Verify that FROM_PATH (a path in $build format) was converted to
$host
# format in TO_PATH. Otherwise, emit an error message, but continue,
resetting
# func_to_host_file_result to a simplistic fallback value (see below).
func_convert_path_check ()
{
  $opt_debug
  if test -z "$4" && test -n "$3"; then
    func_error "Could not determine the host path corresponding to"
    func_error "  \`${3}'"
    func_error "Continuing, but uninstalled executables may not work."
    # Fallback. This is a deliberately simplistic "conversion" and
    # should not be "improved". See libtool.info.
    if test "x$1" != "x$2"; then
      lt_replace_pathsep_chars="s|$1|$2|g"
      func_to_host_path_result=`echo "$3" |
        $SED -e "$lt_replace_pathsep_chars"`
    else
      func_to_host_path_result="$3"
    fi
  fi
}
# end func_convert_path_check

# func_convert_path_front_back_pathsep FRONTPAT BACKPAT REPL ORIG
# Modifies func_to_host_path_result by prepending REPL if ORIG matches
FRONTPAT
# and appending REPL if ORIG matches BACKPAT.
func_convert_path_front_back_pathsep ()
{
  $opt_debug
  case $4 in
  $1 ) func_to_host_path_result="$3$func_to_host_path_result"
    ;;
  esac
  case $4 in

```

```

    $2 ) func_append func_to_host_path_result "$3"
        ;;
    esac
}
# end func_convert_path_front_back_pathsep

#####
# $build to $host FILE NAME CONVERSION FUNCTIONS #
#####
# invoked via `sto_host_file_cmd ARG'
#
# In each case, ARG is the path to be converted from $build to $host
format.
# Result will be available in $func_to_host_file_result.

# func_to_host_file ARG
# Converts the file name ARG from $build format to $host format.
Return result
# in func_to_host_file_result.
func_to_host_file ()
{
    $opt_debug
    sto_host_file_cmd "$1"
}
# end func_to_host_file

# func_to_tool_file ARG LAZY
# converts the file name ARG from $build format to toolchain format.
Return
# result in func_to_tool_file_result. If the conversion in use is
listed
# in (the comma separated) LAZY, no conversion takes place.
func_to_tool_file ()
{
    $opt_debug
    case , $2, in
        *, "$to_tool_file_cmd", *)
            func_to_tool_file_result=$1
            ;;
        *)
            sto_tool_file_cmd "$1"
            func_to_tool_file_result=$func_to_host_file_result
            ;;
    esac
}
# end func_to_tool_file

# func_convert_file_noop ARG

```

```

# Copy ARG to func_to_host_file_result.
func_convert_file_noop ()
{
    func_to_host_file_result="$1"
}
# end func_convert_file_noop

# func_convert_file_msys_to_w32 ARG
# Convert file name ARG from (mingw) MSYS to (mingw) w32 format;
automatic
# conversion to w32 is not available inside the cwrapper. Returns
result in
# func_to_host_file_result.
func_convert_file_msys_to_w32 ()
{
    $opt_debug
    func_to_host_file_result="$1"
    if test -n "$1"; then
        func_convert_core_msys_to_w32 "$1"
        func_to_host_file_result="$func_convert_core_msys_to_w32_result"
    fi
    func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_msys_to_w32

# func_convert_file_cygwin_to_w32 ARG
# Convert file name ARG from Cygwin to w32 format. Returns result in
# func_to_host_file_result.
func_convert_file_cygwin_to_w32 ()
{
    $opt_debug
    func_to_host_file_result="$1"
    if test -n "$1"; then
        # because $build is cygwin, we call "the" cygpath in $PATH; no
need to use
        # LT_CYGPATH in this case.
        func_to_host_file_result=`cygpath -m "$1"`
    fi
    func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_cygwin_to_w32

# func_convert_file_nix_to_w32 ARG
# Convert file name ARG from *nix to w32 format. Requires a wine
environment
# and a working winepath. Returns result in func_to_host_file_result.
func_convert_file_nix_to_w32 ()
{
    $opt_debug

```

```

func_to_host_file_result="$1"
if test -n "$1"; then
    func_convert_core_file_wine_to_w32 "$1"

func_to_host_file_result="$func_convert_core_file_wine_to_w32_result"
fi
func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_nix_to_w32

# func_convert_file_msys_to_cygwin ARG
# Convert file name ARG from MSYS to Cygwin format.  Requires
LT_CYGPATH set.
# Returns result in func_to_host_file_result.
func_convert_file_msys_to_cygwin ()
{
    $opt_debug
    func_to_host_file_result="$1"
    if test -n "$1"; then
        func_convert_core_msys_to_w32 "$1"
        func_cygpath -u "$func_convert_core_msys_to_w32_result"
        func_to_host_file_result="$func_cygpath_result"
    fi
    func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_msys_to_cygwin

# func_convert_file_nix_to_cygwin ARG
# Convert file name ARG from *nix to Cygwin format.  Requires Cygwin
installed
# in a wine environment, working winepath, and LT_CYGPATH set.
Returns result
# in func_to_host_file_result.
func_convert_file_nix_to_cygwin ()
{
    $opt_debug
    func_to_host_file_result="$1"
    if test -n "$1"; then
        # convert from *nix to w32, then use cygpath to convert from w32
to cygwin.
        func_convert_core_file_wine_to_w32 "$1"
        func_cygpath -u "$func_convert_core_file_wine_to_w32_result"
        func_to_host_file_result="$func_cygpath_result"
    fi
    func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_nix_to_cygwin

#####

```



```

# $build to $host PATH CONVERSION FUNCTIONS #
#####
# invoked via `sto_host_path_cmd ARG'
#
# In each case, ARG is the path to be converted from $build to $host
format.
# The result will be available in $func_to_host_path_result.
#
# Path separators are also converted from $build format to $host
format. If
# ARG begins or ends with a path separator character, it is preserved
(but
# converted to $host format) on output.
#
# All path conversion functions are named using the following
convention:
#   file name conversion function      : func_convert_file_X_to_Y ()
#   path conversion function          : func_convert_path_X_to_Y ()
# where, for any given $build/$host combination the 'X_to_Y' value is
the
# same. If conversion functions are added for new $build/$host
combinations,
# the two new functions must follow this pattern, or
func_init_to_host_path_cmd
# will break.

# func_init_to_host_path_cmd
# Ensures that function "pointer" variable sto_host_path_cmd is set to
the
# appropriate value, based on the value of sto_host_file_cmd.
to_host_path_cmd=
func_init_to_host_path_cmd ()
{
    $opt_debug
    if test -z "$sto_host_path_cmd"; then
        func_stripname 'func_convert_file_' '' "$sto_host_file_cmd"
        to_host_path_cmd="func_convert_path_${func_stripname_result}"
    fi
}

# func_to_host_path ARG
# Converts the path ARG from $build format to $host format. Return
result
# in func_to_host_path_result.
func_to_host_path ()
{
    $opt_debug
    func_init_to_host_path_cmd
    sto_host_path_cmd "$1"
}

```

```

# end func_to_host_path

# func_convert_path_noop ARG
# Copy ARG to func_to_host_path_result.
func_convert_path_noop ()
{
    func_to_host_path_result="$1"
}
# end func_convert_path_noop

# func_convert_path_msys_to_w32 ARG
# Convert path ARG from (mingw) MSYS to (mingw) w32 format; automatic
# conversion to w32 is not available inside the cwrapper. Returns
# result in
# func_to_host_path_result.
func_convert_path_msys_to_w32 ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # Remove leading and trailing path separator characters from ARG.
MSYS
        # behavior is inconsistent here; cygpath turns them into '.' and
';.';
        # and winepath ignores them completely.
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_convert_core_msys_to_w32 "$func_to_host_path_tmp1"
        func_to_host_path_result="$func_convert_core_msys_to_w32_result"
        func_convert_path_check : ";" \
            "$func_to_host_path_tmp1" "$func_to_host_path_result"
        func_convert_path_front_back_pathsep ":*" "':" ";" "$1"
    fi
}
# end func_convert_path_msys_to_w32

# func_convert_path_cygwin_to_w32 ARG
# Convert path ARG from Cygwin to w32 format. Returns result in
# func_to_host_file_result.
func_convert_path_cygwin_to_w32 ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # See func_convert_path_msys_to_w32:
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_to_host_path_result=`cygpath -m -p "$func_to_host_path_tmp1"`
        func_convert_path_check : ";" \

```

```

        "$func_to_host_path_tmp1" "$func_to_host_path_result"
    func_convert_path_front_back_pathsep ":*" "*:;" ";" "$1"
fi
}
# end func_convert_path_cygwin_to_w32

# func_convert_path_nix_to_w32 ARG
# Convert path ARG from *nix to w32 format.  Requires a wine
environment and
# a working winepath.  Returns result in func_to_host_file_result.
func_convert_path_nix_to_w32 ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # See func_convert_path_msys_to_w32:
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_convert_core_path_wine_to_w32 "$func_to_host_path_tmp1"

    func_to_host_path_result="$func_convert_core_path_wine_to_w32_result"
    func_convert_path_check : ;" \
        "$func_to_host_path_tmp1" "$func_to_host_path_result"
    func_convert_path_front_back_pathsep ":*" "*:;" ";" "$1"
    fi
}
# end func_convert_path_nix_to_w32

# func_convert_path_msys_to_cygwin ARG
# Convert path ARG from MSYS to Cygwin format.  Requires LT_CYGPATH
set.
# Returns result in func_to_host_file_result.
func_convert_path_msys_to_cygwin ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # See func_convert_path_msys_to_w32:
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_convert_core_msys_to_w32 "$func_to_host_path_tmp1"
        func_cygpath -u -p "$func_convert_core_msys_to_w32_result"
        func_to_host_path_result="$func_cygpath_result"
        func_convert_path_check : : \
            "$func_to_host_path_tmp1" "$func_to_host_path_result"
        func_convert_path_front_back_pathsep ":*" "*:;" : "$1"
    fi
}
# end func_convert_path_msys_to_cygwin

```

```

# func_convert_path_nix_to_cygwin ARG
# Convert path ARG from *nix to Cygwin format.  Requires Cygwin
installed in a
# a wine environment, working winepath, and LT_CYGPATH set.  Returns
result in
# func_to_host_file_result.
func_convert_path_nix_to_cygwin ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # Remove leading and trailing path separator characters from
        # ARG. msys behavior is inconsistent here, cygpath turns them
        # into '.' and ';.', and winepath ignores them completely.
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_convert_core_path_wine_to_w32 "$func_to_host_path_tmp1"
        func_cygpath -u -p "$func_convert_core_path_wine_to_w32_result"
        func_to_host_path_result="$func_cygpath_result"
        func_convert_path_check : : \
            "$func_to_host_path_tmp1" "$func_to_host_path_result"
        func_convert_path_front_back_pathsep ":*" "*:." : "$1"
    fi
}
# end func_convert_path_nix_to_cygwin

# func_mode_compile arg...
func_mode_compile ()
{
    $opt_debug
    # Get the compilation command and the source file.
    base_compile=
    srcfile="$nonopt" # always keep a non-empty value in "srcfile"
    suppress_opt=yes
    suppress_output=
    arg_mode=normal
    libobj=
    later=
    pie_flag=

    for arg
    do
        case $arg_mode in
            arg )
                # do not "continue".  Instead, add this to base_compile
                lastarg="$arg"
                arg_mode=normal
                ;;
            target )

```

```

libobj="$arg"
arg_mode=normal
continue
;;

normal )
# Accept any command-line options.
case $arg in
-o)
    test -n "$libobj" && \
        func_fatal_error "you cannot specify \`-o' more than once"
    arg_mode=target
    continue
    ;;

-pie | -fpie | -fPIE)
    func_append pie_flag " $arg"
    continue
    ;;

-shared | -static | -prefer-pic | -prefer-non-pic)
    func_append later " $arg"
    continue
    ;;

-no-suppress)
    suppress_opt=no
    continue
    ;;

-Xcompiler)
    arg_mode=arg # the next one goes into the "base_compile" arg
list
    continue # The current "srcfile" will either be retained
or
    ;; # replaced later. I would guess that would be a
bug.

-Wc, *)
    func_stripname '-Wc,' '' "$arg"
    args=$func_stripname_result
    lastarg=
    save_ifs="$IFS"; IFS=', '
    for arg in $args; do
        IFS="$save_ifs"
        func_append_quoted lastarg "$arg"
    done
    IFS="$save_ifs"
    func_stripname ' ' '' "$lastarg"
    lastarg=$func_stripname_result

# Add the arguments to base_compile.

```

```

    func_append base_compile " $lastarg"
    continue
    ;;

*)
    # Accept the current argument as the source file.
    # The previous "srcfile" becomes the current argument.
    #
    lastarg="$srcfile"
    srcfile="$arg"
    ;;
esac # case $arg
;;
esac # case $arg_mode

# Aesthetically quote the previous argument.
func_append_quoted base_compile "$lastarg"
done # for arg

case $arg_mode in
arg)
    func_fatal_error "you must specify an argument for -Xcompile"
    ;;
target)
    func_fatal_error "you must specify a target with \`-o'"
    ;;
*)
    # Get the name of the library object.
    test -z "$libobj" && {
    func_basename "$srcfile"
    libobj="$func_basename_result"
    }
    ;;
esac

# Recognize several different file suffixes.
# If the user specifies -o file.o, it is replaced with file.lo
case $libobj in
*.c | *.C | *.S | *.s | \
*.ada | *.adb | *.ads | *.asm | \
*.c++ | *.cc | *.ii | *.class | *.cpp | *.cxx | \
*.f | *.F | *.for | *.java | *.go | *.obj | *.sx | *.cu | *.cup)
    func_xform "$libobj"
    libobj=$func_xform_result
    ;;
esac

case $libobj in
*.lo) func_lo2o "$libobj"; obj=$func_lo2o_result ;;
*)
    func_fatal_error "cannot determine name of library object from
\`$libobj'"

```

```

    ;;
esac

func_infer_tag $base_compile

for arg in $later; do
    case $arg in
        -shared)
            test "$build_libtool_libs" != yes && \
                func_fatal_configuration "can not build a shared library"
            build_old_libs=no
            continue
            ;;

        -static)
            build_libtool_libs=no
            build_old_libs=yes
            continue
            ;;

        -prefer-pic)
            pic_mode=yes
            continue
            ;;

        -prefer-non-pic)
            pic_mode=no
            continue
            ;;
    esac
done

func_quote_for_eval "$libobj"
test "X$libobj" != "X$func_quote_for_eval_result" \
    && $ECHO "X$libobj" | $GREP '[~#^*{};<>?'"'"' &()|`$[]' \
    && func_warning "libobj name `\$libobj' may not contain shell
special characters."
func_dirname_and_basename "$obj" "/" ""
objname="$func_basename_result"
xdir="$func_dirname_result"
lobj=${xdir}$objdir/$objname

test -z "$base_compile" && \
    func_fatal_help "you must specify a compilation command"

# Delete any leftover library objects.
if test "$build_old_libs" = yes; then
    removelist="$obj $lobj $libobj ${libobj}T"
else
    removelist="$lobj $libobj ${libobj}T"
fi
fi
```

```

    # On Cygwin there's no "real" PIC flag so we must build both
object types
    case $host_os in
    cygwin* | mingw* | pw32* | os2* | cegcc*)
        pic_mode=default
        ;;
    esac
    if test "$pic_mode" = no && test "$deplibs_check_method" !=
pass_all; then
        # non-PIC code in shared libraries is not supported
        pic_mode=default
    fi

    # Calculate the filename of the output object if compiler does
    # not support -o with -c
    if test "$compiler_c_o" = no; then
        output_obj=`$ECHO "$srcfile" | $SED 's%^.*/%%';
s%\.[^.]*$%%'\.${objext}
        lockfile="$output_obj.lock"
    else
        output_obj=
        need_locks=no
        lockfile=
    fi

    # Lock this critical section if it is needed
    # We use this script file to make the link, it avoids creating a
new file
    if test "$need_locks" = yes; then
        until $opt_dry_run || ln "$proppath" "$lockfile" 2>/dev/null; do
            func_echo "Waiting for $lockfile to be removed"
            sleep 2
        done
    elif test "$need_locks" = warn; then
        if test -f "$lockfile"; then
            $ECHO "\
*** ERROR, $lockfile exists and contains:
`cat $lockfile 2>/dev/null`

This indicates that another process is trying to use the same
temporary object file, and libtool could not work around it because
your compiler does not support \'-c' and \'-o' together.  If you
repeat this compilation, it may succeed, by chance, but you had better
avoid parallel builds (make -j) in this platform, or get a better
compiler."

            $opt_dry_run || $RM $removelist
            exit $EXIT_FAILURE
        fi
        func_append removelist " $output_obj"
        $ECHO "$srcfile" > "$lockfile"
    fi

```



```

$opt_dry_run || $RM $removelist
func_append removelist " $lockfile"
trap '$opt_dry_run || $RM $removelist; exit $EXIT_FAILURE' 1 2 15

func_to_tool_file "$srcfile" func_convert_file_msys_to_w32
srcfile=$func_to_tool_file_result
func_quote_for_eval "$srcfile"
qsrcfile=$func_quote_for_eval_result

# Only build a PIC object if we are building libtool libraries.
if test "$build_libtool_libs" = yes; then
  # Without this assignment, base_compile gets emptied.
  fbsd_hideous_sh_bug=$base_compile

  if test "$pic_mode" != no; then
    command="$base_compile $qsrcfile $pic_flag"
  else
    # Don't build PIC code
    command="$base_compile $qsrcfile"
  fi

  func_mkdir_p "$xdir$objdir"

  if test -z "$output_obj"; then
    # Place PIC objects in $objdir
    func_append command " -o $lobj"
  fi

  func_show_eval_locale "$command" \
    'test -n "$output_obj" && $RM $removelist; exit
$EXIT_FAILURE'

  if test "$need_locks" = warn &&
    test "X`cat $lockfile 2>/dev/null`" != "X$srcfile"; then
    $ECHO "\
*** ERROR, $lockfile contains:
`cat $lockfile 2>/dev/null`

but it should contain:
$srcfile

This indicates that another process is trying to use the same
temporary object file, and libtool could not work around it because
your compiler does not support \'-c' and \'-o' together.  If you
repeat this compilation, it may succeed, by chance, but you had better
avoid parallel builds (make -j) in this platform, or get a better
compiler."

  $opt_dry_run || $RM $removelist
  exit $EXIT_FAILURE
fi

```

```

    # Just move the object if needed, then go on to compile the next
one
    if test -n "$output_obj" && test "X$output_obj" != "X$lobj";
then
    func_show_eval '$MV "$output_obj" "$lobj"' \
        'error=$?; $opt_dry_run || $RM $removelist; exit $error'
    fi

    # Allow error messages only from the first compilation.
    if test "$suppress_opt" = yes; then
    suppress_output=' >/dev/null 2>&1'
    fi
fi

```

```

# Only build a position-dependent object if we build old
libraries.
if test "$build_old_libs" = yes; then
    if test "$pic_mode" != yes; then
    # Don't build PIC code
    command="$base_compile $qsrcfile$pie_flag"
    else
    command="$base_compile $qsrcfile $pic_flag"
    fi
    if test "$compiler_c_o" = yes; then
    func_append command " -o $obj"
    fi

    # Suppress compiler output if we already did a PIC compilation.
    func_append command "$suppress_output"
    func_show_eval_locale "$command" \
        '$opt_dry_run || $RM $removelist; exit $EXIT_FAILURE'

    if test "$need_locks" = warn &&
        test "X`cat $lockfile 2>/dev/null`" != "X$srcfile"; then
    $ECHO "\
*** ERROR, $lockfile contains:
`cat $lockfile 2>/dev/null`

```

but it should contain:
\$srcfile

This indicates that another process is trying to use the same temporary object file, and libtool could not work around it because your compiler does not support \'-c' and \'-o' together. If you repeat this compilation, it may succeed, by chance, but you had better avoid parallel builds (make -j) in this platform, or get a better compiler."

```

    $opt_dry_run || $RM $removelist
    exit $EXIT_FAILURE
fi

```

```

    # Just move the object if needed
    if test -n "$output_obj" && test "X$output_obj" != "X$obj"; then
func_show_eval '$MV "$output_obj" "$obj"' \
    'error=$?; $opt_dry_run || $RM $removelist; exit $error'
    fi
fi

$opt_dry_run || {
    func_write_libtool_object "$libobj" "$objdir/$objname"
"$objname"

    # Unlock the critical section if it was locked
    if test "$need_locks" != no; then
removelist=$lockfile
        $RM "$lockfile"
    fi
}

exit $EXIT_SUCCESS
}

$opt_help || {
    test "$opt_mode" = compile && func_mode_compile ${1+"$@"}
}

func_mode_help ()
{
    # We need to display help for each of the modes.
    case $opt_mode in
        "")
            # Generic help is extracted from the usage comments
            # at the start of this file.
            func_help
            ;;

        clean)
            $ECHO \
"Usage: $progname [OPTION]... --mode=clean RM [RM-OPTION]... FILE...

Remove files from the build directory.

RM is the name of the program to use to delete files associated with
each FILE
(typically `"/bin/rm').  RM-OPTIONS are options (such as `-f') to be
passed
to RM.

If FILE is a libtool library, object or program, all the files
associated
with it are deleted.  Otherwise, only FILE itself is deleted using RM."
            ;;
    esac
}

```

```
    compile)
    $ECHO \
"Usage: $progname [OPTION]... --mode=compile COMPILE-COMMAND...
SOURCEFILE
```

Compile a source file into a libtool library object.

This mode accepts the following additional options:

```
    -o OUTPUT-FILE      set the output file name to OUTPUT-FILE
    -no-suppress        do not suppress compiler output for multiple
passes
    -prefer-pic         try to build PIC objects only
    -prefer-non-pic    try to build non-PIC objects only
    -shared             do not build a ``.o' file suitable for static
linking
    -static            only build a ``.o' file suitable for static
linking
    -Wc,FLAG           pass FLAG directly to the compiler
```

COMPILE-COMMAND is a command to be used in creating a ``standard' object file from the given SOURCEFILE.

The output file name is determined by removing the directory component from SOURCEFILE, then substituting the C source code suffix ``.c' with the library object suffix, ``.lo'."

```
    ; ;
```

```
    execute)
    $ECHO \
"Usage: $progname [OPTION]... --mode=execute COMMAND [ARGS]...
```

Automatically set library path, then run a program.

This mode accepts the following additional options:

```
    -dlopen FILE       add the directory containing FILE to the library
path
```

This mode sets the library path environment variable according to ``-dlopen' flags.

If any of the ARGS are libtool executable wrappers, then they are translated into their corresponding uninstalled binary, and any of their required library directories are added to the library path.

Then, COMMAND is executed, with ARGS as arguments."

;;

finish)

\$ECHO \

"Usage: \$progname [OPTION]... --mode=finish [LIBDIR]...

Complete the installation of libtool libraries.

Each LIBDIR is a directory that contains libtool libraries.

The commands that this mode executes may require superuser privileges.

Use

the '--dry-run' option if you just want to see what would be executed."

;;

install)

\$ECHO \

"Usage: \$progname [OPTION]... --mode=install INSTALL-COMMAND...

Install executables or libraries.

INSTALL-COMMAND is the installation command. The first component should be

either the 'install' or 'cp' program.

The following components of INSTALL-COMMAND are treated specially:

-inst-prefix-dir PREFIX-DIR Use PREFIX-DIR as a staging area for installation

The rest of the components are interpreted as arguments to that command (only

BSD-compatible install options are recognized)."

;;

link)

\$ECHO \

"Usage: \$progname [OPTION]... --mode=link LINK-COMMAND...

Link object files or libraries together to form another library, or to create an executable program.

LINK-COMMAND is a command using the C compiler that you would use to create

a program from several object files.

The following components of LINK-COMMAND are treated specially:

-all-static do not do any dynamic linking at all
-avoid-version do not add a version suffix if possible

-bindir BINDIR specify path to binaries directory (for systems where libraries must be found in the PATH setting at runtime)

-dlopen FILE \'-dlpreopen' FILE if it cannot be dlopened at runtime

-dlpreopen FILE link in FILE and add its symbols to lt_preloaded_symbols

-export-dynamic allow symbols from OUTPUT-FILE to be resolved with dlsym(3)

-export-symbols SYMFILE try to export only the symbols listed in SYMFILE

-export-symbols-regex REGEX try to export only the symbols matching REGEX

-LLIBDIR search LIBDIR for required installed libraries

-lname OUTPUT-FILE requires the installed library libNAME

-module build a library that can dlopened

-no-fast-install disable the fast-install mode

-no-install link a not-installable executable

-no-undefined declare that a library does not refer to external symbols

-o OUTPUT-FILE create OUTPUT-FILE from the specified objects

-objectlist FILE Use a list of object files found in FILE to specify objects

-precious-files-regex REGEX don't remove output files matching REGEX

-release RELEASE specify package release information

-rpath LIBDIR the created library will eventually be installed in LIBDIR

-R[]LIBDIR add LIBDIR to the runtime path of programs and libraries

-shared only do dynamic linking of libtool libraries

-shrext SUFFIX override the standard shared library file extension

-static do not do any dynamic linking of uninstalled libtool libraries

-static-libtool-libs do not do any dynamic linking of libtool libraries

-version-info CURRENT[:REVISION[:AGE]] specify library version info [each variable defaults to 0]

-weak LIBNAME declare that the target provides the LIBNAME interface

-Wc,FLAG pass linker-specific FLAG directly to the compiler

-Xcompiler FLAG pass linker-specific FLAG directly to the compiler

-Wl,FLAG pass linker-specific FLAG directly to the linker

-Xlinker FLAG pass linker-specific FLAG directly to the linker

-XCc linker FLAG pass link-specific FLAG to the compiler driver (CC)

All other options (arguments beginning with \'-') are ignored.

Every other argument is treated as a filename. Files ending in ``.la'` are treated as uninstalled libtool libraries, other files are standard or library object files.

If the OUTPUT-FILE ends in ``.la'`, then a libtool library is created, only library objects (``.lo'` files) may be specified, and ``.rpath'` is required, except when creating a convenience library.

If OUTPUT-FILE ends in ``.a'` or ``.lib'`, then a standard library is created using ``.ar'` and ``.ranlib'`, or on Windows using ``.lib'`.

If OUTPUT-FILE ends in ``.lo'` or ``.${objext}'`, then a reloadable object file is created, otherwise an executable program is created."

```
;;

    uninstall)
    $ECHO \
"Usage: $progname [OPTION]... --mode=uninstall RM [RM-OPTION]...
FILE..."
```

Remove libraries from an installation directory.

RM is the name of the program to use to delete files associated with each FILE (typically ``.bin/rm'`). RM-OPTIONS are options (such as ``.f'`) to be passed to RM.

If FILE is a libtool library, all the files associated with it are deleted.

Otherwise, only FILE itself is deleted using RM."

```
;;

    *)
    func_fatal_help "invalid operation mode \`${opt_mode}'"
    ;;
esac

    echo
    $ECHO "Try \`${progname} --help' for more information about other
modes."
}
```

Now that we've collected a possible --mode arg, show help if necessary

```
if $opt_help; then
  if test "$opt_help" = :; then
    func_mode_help
```

```

else
{
    func_help noexit
    for opt_mode in compile link execute install finish uninstall
clean; do
    func_mode_help
    done
} | sed -n '1p; 2,$s/^Usage:/ or: /p'
{
    func_help noexit
    for opt_mode in compile link execute install finish uninstall
clean; do
    echo
    func_mode_help
    done
} |
sed '1d
    /^When reporting/,/^Report/{
    H
    d
    }
    $x
    /information about other modes/d
    /more detailed .*MODE/d
    s/^Usage:.*--mode=\([^ ]*\) .*/Description of \1 mode:/'
fi
exit $?
fi

```

```

# func_mode_execute arg...
func_mode_execute ()
{
    $opt_debug
    # The first argument is the command name.
    cmd="$nonopt"
    test -z "$cmd" && \
        func_fatal_help "you must specify a COMMAND"

    # Handle -dlopen flags immediately.
    for file in $opt_dlopen; do
        test -f "$file" \
            || func_fatal_help "`$file' is not a file"

        dir=
        case $file in
        *.la)
            func_resolve_sysroot "$file"
            file=$func_resolve_sysroot_result

            # Check to see that this really is a libtool archive.
            func_lalib_unsafe_p "$file" \

```



```

    || func_fatal_help "\`$lib' is not a valid libtool archive"

# Read the libtool library.
dlname=
library_names=
func_source "$file"

# Skip this library if it cannot be dlopened.
if test -z "$dlname"; then
  # Warn if it was a shared library.
  test -n "$library_names" && \
    func_warning "\`$file' was not linked with \`-export-
dynamic'"
  continue
fi

func_dirname "$file" "" "."
dir="$func_dirname_result"

if test -f "$dir/$objdir/$dlname"; then
  func_append dir "/$objdir"
else
  if test ! -f "$dir/$dlname"; then
    func_fatal_error "cannot find \`$dlname' in \`$dir' or
\`$dir/$objdir'"
  fi
fi
;;

*.lo)
# Just add the directory containing the .lo file.
func_dirname "$file" "" "."
dir="$func_dirname_result"
;;

*)
func_warning "\`-dlopen' is ignored for non-libtool libraries and
objects"
continue
;;
esac

# Get the absolute pathname.
absdir=`cd "$dir" && pwd`
test -n "$absdir" && dir="$absdir"

# Now add the directory to shlibpath_var.
if eval "test -z \"\`$$shlibpath_var\`"; then
eval "$shlibpath_var=\"\`$dir\`"
else
eval "$shlibpath_var=\"\`$dir:\`$$shlibpath_var\`"
fi

```

```

done

# This variable tells wrapper scripts just to set shlibpath_var
# rather than running their programs.
libtool_execute_magic="$magic"

# Check if any of the arguments is a wrapper script.
args=
for file
do
  case $file in
    -* | *.la | *.lo ) ;;
    *)
      # Do a test to see if this is really a libtool program.
      if func_ltwrapper_script_p "$file"; then
        func_source "$file"
        # Transform arg to wrapped name.
        file="$progdir/$program"
      elif func_ltwrapper_executable_p "$file"; then
        func_ltwrapper_scriptname "$file"
        func_source "$func_ltwrapper_scriptname_result"
        # Transform arg to wrapped name.
        file="$program"
      fi
    ;;
  esac
  # Quote arguments (to preserve shell metacharacters).
  func_append_quoted args "$file"
done

if test "X$opt_dry_run" = Xfalse; then
  if test -n "$shlibpath_var"; then
    # Export the shlibpath_var.
    eval "export $shlibpath_var"
  fi

  # Restore saved environment variables
  for lt_var in LANG LANGUAGE LC_ALL LC_CTYPE LC_COLLATE
LC_MESSAGES
  do
    eval "if test \"\${save_$lt_var+set}\" = set; then
      $lt_var=\$save_$lt_var; export $lt_var
    else
      $lt_unset $lt_var
    fi"
  done

  # Now prepare to actually exec the command.
  exec_cmd="\$cmd$args"
else
  # Display what would be done.
  if test -n "$shlibpath_var"; then

```

```

    eval "\$ECHO \"\$shlibpath_var=\$\$shlibpath_var\""
    echo "export \$shlibpath_var"
    fi
    \$ECHO "\$cmd$args"
    exit \$EXIT_SUCCESS
fi
}

test "\$opt_mode" = execute && func_mode_execute ${1+"$@"}

# func_mode_finish arg...
func_mode_finish ()
{
    $opt_debug
    libs=
    libdirs=
    admincmds=

    for opt in "$nonopt" ${1+"$@"}
    do
        if test -d "$opt"; then
            func_append libdirs " $opt"

            elif test -f "$opt"; then
                if func_lalib_unsafe_p "$opt"; then
                    func_append libs " $opt"
                else
                    func_warning "\`$opt' is not a valid libtool archive"
                fi

            else
                func_fatal_error "invalid argument \`$opt'"
            fi
        done

        if test -n "$libs"; then
            if test -n "$lt_sysroot"; then
                sysroot_regex=`$ECHO "$lt_sysroot" | $SED
"$sed_make_literal_regex"
                sysroot_cmd="s/\([ ']\)\$sysroot_regex/\1/g;"
            else
                sysroot_cmd=
            fi

            # Remove sysroot references
            if $opt_dry_run; then
                for lib in $libs; do
                    echo "removing references to $lt_sysroot and `=' prefixes
from $lib"
                done
            else

```

```

        tmpdir=`func_mktempdir`
        for lib in $libs; do
            sed -e "${sysroot_cmd} s/\([ ']-[LR]\)=/\1/g; s/\([ ']\)=/\1/g"
$lib \
            > $tmpdir/tmp-la
            mv -f $tmpdir/tmp-la $lib
        done
        ${RM}r "$tmpdir"
    fi
fi

if test -n "$finish_cmds$finish_eval" && test -n "$libdirs"; then
    for libdir in $libdirs; do
        if test -n "$finish_cmds"; then
            # Do each command in the finish commands.
            func_execute_cmds "$finish_cmds" 'admincmds="$admincmds
'"$cmd"''
            fi
        if test -n "$finish_eval"; then
            # Do the single finish_eval.
            eval cmds="\$finish_eval\"
            $opt_dry_run || eval "$cmds" || func_append admincmds "
            $cmds"
        fi
    done
fi

# Exit here if they wanted silent mode.
$opt_silent && exit $EXIT_SUCCESS

if test -n "$finish_cmds$finish_eval" && test -n "$libdirs"; then
    echo "-----"
    echo "Libraries have been installed in:"
    for libdir in $libdirs; do
        $ECHO "    $libdir"
    done
    echo
    echo "If you ever happen to want to link against installed
libraries"
    echo "in a given directory, LIBDIR, you must either use libtool,
and"
    echo "specify the full pathname of the library, or use the \`-
LLIBDIR'"
    echo "flag during linking and do at least one of the following:"
    if test -n "$shlibpath_var"; then
        echo "    - add LIBDIR to the `\$shlibpath_var' environment
variable"
        echo "    during execution"
    fi
    if test -n "$runpath_var"; then

```

```

        echo "    - add LIBDIR to the `\$runpath_var' environment
variable"
        echo "        during linking"
        fi
        if test -n "$hardcode_libdir_flag_spec"; then
libdir=LIBDIR
eval flag="\$hardcode_libdir_flag_spec"

        $ECHO "    - use the `\$flag' linker flag"
        fi
        if test -n "$admincmds"; then
        $ECHO "    - have your system administrator run these
commands:$admincmds"
        fi
        if test -f /etc/ld.so.conf; then
        echo "    - have your system administrator add LIBDIR to
`/etc/ld.so.conf'"
        fi
        echo

        echo "See any operating system documentation about shared
libraries for"
        case $host in
solaris2.[6789]|solaris2.1[0-9])
        echo "more information, such as the ld(1), crle(1) and ld.so(8)
manual"
        echo "pages."
        ;;
*)
        echo "more information, such as the ld(1) and ld.so(8) manual
pages."
        ;;
esac
        echo "-----"
-----"
        fi
        exit $EXIT_SUCCESS
}

test "$opt_mode" = finish && func_mode_finish ${1+"$@"}

# func_mode_install arg...
func_mode_install ()
{
    $opt_debug
    # There may be an optional sh(1) argument at the beginning of
    # install_prog (especially on Windows NT).
    if test "$nonopt" = "$SHELL" || test "$nonopt" = /bin/sh ||
        # Allow the use of GNU shtool's install command.
        case $nonopt in *shtool*) ;; *) false;; esac; then
        # Aesthetically quote it.

```

```

    func_quote_for_eval "$nonopt"
    install_prog="$func_quote_for_eval_result "
    arg=$1
    shift
else
    install_prog=
    arg=$nonopt
fi

# The real first argument should be the name of the installation
program.
# Aesthetically quote it.
func_quote_for_eval "$arg"
func_append install_prog "$func_quote_for_eval_result"
install_shared_prog=$install_prog
case " $install_prog " in
    *[\ \ /]cp\ *) install_cp=: ;;
    *) install_cp=false ;;
esac

# We need to accept at least all the BSD install flags.
dest=
files=
opts=
prev=
install_type=
isdir=no
stripme=
no_mode=:
for arg
do
    arg2=
    if test -n "$dest"; then
        func_append files " $dest"
        dest=$arg
        continue
    fi

    case $arg in
        -d) isdir=yes ;;
        -f)
            if $install_cp; then :; else
                prev=$arg
            fi
            ;;
        -g | -m | -o)
            prev=$arg
            ;;
        -s)
            stripme=" -s"
            continue
            ;;
    esac
done

```

```

    -*)
  ;;
  *)
  # If the previous option needed an argument, then skip it.
  if test -n "$prev"; then
    if test "x$prev" = x-m && test -n "$install_override_mode";
then
      arg2=$install_override_mode
      no_mode=false
    fi
    prev=
  else
    dest=$arg
    continue
  fi
  ;;
esac

  # Aesthetically quote the argument.
  func_quote_for_eval "$arg"
  func_append install_prog " $func_quote_for_eval_result"
  if test -n "$arg2"; then
    func_quote_for_eval "$arg2"
  fi
  func_append install_shared_prog " $func_quote_for_eval_result"
done

test -z "$install_prog" && \
  func_fatal_help "you must specify an install program"

test -n "$prev" && \
  func_fatal_help "the \"\$prev' option requires an argument"

if test -n "$install_override_mode" && $no_mode; then
  if $install_cp; then :; else
    func_quote_for_eval "$install_override_mode"
    func_append install_shared_prog " -m $func_quote_for_eval_result"
  fi
fi

if test -z "$files"; then
  if test -z "$dest"; then
    func_fatal_help "no file or destination specified"
  else
    func_fatal_help "you must specify a destination"
  fi
fi

# Strip any trailing slash from the destination.
func_stripname '' '/' "$dest"
dest=$func_stripname_result

```

```

# Check to see that the destination is a directory.
test -d "$dest" && isdir=yes
if test "$isdir" = yes; then
    destdir="$dest"
    destname=
else
    func_dirname_and_basename "$dest" "" "."
    destdir="$func_dirname_result"
    destname="$func_basename_result"

    # Not a directory, so check to see that there is only one file
specified.
    set dummy $files; shift
    test "$#" -gt 1 && \
func_fatal_help "`$dest' is not a directory"
fi
case $destdir in
[\\/*]* | [A-Za-z]:[\\/*]*) ;;
*)
    for file in $files; do
        case $file in
*.lo) ;;
*)
            func_fatal_help "`$destdir' must be an absolute directory
name"
                ;;
        esac
    done
    ;;
esac

# This variable tells wrapper scripts just to set variables rather
# than running their programs.
libtool_install_magic="$magic"

staticlibs=
future_libdirs=
current_libdirs=
for file in $files; do

    # Do each installation.
    case $file in
*.$libext)
        # Do the static libraries later.
        func_append staticlibs " $file"
        ;;

*.la)
        func_resolve_sysroot "$file"
        file=$func_resolve_sysroot_result

        # Check to see that this really is a libtool archive.

```



```

func_lalib_unsafe_p "$file" \
  || func_fatal_help "\`$file' is not a valid libtool archive"

library_names=
old_library=
relink_command=
func_source "$file"

# Add the libdir to current_libdirs if it is the destination.
if test "X$destdir" = "X$libdir"; then
  case "$current_libdirs " in
    *" $libdir ") ;;
    *) func_append current_libdirs " $libdir" ;;
  esac
else
  # Note the libdir as a future libdir.
  case "$future_libdirs " in
    *" $libdir ") ;;
    *) func_append future_libdirs " $libdir" ;;
  esac
fi

func_dirname "$file" "/" ""
dir="$func_dirname_result"
func_append dir "$objdir"

if test "$fast_install" = no && test -n "$relink_command"; then
  # Strip any trailing slash from the destination.
  func_stripname ' ' '/' "$libdir"
  destlibdir=$func_stripname_result

  func_stripname ' ' '/' "$destdir"
  s_destdir=$func_stripname_result

  # Determine the prefix the user has applied to our future dir.
  inst_prefix_dir=`$ECHO "X$s_destdir" | $Xsed -e
"s%$destlibdir\$%%"`

  # Don't allow the user to place us outside of our expected
  # location b/c this prevents finding dependent libraries that
  # are installed to the same prefix.
  # At present, this check doesn't affect windows .dll's that
  # are installed into $libdir/./bin (currently, that works
fine)
  # but it's something to keep an eye on.
  test "$inst_prefix_dir" = "$destdir" && \
    func_fatal_error "error: cannot install \`$file' to a
directory not ending in $libdir"

  if test -n "$inst_prefix_dir"; then
    # Stick the inst_prefix_dir data into the link command.

```

```

        relink_command=`$ECHO "$relink_command" | $SED
"s%@inst_prefix_dir@%-inst-prefix-dir $inst_prefix_dir%"`
        else
            relink_command=`$ECHO "$relink_command" | $SED
"s%@inst_prefix_dir@%%%"`
        fi

        func_warning "relinking \`${file}`"
        func_show_eval "$relink_command" \
            'func_fatal_error "error: relink \`${file}`" with the above
command before installing it"'
        fi

# See the names of the shared library.
set dummy $library_names; shift
if test -n "$1"; then
    realname="$1"
    shift

    srcname="$realname"
    test "$fast_install" = no && test -n "$relink_command" &&
srcname="$realname"

# Install the shared library and build the symlinks.
func_show_eval "$install_shared_prog $dir/$srcname
$destdir/$realname" \
    'exit $?'
tstripme="$stripme"
case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
    case $realname in
*.dll.a)
        tstripme=""
        ;;
    esac
    ;;
esac
if test -n "$tstripme" && test -n "$striplib"; then
    func_show_eval "$striplib $destdir/$realname" 'exit $?'
fi

if test "$#" -gt 0; then
# Delete the old symlinks, and create new ones.
# Try `ln -sf' first, because the `ln' binary might depend on
# the symlink we replace! Solaris /bin/ln does not
understand -f,
# so we also need to try rm && ln -s.
for linkname
do
    test "$linkname" != "$realname" \
        && func_show_eval "(cd $destdir && { $LN_S -f $realname
$linkname || { $RM $linkname && $LN_S $realname $linkname; } })"

```

```

        done
    fi

    # Do each command in the postinstall commands.
    lib="$destdir/$realname"
    func_execute_cmds "$postinstall_cmds" 'exit $?'
fi

# Install the pseudo-library for information purposes.
func_basename "$file"
name="$func_basename_result"
instname="$dir/$name"i
func_show_eval "$install_prog $instname $destdir/$name" 'exit $?'

# Maybe install the static library, too.
test -n "$old_library" && func_append staticlibs "
$dir/$old_library"
;;

*.lo)
# Install (i.e. copy) a libtool object.

# Figure out destination file name, if it wasn't already
specified.
if test -n "$destname"; then
    destfile="$destdir/$destname"
else
    func_basename "$file"
    destfile="$func_basename_result"
    destfile="$destdir/$destfile"
fi

# Deduce the name of the destination old-style object file.
case $destfile in
*.lo)
    func_lo2o "$destfile"
    staticdest=$func_lo2o_result
    ;;
*.$objext)
    staticdest="$destfile"
    destfile=
    ;;
*)
    func_fatal_help "cannot copy a libtool object to `\$destfile'"
    ;;
esac

# Install the libtool object if requested.
test -n "$destfile" && \
    func_show_eval "$install_prog $file $destfile" 'exit $?'

# Install the old object if enabled.

```

```

if test "$build_old_libs" = yes; then
    # Deduce the name of the old-style object file.
    func_lo2o "$file"
    staticobj=$func_lo2o_result
    func_show_eval "$install_prog \$staticobj \$staticdest" 'exit
$?'
fi
exit $EXIT_SUCCESS
;;

*)
# Figure out destination file name, if it wasn't already
specified.
if test -n "$destname"; then
    destfile="$destdir/$destname"
else
    func_basename "$file"
    destfile="$func_basename_result"
    destfile="$destdir/$destfile"
fi

# If the file is missing, and there is a .exe on the end, strip
it
# because it is most likely a libtool script we actually want to
# install
stripped_ext=""
case $file in
    *.exe)
        if test ! -f "$file"; then
            func_stripname '' '.exe' "$file"
            file=$func_stripname_result
            stripped_ext=".exe"
        fi
        ;;
    esac

# Do a test to see if this is really a libtool program.
case $host in
    *cygwin* | *mingw*)
        if func_ltwrapper_executable_p "$file"; then
            func_ltwrapper_scriptname "$file"
            wrapper=$func_ltwrapper_scriptname_result
        else
            func_stripname '' '.exe' "$file"
            wrapper=$func_stripname_result
        fi
        ;;
    *)
        wrapper=$file
        ;;
    esac
if func_ltwrapper_script_p "$wrapper"; then

```

```

notinst_deplibs=
relink_command=

func_source "$wrapper"

# Check the variables that should have been set.
test -z "$generated_by_libtool_version" && \
  func_fatal_error "invalid libtool wrapper script \`${wrapper}`"

finalize=yes
for lib in $notinst_deplibs; do
  # Check to see that each library is installed.
  libdir=
  if test -f "$lib"; then
    func_source "$lib"
  fi
  libfile="$libdir/"`$ECHO "$lib" | $SED 's%^.*/%g`' ###
testsuite: skip nested quoting test
  if test -n "$libdir" && test ! -f "$libfile"; then
    func_warning "\`${lib}` has not been installed in \`${libdir}`"
    finalize=no
  fi
done

relink_command=
func_source "$wrapper"

outputname=
if test "$fast_install" = no && test -n "$relink_command"; then
  $opt_dry_run || {
    if test "$finalize" = yes; then
      tmpdir=`func_mkdir`
      func_basename "$file$stripped_ext"
      file="$func_basename_result"
      outputname="$tmpdir/$file"
      # Replace the output file specification.
      relink_command=`$ECHO "$relink_command" | $SED
's%@OUTPUT@%' "$outputname"'%g`

      $opt_silent || {
        func_quote_for_expand "$relink_command"
        eval "func_echo $func_quote_for_expand_result"
      }
      if eval "$relink_command"; then :
        else
          func_error "error: relink \`${file}` with the above command
before installing it"
          $opt_dry_run || ${RM}r "$tmpdir"
          continue
        fi
        file="$outputname"
      else

```

```

        func_warning "cannot relink \`${file}'"
    fi
}
else
    # Install the binary that we compiled earlier.
    file=`$ECHO "$file$stripped_ext" | $SED
"s%\([^/]*\)%%$objdir/\1%"`
    fi
fi

# remove .exe since cygwin /usr/bin/install will append another
# one anyway
case $install_prog,$host in
*/usr/bin/install*,*cygwin*)
    case $file:$destfile in
*.exe:*.exe)
        # this is ok
        ;;
*.exe:*)
        destfile=$destfile.exe
        ;;
*:*.exe)
        func_stripname '' '.exe' "$destfile"
        destfile=$func_stripname_result
        ;;
    esac
    ;;
esac

func_show_eval "$install_prog\$stripme \`${file} \`${destfile" 'exit
$?'

$opt_dry_run || if test -n "$outputname"; then
    ${RM}r "$tmpdir"
fi
;;
esac
done

for file in $staticlibs; do
    func_basename "$file"
    name="$func_basename_result"

    # Set up the ranlib parameters.
    oldlib="$destdir/$name"
    func_to_tool_file "$oldlib" func_convert_file_msys_to_w32
    tool_oldlib=$func_to_tool_file_result

    func_show_eval "$install_prog \`${file} \`${oldlib" 'exit $?'

    if test -n "$stripme" && test -n "$old_striplib"; then
        func_show_eval "$old_striplib $tool_oldlib" 'exit $?'
    fi

```

```

    # Do each command in the postinstall commands.
    func_execute_cmds "$old_postinstall_cmds" 'exit $?'
done

test -n "$future_libdirs" && \
    func_warning "remember to run \`${$progname} --
finish$future_libdirs'"

if test -n "$current_libdirs"; then
    # Maybe just do a dry run.
    $opt_dry_run && current_libdirs=" -n$current_libdirs"
    exec_cmd='$SHELL $progpath $preserve_args --
finish$current_libdirs'
else
    exit $EXIT_SUCCESS
fi
}

test "$opt_mode" = install && func_mode_install ${1+"$@"}

# func_generate_dlsyms outputname originator pic_p
# Extract symbols from dlprefiles and create ${outputname}.S.o with
# a dlpreopen symbol table.
func_generate_dlsyms ()
{
    $opt_debug
    my_outputname="$1"
    my_originator="$2"
    my_pic_p="${3-no}"
    my_prefix=`$ECHO "$my_originator" | sed 's%[^a-zA-Z0-9]%%g'`
    my_dlsyms=

    if test -n "$dlfiles$dlprefiles" || test "$dlsel" != no; then
        if test -n "$NM" && test -n "$global_symbol_pipe"; then
            my_dlsyms="${my_outputname}.S.c"
        else
            func_error "not configured to extract global symbols from
dlpreopened files"
        fi
    fi

    if test -n "$my_dlsyms"; then
        case $my_dlsyms in
            "") ;;
            *.c)
                # Discover the nlist of each of the dlfiles.
                nlist="$output_objdir/${my_outputname}.nm"

                func_show_eval "$RM $nlist ${nlist}S ${nlist}T"

                # Parse the name list into a source file.

```

```

func_verbose "creating $output_objdir/$my_dlsyms"

$opt_dry_run || $ECHO > "$output_objdir/$my_dlsyms" "\
/* $my_dlsyms - symbol resolution table for \`${my_outputname}' dlsym
emulation. */
/* Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION */

#ifdef __cplusplus
extern "C" {
#endif

#ifdef defined(__GNUC__) && (((__GNUC__ == 4) && (__GNUC_MINOR__ >= 4))
|| (__GNUC__ > 4))
#pragma GCC diagnostic ignored "-Wstrict-prototypes"
#endif

/* Keep this code in sync between libtool.m4, ltmain, lt_system.h, and
tests. */
#ifdef defined(_WIN32) || defined(__CYGWIN__) || defined(_WIN32_WCE)
/* DATA imports from DLLs on WIN32 can't be const, because runtime
relocations are performed -- see ld's documentation on pseudo-
relocs. */
# define LT_DLSYM_CONST
#elif defined(__osf__)
/* This system does not cope well with relocations in const data. */
# define LT_DLSYM_CONST
#else
# define LT_DLSYM_CONST const
#endif

/* External symbol declarations for the compiler. */\
"

if test "$dlsym" = yes; then
  func_verbose "generating symbol list for \`${output}'"

  $opt_dry_run || echo ': @PROGRAM@ ' > "$nlist"

  # Add our own program objects to the symbol list.
  progfiles=`$ECHO "$objs$d_deplibs" | $SP2NL | $SED "$lo2o" |
$NL2SP`
  for progfile in $progfiles; do
    func_to_tool_file "$progfile" func_convert_file_msys_to_w32
    func_verbose "extracting global C symbols from
\`${func_to_tool_file_result}"
    $opt_dry_run || eval "$NM $func_to_tool_file_result |
$global_symbol_pipe >> '$nlist'"
  done

  if test -n "$exclude_expsyms"; then
    $opt_dry_run || {

```



```

        eval '$EGREP -v ' ($exclude_expsyms)$' "$nlist" >
"$nlist"T'
        eval '$MV "$nlist"T "$nlist"'
    }
fi

if test -n "$export_symbols_regex"; then
    $opt_dry_run || {
        eval '$EGREP -e "$export_symbols_regex" "$nlist" >
"$nlist"T'
        eval '$MV "$nlist"T "$nlist"'
    }
fi

# Prepare the list of exported symbols
if test -z "$export_symbols"; then
    export_symbols="$output_objdir/$outputname.exp"
    $opt_dry_run || {
        $RM $export_symbols
        eval "${SED} -n -e '/^: @PROGRAM@ $/d' -e 's/^.*
\(.*\)$/\1/p' "'< "$nlist" > "$export_symbols"'
        case $host in
            *cygwin* | *mingw* | *cegcc* )
                eval "echo EXPORTS "'>
"$output_objdir/$outputname.def"'
                eval 'cat "$export_symbols" >>
"$output_objdir/$outputname.def"'
                ;;
            esac
        }
    else
        $opt_dry_run || {
            eval "${SED} -e 's/\([[:.*^$]]\)/\\\1/g' -e 's/^/ /' -e
's/$/$/'"' < "$export_symbols" > "$output_objdir/$outputname.exp"'
            eval '$GREP -f "$output_objdir/$outputname.exp" < "$nlist"
> "$nlist"T'
            eval '$MV "$nlist"T "$nlist"'
            case $host in
                *cygwin* | *mingw* | *cegcc* )
                    eval "echo EXPORTS "'>
"$output_objdir/$outputname.def"'
                    eval 'cat "$nlist" >> "$output_objdir/$outputname.def"'
                    ;;
                esac
            }
        fi
    fi

for dlprefile in $dlprefiles; do
    func_verbose "extracting global C symbols from \"\$dlprefile\""
    func_basename "$dlprefile"
    name="$func_basename_result"

```

```

    case $host in
    *cygwin* | *mingw* | *cegcc* )
        # if an import library, we need to obtain dlname
        if func_win32_import_lib_p "$dlprefile"; then
            func_tr_sh "$dlprefile"
            eval "curr_lafile=\$libfile_$(func_tr_sh_result)"
            dlprefile_dlname=""
            if test -n "$curr_lafile" && func_lalib_p "$curr_lafile";
then
                # Use subshell, to avoid clobbering current variable
values
                dlprefile_dlname=`source "$curr_lafile" && echo
"$dlname"`
                if test -n "$dlprefile_dlname" ; then
                    func_basename "$dlprefile_dlname"
                    dlprefile_dlname="$(func_basename_result)"
                else
                    # no lafile. user explicitly requested -dlpreopen
<import library>.
                    $sharedlib_from_linklib_cmd "$dlprefile"
                    dlprefile_dlname=$sharedlib_from_linklib_result
                fi
                fi
                $opt_dry_run || {
                    if test -n "$dlprefile_dlname" ; then
                        eval '$ECHO ": $dlprefile_dlname" >> "$nlist"'
                    else
                        func_warning "Could not compute DLL name from $name"
                        eval '$ECHO ": $name " >> "$nlist"'
                    fi
                    func_to_tool_file "$dlprefile"
func_convert_file_msys_to_w32
                    eval "$NM \"$(func_to_tool_file_result)\" 2>/dev/null |
$global_symbol_pipe |
                    $SED -e '/I __imp/d' -e 's/I __nm_/D /;s/_nm_/' >>
'$nlist'"
                }
            else # not an import lib
                $opt_dry_run || {
                    eval '$ECHO ": $name " >> "$nlist"'
                    func_to_tool_file "$dlprefile"
func_convert_file_msys_to_w32
                    eval "$NM \"$(func_to_tool_file_result)\" 2>/dev/null |
$global_symbol_pipe >> '$nlist'"
                }
            fi
        ;;
    *)
        $opt_dry_run || {
            eval '$ECHO ": $name " >> "$nlist"'
            func_to_tool_file "$dlprefile"
func_convert_file_msys_to_w32

```

```

        eval "$NM \"\$func_to_tool_file_result\" 2>/dev/null |
$global_symbol_pipe >> '$nlist'"
    }
    ;;
    esac
done

$opt_dry_run || {
# Make sure we have at least an empty file.
test -f "$nlist" || : > "$nlist"

if test -n "$exclude_expsyms"; then
    $EGREP -v " ($exclude_expsyms)$" "$nlist" > "$nlist.T"
    $MV "$nlist.T" "$nlist"
fi

# Try sorting and uniquifying the output.
if $GREP -v "^: " < "$nlist" |
    if sort -k 3 </dev/null >/dev/null 2>&1; then
        sort -k 3
    else
        sort +2
    fi |
    uniq > "$nlist.S"; then
:
else
    $GREP -v "^: " < "$nlist" > "$nlist.S"
fi

if test -f "$nlist.S"; then
    eval "$global_symbol_to_cdecl" < "$nlist.S" >>
"$output_objdir/$my_dlsyms"
else
    echo '/* NONE */' >> "$output_objdir/$my_dlsyms"
fi

echo >> "$output_objdir/$my_dlsyms" "\

/* The mapping between symbol names and symbols. */
typedef struct {
    const char *name;
    void *address;
} lt_dlsymlist;
extern LT_DLSYM_CONST lt_dlsymlist
lt_${my_prefix}_LTX_preloaded_symbols[];
LT_DLSYM_CONST lt_dlsymlist
lt_${my_prefix}_LTX_preloaded_symbols[] =
{\
    { \"$my_originator\", (void *) 0 },"

    case $need_lib_prefix in
no)

```

```

        eval "$global_symbol_to_c_name_address" < "$nlist" >>
"$output_objdir/$my_dlsyms"
        ;;
    *)
        eval "$global_symbol_to_c_name_address_lib_prefix" < "$nlist"
>> "$output_objdir/$my_dlsyms"
        ;;
    esac
    echo >> "$output_objdir/$my_dlsyms" "\
{0, (void *) 0}
};

/* This works around a problem in FreeBSD linker */
#ifdef FREEBSD_WORKAROUND
static const void *lt_preloaded_setup() {
    return lt_${my_prefix}_LTX_preloaded_symbols;
}
#endif

#ifdef __cplusplus
}
#endif\
"

    } # !$opt_dry_run

pic_flag_for_symlib=
case "$compile_command " in
*" -static ") ;;
*)
    case $host in
    # compiling the symbol table file with pic_flag works around
    # a FreeBSD bug that causes programs to crash when -lm is
    # linked before any other PIC object.  But we must not use
    # pic_flag when linking with -static.  The problem exists in
    # FreeBSD 2.2.6 and is fixed in FreeBSD 3.1.
    *-*-freebsd2.*|*-*-freebsd3.0*|*-*-freebsdelf3.0*)
        pic_flag_for_symlib=" $pic_flag -DFREEBSD_WORKAROUND" ;;
    *-*-hpux*)
        pic_flag_for_symlib=" $pic_flag" ;;
    *)
        if test "X$my_pic_p" != Xno; then
            pic_flag_for_symlib=" $pic_flag"
        fi
        ;;
    esac
    ;;
esac

symlib_cflags=
for arg in $LTCFLAGS; do
    case $arg in
    -pie | -fpie | -fPIE) ;;
    *) func_append symlib_cflags " $arg" ;;

```

```

    esac
done

# Now compile the dynamic symbol file.
func_show_eval '(cd $output_objdir && $LTCC$symtab_cflags -
c$no_builtin_flag$pic_flag_for_symtable "$my_dlsyms")' 'exit $?'

# Clean up the generated files.
func_show_eval '$RM "$output_objdir/$my_dlsyms" "$nlist"
"${nlist}S" "${nlist}T"'

# Transform the symbol file into the correct name.
symfileobj="$output_objdir/${my_outputname}S.$objext"
case $host in
*cygwin* | *mingw* | *cegcc* )
    if test -f "$output_objdir/$my_outputname.def"; then
        compile_command=`$ECHO "$compile_command" | $SED
"s%@SYMFIL@%$output_objdir/$my_outputname.def $symfileobj%"`
        finalize_command=`$ECHO "$finalize_command" | $SED
"s%@SYMFIL@%$output_objdir/$my_outputname.def $symfileobj%"`
    else
        compile_command=`$ECHO "$compile_command" | $SED
"s%@SYMFIL@%$symfileobj%"`
        finalize_command=`$ECHO "$finalize_command" | $SED
"s%@SYMFIL@%$symfileobj%"`
    fi
    ;;
*)
    compile_command=`$ECHO "$compile_command" | $SED
"s%@SYMFIL@%$symfileobj%"`
    finalize_command=`$ECHO "$finalize_command" | $SED
"s%@SYMFIL@%$symfileobj%"`
    ;;
esac
;;
*)
func_fatal_error "unknown suffix for \`${my_dlsyms}'"
;;
esac
else
# We keep going just in case the user didn't refer to
# lt_preloaded_symbols. The linker will fail if
global_symbol_pipe
# really was required.

# Nullify the symbol file.
compile_command=`$ECHO "$compile_command" | $SED "s%
@SYMFIL@%%"`
finalize_command=`$ECHO "$finalize_command" | $SED "s%
@SYMFIL@%%"`
fi
}

```

```

# func_win32_libid arg
# return the library type of file 'arg'
#
# Need a lot of goo to handle *both* DLLs and import libs
# Has to be a shell function in order to 'eat' the argument
# that is supplied when $file_magic_command is called.
# Despite the name, also deal with 64 bit binaries.
func_win32_libid ()
{
    $opt_debug
    win32_libid_type="unknown"
    win32_fileres=`file -L $1 2>/dev/null`
    case $win32_fileres in
        *ar\ archive\ import\ library*) # definitely import
            win32_libid_type="x86 archive import"
            ;;
        *ar\ archive*) # could be an import, or static
            # Keep the egrep pattern in sync with the one in
            _LT_CHECK_MAGIC_METHOD.
            if eval $OBJDUMP -f $1 | $SED -e '10q' 2>/dev/null |
                $EGREP 'file format (pei*-i386(.?architecture: i386)?|pe-arm-
wince|pe-x86-64)' >/dev/null; then
                func_to_tool_file "$1" func_convert_file_msys_to_w32
                win32_nmres=`eval $NM -f posix -A \"\$func_to_tool_file_result\"
|
                $SED -n -e '
                    1,100{
                        / I /{
                            s,.*,import,
                            p
                            q
                        }
                    }'`
                case $win32_nmres in
                    import*) win32_libid_type="x86 archive import";;
                    *) win32_libid_type="x86 archive static";;
                esac
            fi
            ;;
        *DLL*)
            win32_libid_type="x86 DLL"
            ;;
        *executable*) # but shell scripts are "executable" too...
            case $win32_fileres in
                *MS\ Windows\ PE\ Intel*)
                    win32_libid_type="x86 DLL"
                    ;;
            esac
            ;;
    esac
    $ECHO "$win32_libid_type"
}

```

```

}

# func_cygming_dll_for_implib ARG
#
# Platform-specific function to extract the
# name of the DLL associated with the specified
# import library ARG.
# Invoked by eval'ing the libtool variable
#   $sharedlib_from_linklib_cmd
# Result is available in the variable
#   $sharedlib_from_linklib_result
func_cygming_dll_for_implib ()
{
    $opt_debug
    sharedlib_from_linklib_result=`$DLLTOOL --identify-strict --identify
"$1"`
}

# func_cygming_dll_for_implib_fallback_core SECTION_NAME LIBNAMEs
#
# This is the core of a fallback implementation of a
# platform-specific function to extract the name of the
# DLL associated with the specified import library LIBNAME.
#
# SECTION_NAME is either .idata$6 or .idata$7, depending
# on the platform and compiler that created the implib.
#
# Echoes the name of the DLL associated with the
# specified import library.
func_cygming_dll_for_implib_fallback_core ()
{
    $opt_debug
    match_literal=`$ECHO "$1" | $SED "$sed_make_literal_regex"`
    $OBJDUMP -s --section "$1" "$2" 2>/dev/null |
        $SED '/^Contents of section '"$match_literal"':/{
            # Place marker at beginning of archive member dllname section
            s/./====MARK====/
            p
            d
        }
    # These lines can sometimes be longer than 43 characters, but
    # are always uninteresting
    /:[      ]*file format pe[i]\{,1\}-/d
    /^In archive [^:]*:/d
    # Ensure marker is printed
    /^====MARK====/p
    # Remove all lines with less than 43 characters
    /^.\{43\}//!d
    # From remaining lines, remove first 43 characters
    s/^.\{43\}//' |
    $SED -n '
        # Join marker and all lines until next marker into a single line

```

```

/^====MARK====/ b para
H
$ b para
b
:para
x
s/\n//g
# Remove the marker
s/^====MARK====//
# Remove trailing dots and whitespace
s/[\. \t]*$//
# Print
./p' |
# we now have a list, one entry per line, of the stringified
# contents of the appropriate section of all members of the
# archive which possess that section. Heuristic: eliminate
# all those which have a first or second character that is
# a '.' (that is, objdump's representation of an unprintable
# character.) This should work for all archives with less than
# 0x302f exports -- but will fail for DLLs whose name actually
# begins with a literal '.' or a single character followed by
# a '.'.
#
# Of those that remain, print the first one.
$SED -e '/^\./d;/^\./d;q'
}

# func_cygming_gnu_implib_p ARG
# This predicate returns with zero status (TRUE) if
# ARG is a GNU/binutils-style import library. Returns
# with nonzero status (FALSE) otherwise.
func_cygming_gnu_implib_p ()
{
    $opt_debug
    func_to_tool_file "$1" func_convert_file_msys_to_w32
    func_cygming_gnu_implib_tmp=`$NM "$func_to_tool_file_result" | eval
"$global_symbol_pipe" | $EGREP ' (_head_[A-Za-z0-9_]+_[ad]l*|[A-Za-z0-
9_]+_[ad]l*_iname)$'`
    test -n "$func_cygming_gnu_implib_tmp"
}

# func_cygming_ms_implib_p ARG
# This predicate returns with zero status (TRUE) if
# ARG is an MS-style import library. Returns
# with nonzero status (FALSE) otherwise.
func_cygming_ms_implib_p ()
{
    $opt_debug
    func_to_tool_file "$1" func_convert_file_msys_to_w32
    func_cygming_ms_implib_tmp=`$NM "$func_to_tool_file_result" | eval
"$global_symbol_pipe" | $GREP '_NULL_IMPORT_DESCRIPTOR'`
    test -n "$func_cygming_ms_implib_tmp"
}

```



```

}

# func_cygming_dll_for_implib_fallback ARG
# Platform-specific function to extract the
# name of the DLL associated with the specified
# import library ARG.
#
# This fallback implementation is for use when $DLLTOOL
# does not support the --identify-strict option.
# Invoked by eval'ing the libtool variable
#   $sharedlib_from_linklib_cmd
# Result is available in the variable
#   $sharedlib_from_linklib_result
func_cygming_dll_for_implib_fallback ()
{
    $opt_debug
    if func_cygming_gnu_implib_p "$1" ; then
        # binutils import library

sharedlib_from_linklib_result=`func_cygming_dll_for_implib_fallback_core '.idata$7' "$1"`
        elif func_cygming_ms_implib_p "$1" ; then
            # ms-generated import library

sharedlib_from_linklib_result=`func_cygming_dll_for_implib_fallback_core '.idata$6' "$1"`
        else
            # unknown
            sharedlib_from_linklib_result=""
        fi
    }

# func_extract_an_archive dir oldlib
func_extract_an_archive ()
{
    $opt_debug
    f_ex_an_ar_dir="$1"; shift
    f_ex_an_ar_oldlib="$1"
    if test "$lock_old_archive_extraction" = yes; then
        lockfile=$f_ex_an_ar_oldlib.lock
        until $opt_dry_run || ln "$proppath" "$lockfile" 2>/dev/null; do
            func_echo "Waiting for $lockfile to be removed"
            sleep 2
        done
    fi
    func_show_eval "(cd \"$f_ex_an_ar_dir\" && $AR x
\"$f_ex_an_ar_oldlib\")" \
        'stat=$?; rm -f "$lockfile"; exit $stat'
    if test "$lock_old_archive_extraction" = yes; then
        $opt_dry_run || rm -f "$lockfile"
    fi
}

```

```

        if ($AR t "$f_ex_an_ar_oldlib" | sort | sort -uc >/dev/null 2>&1);
then
    :
else
    func_fatal_error "object name conflicts in archive:
$f_ex_an_ar_dir/$f_ex_an_ar_oldlib"
fi
}

# func_extract_archives gentop oldlib ...
func_extract_archives ()
{
    $opt_debug
    my_gentop="$1"; shift
    my_oldlibs=${1+"$@"}
    my_oldobjs=""
    my_xlib=""
    my_xabs=""
    my_xdir=""

    for my_xlib in $my_oldlibs; do
        # Extract the objects.
        case $my_xlib in
            [\\/] * | [A-Za-z]:[\\/] *) my_xabs="$my_xlib" ;;
            *) my_xabs=`pwd`"/$my_xlib" ;;
        esac
        func_basename "$my_xlib"
        my_xlib="$func_basename_result"
        my_xlib_u=$my_xlib
        while :; do
            case " $extracted_archives " in
                *" $my_xlib_u "*)
                    func_arith $extracted_serial + 1
                    extracted_serial=$func_arith_result
                    my_xlib_u=lt$extracted_serial-$my_xlib ;;
                *) break ;;
            esac
        done
        extracted_archives="$extracted_archives $my_xlib_u"
        my_xdir="$my_gentop/$my_xlib_u"

        func_mkdir_p "$my_xdir"

        case $host in
            *-darwin*)
                func_verbose "Extracting $my_xabs"
                # Do not bother doing anything if just a dry run
                $opt_dry_run || {
                    darwin_orig_dir=`pwd`
                    cd $my_xdir || exit $?
                    darwin_archive=$my_xabs
                }
            esac
        done
    done
}

```

```

darwin_curdir=`pwd`
darwin_base_archive=`basename "$darwin_archive"`
darwin_arches=`$LIPO -info "$darwin_archive" 2>/dev/null |
$GREP Architectures 2>/dev/null || true`
if test -n "$darwin_arches"; then
    darwin_arches=`$ECHO "$darwin_arches" | $SED -e 's/.*are:/'`
    darwin_arch=
    func_verbose "$darwin_base_archive has multiple architectures
$darwin_arches"
    for darwin_arch in $darwin_arches ; do
        func_mkdir_p "unfat-$$/${darwin_base_archive}-
${darwin_arch}"
        $LIPO -thin $darwin_arch -output "unfat-
$$/${darwin_base_archive}-${darwin_arch}/${darwin_base_archive}"
"${darwin_archive}"
        cd "unfat-$$/${darwin_base_archive}-${darwin_arch}"
        func_extract_an_archive "`pwd`" "${darwin_base_archive}"
        cd "$darwin_curdir"
        $RM "unfat-$$/${darwin_base_archive}-
${darwin_arch}/${darwin_base_archive}"
    done # $darwin_arches
    ## Okay now we've a bunch of thin objects, gotta fatten
them up :)
    darwin_filelist=`find unfat-$$ -type f -name \*.o -print -o -
name \*.lo -print | $SED -e "$basename" | sort -u`
    darwin_file=
    darwin_files=
    for darwin_file in $darwin_filelist; do
        darwin_files=`find unfat-$$ -name $darwin_file -print |
sort | $NL2SP`
        $LIPO -create -output "$darwin_file" $darwin_files
    done # $darwin_filelist
    $RM -rf unfat-$$
    cd "$darwin_orig_dir"
else
    cd $darwin_orig_dir
    func_extract_an_archive "$my_xdir" "$my_xabs"
    fi # $darwin_arches
} # !$opt_dry_run
;;
*)
    func_extract_an_archive "$my_xdir" "$my_xabs"
;;
esac
my_oldobjs="$my_oldobjs "`find $my_xdir -name \*.$objext -print
-o -name \*.lo -print | sort | $NL2SP`
done

func_extract_archives_result="$my_oldobjs"
}

```

```

# func_emit_wrapper [arg=no]
#
# Emit a libtool wrapper script on stdout.
# Don't directly open a file because we may want to
# incorporate the script contents within a cygwin/mingw
# wrapper executable. Must ONLY be called from within
# func_mode_link because it depends on a number of variables
# set therein.
#
# ARG is the value that the WRAPPER_SCRIPT_BELONGS_IN_OBJDIR
# variable will take. If 'yes', then the emitted script
# will assume that the directory in which it is stored is
# the $objdir directory. This is a cygwin/mingw-specific
# behavior.
func_emit_wrapper ()
{
    func_emit_wrapper_arg1=${1-no}

    $ECHO "\
#! $SHELL

# $output - temporary wrapper script for $objdir/$outputname
# Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION
#
# The $output program cannot be directly executed until all the
# libtool
# libraries that it depends on are installed.
#
# This wrapper script should never be moved out of the build
# directory.
# If it is, it will not operate correctly.

# Sed substitution that helps us do robust quoting. It backslashifies
# metacharacters that are still active within double-quoted strings.
sed_quote_subst='$sed_quote_subst'

# Be Bourne compatible
if test -n \"\${ZSH_VERSION+set}\" && (emulate sh) >/dev/null 2>&1;
then
    emulate sh
    NULLCMD=:
    # Zsh 3.x and 4.x performs word splitting on \"\${1+\"$@\"}\", which
    # is contrary to our usage. Disable this feature.
    alias -g \"\${1+\"$@\"}\"='\"$@\"'
    setopt NO_GLOB_SUBST
else
    case \"(set -o) 2>/dev/null\" in *posix*) set -o posix;; esac
fi
BIN_SH=xpg4; export BIN_SH # for Tru64
DUALCASE=1; export DUALCASE # for MKS sh

# The HP-UX ksh and POSIX shell print the target directory to stdout

```

```

# if CDPATH is set.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

relink_command="\$relink_command\"

# This environment variable determines our operation mode.
if test \"\$libtool_install_magic\" = \"\$magic\"; then
  # install mode needs the following variables:
  generated_by_libtool_version='\$macro_version'
  notinst_deplibs='\$notinst_deplibs'
else
  # When we are sourced in execute mode, \$file and \$ECHO are already
  set.
  if test \"\$libtool_execute_magic\" != \"\$magic\"; then
    file=\"\$0\"

    qECHO=`$ECHO \"$ECHO\" | $SED \"$sed_quote_subst\"`
    $ECHO \"\

# A function that is used when there is no print builtin or printf.
func_fallback_echo ()
{
  eval 'cat <<_LTECHO_EOF
\$1
_LTECHO_EOF'
}
  ECHO=\"\$qECHO\"
  fi

# Very basic option parsing. These options are (a) specific to
# the libtool wrapper, (b) are identical between the wrapper
# /script/ and the wrapper /executable/ which is used only on
# windows platforms, and (c) all begin with the string "--lt-"
# (application programs are unlikely to have options which match
# this pattern).
#
# There are only two supported options: --lt-debug and
# --lt-dump-script. There is, deliberately, no --lt-help.
#
# The first argument to this parsing function should be the
# script's $0 value, followed by "$@".
lt_option_debug=
func_parse_lt_options ()
{
  lt_script_arg0=\$0
  shift
  for lt_opt
  do
    case \"\$lt_opt\" in
      --lt-debug) lt_option_debug=1 ;;
      --lt-dump-script)

```

```

        lt_dump_D=`\`$ECHO `X`$lt_script_arg0`" | $SED -e 's/^X//' -e
's%/[^/]*$%%'\`
        test `X`$lt_dump_D`" = `X`$lt_script_arg0`" && lt_dump_D=.
        lt_dump_F=`\`$ECHO `X`$lt_script_arg0`" | $SED -e 's/^X//' -e
's%^.*/%%\`
        cat `"$lt_dump_D/$lt_dump_F`"
        exit 0
;;
--lt-*)
    \`$ECHO `Unrecognized --lt- option: '$lt_opt`" 1>&2
    exit 1
;;
esac
done

# Print the debug banner immediately:
if test -n `"$lt_option_debug`"; then
    echo `"$outputname}:${output}:\${LINENO}: libtool wrapper (GNU
$PACKAGE$TIMESTAMP) $VERSION`" 1>&2
fi
}

# Used when --lt-debug. Prints its arguments to stdout
# (redirection is the responsibility of the caller)
func_lt_dump_args ()
{
    lt_dump_args_N=1;
    for lt_arg
    do
        \`$ECHO `"$outputname}:${output}:\${LINENO}:
newargv[`${lt_dump_args_N}]: $lt_arg`"
        lt_dump_args_N=`expr $lt_dump_args_N + 1`
    done
}

# Core function for launching the target application
func_exec_program_core ()
{
"
    case $host in
    # Backslashes separate directories on plain windows
    *-mingw | *-os2* | *-cegcc*)
        \`$ECHO `"\
            if test -n `"$lt_option_debug`"; then
                \`$ECHO `"$outputname}:${output}:\${LINENO}: newargv[0]:
\`$progdir\\\\\\$program`" 1>&2
                func_lt_dump_args `"{1+`"$@"`" 1>&2
            fi
            exec `"$progdir\\\\\\$program`" `"{1+`"$@"`"
"
;;

```

```

*)
    $ECHO "\
        if test -n \"\$lt_option_debug\"; then
            \$ECHO \"\${outputname}:\${output}:\${LINENO}: newargv[0]:
\${progdir}/\${program}\" 1>&2
            func_lt_dump_args \${1+\"\$@\"} 1>&2
        fi
        exec \"\${progdir}/\${program}\" \${1+\"\$@\"}
    \"
;;
esac
$ECHO "\
    \$ECHO \"\${0}: cannot exec \${program} \${*}\" 1>&2
    exit 1
}

# A function to encapsulate launching the target application
# Strips options in the --lt-* namespace from \@ and
# launches target application with the remaining arguments.
func_exec_program ()
{
    case \" \${*} \" in
    *\\ --lt-*)
        for lt_wr_arg
        do
            case \"\$lt_wr_arg in
            --lt-*) ;;
            *) set x \"\$@\" \"\$lt_wr_arg\"; shift;;
            esac
            shift
        done ;;
    esac
    func_exec_program_core \${1+\"\$@\"}
}

# Parse options
func_parse_lt_options \"\$0\" \${1+\"\$@\"}

# Find the directory that this script lives in.
thisdir=\\$ECHO \"\$file\" | $SED 's%/[^/]*$%%'\`
test \"x\$thisdir\" = \"x\$file\" && thisdir=.

# Follow symbolic links until we get to the real thisdir.
file=\\ls -ld \"\$file\" | $SED -n 's/.*-> //p'\`
while test -n \"\$file\"; do
    destdir=\\$ECHO \"\$file\" | $SED 's%/[^/]*$%%'\`

    # If there was a directory component, then change thisdir.
    if test \"x\$destdir\" != \"x\$file\"; then
        case \"\$destdir\" in
        [\\\\\\/] * | [A-Za-z]:[\\\\\\/]*) thisdir=\\\"\$destdir\" ;;
        *) thisdir=\\\"\$thisdir/\$destdir\" ;;
        esac
    fi
done

```

```

    esac
fi

file=\\$ECHO "\\$file\" | $SED 's%^.*/%%'`
file=\\ls -ld "\\$thisdir/\$file\" | $SED -n 's/.*-> //p'`
done

# Usually 'no', except on cygwin/mingw when embedded into
# the cwrapper.
WRAPPER_SCRIPT_BELONGS_IN_OBJDIR=$func_emit_wrapper_arg1
if test "\\$WRAPPER_SCRIPT_BELONGS_IN_OBJDIR\" = \"yes\"; then
    # special case for '.'
    if test "\\$thisdir\" = \".\"; then
        thisdir=`pwd`
    fi
    # remove .libs from thisdir
    case "\\$thisdir\" in
    *[\|\\|/]$objdir ) thisdir=\\$ECHO "\\$thisdir\" | $SED
's%[\|\\|/][^\\|\\|/]*$%'` ;;
    $objdir ) thisdir=. ;;
    esac
fi

# Try to get the absolute directory name.
absdir=`cd "\\$thisdir\" && pwd`
test -n "\\$absdir\" && thisdir=\"\\$absdir\"
"

    if test \"$fast_install\" = yes; then
        $ECHO "\
program=lt-'$outputname'$exeext
progdir=\"\\$thisdir/$objdir\"

if test ! -f "\\$progdir/\$program\" ||
{ file=\\ls -ldt "\\$progdir/\$program\"
\\$progdir/./\\$program\" 2>/dev/null | ${SED} 1q`; \\
test \"X$file\" != \"X\\$progdir/\$program\"; } then

file=\"\\$-$-\\$program\"

if test ! -d "\\$progdir\"; then
    $MKDIR "\\$progdir\"
else
    $RM "\\$progdir/\$file\"
fi\"

        $ECHO "\

# relink executable if necessary
if test -n "\\$relink_command\"; then
    if relink_command_output=`eval \\$relink_command 2>&1` ; then :
    else

```



```

$ECHO "\"$relink_command_output\" ">&2
$RM "\"$progdir/\$file\"
exit 1
fi
fi

$MV "\"$progdir/\$file\" "\"$progdir/\$program\" 2>/dev/null ||
{ $RM "\"$progdir/\$program\";
  $MV "\"$progdir/\$file\" "\"$progdir/\$program\"; }
$RM "\"$progdir/\$file\"
fi"
else
  $ECHO "\
program='$outputname'
progdir=\"\"$thisdir/$objdir\"
"
  fi

  $ECHO "\

if test -f "\"$progdir/\$program\"; then"

  # fixup the dll searchpath if we need to.
  #
  # Fix the DLL searchpath if we need to. Do this before
prepending
  # to shlibpath, because on Windows, both are PATH and uninstalled
  # libraries must come first.
  if test -n "$dllsearchpath"; then
    $ECHO "\
# Add the dll search path components to the executable PATH
PATH=$dllsearchpath:\$PATH
"
    fi

    # Export our shlibpath_var if we have one.
    if test "$shlibpath_overrides_runpath" = yes && test -n
"$shlibpath_var" && test -n "$temp_rpath"; then
      $ECHO "\
# Add our own library path to $shlibpath_var
$shlibpath_var=\"$temp_rpath\$$shlibpath_var\"

# Some systems cannot cope with colon-terminated $shlibpath_var
# The second colon is a workaround for a bug in BeOS R4 sed
$shlibpath_var=\"\"$ECHO "\"\$$shlibpath_var\" | $SED 's/::*\$//'\`

export $shlibpath_var
"
    fi

    $ECHO "\
if test "\"$libtool_execute_magic\" != \"$magic\"; then

```

```

        # Run the actual program with our arguments.
        func_exec_program \${1+\\"$@"}
    fi
else
    # The program doesn't exist.
    \${ECHO} \\"$0: error: \\\"$progdir/\$program' does not exist\"
1>&2
    \${ECHO} \\"This script is just a wrapper for \$program.\" 1>&2
    \${ECHO} \\"See the $PACKAGE documentation for more information.\"
1>&2
    exit 1
fi
fi\
"
}

```

```

# func_emit_cwrapperexe_src
# emit the source code for a wrapper executable on stdout
# Must ONLY be called from within func_mode_link because
# it depends on a number of variable set therein.
func_emit_cwrapperexe_src ()
{

```

```

    cat <<EOF

```

```

/* $cwrappersource - temporary wrapper executable for
$objdir/$outputname
Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION

```

```

The $output program cannot be directly executed until all the
libtool
libraries that it depends on are installed.

```

```

This wrapper executable should never be moved out of the build
directory.
If it is, it will not operate correctly.
*/
EOF

```

```

    cat <<"EOF"
#ifdef _MSC_VER
# define _CRT_SECURE_NO_DEPRECATED 1
#endif
#include <stdio.h>
#include <stdlib.h>
#ifdef _MSC_VER
# include <direct.h>
# include <process.h>
# include <io.h>
#else
# include <unistd.h>
# include <stdint.h>
# ifdef __CYGWIN__

```

```

# include <io.h>
# endif
#endif
#include <malloc.h>
#include <stdarg.h>
#include <assert.h>
#include <string.h>
#include <ctype.h>
#include <errno.h>
#include <fcntl.h>
#include <sys/stat.h>

/* declarations of non-ANSI functions */
#if defined(__MINGW32__)
# ifdef __STRICT_ANSI__
int _putenv (const char *);
# endif
#elif defined(__CYGWIN__)
# ifdef __STRICT_ANSI__
char *realpath (const char *, char *);
int putenv (char *);
int setenv (const char *, const char *, int);
# endif
/* #elif defined (other platforms) ... */
#endif

/* portability defines, excluding path handling macros */
#if defined(_MSC_VER)
# define setmode _setmode
# define stat _stat
# define chmod _chmod
# define getcwd _getcwd
# define putenv _putenv
# define S_IXUSR _S_IXUSR
# ifndef _INTPTR_T_DEFINED
# define _INTPTR_T_DEFINED
# define intptr_t int
# endif
#elif defined(__MINGW32__)
# define setmode _setmode
# define stat _stat
# define chmod _chmod
# define getcwd _getcwd
# define putenv _putenv
#elif defined(__CYGWIN__)
# define HAVE_SETENV
# define FOPEN_WB "wb"
/* #elif defined (other platforms) ... */
#endif

#if defined(PATH_MAX)
# define LT_PATHMAX PATH_MAX

```

```

#elif defined(MAXPATHLEN)
# define LT_PATHMAX MAXPATHLEN
#else
# define LT_PATHMAX 1024
#endif

#ifndef S_IXOTH
# define S_IXOTH 0
#endif
#ifndef S_IXGRP
# define S_IXGRP 0
#endif

/* path handling portability macros */
#ifndef DIR_SEPARATOR
# define DIR_SEPARATOR '/'
# define PATH_SEPARATOR ':'
#endif

#if defined (__WIN32) || defined (__MSDOS__) || defined (__DJGPP__) ||
\
    defined (__OS2__)
# define HAVE_DOS_BASED_FILE_SYSTEM
# define FOPEN_WB "wb"
# ifndef DIR_SEPARATOR_2
#   define DIR_SEPARATOR_2 '\\\
'
# endif
# ifndef PATH_SEPARATOR_2
#   define PATH_SEPARATOR_2 ';'
# endif
#endif

#ifndef DIR_SEPARATOR_2
# define IS_DIR_SEPARATOR(ch) ((ch) == DIR_SEPARATOR)
#else /* DIR_SEPARATOR_2 */
# define IS_DIR_SEPARATOR(ch) \
    (((ch) == DIR_SEPARATOR) || ((ch) == DIR_SEPARATOR_2))
#endif /* DIR_SEPARATOR_2 */

#ifndef PATH_SEPARATOR_2
# define IS_PATH_SEPARATOR(ch) ((ch) == PATH_SEPARATOR)
#else /* PATH_SEPARATOR_2 */
# define IS_PATH_SEPARATOR(ch) ((ch) == PATH_SEPARATOR_2)
#endif /* PATH_SEPARATOR_2 */

#ifndef FOPEN_WB
# define FOPEN_WB "w"
#endif
#ifndef _O_BINARY
# define _O_BINARY 0
#endif

```

```

#define XMALLOC(type, num)      ((type *) xmalloc ((num) *
sizeof(type)))
#define XFREE(stale) do { \
    if (stale) { free ((void *) stale); stale = 0; } \
} while (0)

#if defined(LT_DEBUGWRAPPER)
static int lt_debug = 1;
#else
static int lt_debug = 0;
#endif

const char *program_name = "libtool-wrapper"; /* in case xstrdup fails
*/

void *xmalloc (size_t num);
char *xstrdup (const char *string);
const char *base_name (const char *name);
char *find_executable (const char *wrapper);
char *chase_symlinks (const char *pathspec);
int make_executable (const char *path);
int check_executable (const char *path);
char *strendzap (char *str, const char *pat);
void lt_debugprintf (const char *file, int line, const char *fmt,
...);
void lt_fatal (const char *file, int line, const char *message, ...);
static const char *nonnull (const char *s);
static const char *nonempty (const char *s);
void lt_setenv (const char *name, const char *value);
char *lt_extend_str (const char *orig_value, const char *add, int
to_end);
void lt_update_exe_path (const char *name, const char *value);
void lt_update_lib_path (const char *name, const char *value);
char **prepare_spawn (char **argv);
void lt_dump_script (FILE *f);
EOF

    cat <<EOF
volatile const char * MAGIC_EXE = "$magic_exe";
const char * LIB_PATH_VARNAME = "$shlibpath_var";
EOF

    if test "$shlibpath_overrides_runpath" = yes && test -n
"$shlibpath_var" && test -n "$temp_rpath"; then
        func_to_host_path "$temp_rpath"
        cat <<EOF
const char * LIB_PATH_VALUE    = "$func_to_host_path_result";
EOF
    else
        cat <<"EOF"
const char * LIB_PATH_VALUE    = "";
EOF

```

```

        fi

        if test -n "$dllsearchpath"; then
            func_to_host_path "$dllsearchpath:"
            cat <<EOF
const char * EXE_PATH_VARNAME = "PATH";
const char * EXE_PATH_VALUE   = "$func_to_host_path_result";
EOF
        else
            cat <<"EOF"
const char * EXE_PATH_VARNAME = "";
const char * EXE_PATH_VALUE   = "";
EOF
        fi

        if test "$fast_install" = yes; then
            cat <<EOF
const char * TARGET_PROGRAM_NAME = "lt-$outputname"; /* hopefully, no
.exe */
EOF
        else
            cat <<EOF
const char * TARGET_PROGRAM_NAME = "$outputname"; /* hopefully, no
.exe */
EOF
        fi

        cat <<"EOF"

#define LTWRAPPER_OPTION_PREFIX      "--lt-"

static const char *ltwrapper_option_prefix = LTWRAPPER_OPTION_PREFIX;
static const char *dumpscrip_opt         = LTWRAPPER_OPTION_PREFIX
"dump-script";
static const char *debug_opt             = LTWRAPPER_OPTION_PREFIX
"debug";

int
main (int argc, char *argv[])
{
    char **newargz;
    int newargc;
    char *tmp_pathspec;
    char *actual_cwrapper_path;
    char *actual_cwrapper_name;
    char *target_name;
    char *lt_argv_zero;
    intptr_t rval = 127;

    int i;

```

```

program_name = (char *) xstrdup (base_name (argv[0]));
newargz = XMALLOC (char *, argc + 1);

/* very simple arg parsing; don't want to rely on getopt
 * also, copy all non cwrapper options to newargz, except
 * argz[0], which is handled differently
 */
newargc=0;
for (i = 1; i < argc; i++)
{
    if (strcmp (argv[i], dumpscript_opt) == 0)
    {
EOF
        case "$host" in
            *mingw* | *cygwin* )
                # make stdout use "unix" line endings
                echo "          setmode(1, _O_BINARY);"
                ;;
            esac

            cat <<"EOF"
            lt_dump_script (stdout);
            return 0;
        }
        if (strcmp (argv[i], debug_opt) == 0)
        {
            lt_debug = 1;
            continue;
        }
        if (strcmp (argv[i], ltwrapper_option_prefix) == 0)
        {
            /* however, if there is an option in the
LTWRAPPER_OPTION_PREFIX
            namespace, but it is not one of the ones we know about
and
            have already dealt with, above (including dump-script),
then
            report an error. Otherwise, targets might begin to
believe
            they are allowed to use options in the
LTWRAPPER_OPTION_PREFIX
            namespace. The first time any user complains about this,
we'll
            need to make LTWRAPPER_OPTION_PREFIX a configure-time
option
            or a configure.ac-settable value.
            */
            lt_fatal (__FILE__, __LINE__,
                "unrecognized %s option: '%s'",
                    ltwrapper_option_prefix, argv[i]);
        }
        /* otherwise ... */
    }
}

```

```

        newargz[++newargc] = xstrdup (argv[i]);
    }
    newargz[++newargc] = NULL;

EOF
        cat <<EOF
    /* The GNU banner must be the first non-error debug message */
    lt_debugprintf (__FILE__, __LINE__, "libtool wrapper (GNU
$PACKAGE$TIMESTAMP) $VERSION\n");
EOF
        cat <<"EOF"
    lt_debugprintf (__FILE__, __LINE__, "(main) argv[0]: %s\n",
argv[0]);
    lt_debugprintf (__FILE__, __LINE__, "(main) program_name: %s\n",
program_name);

    tmp_pathspec = find_executable (argv[0]);
    if (tmp_pathspec == NULL)
        lt_fatal (__FILE__, __LINE__, "couldn't find %s", argv[0]);
    lt_debugprintf (__FILE__, __LINE__,
                    "(main) found exe (before symlink chase) at: %s\n",
                    tmp_pathspec);

    actual_cwrapper_path = chase_symlinks (tmp_pathspec);
    lt_debugprintf (__FILE__, __LINE__,
                    "(main) found exe (after symlink chase) at: %s\n",
                    actual_cwrapper_path);
    XFREE (tmp_pathspec);

    actual_cwrapper_name = xstrdup (base_name (actual_cwrapper_path));
    strendzap (actual_cwrapper_path, actual_cwrapper_name);

    /* wrapper name transforms */
    strendzap (actual_cwrapper_name, ".exe");
    tmp_pathspec = lt_extend_str (actual_cwrapper_name, ".exe", 1);
    XFREE (actual_cwrapper_name);
    actual_cwrapper_name = tmp_pathspec;
    tmp_pathspec = 0;

    /* target_name transforms -- use actual target program name; might
have lt- prefix */
    target_name = xstrdup (base_name (TARGET_PROGRAM_NAME));
    strendzap (target_name, ".exe");
    tmp_pathspec = lt_extend_str (target_name, ".exe", 1);
    XFREE (target_name);
    target_name = tmp_pathspec;
    tmp_pathspec = 0;

    lt_debugprintf (__FILE__, __LINE__,
                    "(main) libtool target name: %s\n",
                    target_name);
EOF

```



```

        cat <<EOF
newargz[0] =
    XMALLOC (char, (strlen (actual_cwrapper_path) +
        strlen ("$objdir") + 1 + strlen (actual_cwrapper_name)
+ 1));
strcpy (newargz[0], actual_cwrapper_path);
strcat (newargz[0], "$objdir");
strcat (newargz[0], "/");
EOF

```

```

        cat <<"EOF"
/* stop here, and copy so we don't have to do this twice */
tmp_pathspec = xstrdup (newargz[0]);

/* do NOT want the lt- prefix here, so use actual_cwrapper_name */
strcat (newargz[0], actual_cwrapper_name);

/* DO want the lt- prefix here if it exists, so use target_name */
lt_argv_zero = lt_extend_str (tmp_pathspec, target_name, 1);
XFREE (tmp_pathspec);
tmp_pathspec = NULL;
EOF

```

```

        case $host_os in
            mingw*)
                cat <<"EOF"
{
    char* p;
    while ((p = strchr (newargz[0], '\\')) != NULL)
        {
            *p = '/';
        }
    while ((p = strchr (lt_argv_zero, '\\')) != NULL)
        {
            *p = '/';
        }
}
EOF

```

```

;;
esac

```

```

        cat <<"EOF"
XFREE (target_name);
XFREE (actual_cwrapper_path);
XFREE (actual_cwrapper_name);

lt_setenv ("BIN_SH", "xpg4"); /* for Tru64 */
lt_setenv ("DUALCASE", "1"); /* for MSK sh */
/* Update the DLL searchpath. EXE_PATH_VALUE ($dllsearchpath) must
    be prepended before (that is, appear after) LIB_PATH_VALUE
($temp_rpath)

```

```

        because on Windows, both *_VARNAMES are PATH but uninstalled
        libraries must come first. */
lt_update_exe_path (EXE_PATH_VARNAME, EXE_PATH_VALUE);
lt_update_lib_path (LIB_PATH_VARNAME, LIB_PATH_VALUE);

lt_debugprintf (__FILE__, __LINE__, "(main) lt_argv_zero: %s\n",
                nonnull (lt_argv_zero));
for (i = 0; i < newargc; i++)
{
    lt_debugprintf (__FILE__, __LINE__, "(main) newargz[%d]: %s\n",
                    i, nonnull (newargz[i]));
}

EOF

        case $host_os in
            mingw*)
                cat <<"EOF"
/* execv doesn't actually work on mingw as expected on unix */
newargz = prepare_spawn (newargz);
rval = _spawnv (_P_WAIT, lt_argv_zero, (const char * const *)
newargz);
if (rval == -1)
{
    /* failed to start process */
    lt_debugprintf (__FILE__, __LINE__,
                    "(main) failed to launch target \"%s\": %s\n",
                    lt_argv_zero, nonnull (strerror (errno)));
    return 127;
}
return rval;
EOF

                ;;
            *)
                cat <<"EOF"
execv (lt_argv_zero, newargz);
return rval; /* =127, but avoids unused variable warning */
EOF

                ;;
            esac

        cat <<"EOF"
}

void *
xmalloc (size_t num)
{
    void *p = (void *) malloc (num);
    if (!p)
        lt_fatal (__FILE__, __LINE__, "memory exhausted");

    return p;
}

```

```

}

char *
xstrdup (const char *string)
{
    return string ? strcpy ((char *) xmalloc (strlen (string) + 1),
        string) : NULL;
}

const char *
base_name (const char *name)
{
    const char *base;

#ifdef HAVE_DOS_BASED_FILE_SYSTEM
    /* Skip over the disk name in MSDOS pathnames. */
    if (isalpha ((unsigned char) name[0]) && name[1] == ':')
        name += 2;
#endif

    for (base = name; *name; name++)
        if (IS_DIR_SEPARATOR (*name))
            base = name + 1;
    return base;
}

int
check_executable (const char *path)
{
    struct stat st;

    lt_debugprintf (__FILE__, __LINE__, "(check_executable): %s\n",
        nonempty (path));
    if ((!path) || (!*path))
        return 0;

    if ((stat (path, &st) >= 0)
        && (st.st_mode & (S_IXUSR | S_IXGRP | S_IXOTH)))
        return 1;
    else
        return 0;
}

int
make_executable (const char *path)
{
    int rval = 0;
    struct stat st;

    lt_debugprintf (__FILE__, __LINE__, "(make_executable): %s\n",
        nonempty (path));
    if ((!path) || (!*path))

```

```

    return 0;

    if (stat (path, &st) >= 0)
    {
        rval = chmod (path, st.st_mode | S_IXOTH | S_IXGRP | S_IXUSR);
    }
    return rval;
}

/* Searches for the full path of the wrapper. Returns
   newly allocated full path name if found, NULL otherwise
   Does not chase symlinks, even on platforms that support them.
*/
char *
find_executable (const char *wrapper)
{
    int has_slash = 0;
    const char *p;
    const char *p_next;
    /* static buffer for getcwd */
    char tmp[LT_PATHMAX + 1];
    int tmp_len;
    char *concat_name;

    lt_debugprintf (__FILE__, __LINE__, "(find_executable): %s\n",
                    nonempty (wrapper));

    if ((wrapper == NULL) || (*wrapper == '\\0'))
        return NULL;

    /* Absolute path? */
#ifdef HAVE_DOS_BASED_FILE_SYSTEM
    if (isalpha ((unsigned char) wrapper[0]) && wrapper[1] == ':')
    {
        concat_name = xstrdup (wrapper);
        if (check_executable (concat_name))
            return concat_name;
        XFREE (concat_name);
    }
    else
    {
#endif
        if (IS_DIR_SEPARATOR (wrapper[0]))
        {
            concat_name = xstrdup (wrapper);
            if (check_executable (concat_name))
                return concat_name;
            XFREE (concat_name);
        }
#ifdef HAVE_DOS_BASED_FILE_SYSTEM
    }
#endif
}
#endif

```

```

for (p = wrapper; *p; p++)
    if (*p == '/')
        {
            has_slash = 1;
            break;
        }
if (!has_slash)
    {
        /* no slashes; search PATH */
        const char *path = getenv ("PATH");
        if (path != NULL)
            {
                for (p = path; *p; p = p_next)
                    {
                        const char *q;
                        size_t p_len;
                        for (q = p; *q; q++)
                            if (IS_PATH_SEPARATOR (*q))
                                break;
                        p_len = q - p;
                        p_next = (*q == '\\0' ? q : q + 1);
                        if (p_len == 0)
                            {
                                /* empty path: current directory */
                                if (getcwd (tmp, LT_PATHMAX) == NULL)
                                    lt_fatal (__FILE__, __LINE__, "getcwd failed: %s",
                                                nonnull (strerror (errno)));
                                tmp_len = strlen (tmp);
                                concat_name =
                                    XMALLOC (char, tmp_len + 1 + strlen (wrapper) + 1);
                                memcpy (concat_name, tmp, tmp_len);
                                concat_name[tmp_len] = '/';
                                strcpy (concat_name + tmp_len + 1, wrapper);
                            }
                        else
                            {
                                concat_name =
                                    XMALLOC (char, p_len + 1 + strlen (wrapper) + 1);
                                memcpy (concat_name, p, p_len);
                                concat_name[p_len] = '/';
                                strcpy (concat_name + p_len + 1, wrapper);
                            }
                        if (check_executable (concat_name))
                            return concat_name;
                        XFREE (concat_name);
                    }
            }
        /* not found in PATH; assume curdir */
    }
/* Relative path | not found in path: prepend cwd */
if (getcwd (tmp, LT_PATHMAX) == NULL)

```

```

    lt_fatal (__FILE__, __LINE__, "getcwd failed: %s",
              nonnull (strerror (errno)));
tmp_len = strlen (tmp);
concat_name = XMALLOC (char, tmp_len + 1 + strlen (wrapper) + 1);
memcpy (concat_name, tmp, tmp_len);
concat_name[tmp_len] = '/';
strcpy (concat_name + tmp_len + 1, wrapper);

if (check_executable (concat_name))
    return concat_name;
XFREE (concat_name);
return NULL;
}

char *
chase_symlinks (const char *pathspec)
{
#ifdef S_ISLNK
    return xstrdup (pathspec);
#else
    char buf[LT_PATHMAX];
    struct stat s;
    char *tmp_pathspec = xstrdup (pathspec);
    char *p;
    int has_symlinks = 0;
    while (strlen (tmp_pathspec) && !has_symlinks)
    {
        lt_debugprintf (__FILE__, __LINE__,
                        "checking path component for symlinks: %s\n",
                        tmp_pathspec);
        if (lstat (tmp_pathspec, &s) == 0)
        {
            if (S_ISLNK (s.st_mode) != 0)
            {
                has_symlinks = 1;
                break;
            }

            /* search backwards for last DIR_SEPARATOR */
            p = tmp_pathspec + strlen (tmp_pathspec) - 1;
            while ((p > tmp_pathspec) && (!IS_DIR_SEPARATOR (*p)))
                p--;
            if ((p == tmp_pathspec) && (!IS_DIR_SEPARATOR (*p)))
            {
                /* no more DIR_SEPARATORS left */
                break;
            }
            *p = '\\0';
        }
        else
        {
            lt_fatal (__FILE__, __LINE__,

```

```

        "error accessing file \"%s\": %s",
        tmp_pathspec, nonnull (strerror (errno)));
    }
}
XFREE (tmp_pathspec);

if (!has_symlinks)
{
    return xstrdup (pathspec);
}

tmp_pathspec = realpath (pathspec, buf);
if (tmp_pathspec == 0)
{
    lt_fatal (__FILE__, __LINE__,
              "could not follow symlinks for %s", pathspec);
}
return xstrdup (tmp_pathspec);
#endif
}

char *
strendzap (char *str, const char *pat)
{
    size_t len, patlen;

    assert (str != NULL);
    assert (pat != NULL);

    len = strlen (str);
    patlen = strlen (pat);

    if (patlen <= len)
    {
        str += len - patlen;
        if (strcmp (str, pat) == 0)
            *str = '\0';
    }
    return str;
}

void
lt_debugprintf (const char *file, int line, const char *fmt, ...)
{
    va_list args;
    if (lt_debug)
    {
        (void) fprintf (stderr, "%s:%s:%d: ", program_name, file, line);
        va_start (args, fmt);
        (void) vfprintf (stderr, fmt, args);
        va_end (args);
    }
}

```

```

}

static void
lt_error_core (int exit_status, const char *file,
               int line, const char *mode,
               const char *message, va_list ap)
{
    fprintf (stderr, "%s:%s:%d: %s: ", program_name, file, line, mode);
    vfprintf (stderr, message, ap);
    fprintf (stderr, ".\n");

    if (exit_status >= 0)
        exit (exit_status);
}

void
lt_fatal (const char *file, int line, const char *message, ...)
{
    va_list ap;
    va_start (ap, message);
    lt_error_core (EXIT_FAILURE, file, line, "FATAL", message, ap);
    va_end (ap);
}

static const char *
nonnull (const char *s)
{
    return s ? s : "(null)";
}

static const char *
nonempty (const char *s)
{
    return (s && !*s) ? "(empty)" : nonnull (s);
}

void
lt_setenv (const char *name, const char *value)
{
    lt_debugprintf (__FILE__, __LINE__,
                   "(lt_setenv) setting '%s' to '%s'\n",
                   nonnull (name), nonnull (value));
    {
#ifdef HAVE_SETENV
        /* always make a copy, for consistency with !HAVE_SETENV */
        char *str = xstrdup (value);
        setenv (name, str, 1);
#else
        int len = strlen (name) + 1 + strlen (value) + 1;
        char *str = XMALLOC (char, len);
        sprintf (str, "%s=%s", name, value);
        if (putenv (str) != EXIT_SUCCESS)

```



```

        {
            XFREE (str);
        }
#endif
    }
}

char *
lt_extend_str (const char *orig_value, const char *add, int to_end)
{
    char *new_value;
    if (orig_value && *orig_value)
    {
        int orig_value_len = strlen (orig_value);
        int add_len = strlen (add);
        new_value = XMALLOC (char, add_len + orig_value_len + 1);
        if (to_end)
        {
            strcpy (new_value, orig_value);
            strcpy (new_value + orig_value_len, add);
        }
        else
        {
            strcpy (new_value, add);
            strcpy (new_value + add_len, orig_value);
        }
    }
    else
    {
        new_value = xstrdup (add);
    }
    return new_value;
}

void
lt_update_exe_path (const char *name, const char *value)
{
    lt_debugprintf (__FILE__, __LINE__,
                    "(lt_update_exe_path) modifying '%s' by prepending
'%s'\n",
                    nonnull (name), nonnull (value));

    if (name && *name && value && *value)
    {
        char *new_value = lt_extend_str (getenv (name), value, 0);
        /* some systems can't cope with a ':'-terminated path '#' */
        int len = strlen (new_value);
        while (((len = strlen (new_value)) > 0) && IS_PATH_SEPARATOR
(new_value[len-1]))
        {
            new_value[len-1] = '\0';
        }
    }
}

```

```

        lt_setenv (name, new_value);
        XFREE (new_value);
    }
}

void
lt_update_lib_path (const char *name, const char *value)
{
    lt_debugprintf (__FILE__, __LINE__,
        "(lt_update_lib_path) modifying '%s' by prepending
'%s'\n",
        nonnull (name), nonnull (value));

    if (name && *name && value && *value)
    {
        char *new_value = lt_extend_str (getenv (name), value, 0);
        lt_setenv (name, new_value);
        XFREE (new_value);
    }
}

EOF

    case $host_os in
        mingw*)
            cat <<"EOF"

/* Prepares an argument vector before calling spawn().
Note that spawn() does not by itself call the command interpreter
(getenv ("COMSPEC") != NULL ? getenv ("COMSPEC") :
({ OSVERSIONINFO v; v.dwOSVersionInfoSize =
sizeof(OSVERSIONINFO);
    GetVersionEx(&v);
    v.dwPlatformId == VER_PLATFORM_WIN32_NT;
    }) ? "cmd.exe" : "command.com").
Instead it simply concatenates the arguments, separated by ' ', and
calls
CreateProcess(). We must quote the arguments since Win32
CreateProcess()
interprets characters like ' ', '\t', '\\', '"' (but not '<' and
'>') in a
special way:
- Space and tab are interpreted as delimiters. They are not treated
as
delimiters if they are surrounded by double quotes: "...".
- Unescaped double quotes are removed from the input. Their only
effect is
that within double quotes, space and tab are treated like normal
characters.
- Backslashes not followed by double quotes are not special.
- But 2*n+1 backslashes followed by a double quote become
n backslashes followed by a double quote (n >= 0):
\" -> "

```



```

        else
            backslashes = 0;
    }
    if (quote_around)
        length += backslashes + 1;

    quoted_string = XMALLOC (char, length + 1);

    p = quoted_string;
    backslashes = 0;
    if (quote_around)
        *p++ = '"';
    for (s = string; *s != '\0'; s++)
    {
        char c = *s;
        if (c == '"')
        {
            unsigned int j;
            for (j = backslashes + 1; j > 0; j--)
                *p++ = '\\';
        }
        *p++ = c;
        if (c == '\\')
            backslashes++;
        else
            backslashes = 0;
    }
    if (quote_around)
    {
        unsigned int j;
        for (j = backslashes; j > 0; j--)
            *p++ = '\\';
        *p++ = '"';
    }
    *p = '\0';

    new_argv[i] = quoted_string;
}
else
    new_argv[i] = (char *) string;
}
new_argv[argc] = NULL;

return new_argv;
}
EOF

;;
esac

cat <<"EOF"
void lt_dump_script (FILE* f)
{

```

```

EOF
        func_emit_wrapper yes |
            $SED -n -e '
s/^\(.\{79\}\)\(.*\)/\1\
\2/
h
s/\([\\" ]\)/\\\1/g
s/\$/\\n/
s/\([\^n]*\).* / fputs ("\1", f);/p
g
D'
            cat <<"EOF"
    }
EOF
}
# end: func_emit_cwrapperexe_src

# func_win32_import_lib_p ARG
# True if ARG is an import lib, as indicated by $file_magic_cmd
func_win32_import_lib_p ()
{
    $opt_debug
    case `eval $file_magic_cmd "\$1" 2>/dev/null | $SED -e 10q` in
    *import*) : ;;
    *) false ;;
    esac
}

# func_mode_link arg...
func_mode_link ()
{
    $opt_debug
    case $host in
    *-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-*-cegcc*)
        # It is impossible to link a dll without this setting, and
        # we shouldn't force the makefile maintainer to figure out
        # which system we are compiling for in order to pass an extra
        # flag for every libtool invocation.
        # allow_undefined=no

        # FIXME: Unfortunately, there are problems with the above when
trying
        # to make a dll which has undefined symbols, in which case not
        # even a static library is built.  For now, we need to specify
        # -no-undefined on the libtool link line when we can be certain
        # that all symbols are satisfied, otherwise we get a static
library.
        allow_undefined=yes
        ;;
    *)
        allow_undefined=yes
        ;;
    esac
}

```

```
esac
libtool_args=$nonopt
base_compile="$nonopt $@"
compile_command=$nonopt
finalize_command=$nonopt

compile_rpath=
finalize_rpath=
compile_shlibpath=
finalize_shlibpath=
convenience=
old_convenience=
deplibs=
old_deplibs=
compiler_flags=
linker_flags=
dllsearchpath=
lib_search_path=`pwd`
inst_prefix_dir=
new_inherited_linker_flags=

avoid_version=no
bindir=
dlfiles=
dlprefiles=
dlself=no
export_dynamic=no
export_symbols=
export_symbols_regex=
generated=
libobjs=
ltlibs=
module=no
no_install=no
objs=
non_pic_objects=
precious_files_regex=
prefer_static_libs=no
preload=no
prev=
prevarg=
release=
rpath=
xrpath=
perm_rpath=
temp_rpath=
thread_safe=no
vinfo=
vinfo_number=no
weak_libs=
single_module="{wl}-single_module"
func_infer_tag $base_compile
```

```

# We need to know -static, to get the right output filenames.
for arg
do
  case $arg in
    -shared)
      test "$build_libtool_libs" != yes && \
        func_fatal_configuration "can not build a shared library"
      build_old_libs=no
      break
    ;;
    -all-static | -static | -static-libtool-libs)
      case $arg in
        -all-static)
          if test "$build_libtool_libs" = yes && test -z
"$link_static_flag"; then
            func_warning "complete static linking is impossible in this
configuration"
          fi
          if test -n "$link_static_flag"; then
            dlopen_self=$dlopen_self_static
          fi
          prefer_static_libs=yes
        ;;
        -static)
          if test -z "$pic_flag" && test -n "$link_static_flag"; then
            dlopen_self=$dlopen_self_static
          fi
          prefer_static_libs=built
        ;;
        -static-libtool-libs)
          if test -z "$pic_flag" && test -n "$link_static_flag"; then
            dlopen_self=$dlopen_self_static
          fi
          prefer_static_libs=yes
        ;;
      esac
      build_libtool_libs=no
      build_old_libs=yes
      break
    ;;
  esac
done

# See if our shared archives depend on static archives.
test -n "$old_archive_from_new_cmds" && build_old_libs=yes

# Go through the arguments, transforming them on the way.
while test "$#" -gt 0; do
  arg="$1"
  shift
  func_quote_for_eval "$arg"

```

```

qarg=$func_quote_for_eval_unquoted_result
func_append libtool_args " $func_quote_for_eval_result"

# If the previous option needs an argument, assign it.
if test -n "$prev"; then
case $prev in
output)
    func_append compile_command " @OUTPUT@"
    func_append finalize_command " @OUTPUT@"
    ;;
esac

case $prev in
bindir)
    bindir="$qarg"
    prev=
    continue
    ;;
dlfiles|dlprefiles)
    if test "$preload" = no; then
        # Add the symbol object into the linking commands.
        func_append compile_command " @SYMFIL@"
        func_append finalize_command " @SYMFIL@"
        preload=yes
    fi
    case $qarg in
*.la | *.lo) ;; # We handle these cases below.
force)
    if test "$dlsself" = no; then
        dlsself=needless
        export_dynamic=yes
    fi
    prev=
    continue
    ;;
self)
    if test "$prev" = dlprefiles; then
        dlsself=yes
    elif test "$prev" = dlfiles && test "$dlopen_self" != yes;
then
        dlsself=yes
    else
        dlsself=needless
        export_dynamic=yes
    fi
    prev=
    continue
    ;;
*)
    if test "$prev" = dlfiles; then
        func_append dlfiles " $qarg"
    else

```



```

        func_append dlprefiles " $arg"
    fi
    prev=
    continue
    ;;
esac
;;
expsyms)
    export_symbols="$arg"
    test -f "$arg" \
        || func_fatal_error "symbol file ``$arg' does not exist"
    prev=
    continue
    ;;
expsyms_regex)
    export_symbols_regex="$arg"
    prev=
    continue
    ;;
framework)
    case $host in
        *-*-darwin*)
            case "$deplibs " in
                *" $qarg.ltframework "*) ;;
                *) func_append deplibs " $qarg.ltframework" # this is fixed
later
                    ;;
            esac
            ;;
        esac
        prev=
        continue
        ;;
inst_prefix)
    inst_prefix_dir="$arg"
    prev=
    continue
    ;;
objectlist)
    if test -f "$arg"; then
        save_arg=$arg
        moreargs=
        for fil in `cat "$save_arg"`
        do
#            func_append moreargs " $fil"
            arg=$fil
            # A libtool-controlled object.

            # Check to see that this really is a libtool object.
            if func_lalib_unsafe_p "$arg"; then
                pic_object=
                non_pic_object=

```

```

# Read the .lo file
func_source "$arg"

if test -z "$pic_object" ||
    test -z "$non_pic_object" ||
    test "$pic_object" = none &&
    test "$non_pic_object" = none; then
    func_fatal_error "cannot find name of object for ``$arg'"
fi

# Extract subdirectory from the argument.
func_dirname "$arg" "/" ""
xdir="$func_dirname_result"

if test "$pic_object" != none; then
    # Prepend the subdirectory the object is found in.
    pic_object="$xdir$pic_object"

    if test "$prev" = dlfiles; then
        if test "$build_libtool_libs" = yes && test
"$dlopen_support" = yes; then
            func_append dlfiles " $pic_object"
            prev=
            continue
        else
            # If libtool objects are unsupported, then we need to
preload.
            prev=dlprefiles
        fi
    fi

    # CHECK ME: I think I busted this. -Ossama
    if test "$prev" = dlprefiles; then
        # Preload the old-style object.
        func_append dlprefiles " $pic_object"
        prev=
    fi

    # A PIC object.
    func_append libobjs " $pic_object"
    arg="$pic_object"
fi

# Non-PIC object.
if test "$non_pic_object" != none; then
    # Prepend the subdirectory the object is found in.
    non_pic_object="$xdir$non_pic_object"

    # A standard non-PIC object
    func_append non_pic_objects " $non_pic_object"

```

```

then
    if test -z "$pic_object" || test "$pic_object" = none ;
        arg="$non_pic_object"
    fi
else
    # If the PIC object exists, use it instead.
    # $xdir was prepended to $pic_object above.
    non_pic_object="$pic_object"
    func_append non_pic_objects " $non_pic_object"
fi
else
    # Only an error if not doing a dry-run.
    if $opt_dry_run; then
        # Extract subdirectory from the argument.
        func_dirname "$arg" "/" ""
        xdir="$func_dirname_result"

        func_lo2o "$arg"
        pic_object=$xdir$objdir/$func_lo2o_result
        non_pic_object=$xdir$func_lo2o_result
        func_append libobjs " $pic_object"
        func_append non_pic_objects " $non_pic_object"
    else
        func_fatal_error "\`$arg' is not a valid libtool object"
    fi
fi
done
else
    func_fatal_error "link input file \`$arg' does not exist"
fi
arg=$save_arg
prev=
continue
;;
precious_regex)
    precious_files_regex="$arg"
    prev=
    continue
    ;;
release)
    release="- $arg"
    prev=
    continue
    ;;
rpath | xrpath)
    # We need an absolute path.
    case $arg in
    [\\/*]* | [A-Za-z]:[\\/*]*) ;;
    *)
        func_fatal_error "only absolute run-paths are allowed"
        ;;
    esac

```

```

if test "$prev" = rpath; then
  case "$rpath " in
    *" $arg ") ;;
    *) func_append rpath " $arg" ;;
  esac
else
  case "$xrpath " in
    *" $arg ") ;;
    *) func_append xrpath " $arg" ;;
  esac
fi
prev=
continue
;;
shrext)
shrext_cmds="$arg"
prev=
continue
;;
weak)
func_append weak_libs " $arg"
prev=
continue
;;
xcclinker)
func_append linker_flags " $qarg"
func_append compiler_flags " $qarg"
prev=
func_append compile_command " $qarg"
func_append finalize_command " $qarg"
continue
;;
xcompiler)
func_append compiler_flags " $qarg"
prev=
func_append compile_command " $qarg"
func_append finalize_command " $qarg"
continue
;;
xlinker)
func_append linker_flags " $qarg"
func_append compiler_flags " $wl$qarg"
prev=
func_append compile_command " $wl$qarg"
func_append finalize_command " $wl$qarg"
continue
;;
*)
eval "$prev=\"\$arg\""
prev=
continue
;;

```

```

esac
fi # test -n "$prev"

prevarg="$arg"

case $arg in
-all-static)
if test -n "$link_static_flag"; then
    # See comment for -static flag below, for more details.
    func_append compile_command " $link_static_flag"
    func_append finalize_command " $link_static_flag"
fi
continue
;;

-allow-undefined)
# FIXME: remove this flag sometime in the future.
func_fatal_error "\`-allow-undefined' must not be used because it
is the default"
;;

-avoid-version)
avoid_version=yes
continue
;;

-bindir)
prev=bindir
continue
;;

-dlopen)
prev=dlfiles
continue
;;

-dlpreopen)
prev=dlprefiles
continue
;;

-export-dynamic)
export_dynamic=yes
continue
;;

-export-symbols | -export-symbols-regex)
if test -n "$export_symbols" || test -n "$export_symbols_regex";
then
    func_fatal_error "more than one -exported-symbols argument is
not allowed"
fi

```

```

if test "X$arg" = "X-export-symbols"; then
    prev=expsyms
else
    prev=expsyms_regex
fi
continue
;;

-framework)
prev=framework
continue
;;

-inst-prefix-dir)
prev=inst_prefix
continue
;;

# The native IRIX linker understands -LANG:*, -LIST:* and -LNO:*
# so, if we see these flags be careful not to treat them like -L
-L[A-Z][A-Z]*:*)
case $with_gcc/$host in
no/*-*-irix* | /*-*-irix*)
    func_append compile_command " $arg"
    func_append finalize_command " $arg"
    ;;
esac
continue
;;

-L*)
func_stripname "-L" '' "$arg"
if test -z "$func_stripname_result"; then
    if test "$#" -gt 0; then
        func_fatal_error "require no space between \`-L' and \`$1'"
    else
        func_fatal_error "need path for \`-L' option"
    fi
fi
func_resolve_sysroot "$func_stripname_result"
dir=${func_resolve_sysroot_result}
# We need an absolute path.
case $dir in
[\\/] * | [A-Za-z]:[\\/] *) ;;
*)
    absdir=`cd "$dir" && pwd`
    test -z "$absdir" && \
        func_fatal_error "cannot determine absolute directory name of
\`$dir'"
    dir="$absdir"
    ;;
esac

```

```

case "$deplibs " in
*" -L$dir "*" | "*" $arg "*)
    # Will only happen for absolute or sysroot arguments
    ;;
*)
    # Preserve sysroot, but never include relative directories
    case $dir in
        [\\/] * | [A-Za-z]:[\\/] * | =*) func_append deplibs " $arg" ;;
        *) func_append deplibs " -L$dir" ;;
    esac
    func_append lib_search_path " $dir"
    ;;
esac
case $host in
*-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-cegcc*)
    testbindir=`$ECHO "$dir" | $SED 's*/lib$*/bin*'`
    case :$dllsearchpath: in
        *:$dir:*) ;;
        :*) dllsearchpath=$dir;;
        *) func_append dllsearchpath " :$dir";;
    esac
    case :$dllsearchpath: in
        *:$testbindir:*) ;;
        :*) dllsearchpath=$testbindir;;
        *) func_append dllsearchpath " :$testbindir";;
    esac
    ;;
esac
continue
;;

-l*)
if test "X$arg" = "X-lc" || test "X$arg" = "X-lm"; then
    case $host in
        *-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-beos* | *-cegcc* |
*-*-haiku*)
            # These systems don't actually have a C or math library (as
such)
            continue
            ;;
        *-*-os2*)
            # These systems don't actually have a C library (as such)
            test "X$arg" = "X-lc" && continue
            ;;
        *-*-openbsd* | *-*-freebsd* | *-*-dragonfly*)
            # Do not include libc due to us having libc/libc_r.
            test "X$arg" = "X-lc" && continue
            ;;
        *-*-rhapsody* | *-*-darwin1.[012])
            # Rhapsody C and math libraries are in the System framework
            func_append deplibs " System.ltframework"
            continue

```

```

    ;;
    *-*--sco3.2v5* | *-*--sco5v6*)
    # Causes problems with __ctype
    test "X$arg" = "X-lc" && continue
    ;;
    *-*--sysv4.2uw2* | *-*--sysv5* | *-*--unixware* | *-*--OpenUNIX*)
    # Compiler inserts libc in the correct place for threads to
work
    test "X$arg" = "X-lc" && continue
    ;;
    esac
elif test "X$arg" = "X-lc_r"; then
    case $host in
    *-*--openbsd* | *-*--freebsd* | *-*--dragonfly*)
        # Do not include libc_r directly, use -pthread flag.
        continue
        ;;
    esac
fi
func_append deplibs " $arg"
continue
;;

-module)
module=yes
continue
;;

# Tru64 UNIX uses -model [arg] to determine the layout of C++
# classes, name mangling, and exception handling.
# Darwin uses the -arch flag to determine output architecture.
-model|-arch|-isysroot|--sysroot)
func_append compiler_flags " $arg"
func_append compile_command " $arg"
func_append finalize_command " $arg"
prev=xcompiler
continue
;;

-mt|-mthreads|-kthread|-Kthread|-pthread|-pthreads|--thread-safe
\
|-threads|-fopenmp|-openmp|-mp|-xopenmp|-omp|-qomp=*)
func_append compiler_flags " $arg"
func_append compile_command " $arg"
func_append finalize_command " $arg"
case "$new_inherited_linker_flags" in
    *" $arg"*) ;;
    * ) func_append new_inherited_linker_flags " $arg" ;;
esac
continue
;;

```



```

-multi_module)
single_module="${wl}-multi_module"
continue
;;

-no-fast-install)
fast_install=no
continue
;;

-no-install)
case $host in
*-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-*-darwin* |
*-cegcc*)
# The PATH hackery in wrapper scripts is required on Windows
# and Darwin in order for the loader to find any dlls it needs.
func_warning "`-no-install' is ignored for $host"
func_warning "assuming `'-no-fast-install' instead"
fast_install=no
;;
*) no_install=yes ;;
esac
continue
;;

-no-undefined)
allow_undefined=no
continue
;;

-objectlist)
prev=objectlist
continue
;;

-o) prev=output ;;

-precious-files-regex)
prev=precious_regex
continue
;;

-release)
prev=release
continue
;;

-rpath)
prev=rpath
continue
;;

```

```

-R)
prev=xrpath
continue
;;

-R*)
func_stripname '-R' '' "$arg"
dir=${func_stripname_result}
# We need an absolute path.
case $dir in
[\\/] * | [A-Za-z]:[\\/] *) ;;
=*)
    func_stripname '=' '' "$dir"
    dir=${lt_sysroot}${func_stripname_result}
    ;;
*)
    func_fatal_error "only absolute run-paths are allowed"
    ;;
esac
case "$xrpath " in
*" $dir "*) ;;
*) func_append xrpath " $dir" ;;
esac
continue
;;

-shared)
# The effects of -shared are defined in a previous loop.
continue
;;

-shrext)
prev=shrext
continue
;;

-static | -static-libtool-libs)
# The effects of -static are defined in a previous loop.
# We used to do the same as -all-static on platforms that
# didn't have a PIC flag, but the assumption that the effects
# would be equivalent was wrong. It would break on at least
# Digital Unix and AIX.
continue
;;

-thread-safe)
thread_safe=yes
continue
;;

-version-info)
prev=vinfo

```

```

continue
;;

-version-number)
prev=vinfo
vinfo_number=yes
continue
;;

-weak)
prev=weak
continue
;;

-Wc,*)
func_stripname '-Wc,' '' "$arg"
args=$func_stripname_result
arg=
save_ifs="$IFS"; IFS=', '
for flag in $args; do
IFS="$save_ifs"
func_quote_for_eval "$flag"
func_append arg " $func_quote_for_eval_result"
func_append compiler_flags " $func_quote_for_eval_result"
done
IFS="$save_ifs"
func_stripname ' ' '' "$arg"
arg=$func_stripname_result
;;

-Wl,*)
func_stripname '-Wl,' '' "$arg"
args=$func_stripname_result
arg=
save_ifs="$IFS"; IFS=', '
for flag in $args; do
IFS="$save_ifs"
func_quote_for_eval "$flag"
func_append arg " $wl$func_quote_for_eval_result"
func_append compiler_flags " $wl$func_quote_for_eval_result"
func_append linker_flags " $func_quote_for_eval_result"
done
IFS="$save_ifs"
func_stripname ' ' '' "$arg"
arg=$func_stripname_result
;;

-Xcompiler)
prev=xcompiler
continue
;;

```

```

-Xlinker)
prev=xlinker
continue
;;

-XCCLinker)
prev=xcclinker
continue
;;

# -msg_* for osf cc
-msg_*)
func_quote_for_eval "$arg"
arg="$func_quote_for_eval_result"
;;

# Flags to be passed through unchanged, with rationale:
# -64, -mips[0-9]      enable 64-bit mode for the SGI compiler
# -r[0-9][0-9]*      specify processor for the SGI compiler
# -xarch=*, -xtarget=* enable 64-bit mode for the Sun compiler
# +DA*, +DD*         enable 64-bit mode for the HP compiler
# -q*                compiler args for the IBM compiler
# -m*, -t[45]*, -txscale* architecture-specific flags for GCC
# -F/path            path to uninstalled frameworks, gcc on
darwin
# -p, -pg, --coverage, -fprofile-* profiling flags for GCC
# -fstack-protector* stack protector flags for GCC
# @file             GCC response files
# -tp=*             Portland pgcc target processor selection
# --sysroot=*       for sysroot support
# -O*, -flto*, -fwhopr*, -fuse-linker-plugin GCC link-time
optimization
-64|-mips[0-9]|-r[0-9][0-9]*|-xarch=*|-xtarget=*|+DA*|+DD*|-q*|-
m*| \
-t[45]*|-txscale*|-p|-pg|--coverage|-fprofile-*|-F*|@*|-tp=*|--
sysroot=*| \
-O*|-flto*|-fwhopr*|-fuse-linker-plugin|-fstack-protector*)
func_quote_for_eval "$arg"
arg="$func_quote_for_eval_result"
func_append compile_command " $arg"
func_append finalize_command " $arg"
func_append compiler_flags " $arg"
continue
;;

# Some other compiler flag.
-* | +*)
func_quote_for_eval "$arg"
arg="$func_quote_for_eval_result"
;;

*.$objext)

```

```

# A standard object.
func_append objs " $arg"
;;

*.lo)
# A libtool-controlled object.

# Check to see that this really is a libtool object.
if func_lalib_unsafe_p "$arg"; then
  pic_object=
  non_pic_object=

  # Read the .lo file
  func_source "$arg"

  if test -z "$pic_object" ||
     test -z "$non_pic_object" ||
     test "$pic_object" = none &&
     test "$non_pic_object" = none; then
    func_fatal_error "cannot find name of object for ``$arg'"
  fi

  # Extract subdirectory from the argument.
  func_dirname "$arg" "/" ""
  xdir="$func_dirname_result"

  if test "$pic_object" != none; then
    # Prepend the subdirectory the object is found in.
    pic_object="$xdir$pic_object"

    if test "$prev" = dlfiles; then
      if test "$build_libtool_libs" = yes && test
"$dlopen_support" = yes; then
        func_append dlfiles " $pic_object"
        prev=
        continue
      else
        # If libtool objects are unsupported, then we need to
preload.
        prev=dlprefiles
      fi
    fi

    # CHECK ME: I think I busted this. -Ossama
    if test "$prev" = dlprefiles; then
      # Preload the old-style object.
      func_append dlprefiles " $pic_object"
      prev=
    fi

    # A PIC object.
    func_append libobjs " $pic_object"

```

```

    arg="$pic_object"
fi

# Non-PIC object.
if test "$non_pic_object" != none; then
    # Prepend the subdirectory the object is found in.
    non_pic_object="$xdir$non_pic_object"

    # A standard non-PIC object
    func_append non_pic_objects " $non_pic_object"
    if test -z "$pic_object" || test "$pic_object" = none ; then
        arg="$non_pic_object"
    fi
else
    # If the PIC object exists, use it instead.
    # $xdir was prepended to $pic_object above.
    non_pic_object="$pic_object"
    func_append non_pic_objects " $non_pic_object"
fi
else
    # Only an error if not doing a dry-run.
    if $opt_dry_run; then
        # Extract subdirectory from the argument.
        func_dirname "$arg" "/" ""
        xdir="$func_dirname_result"

        func_lo2o "$arg"
        pic_object=$xdir$objdir/$func_lo2o_result
        non_pic_object=$xdir$func_lo2o_result
        func_append libobjs " $pic_object"
        func_append non_pic_objects " $non_pic_object"
    else
        func_fatal_error "`$arg' is not a valid libtool object"
    fi
fi
;;

*.$libext)
# An archive.
func_append deplibs " $arg"
func_append old_deplibs " $arg"
continue
;;

*.la)
# A libtool-controlled library.

func_resolve_sysroot "$arg"
if test "$prev" = dlfiles; then
    # This library was specified with -dlopen.
    func_append dlfiles " $func_resolve_sysroot_result"
    prev=

```

```

elif test "$prev" = dlprefiles; then
    # The library was specified with -dlpreopen.
    func_append dlprefiles " $func_resolve_sysroot_result"
    prev=
else
    func_append deplibs " $func_resolve_sysroot_result"
fi
continue
;;

# Some other compiler argument.
*)
# Unknown arguments in both finalize_command and compile_command
need # to be aesthetically quoted because they are eval'd later.
func_quote_for_eval "$arg"
arg="$func_quote_for_eval_result"
;;
esac # arg

# Now actually substitute the argument into the commands.
if test -n "$arg"; then
    func_append compile_command " $arg"
    func_append finalize_command " $arg"
fi
done # argument parsing loop

test -n "$prev" && \
    func_fatal_help "the `\$prevarg' option requires an argument"

if test "$export_dynamic" = yes && test -n
"$export_dynamic_flag_spec"; then
    eval arg="\$export_dynamic_flag_spec\"
    func_append compile_command " $arg"
    func_append finalize_command " $arg"
fi

oldlibs=
# calculate the name of the file, without its directory
func_basename "$output"
outputname="$func_basename_result"
libobjs_save="$libobjs"

if test -n "$shlibpath_var"; then
    # get the directories listed in $shlibpath_var
    eval shlib_search_path=\`\$ECHO "\${$shlibpath_var}" \| \${SED
\'s/:/ /g\' \| \
else
    shlib_search_path=
fi
eval sys_lib_search_path="\$sys_lib_search_path_spec"
eval sys_lib_dlsearch_path="\$sys_lib_dlsearch_path_spec"

```

```

func_dirname "$output" "/" ""
output_objdir="$func_dirname_result$objdir"
func_to_tool_file "$output_objdir/"
tool_output_objdir=$func_to_tool_file_result
# Create the object directory.
func_mkdir_p "$output_objdir"

# Determine the type of output
case $output in
"")
    func_fatal_help "you must specify an output file"
    ;;
*.$libext) linkmode=oldlib ;;
*.lo | *.$objext) linkmode=obj ;;
*.la) linkmode=lib ;;
*) linkmode=prog ;; # Anything else should be a program.
esac

specialdeplibs=

libs=
# Find all interdependent deplibs by searching for libraries
# that are linked more than once (e.g. -la -lb -la)
for deplib in $deplibs; do
    if $opt_preserve_dup_deps ; then
        case "$libs " in
*" $deplib ") func_append specialdeplibs " $deplib" ;;
        esac
    fi
    func_append libs " $deplib"
done

if test "$linkmode" = lib; then
    libs="$predeps $libs $compiler_lib_search_path $postdeps"

    # Compute libraries that are listed more than once in $predeps
    # $postdeps and mark them as special (i.e., whose duplicates are
    # not to be eliminated).
    pre_post_deps=
    if $opt_duplicate_compiler_generated_deps; then
        for pre_post_dep in $predeps $postdeps; do
            case "$pre_post_deps " in
*" $pre_post_dep ") func_append specialdeplibs "
$pre_post_deps" ;;
            esac
            func_append pre_post_deps " $pre_post_dep"
        done
    fi
    pre_post_deps=
fi

```



```

deplibs=
newdependency_libs=
newlib_search_path=
need_relink=no # whether we're linking any uninstalled libtool
libraries
notinst_deplibs= # not-installed libtool libraries
notinst_path= # paths that contain not-installed libtool libraries

case $linkmode in
lib)
  passes="conv dlpreopen link"
  for file in $dlfiles $dlprefiles; do
    case $file in
*.la) ;;
*)
      func_fatal_help "libraries can \`-dlopen' only libtool
libraries: $file"
      ;;
    esac
  done
  ;;
prog)
  compile_deplibs=
  finalize_deplibs=
  alldeplibs=no
  newdlfiles=
  newdlprefiles=
  passes="conv scan dlopen dlpreopen link"
  ;;
*) passes="conv"
  ;;
esac

for pass in $passes; do
# The preopen pass in lib mode reverses $deplibs; put it back
here
# so that -L comes before libs that need it for instance...
if test "$linkmode,$pass" = "lib,link"; then
## FIXME: Find the place where the list is rebuilt in the wrong
## order, and fix it there properly
  tmp_deplibs=
  for deplib in $deplibs; do
    tmp_deplibs="$deplib $tmp_deplibs"
  done
  deplibs="$tmp_deplibs"
fi

if test "$linkmode,$pass" = "lib,link" ||
test "$linkmode,$pass" = "prog,scan"; then
libs="$deplibs"
deplibs=
fi

```

```

if test "$linkmode" = prog; then
case $pass in
dlopen) libs="$dlfiles" ;;
dlpreopen) libs="$dlprefiles" ;;
link) libs="$deplibs %DEPLIBS% $dependency_libs" ;;
esac
fi
if test "$linkmode,$pass" = "lib,dlpreopen"; then
# Collect and forward deplibs of preopened libtool libs
for lib in $dlprefiles; do
# Ignore non-libtool-libs
dependency_libs=
func_resolve_sysroot "$lib"
case $lib in
*.la) func_source "$func_resolve_sysroot_result" ;;
esac

# Collect preopened libtool deplibs, except any this library
# has declared as weak libs
for deplib in $dependency_libs; do
func_basename "$deplib"
deplib_base=$func_basename_result
case " $weak_libs " in
*" $deplib_base ") ;;
*) func_append deplibs " $deplib" ;;
esac
done
done
libs="$dlprefiles"
fi
if test "$pass" = dlopen; then
# Collect dlpreopened libraries
save_deplibs="$deplibs"
deplibs=
fi

for deplib in $libs; do
lib=
found=no
case $deplib in
-mt|-mthreads|-kthread|-Kthread|-pthread|-pthreads|--thread-safe
|-threads|-fopenmp|-openmp|-mp|-xopenmp|-omp|-qsmp=*)
if test "$linkmode,$pass" = "prog,link"; then
compile_deplibs="$deplib $compile_deplibs"
finalize_deplibs="$deplib $finalize_deplibs"
else
func_append compiler_flags " $deplib"
if test "$linkmode" = lib ; then
case "$new_inherited_linker_flags " in
*" $deplib ") ;;

```

```

                * ) func_append new_inherited_linker_flags " $deplib"
;;
        esac
    fi
fi
continue
;;
-1*)
if test "$linkmode" != lib && test "$linkmode" != prog; then
    func_warning "`-1' is ignored for archives/objects"
    continue
fi
func_stripname '-1' '' "$deplib"
name=${func_stripname_result}
if test "$linkmode" = lib; then
    searchdirs="$newlib_search_path $lib_search_path
$compiler_lib_search_dirs $sys_lib_search_path $shlib_search_path"
else
    searchdirs="$newlib_search_path $lib_search_path
$sys_lib_search_path $shlib_search_path"
fi
for searchdir in $searchdirs; do
    for search_ext in .la $std_shrext .so .a; do
        # Search the libtool library
        lib="$searchdir/lib${name}${search_ext}"
        if test -f "$lib"; then
            if test "$search_ext" = ".la"; then
                found=yes
            else
                found=no
            fi
            break 2
        fi
    done
done
if test "$found" != yes; then
    # deplib doesn't seem to be a libtool library
    if test "$linkmode,$pass" = "prog,link"; then
        compile_deplibs="$deplib $compile_deplibs"
        finalize_deplibs="$deplib $finalize_deplibs"
    else
        deplibs="$deplib $deplibs"
        test "$linkmode" = lib && newdependency_libs="$deplib
$newdependency_libs"
    fi
    continue
else # deplib is a libtool library
    # If $allow_libtool_libs_with_static_runtimes && $deplib is a
stdlib,
    # We need to do some special things here, and not later.
    if test "X$allow_libtool_libs_with_static_runtimes" = "Xyes"
; then

```

```

        case " $predeps $postdeps " in
        *" $deplib ")
        if func_lalib_p "$lib"; then
            library_names=
            old_library=
            func_source "$lib"
            for l in $old_library $library_names; do
                ll="$l"
            done
            if test "X$ll" = "X$old_library" ; then # only static
version available
                found=no
                func_dirname "$lib" "" "."
                ladir="$func_dirname_result"
                lib=$ladir/$old_library
                if test "$linkmode,$pass" = "prog,link"; then
                    compile_deplibs="$deplib $compile_deplibs"
                    finalize_deplibs="$deplib $finalize_deplibs"
                else
                    deplibs="$deplib $deplibs"
                    test "$linkmode" = lib && newdependency_libs="$deplib
$newdependency_libs"
                fi
                continue
            fi
        fi
        ;;
        *) ;;
        esac
    fi
fi
;; # -l
*.ltframework)
if test "$linkmode,$pass" = "prog,link"; then
    compile_deplibs="$deplib $compile_deplibs"
    finalize_deplibs="$deplib $finalize_deplibs"
else
    deplibs="$deplib $deplibs"
    if test "$linkmode" = lib ; then
        case "$new_inherited_linker_flags " in
        *" $deplib ") ;;
        * ) func_append new_inherited_linker_flags " $deplib"
        ;;
        esac
    fi
fi
continue
;;
-L*)
case $linkmode in
lib)
    deplibs="$deplib $deplibs"

```

```

    test "$pass" = conv && continue
    newdependency_libs="$deplib $newdependency_libs"
    func_stripname '-L' '' "$deplib"
    func_resolve_sysroot "$func_stripname_result"
    func_append newlib_search_path "
$func_resolve_sysroot_result"
    ;;
prog)
  if test "$pass" = conv; then
    deplibs="$deplib $deplibs"
    continue
  fi
  if test "$pass" = scan; then
    deplibs="$deplib $deplibs"
  else
    compile_deplibs="$deplib $compile_deplibs"
    finalize_deplibs="$deplib $finalize_deplibs"
  fi
  func_stripname '-L' '' "$deplib"
  func_resolve_sysroot "$func_stripname_result"
  func_append newlib_search_path "
$func_resolve_sysroot_result"
  ;;
*)
  func_warning "\`-L' is ignored for archives/objects"
  ;;
esac # linkmode
continue
;; # -L
-R*)
  if test "$pass" = link; then
    func_stripname '-R' '' "$deplib"
    func_resolve_sysroot "$func_stripname_result"
    dir=$func_resolve_sysroot_result
    # Make sure the xrpah contains only unique directories.
    case "$xrpah " in
    *" $dir "*) ;;
    *) func_append xrpah " $dir" ;;
    esac
  fi
  deplibs="$deplib $deplibs"
  continue
  ;;
*.la)
  func_resolve_sysroot "$deplib"
  lib=$func_resolve_sysroot_result
  ;;
*.$libext)
  if test "$pass" = conv; then
    deplibs="$deplib $deplibs"
    continue
  fi

```

```

        case $linkmode in
        lib)
            # Linking convenience modules into shared libraries is
allowed,
            # but linking other static libraries is non-portable.
            case " $dlpreconveniencelibs " in
            *" $deplib ") ;;
            *)
                valid_a_lib=no
                case $deplibs_check_method in
                match_pattern*)
                    set dummy $deplibs_check_method; shift
                    match_pattern_regex=`expr "$deplibs_check_method" : "$1
\(.*\)"`
                    if eval "\$ECHO \"$deplib\"" 2>/dev/null | $SED 10q \
                        | $EGREP "$match_pattern_regex" > /dev/null; then
                        valid_a_lib=yes
                    fi
                ;;
                pass_all)
                    valid_a_lib=yes
                ;;
                esac
                if test "$valid_a_lib" != yes; then
                    echo
                    $ECHO "*** Warning: Trying to link with static lib archive
$deplib."
                    echo "*** I have the capability to make that library
automatically link in when"
                    echo "*** you link to this library. But I can only do this
if you have a"
                    echo "*** shared version of the library, which you do not
appear to have"
                    echo "*** because the file extensions .$libext of this
argument makes me believe"
                    echo "*** that it is just a static archive that I should
not use here."
                else
                    echo
                    $ECHO "*** Warning: Linking the shared library $output
against the"
                    $ECHO "*** static library $deplib is not portable!"
                    deplibs="$deplib $deplibs"
                fi
                ;;
            esac
            continue
        ;;
    prog)
        if test "$pass" != link; then
            deplibs="$deplib $deplibs"
        else

```

```

        compile_deplibs="$deplib $compile_deplibs"
        finalize_deplibs="$deplib $finalize_deplibs"
    fi
    continue
    ;;
    esac # linkmode
    ;; # *.$libext
*.lo | *.$objext)
    if test "$pass" = conv; then
        deplibs="$deplib $deplibs"
    elif test "$linkmode" = prog; then
        if test "$pass" = dlpreopen || test "$dlopen_support" != yes
|| test "$build_libtool_libs" = no; then
            # If there is no dlopen support or we're linking
statically,
            # we need to preload.
            func_append newdlprefiles " $deplib"
            compile_deplibs="$deplib $compile_deplibs"
            finalize_deplibs="$deplib $finalize_deplibs"
        else
            func_append newdlfiles " $deplib"
        fi
    fi
    continue
    ;;
%DEPLIBS%)
    alldeplibs=yes
    continue
    ;;
esac # case $deplib

if test "$found" = yes || test -f "$lib"; then :
else
    func_fatal_error "cannot find the library \`$lib' or unhandled
argument \`$deplib'"
fi

# Check to see that this really is a libtool archive.
func_lalib_unsafe_p "$lib" \
    || func_fatal_error "\`$lib' is not a valid libtool archive"

func_dirname "$lib" "" "."
ladir="$func_dirname_result"

dlname=
dlopen=
dlpreopen=
libdir=
library_names=
old_library=
inherited_linker_flags=
# If the library was installed with an old release of libtool,

```

```

# it will not redefine variables installed, or shouldnotlink
installed=yes
shouldnotlink=no
avoidtemprpath=

# Read the .la file
func_source "$lib"

# Convert "-framework foo" to "foo.ltframework"
if test -n "$inherited_linker_flags"; then
  tmp_inherited_linker_flags=`$ECHO "$inherited_linker_flags" |
$SED 's/-framework \([^ $]*\)\/\1.ltframework/g'\`
  for tmp_inherited_linker_flag in $tmp_inherited_linker_flags;
do
  case " $new_inherited_linker_flags " in
    *" $tmp_inherited_linker_flag ") ;;
    *) func_append new_inherited_linker_flags "
$tmp_inherited_linker_flag";;
  esac
done
fi
dependency_libs=`$ECHO " $dependency_libs" | $SED 's% \([^
$]*\)\.ltframework% -framework \1%g'\`
if test "$linkmode,$pass" = "lib,link" ||
  test "$linkmode,$pass" = "prog,scan" ||
  { test "$linkmode" != prog && test "$linkmode" != lib; }; then
  test -n "$dlopen" && func_append dlfiles " $dlopen"
  test -n "$dlpreopen" && func_append dlprefiles " $dlpreopen"
fi

if test "$pass" = conv; then
  # Only check for convenience libraries
  deplibs="$lib $deplibs"
  if test -z "$libdir"; then
    if test -z "$old_library"; then
      func_fatal_error "cannot find name of link library for
\`$lib'"
    fi
    # It is a libtool convenience library, so add in its objects.
    func_append convenience " $ladir/$objdir/$old_library"
    func_append old_convenience " $ladir/$objdir/$old_library"
  elif test "$linkmode" != prog && test "$linkmode" != lib; then
    func_fatal_error "\`$lib' is not a convenience library"
  fi
  tmp_libs=
  for deplib in $dependency_libs; do
    deplibs="$deplib $deplibs"
    if $opt_preserve_dup_deps ; then
      case "$tmp_libs " in
        *" $deplib ") func_append specialdeplibs " $deplib" ;;
      esac
    fi
  done
fi

```



```

        fi
        func_append tmp_libs " $deplib"
    done
    continue
fi # $pass = conv

# Get the name of the library we link against.
linklib=
if test -n "$old_library" &&
  { test "$prefer_static_libs" = yes ||
    test "$prefer_static_libs,$installed" = "built,no"; }; then
    linklib=$old_library
else
    for l in $old_library $library_names; do
        linklib="$l"
    done
fi
if test -z "$linklib"; then
    func_fatal_error "cannot find name of link library for ``$lib'"
fi

# This library was specified with -dlopen.
if test "$pass" = dlopen; then
    if test -z "$libdir"; then
        func_fatal_error "cannot -dlopen a convenience library:
``$lib'"
    fi
    if test -z "$dlname" ||
      test "$dlopen_support" != yes ||
      test "$build_libtool_libs" = no; then
        # If there is no dlname, no dlopen support or we're linking
        # statically, we need to preload.  We also need to preload
any
        # dependent libraries so libltdl's deplib preloader doesn't
        # bomb out in the load deplibs phase.
        func_append dlprefiles " $lib $dependency_libs"
    else
        func_append newdlfiles " $lib"
    fi
    continue
fi # $pass = dlopen

# We need an absolute path.
case $ladir in
[\\/] * | [A-Za-z]:[\\/] *) abs_ladir="$ladir" ;;
*)
    abs_ladir=`cd "$ladir" && pwd`
    if test -z "$abs_ladir"; then
        func_warning "cannot determine absolute directory name of
``$ladir'"
    fi
fi

```

```

        func_warning "passing it literally to the linker, although it
might fail"
        abs_ladir="$ladir"
    fi
    ;;
esac
func_basename "$lib"
laname="$func_basename_result"

# Find the relevant object directory and library name.
if test "X$installed" = Xyes; then
    if test ! -f "$lt_sysroot$libdir/$linklib" && test -f
"$abs_ladir/$linklib"; then
        func_warning "library \`$lib' was moved."
        dir="$ladir"
        absdir="$abs_ladir"
        libdir="$abs_ladir"
    else
        dir="$lt_sysroot$libdir"
        absdir="$lt_sysroot$libdir"
    fi
    test "X$hardcode_automatic" = Xyes && avoidtempdir=yes
else
    if test ! -f "$ladir/$objdir/$linklib" && test -f
"$abs_ladir/$linklib"; then
        dir="$ladir"
        absdir="$abs_ladir"
        # Remove this search path later
        func_append notinst_path " $abs_ladir"
    else
        dir="$ladir/$objdir"
        absdir="$abs_ladir/$objdir"
        # Remove this search path later
        func_append notinst_path " $abs_ladir"
    fi
fi # $installed = yes
func_stripname 'lib' '.la' "$laname"
name=$func_stripname_result

# This library was specified with -dlpreopen.
if test "$pass" = dlpreopen; then
    if test -z "$libdir" && test "$linkmode" = prog; then
        func_fatal_error "only libraries may -dlpreopen a convenience
library: \`$lib'"
    fi
    case "$host" in
        # special handling for platforms with PE-DLLs.
        *cygwin* | *mingw* | *cegcc* )
            # Linker will automatically link against shared library if
both
            # static and shared are present. Therefore, ensure we
extract

```

```

present      # symbols from the import library if a shared library is
              # (otherwise, the dlopen module name will be incorrect).
We do
              # this by putting the import library name into
$newdlprefiles.
              # We recover the dlopen module name by 'saving' the la file
              # name in a special purpose variable, and (later)
extracting the
              # dlname from the la file.
              if test -n "$dlname"; then
                  func_tr_sh "$dir/$linklib"
                  eval "libfile_$func_tr_sh_result=\$abs_ladir/\$lname"
                  func_append newdlprefiles " $dir/$linklib"
              else
                  func_append newdlprefiles " $dir/$old_library"
                  # Keep a list of preopened convenience libraries to check
                  # that they are being used correctly in the link pass.
                  test -z "$libdir" && \
                      func_append dlpreconveniencelibs " $dir/$old_library"
              fi
              ;;
* )
              # Prefer using a static library (so that no silly _DYNAMIC
symbols      # are required to link).
              if test -n "$old_library"; then
                  func_append newdlprefiles " $dir/$old_library"
                  # Keep a list of preopened convenience libraries to check
                  # that they are being used correctly in the link pass.
                  test -z "$libdir" && \
                      func_append dlpreconveniencelibs " $dir/$old_library"
                  # Otherwise, use the dlname, so that lt_dlopen finds it.
                  elif test -n "$dlname"; then
                      func_append newdlprefiles " $dir/$dlname"
                  else
                      func_append newdlprefiles " $dir/$linklib"
                  fi
              ;;
              esac
              fi # $pass = dlpreopen

              if test -z "$libdir"; then
                  # Link the convenience library
                  if test "$linkmode" = lib; then
                      deplibs="$dir/$old_library $deplibs"
                  elif test "$linkmode,$pass" = "prog,link"; then
                      compile_deplibs="$dir/$old_library $compile_deplibs"
                      finalize_deplibs="$dir/$old_library $finalize_deplibs"
                  else
                      deplibs="$lib $deplibs" # used for prog,scan pass
                  fi
              fi

```

```

        continue
    fi

    if test "$linkmode" = prog && test "$pass" != link; then
        func_append newlib_search_path " $ladir"
        deplibs="$lib $deplibs"

        linkalldeplibs=no
        if test "$link_all_deplibs" != no || test -z "$library_names"
||
            test "$build_libtool_libs" = no; then
                linkalldeplibs=yes
            fi

        tmp_libs=
        for deplib in $dependency_libs; do
            case $deplib in
                -L*) func_stripname '-L' '' "$deplib"
                    func_resolve_sysroot "$func_stripname_result"
                    func_append newlib_search_path "
$func_resolve_sysroot_result"
                    ;;
                esac
                # Need to link against all dependency_libs?
                if test "$linkalldeplibs" = yes; then
                    deplibs="$deplib $deplibs"
                else
                    # Need to hardcode shared library paths
                    # or/and link against static libraries
                    newdependency_libs="$deplib $newdependency_libs"
                fi
                if $opt_preserve_dup_deps ; then
                    case "$tmp_libs " in
                        *" $deplib "*) func_append specialdeplibs " $deplib" ;;
                    esac
                fi
                func_append tmp_libs " $deplib"
            done # for deplib
            continue
        fi # $linkmode = prog...

        if test "$linkmode,$pass" = "prog,link"; then
            if test -n "$library_names" &&
                { { test "$prefer_static_libs" = no ||
                    test "$prefer_static_libs,$installed" = "built,yes"; }
||
                    test -z "$old_library"; }; then
                # We need to hardcode the library path
                if test -n "$shlibpath_var" && test -z "$avoidtemprpath" ;
then
                    # Make sure the rpath contains only unique directories.

```

```

        case "$temp_rpath:" in
        *"$absdir:") ;;
        *) func_append temp_rpath "$absdir:" ;;
        esac
    fi

    # Hardcode the library path.
    # Skip directories that are in the system default run-time
    # search path.
    #case " $sys_lib_dlsearch_path " in
    #*" $absdir "*) ;;
    #*)
    # case "$compile_rpath " in
    # *" $absdir "*) ;;
    # *) func_append compile_rpath " $absdir" ;;
    # esac
    # ;;
    #esac
    case " $sys_lib_dlsearch_path " in
    *" $libdir "*) ;;
    *)
        case "$finalize_rpath " in
        *" $libdir "*) ;;
        *) func_append finalize_rpath " $libdir" ;;
        esac
        ;;
    esac
fi # $linkmode,$pass = prog,link...

if test "$alldeplibs" = yes &&
{ test "$deplibs_check_method" = pass_all ||
  { test "$build_libtool_libs" = yes &&
    test -n "$library_names"; }; }; then
# We only need to search for static libraries
continue
fi
fi

link_static=no # Whether the deplib will be linked statically
use_static_libs=$prefer_static_libs
if test "$use_static_libs" = built && test "$installed" = yes;
then
    use_static_libs=no
fi
if test -n "$library_names" &&
{ test "$use_static_libs" = no || test -z "$old_library"; };
then
case $host in
*cygwin* | *mingw* | *cegcc*)
    # No point in relinking DLLs because paths are not encoded
    func_append notinst_deplibs " $lib"
    need_relink=no

```

```

    ;;
*)
    if test "$installed" = no; then
        func_append notinst_deplibs " $lib"
        need_relink=yes
    fi
    ;;
esac
# This is a shared library

# Warn about portability, can't link against -module's on some
# systems (darwin). Don't bleat about dlopened modules though!
dlopenmodule=""
for dlpremoduletest in $dlprefiles; do
    if test "X$dlpremoduletest" = "X$lib"; then
        dlopenmodule="$dlpremoduletest"
        break
    fi
done
if test -z "$dlopenmodule" && test "$shouldnotlink" = yes &&
test "$pass" = link; then
    echo
    if test "$linkmode" = prog; then
        $ECHO "*** Warning: Linking the executable $output against
the loadable module"
    else
        $ECHO "*** Warning: Linking the shared library $output
against the loadable module"
    fi
    $ECHO "*** $linklib is not portable!"
fi
if test "$linkmode" = lib &&
    test "$hardcode_into_libs" = yes; then
    # Hardcode the library path.
    # Skip directories that are in the system default run-time
    # search path.
    #case " $sys_lib_dlsearch_path " in
    #" $absdir ") ;;
    #*)
    # case "$compile_rpath " in
    # *) $absdir ") ;;
    # *) func_append compile_rpath " $absdir" ;;
    # esac
    # ;;
#esac
case " $sys_lib_dlsearch_path " in
*" $libdir ") ;;
*)
    case "$finalize_rpath " in
    *" $libdir ") ;;
    *) func_append finalize_rpath " $libdir" ;;
    esac

```

```

        ;;
    esac
fi

if test -n "$old_archive_from_expsyms_cmds"; then
# figure out the soname
set dummy $library_names
shift
realname="$1"
shift
libname=`eval "\\$ECHO \"\$libname_spec\""`
# use dlname if we got it. it's perfectly good, no?
if test -n "$dlname"; then
    soname="$dlname"
elif test -n "$soname_spec"; then
    # bleh windows
    case $host in
    *cygwin* | mingw* | *cegcc*)
        func_arith $current - $age
        major=$func_arith_result
        versuffix="-${major}"
        ;;
    esac
    eval soname="\$soname_spec\"
else
    soname="$realname"
fi

# Make a new name for the extract_expsyms_cmds to use
soroot="$soname"
func_basename "$soroot"
soname="$func_basename_result"
func_stripname 'lib' '.dll' "$soname"
newlib=libimp-$func_stripname_result.a

# If the library has no export list, then create one now
if test -f "$output_objdir/$soname-def"; then :
else
    func_verbose "extracting exported symbol list from
\`$soname'"
    func_execute_cmds "$extract_expsyms_cmds" 'exit $?'
fi

# Create $newlib
if test -f "$output_objdir/$newlib"; then ;; else
    func_verbose "generating import library for \`$soname'"
    func_execute_cmds "$old_archive_from_expsyms_cmds" 'exit
$?'

fi
# make sure the library variables are pointing to the new
library
dir=$output_objdir

```

```

    linklib=$newlib
fi # test -n "$old_archive_from_expsyms_cmds"

if test "$linkmode" = prog || test "$opt_mode" != relink; then
    add_shlibpath=
    add_dir=
    add=
    lib_linked=yes
    case $hardcode_action in
    immediate | unsupported)
        if test "$hardcode_direct" = no; then
            add="$dir/$linklib"
            case $host in
            *--sco3.2v5.0.[024]*) add_dir="-L$dir" ;;
            *--sysv4*uw2*) add_dir="-L$dir" ;;
            *--sysv5OpenUNIX* | *--sysv5UnixWare7.[01].[10]* | \
            *--unixware7*) add_dir="-L$dir" ;;
            *--darwin* )
                # if the lib is a (non-dlopened) module then we can not
                # link against it, someone is ignoring the earlier
                warnings
                if /usr/bin/file -L $add 2> /dev/null |
                    $GREP ": [^:]* bundle" >/dev/null ; then
                    if test "$dlopenmodule" != "$lib"; then
                        $ECHO "*** Warning: lib $linklib is a module, not a
shared library"
                    fi
                    if test -z "$old_library" ; then
                        echo
                        echo "*** And there doesn't seem to be a static
archive available"
                        echo "*** The link will probably fail, sorry"
                    else
                        add="$dir/$old_library"
                    fi
                    elif test -n "$old_library"; then
                        add="$dir/$old_library"
                    fi
                fi
            esac
            elif test "$hardcode_minus_L" = no; then
                case $host in
                *--sunos*) add_shlibpath="$dir" ;;
                esac
                add_dir="-L$dir"
                add="-l$name"
                elif test "$hardcode_shlibpath_var" = no; then
                    add_shlibpath="$dir"
                    add="-l$name"
                else
                    lib_linked=no
                fi
            ;;

```



```

relink)
  if test "$hardcode_direct" = yes &&
    test "$hardcode_direct_absolute" = no; then
add="$dir/$linklib"
  elif test "$hardcode_minus_L" = yes; then
add_dir="-L$absdir"
  # Try looking first in the location we're being installed
to.
  if test -n "$inst_prefix_dir"; then
    case $libdir in
      [\\/]*)
        func_append add_dir " -L$inst_prefix_dir$libdir"
        ;;
    esac
  fi
add="-l$name"
  elif test "$hardcode_shlibpath_var" = yes; then
add_shlibpath="$dir"
add="-l$name"
  else
lib_linked=no
  fi
  ;;
*) lib_linked=no ;;
esac

if test "$lib_linked" != yes; then
  func_fatal_configuration "unsupported hardcode properties"
fi

if test -n "$add_shlibpath"; then
  case :$compile_shlibpath: in
    *:$add_shlibpath:*) ;;
    *) func_append compile_shlibpath "$add_shlibpath:" ;;
  esac
fi
if test "$linkmode" = prog; then
  test -n "$add_dir" && compile_deplibs="$add_dir
$compile_deplibs"
  test -n "$add" && compile_deplibs="$add $compile_deplibs"
else
  test -n "$add_dir" && deplibs="$add_dir $deplibs"
  test -n "$add" && deplibs="$add $deplibs"
  if test "$hardcode_direct" != yes &&
    test "$hardcode_minus_L" != yes &&
    test "$hardcode_shlibpath_var" = yes; then
    case :$finalize_shlibpath: in
      *:$libdir:*) ;;
      *) func_append finalize_shlibpath "$libdir:" ;;
    esac
  fi
fi

```

```

fi

if test "$linkmode" = prog || test "$opt_mode" = relink; then
  add_shlibpath=
  add_dir=
  add=
  # Finalize command for both is simple: just hardcode it.
  if test "$hardcode_direct" = yes &&
    test "$hardcode_direct_absolute" = no; then
    add="$libdir/$linklib"
  elif test "$hardcode_minus_L" = yes; then
    add_dir="-L$libdir"
    add="-l$name"
  elif test "$hardcode_shlibpath_var" = yes; then
    case :$finalize_shlibpath: in
      *:$libdir:*) ;;
      *) func_append finalize_shlibpath "$libdir:" ;;
    esac
    add="-l$name"
  elif test "$hardcode_automatic" = yes; then
    if test -n "$inst_prefix_dir" &&
      test -f "$inst_prefix_dir$libdir/$linklib" ; then
      add="$inst_prefix_dir$libdir/$linklib"
    else
      add="$libdir/$linklib"
    fi
  else
    # We cannot seem to hardcode it, guess we'll fake it.
    add_dir="-L$lt_sysroot$libdir"
    # Try looking first in the location we're being installed
to.

    if test -n "$inst_prefix_dir"; then
      case $libdir in
        [\\/]*)
          func_append add_dir " -L$inst_prefix_dir$libdir"
          ;;
      esac
    fi
    add="-l$name"
  fi
fi

if test "$linkmode" = prog; then
  test -n "$add_dir" && finalize_deplibs="$add_dir
$finalize_deplibs"
  test -n "$add" && finalize_deplibs="$add $finalize_deplibs"
else
  test -n "$add_dir" && deplibs="$add_dir $deplibs"
  test -n "$add" && deplibs="$add $deplibs"
fi
fi
elif test "$linkmode" = prog; then

```

```

        # Here we assume that one of hardcode_direct or
hardcode_minus_L
        # is not unsupported.  This is valid on all known static and
        # shared platforms.
        if test "$hardcode_direct" != unsupported; then
            test -n "$old_library" && linklib="$old_library"
            compile_deplibs="$dir/$linklib $compile_deplibs"
            finalize_deplibs="$dir/$linklib $finalize_deplibs"
        else
            compile_deplibs="-l$name -L$dir $compile_deplibs"
            finalize_deplibs="-l$name -L$dir $finalize_deplibs"
        fi
    elif test "$build_libtool_libs" = yes; then
        # Not a shared library
        if test "$deplibs_check_method" != pass_all; then
            # We're trying link a shared library against a static one
            # but the system doesn't support it.

            # Just print a warning and add the library to dependency_libs
so
            # that the program can be linked against the static library.
            echo
            $ECHO "**** Warning: This system can not link to static lib
archive $lib."
            echo "**** I have the capability to make that library
automatically link in when"
            echo "**** you link to this library.  But I can only do this
if you have a"
            echo "**** shared version of the library, which you do not
appear to have."
            if test "$module" = yes; then
                echo "**** But as you try to build a module library, libtool
will still create "
                echo "**** a static module, that should work as long as the
dlopening application"
                echo "**** is linked with the -dlopen flag to resolve
symbols at runtime."
                if test -z "$global_symbol_pipe"; then
                    echo
                    echo "**** However, this would only work if libtool was able
to extract symbol"
                    echo "**** lists from a program, using `nm' or equivalent,
but libtool could"
                    echo "**** not find such a program.  So, this module is
probably useless."
                    echo "**** `nm' from GNU binutils and a full rebuild may
help."
                fi
            fi
            if test "$build_old_libs" = no; then
                build_libtool_libs=module
                build_old_libs=yes
            else

```

```

        build_libtool_libs=no
        fi
    fi
else
    deplibs="$dir/$old_library $deplibs"
    link_static=yes
    fi
fi # link shared/static library?

if test "$linkmode" = lib; then
    if test -n "$dependency_libs" &&
        { test "$hardcode_into_libs" != yes ||
          test "$build_old_libs" = yes ||
          test "$link_static" = yes; }; then
        # Extract -R from dependency_libs
        temp_deplibs=
        for libdir in $dependency_libs; do
            case $libdir in
                -R*) func_stripname '-R' '' "$libdir"
                    temp_xrpath=$func_stripname_result
                    case " $xrpath " in
                        *" $temp_xrpath ") ;;
                        *) func_append xrpath " $temp_xrpath";;
                    esac;;
                *) func_append temp_deplibs " $libdir";;
            esac
        done
        dependency_libs="$temp_deplibs"
    fi

    func_append newlib_search_path " $absdir"
    # Link against this library
    test "$link_static" = no &&
    newdependency_libs="$abs_ladir/$lname $newdependency_libs"
    # ... and its dependency_libs
    tmp_libs=
    for deplib in $dependency_libs; do
        newdependency_libs="$deplib $newdependency_libs"
        case $deplib in
            -L*) func_stripname '-L' '' "$deplib"
                func_resolve_sysroot "$func_stripname_result";;
            *) func_resolve_sysroot "$deplib" ;;
        esac
    if $opt_preserve_dup_deps ; then
        case "$tmp_libs " in
            *" $func_resolve_sysroot_result ")
                func_append specialdeplibs "
$func_resolve_sysroot_result" ;;
        esac
    fi
    func_append tmp_libs " $func_resolve_sysroot_result"
done

```

```

if test "$link_all_deplibs" != no; then
  # Add the search paths of all dependency libraries
  for deplib in $dependency_libs; do
    path=
    case $deplib in
      -L*) path="$deplib" ;;
      *.la)
        func_resolve_sysroot "$deplib"
        deplib=$func_resolve_sysroot_result
        func_dirname "$deplib" "" "."
        dir=$func_dirname_result
        # We need an absolute path.
        case $dir in
          [\\/*] | [A-Za-z]:[\\/*]*) absdir="$dir" ;;
          *)
            absdir=`cd "$dir" && pwd`
            if test -z "$absdir"; then
              func_warning "cannot determine absolute directory name
of `\$dir'"
            fi
            absdir="$dir"
          fi
        ;;
      esac
      if $GREP "^installed=no" $deplib > /dev/null; then
        case $host in
          *-*-darwin*)
            depdepl=
            eval depliblibrary_names=`${SED} -n -e
's/^library_names=(.*)$/\1/p' $deplib`
            if test -n "$depliblibrary_names" ; then
              for tmp in $depliblibrary_names ; do
                depdepl=$tmp
              done
              if test -f "$absdir/$objdir/$depdepl" ; then
                depdepl="$absdir/$objdir/$depdepl"
                darwin_install_name=`${OTOOL} -L $depdepl | awk '{if
(NR == 2) {print $1;exit}}'`
                if test -z "$darwin_install_name"; then
                  darwin_install_name=`${OTOOL64} -L $depdepl
| awk '{if (NR == 2) {print $1;exit}}'`
                fi
                func_append compiler_flags " ${wl}-dylib_file
${wl}${darwin_install_name}:${depdepl}"
                func_append linker_flags " -dylib_file
${darwin_install_name}:${depdepl}"
                path=
              fi
            fi
          ;;
          *)
            path="-L$absdir/$objdir"
        esac
      fi
    done
  done

```

```

        ;;
    esac
else
    eval libdir=`${SED} -n -e 's/^libdir=(.*)$/\1/p'
$deplib`
    test -z "$libdir" && \
        func_fatal_error "`$deplib' is not a valid libtool
archive"
    #test "$absdir" != "$libdir" && \
    # func_warning "`$deplib' seems to be moved"

    path="-L$absdir"
fi
;;
esac
case " $deplibs " in
*" $path ") ;;
*) deplibs="$path $deplibs" ;;
esac
done
fi # link_all_deplibs != no
fi # linkmode = lib
done # for deplib in $libs
if test "$pass" = link; then
if test "$linkmode" = "prog"; then
    compile_deplibs="$new_inherited_linker_flags $compile_deplibs"
    finalize_deplibs="$new_inherited_linker_flags
$finalize_deplibs"
else
    compiler_flags="$compiler_flags "`$ECHO "
$new_inherited_linker_flags" | ${SED} 's% \([^ $]*\).ltframework% -
framework \1%g'`
fi
fi
dependency_libs="$newdependency_libs"
if test "$pass" = dlpreopen; then
# Link the dlpreopened libraries before other libraries
for deplib in $save_deplibs; do
    deplibs="$deplib $deplibs"
done
fi
if test "$pass" != dlopen; then
if test "$pass" != conv; then
    # Make sure lib_search_path contains only unique directories.
    lib_search_path=
    for dir in $newlib_search_path; do
        case "$lib_search_path " in
*" $dir ") ;;
*) func_append lib_search_path " $dir" ;;
esac
done
newlib_search_path=

```

```

fi

if test "$linkmode,$pass" != "prog,link"; then
  vars="deplibs"
else
  vars="compile_deplibs finalize_deplibs"
fi
for var in $vars dependency_libs; do
  # Add libraries to $var in reverse order
  eval tmp_libs="\${$var}"
  new_libs=
  for deplib in $tmp_libs; do
    # FIXME: Pedantically, this is the right thing to do, so
    #         that some nasty dependency loop isn't accidentally
    #         broken:
    #new_libs="$deplib $new_libs"
    # Pragmatically, this seems to cause very few problems in
    # practice:
    case $deplib in
    -L*) new_libs="$deplib $new_libs" ;;
    -R*) ;;
    *)
      # And here is the reason: when a library appears more
      # than once as an explicit dependence of a library, or
      # is implicitly linked in more than once by the
      # compiler, it is considered special, and multiple
      # occurrences thereof are not removed. Compare this
      # with having the same library being listed as a
      # dependency of multiple other libraries: in this case,
      # we know (pedantically, we assume) the library does not
      # need to be listed more than once, so we keep only the
      # last copy. This is not always right, but it is rare
      # enough that we require users that really mean to play
      # such unportable linking tricks to link the library
      # using -Wl,-lname, so that libtool does not consider it
      # for duplicate removal.
      case " $specialdeplibs " in
      *" $deplib "*) new_libs="$deplib $new_libs" ;;
      *)
        case " $new_libs " in
        *" $deplib "*) ;;
        *) new_libs="$deplib $new_libs" ;;
        esac
      ;;
      esac
    ;;
  esac
done
tmp_libs=
for deplib in $new_libs; do
  case $deplib in
  -L*)

```

```

        case " $tmp_libs " in
        *" $deplib ") ;;
        *) func_append tmp_libs " $deplib" ;;
        esac
        ;;
    *) func_append tmp_libs " $deplib" ;;
    esac
done
eval $var="\$tmp_libs\"
done # for var
fi
# Last step: remove runtime libs from dependency_libs
# (they stay in deplibs)
tmp_libs=
for i in $dependency_libs ; do
case " $predeps $postdeps $compiler_lib_search_path " in
*" $i ")
    i=""
    ;;
esac
if test -n "$i" ; then
    func_append tmp_libs " $i"
fi
done
dependency_libs=$tmp_libs
done # for pass
if test "$linkmode" = prog; then
    dlfiles="$newdlfiles"
fi
if test "$linkmode" = prog || test "$linkmode" = lib; then
    dlprefiles="$newdlprefiles"
fi

case $linkmode in
oldlib)
    if test -n "$dlfiles$dlprefiles" || test "$dlsself" != no; then
        func_warning "\`-dlopen' is ignored for archives"
    fi

    case " $deplibs" in
    *\ -l* | *\ -L*)
        func_warning "\`-l' and \`-L' are ignored for archives" ;;
    esac

    test -n "$rpath" && \
        func_warning "\`-rpath' is ignored for archives"

    test -n "$xrpath" && \
        func_warning "\`-R' is ignored for archives"

    test -n "$vinfo" && \

```



```

func_warning "\`-version-info/-version-number' is ignored for
archives"

test -n "$release" && \
func_warning "\`-release' is ignored for archives"

test -n "$export_symbols$export_symbols_regex" && \
func_warning "\`-export-symbols' is ignored for archives"

# Now set the variables for building old libraries.
build_libtool_libs=no
oldlibs="$output"
func_append objs "$old_deplibs"
;;

lib)
# Make sure we only generate libraries of the form `libNAME.la'.
case $outputname in
lib*)
func_stripname 'lib' '.la' "$outputname"
name=$func_stripname_result
eval shared_ext="\`$shrext_cmds\"
eval libname="\`$libname_spec\"
;;
*)
test "$module" = no && \
func_fatal_help "libtool library \`${output}' must begin with
\`lib'"

if test "$need_lib_prefix" != no; then
# Add the "lib" prefix for modules if required
func_stripname ' ' '.la' "$outputname"
name=$func_stripname_result
eval shared_ext="\`$shrext_cmds\"
eval libname="\`$libname_spec\"
else
func_stripname ' ' '.la' "$outputname"
libname=$func_stripname_result
fi
;;
esac

if test -n "$objs"; then
if test "$deplibs_check_method" != pass_all; then
func_fatal_error "cannot build libtool library \`${output}' from
non-libtool objects on this host:$objs"
else
echo
$ECHO "*** Warning: Linking the shared library $output against
the non-libtool"
$ECHO "*** objects $objs is not portable!"
func_append libobjs " $objs"

```

```

fi
fi

test "$dlsel" != no && \
func_warning "\`-dlopen self' is ignored for libtool libraries"

set dummy $rpath
shift
test "$#" -gt 1 && \
func_warning "ignoring multiple \`-rpath's for a libtool library"

install_libdir="$1"

oldlibs=
if test -z "$rpath"; then
if test "$build_libtool_libs" = yes; then
# Building a libtool convenience library.
# Some compilers have problems with a `.al' extension so
# convenience libraries should have the same extension as
# archive normally would.
oldlibs="$output_objdir/$libname.$libext $oldlibs"
build_libtool_libs=convenience
build_old_libs=yes
fi
fi

test -n "$vinfo" && \
func_warning "\`-version-info/-version-number' is ignored for
convenience libraries"

test -n "$release" && \
func_warning "\`-release' is ignored for convenience libraries"
else

# Parse the version information argument.
save_ifs="$IFS"; IFS=:
set dummy $vinfo 0 0 0
shift
IFS="$save_ifs"

test -n "$7" && \
func_fatal_help "too many parameters to \`-version-info'"

# convert absolute version numbers to libtool ages
# this retains compatibility with .la files and attempts
# to make the code below a bit more comprehensible

case $vinfo_number in
yes)
number_major="$1"
number_minor="$2"
number_revision="$3"
#

```

```

# There are really only two kinds -- those that
# use the current revision as the major version
# and those that subtract age and use age as
# a minor version.  But, then there is irix
# which has an extra 1 added just for fun
#
case $version_type in
# correct linux to gnu/linux during the next big refactor
darwin|linux|osf|windows|none)
    func_arith $number_major + $number_minor
    current=$func_arith_result
    age="$number_minor"
    revision="$number_revision"
    ;;
freebsd-aout|freebsd-elf|qnx|sunos)
    current="$number_major"
    revision="$number_minor"
    age="0"
    ;;
irix|nonstopux)
    func_arith $number_major + $number_minor
    current=$func_arith_result
    age="$number_minor"
    revision="$number_minor"
    lt_irix_increment=no
    ;;
esac
;;
no)
    current="$1"
    revision="$2"
    age="$3"
    ;;
esac

# Check that each of the things are valid numbers.
case $current in
0|[1-9]|[1-9][0-9]|[1-9][0-9][0-9]|[1-9][0-9][0-9][0-9]|[1-9][0-9][0-9][0-9][0-9]) ;;
*)
    func_error "CURRENT \`${current}' must be a nonnegative integer"
    func_fatal_error "\`${vinfo}' is not valid version information"
    ;;
esac

case $revision in
0|[1-9]|[1-9][0-9]|[1-9][0-9][0-9]|[1-9][0-9][0-9][0-9]|[1-9][0-9][0-9][0-9][0-9]) ;;
*)
    func_error "REVISION \`${revision}' must be a nonnegative
integer"
    func_fatal_error "\`${vinfo}' is not valid version information"

```

```

    ;;
esac

case $age in
0|[1-9]|[1-9][0-9]|[1-9][0-9][0-9]|[1-9][0-9][0-9][0-9]|[1-9][0-9][0-9][0-9][0-9]) ;;
*)
    func_error "AGE \`${age}' must be a nonnegative integer"
    func_fatal_error "\`${vinfo}' is not valid version information"
    ;;
esac

if test "$age" -gt "$current"; then
    func_error "AGE \`${age}' is greater than the current interface
number \`${current}'"
    func_fatal_error "\`${vinfo}' is not valid version information"
fi

# Calculate the version variables.
major=
versuffix=
verstring=
case $version_type in
none) ;;

darwin)
    # Like Linux, but with the current version available in
    # verstring for coding it into the library header
    func_arith $current - $age
    major=.$func_arith_result
    versuffix="$major.$age.$revision"
    # Darwin ld doesn't like 0 for these options...
    func_arith $current + 1
    minor_current=$func_arith_result
    xlcverstring="${wl}-compatibility_version ${wl}$minor_current
${wl}-current_version ${wl}$minor_current.$revision"
    verstring="-compatibility_version $minor_current -
current_version $minor_current.$revision"
    ;;

freebsd-aout)
    major=".$current"
    versuffix=".$current.$revision";
    ;;

freebsd-elf)
    major=".$current"
    versuffix=".$current"
    ;;

irix | nonstopux)
    if test "X$lt_irix_increment" = "Xno"; then

```

```

    func_arith $current - $age
else
    func_arith $current - $age + 1
fi
major=$func_arith_result

case $version_type in
    nonstopux) verstring_prefix=nonstopux ;;
    *)         verstring_prefix=sgi ;;
esac
verstring="$verstring_prefix$major.$revision"

# Add in all the interfaces that we are compatible with.
loop=$revision
while test "$loop" -ne 0; do
    func_arith $revision - $loop
    iface=$func_arith_result
    func_arith $loop - 1
    loop=$func_arith_result
    verstring="$verstring_prefix$major.$iface:$verstring"
done

# Before this point, $major must not contain `.'.
major=.$major
versuffix="$major.$revision"
;;

linux) # correct to gnu/linux during the next big refactor
    func_arith $current - $age
    major=.$func_arith_result
    versuffix="$major.$age.$revision"
    ;;

osf)
    func_arith $current - $age
    major=.$func_arith_result
    versuffix=".$current.$age.$revision"
    verstring="$current.$age.$revision"

# Add in all the interfaces that we are compatible with.
loop=$age
while test "$loop" -ne 0; do
    func_arith $current - $loop
    iface=$func_arith_result
    func_arith $loop - 1
    loop=$func_arith_result
    verstring="$verstring:${iface}.0"
done

# Make executables depend on our current version.
func_append verstring ":{current}.0"
;;

```

```

gnx)
    major=".$current"
    versuffix=".$current"
    ;;

sunos)
    major=".$current"
    versuffix=".$current.$revision"
    ;;

windows)
    # Use '-' rather than '.', since we only want one
    # extension on DOS 8.3 filesystems.
    func_arith $current - $age
    major=${func_arith_result}
    versuffix="-${major}"
    ;;

*)
    func_fatal_configuration "unknown library version type
\\$version_type"
    ;;
esac

# Clear the version info if we defaulted, and they specified a
release.
if test -z "$vinfo" && test -n "$release"; then
    major=
    case $version_type in
    darwin)
        # we can't check for "0.0" in archive_cmds due to quoting
        # problems, so we reset it completely
        verstring=
        ;;
    *)
        verstring="0.0"
        ;;
    esac
    if test "$need_version" = no; then
        versuffix=
    else
        versuffix=".0.0"
    fi
fi

# Remove version info from name if versioning should be avoided
if test "$avoid_version" = yes && test "$need_version" = no; then
    major=
    versuffix=
    verstring=""
fi

```

```

# Check to see if the archive will have undefined symbols.
if test "$allow_undefined" = yes; then
  if test "$allow_undefined_flag" = unsupported; then
    func_warning "undefined symbols not allowed in $host shared
libraries"
    build_libtool_libs=no
    build_old_libs=yes
  fi
else
  # Don't allow undefined symbols.
  allow_undefined_flag="$no_undefined_flag"
fi

fi

func_generate_dlsyms "$libname" "$libname" "yes"
func_append libobjs " $symfileobj"
test "X$libobjs" = "X " && libobjs=

if test "$opt_mode" != relink; then
# Remove our outputs, but don't remove object files since they
# may have been created when compiling PIC objects.
removelist=
tempremovelist=`$ECHO "$output_objdir/*" `
for p in $tempremovelist; do
  case $p in
    *.$objext | *.gcno)
      ;;
    $output_objdir/$outputname | $output_objdir/$libname.* |
$output_objdir/${libname}${release}.* )
      if test "X$precious_files_regex" != "X"; then
        if $ECHO "$p" | $EGREP -e "$precious_files_regex"
>/dev/null 2>&1
        then
          continue
        fi
      fi
      func_append removelist " $p"
      ;;
    *) ;;
  esac
done
test -n "$removelist" && \
  func_show_eval "${RM}r \ $removelist"
fi

# Now set the variables for building old libraries.
if test "$build_old_libs" = yes && test "$build_libtool_libs" !=
convenience ; then
  func_append oldlibs " $output_objdir/$libname.$libext"

```

```

# Transform .lo files to .o files.
oldobjs="$objs "`$ECHO "$libobjs" | $SP2NL | $SED
"/\.${libext}$/d; $lo2o" | $NL2SP`
fi

# Eliminate all temporary directories.
#for path in $notinst_path; do
#  lib_search_path=`$ECHO "$lib_search_path " | $SED "s% $path
% %g"`
#  deplibs=`$ECHO "$deplibs " | $SED "s% -L$path % %g"`
#  dependency_libs=`$ECHO "$dependency_libs " | $SED "s% -
L$path % %g"`
#done

if test -n "$xrpath"; then
# If the user specified any rpath flags, then add them.
temp_xrpath=
for libdir in $xrpath; do
  func_replace_sysroot "$libdir"
  func_append temp_xrpath " -R$func_replace_sysroot_result"
  case "$finalize_rpath " in
    *" $libdir ") ;;
    *) func_append finalize_rpath " $libdir" ;;
  esac
done
if test "$hardcode_into_libs" != yes || test "$build_old_libs" =
yes; then
  dependency_libs="$temp_xrpath $dependency_libs"
fi
fi

# Make sure dlfiles contains only unique files that won't be
dlpreopened
old_dlfiles="$dlfiles"
dlfiles=
for lib in $old_dlfiles; do
case " $dlprefiles $dlfiles " in
*" $lib ") ;;
*) func_append dlfiles " $lib" ;;
esac
done

# Make sure dlprefiles contains only unique files
old_dlprefiles="$dlprefiles"
dlprefiles=
for lib in $old_dlprefiles; do
case "$dlprefiles " in
*" $lib ") ;;
*) func_append dlprefiles " $lib" ;;
esac
done

```



```

    if test "$build_libtool_libs" = yes; then
    if test -n "$rpath"; then
        case $host in
            *-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-*-beos* |
*-cegcc* | *-*-haiku*)
                # these systems don't actually have a c library (as such)!
                ;;
            *-*-rhapsody* | *-*-darwin1.[012])
                # Rhapsody C library is in the System framework
                func_append deplibs " System.ltframework"
                ;;
            *-*-netbsd*)
                # Don't link with libc until the a.out ld.so is fixed.
                ;;
            *-*-openbsd* | *-*-freebsd* | *-*-dragonfly*)
                # Do not include libc due to us having libc/libc_r.
                ;;
            *-*-sco3.2v5* | *-*-sco5v6*)
                # Causes problems with __ctype
                ;;
            *-*-sysv4.2uw2* | *-*-sysv5* | *-*-unixware* | *-*-OpenUNIX*)
                # Compiler inserts libc in the correct place for threads to
work
                ;;
            *)
                # Add libc to deplibs on all other systems if necessary.
                if test "$build_libtool_need_lc" = "yes"; then
                    func_append deplibs " -lc"
                fi
                ;;
        esac
    fi

    # Transform deplibs into only deplibs that can be linked in
shared.
    name_save=$name
    libname_save=$libname
    release_save=$release
    versuffix_save=$versuffix
    major_save=$major
    # I'm not sure if I'm treating the release correctly.  I think
    # release should show up in the -l (ie -lgmp5) so we don't want
to
    # add it in twice.  Is that correct?
    release=""
    versuffix=""
    major=""
    newdeplibs=
    droppeddeps=no
    case $deplibs_check_method in
    pass_all)
        # Don't check for shared/static.  Everything works.

```

```

# This might be a little naive.  We might want to check
# whether the library exists or not.  But this is on
# osf3 & osf4 and I'm not really sure...  Just
# implementing what was already the behavior.
newdeplibs=$deplibs
;;
test_compile)
# This code stresses the "libraries are programs" paradigm to
its
# limits.  Maybe even breaks it.  We compile a program, linking
it
# against the deplibs as a proxy for the library.  Then we can
check
# whether they linked in statically or dynamically with ldd.
$opt_dry_run || $RM conftest.c
cat > conftest.c <<EOF
EOF
int main() { return 0; }

$opt_dry_run || $RM conftest
if $LTCC $LTCFLAGS -o conftest conftest.c $deplibs; then
  ldd_output=`ldd conftest`
  for i in $deplibs; do
    case $i in
      -l*)
        func_stripname -l '' "$i"
        name=$func_stripname_result
        if test "X$allow_libtool_libs_with_static_runtimes" =
"Xyes" ; then
          case " $predeps $postdeps " in
            *" $i "*)
              func_append newdeplibs " $i"
              i=""
            ;;
          esac
        fi
        if test -n "$i" ; then
          libname=`eval "\\$ECHO \"\$libname_spec\""`
          deplib_matches=`eval "\\$ECHO \"\$library_names_spec\""`
          set dummy $deplib_matches; shift
          deplib_match=$1
          if test `expr "$ldd_output" : ".*$deplib_match" -ne 0` ;
then
            func_append newdeplibs " $i"
          else
            droppeddeps=yes
            echo
            $ECHO "*** Warning: dynamic linker does not accept
needed library $i."
            echo "*** I have the capability to make that library
automatically link in when"
            echo "*** you link to this library.  But I can only do
this if you have a"

```

```

                echo "*** shared version of the library, which I
believe you do not have"
                echo "*** because a test_compile did reveal that the
linker did not use it for"
                echo "*** its dynamic dependency list that programs get
resolved with at runtime."
            fi
        fi
        ;;
        *)
        func_append newdeplibs " $i"
        ;;
    esac
done
else
# Error occurred in the first compile.  Let's try to salvage
# the situation:  Compile a separate program for each library.
for i in $deplibs; do
    case $i in
    -l*)
        func_stripname -l '' "$i"
        name=$func_stripname_result
        $opt_dry_run || $RM conftest
        if $LTCC $LTCCFLAGS -o conftest conftest.c $i; then
            ldd_output=`ldd conftest`
            if test "X$allow_libtool_libs_with_static_runtimes" =
"Xyes" ; then
                case " $predeps $postdeps " in
                *" $i "*)
                    func_append newdeplibs " $i"
                    i=""
                    ;;
                esac
            fi
            if test -n "$i" ; then
                libname=`eval "\\$ECHO \"\$libname_spec\""`
                deplib_matches=`eval "\\$ECHO \"\$library_names_spec\""`
                set dummy $deplib_matches; shift
                deplib_match=$1
                if test `expr "$ldd_output" : ".*$deplib_match"` -ne 0
; then
                    func_append newdeplibs " $i"
                else
                    droppeddeps=yes
                    echo
                    $ECHO "*** Warning: dynamic linker does not accept
needed library $i."
                    echo "*** I have the capability to make that library
automatically link in when"
                    echo "*** you link to this library.  But I can only
do this if you have a"

```

```

        echo "*** shared version of the library, which you do
not appear to have"
        echo "*** because a test_compile did reveal that the
linker did not use this one"
        echo "*** as a dynamic dependency that programs can
get resolved with at runtime."
        fi
        fi
    else
        droppeddeps=yes
        echo
        $ECHO "*** Warning! Library $i is needed by this library
but I was not able to"
        echo "*** make it link in! You will probably need to
install it or some"
        echo "*** library that it depends on before this library
will be fully"
        echo "*** functional. Installing it before continuing
would be even better."
        fi
        ;;
        *)
        func_append newdeplibs " $i"
        ;;
    esac
done
fi
;;
file_magic*)
set dummy $deplibs_check_method; shift
file_magic_regex=`expr "$deplibs_check_method" : "$1 \(.*\)"`
for a_deplib in $deplibs; do
    case $a_deplib in
        -l*)
            func_stripname -l '' "$a_deplib"
            name=$func_stripname_result
            if test "X$allow_libtool_libs_with_static_runtimes" =
"Xyes" ; then
                case " $predeps $postdeps " in
                    *" $a_deplib "*)
                        func_append newdeplibs " $a_deplib"
                        a_deplib=""
                        ;;
                esac
            fi
            if test -n "$a_deplib" ; then
                libname=`eval "\\$ECHO \"$libname_spec\""`
                if test -n "$file_magic_glob"; then
                    libnameglob=`func_echo_all "$libname" | $SED -e
$file_magic_glob`
                else
                    libnameglob=$libname

```

```

        fi
        test "$want_nocaseglob" = yes && nocaseglob=`shopt -p
nocaseglob`
        for i in $lib_search_path $sys_lib_search_path
$shlib_search_path; do
            if test "$want_nocaseglob" = yes; then
                shopt -s nocaseglob
                potential_libs=`ls $i/$libnameglob[.]* 2>/dev/null`
                $nocaseglob
            else
                potential_libs=`ls $i/$libnameglob[.]* 2>/dev/null`
            fi
            for potent_lib in $potential_libs; do
                # Follow soft links.
                if ls -lLd "$potent_lib" 2>/dev/null |
                $GREP " -> " >/dev/null; then
                    continue
                fi
                # The statement above tries to avoid entering an
                # endless loop below, in case of cyclic links.
                # We might still enter an endless loop, since a link
                # loop can be closed while we follow links,
                # but so what?
                potlib="$potent_lib"
                while test -h "$potlib" 2>/dev/null; do
                    potliblink=`ls -ld $potlib | ${SED} 's/.*/>/dev/null`
                    case $potliblink in
                        [\\/*] | [A-Za-z]:[\\/*]*) potlib="$potliblink";;
                        *) potlib=`$ECHO "$potlib" | $SED
's,[^/]*$,,'`"$potliblink";;
                    esac
                done
                if eval $file_magic_cmd "\"$potlib\" 2>/dev/null |
                $SED -e 10q |
                $EGREP "$file_magic_regex" > /dev/null; then
                    func_append newdeplibs " $a_deplib"
                    a_deplib=""
                    break 2
                fi
            done
        done
        fi
        if test -n "$a_deplib" ; then
            droppeddeps=yes
            echo
            $ECHO "*** Warning: linker path does not have real file for
library $a_deplib."
            echo "*** I have the capability to make that library
automatically link in when"
            echo "*** you link to this library. But I can only do this
if you have a"

```



```

        a_deplib=""
        break 2
    fi
done
done
fi
if test -n "$a_deplib" ; then
droppeddeps=yes
echo
$ECHO "*** Warning: linker path does not have real file for
library $a_deplib."
echo "*** I have the capability to make that library
automatically link in when"
echo "*** you link to this library. But I can only do this
if you have a"
echo "*** shared version of the library, which you do not
appear to have"
echo "*** because I did check the linker path looking for a
file starting"
    if test -z "$spotlib" ; then
        $ECHO "*** with $libname but no candidates were found.
(...for regex pattern test)"
    else
        $ECHO "*** with $libname and none of the candidates
passed a file format test"
        $ECHO "*** using a regex pattern. Last file checked:
$spotlib"
    fi
fi
fi
;;
*)
# Add a -L argument.
func_append newdeplibs " $a_deplib"
;;
esac
done # Gone through all deplibs.
;;
none | unknown | *)
newdeplibs=""
tmp_deplibs=`$ECHO " $deplibs" | $SED 's/ -lc$//; s/ -[LR][^
]*/g'`
if test "X$allow_libtool_libs_with_static_runtimes" = "Xyes" ;
then
    for i in $predeps $postdeps ; do
        # can't use Xsed below, because $i might contain '/'
        tmp_deplibs=`$ECHO " $tmp_deplibs" | $SED "s,$i,,"`
    done
fi
case $tmp_deplibs in
*[\ \ \ ]*)
    echo
    if test "X$deplibs_check_method" = "Xnone"; then

```

```

        echo "*** Warning: inter-library dependencies are not
supported in this platform."
    else
        echo "*** Warning: inter-library dependencies are not known
to be supported."
    fi
    echo "*** All declared inter-library dependencies are being
dropped."
    droppeddeps=yes
    ;;
esac
    ;;
esac
versuffix=$versuffix_save
major=$major_save
release=$release_save
libname=$libname_save
name=$name_save

case $host in
*-*-rhapsody* | *-*-darwin1.[012])
    # On Rhapsody replace the C library with the System framework
    newdeplibs=`$ECHO " $newdeplibs" | $SED 's/ -lc /
System.ltframework /'`
    ;;
esac

if test "$droppeddeps" = yes; then
    if test "$module" = yes; then
        echo
        echo "*** Warning: libtool could not satisfy all declared
inter-library"
        $ECHO "*** dependencies of module $libname.  Therefore,
libtool will create"
        echo "*** a static module, that should work as long as the
dlopening"
        echo "*** application is linked with the -dlopen flag."
        if test -z "$global_symbol_pipe"; then
            echo
            echo "*** However, this would only work if libtool was able
to extract symbol"
            echo "*** lists from a program, using `nm' or equivalent,
but libtool could"
            echo "*** not find such a program.  So, this module is
probably useless."
            echo "*** `nm' from GNU binutils and a full rebuild may
help."
        fi
        if test "$build_old_libs" = no; then
            oldlibs="$output_objdir/$libname.$libext"
            build_libtool_libs=module
            build_old_libs=yes
        fi
    fi
fi

```



```

        else
            build_libtool_libs=no
        fi
    else
        echo "*** The inter-library dependencies that have been
dropped here will be"
        echo "*** automatically added whenever a program is linked
with this library"
        echo "*** or is declared to -dlopen it."

        if test "$allow_undefined" = no; then
            echo
            echo "*** Since this library must not contain undefined
symbols,"
            echo "*** because either the platform does not support them
or"
            echo "*** it was explicitly requested with -no-undefined,"
            echo "*** libtool will only create a static version of it."
            if test "$build_old_libs" = no; then
                oldlibs="$output_objdir/$libname.$libext"
                build_libtool_libs=module
                build_old_libs=yes
            else
                build_libtool_libs=no
            fi
        fi
    fi
fi
fi
# Done checking deplibs!
deplibs=$newdeplibs
fi
# Time to change all our "foo.ltframework" stuff back to "-
framework foo"
case $host in
*-*-darwin*)
    newdeplibs=`$ECHO " $newdeplibs" | $SED 's% \([^
$]*\)\.ltframework% -framework \1%g'\`
    new_inherited_linker_flags=`$ECHO "
$new_inherited_linker_flags" | $SED 's% \([^ $]*\)\.ltframework% -
framework \1%g'\`
    deplibs=`$ECHO " $deplibs" | $SED 's% \([^ $]*\)\.ltframework% -
framework \1%g'\`
    ;;
esac

# move library search paths that coincide with paths to not yet
# installed libraries to the beginning of the library search
list
new_libs=
for path in $notinst_path; do
case " $new_libs " in
*" -L$path/$objdir "*) ;;

```

```

*)
  case " $deplibs " in
    *" -L$path/$objdir "*)
      func_append new_libs " -L$path/$objdir" ;;
  esac
  ;;
esac
done
for deplib in $deplibs; do
case $deplib in
-L*)
  case " $new_libs " in
    *" $deplib "*) ;;
    *) func_append new_libs " $deplib" ;;
  esac
  ;;
*) func_append new_libs " $deplib" ;;
esac
done
deplibs="$new_libs"

# All the library-specific variables (install_libdir is set
above).
library_names=
old_library=
dlname=

# Test again, we may have decided not to build it any more
if test "$build_libtool_libs" = yes; then
# Remove ${wl} instances when linking with ld.
# FIXME: should test the right _cmds variable.
case $archive_cmds in
*\$LD\ *) wl= ;;
esac
if test "$hardcode_into_libs" = yes; then
# Hardcode the library paths
hardcode_libdirs=
dep_rpath=
rpath="$finalize_rpath"
test "$opt_mode" != relink && rpath="$compile_rpath$rpath"
for libdir in $rpath; do
  if test -n "$hardcode_libdir_flag_spec"; then
    func_replace_sysroot "$libdir"
    libdir=$func_replace_sysroot_result
    func_stripname '=' ' ' "$libdir"
    libdir=$func_stripname_result
    if test -n "$hardcode_libdir_separator"; then
      if test -z "$hardcode_libdirs"; then
        hardcode_libdirs="$libdir"
      else
        # Just accumulate the unique libdirs.

```

```

        case
$hardcode_libdir_separator$hardcode_libdirs$hardcode_libdir_separator
in
*"${hardcode_libdir_separator}$libdir${hardcode_libdir_separator}"*)
    ;;
    *)
        func_append hardcode_libdirs
"$hardcode_libdir_separator$libdir"
    ;;
esac
fi
else
    # We only want to hardcode in an rpath if it isn't in
the
    # default dlsearch path.
    func_normal_abspath "$libdir"
    libdir_norm=${func_normal_abspath_result}
    case " $sys_lib_dlsearch_path " in
*" $libdir_norm "*) ;;
    *) eval flag="\${hardcode_libdir_flag_spec}\\"
        func_append dep_rpath " $flag"
        ;;
    esac
fi
elif test -n "$runpath_var"; then
    case "$perm_rpath " in
*" $libdir "*) ;;
    *) func_append perm_rpath " $libdir" ;;
    esac
fi
done
# Substitute the hardcoded libdirs into the rpath.
if test -n "$hardcode_libdir_separator" &&
test -n "$hardcode_libdirs"; then
    libdir="$hardcode_libdirs"
    eval "dep_rpath=\${hardcode_libdir_flag_spec}\\"
fi
if test -n "$runpath_var" && test -n "$perm_rpath"; then
    # We should set the runpath_var.
    rpath=
    for dir in $perm_rpath; do
        func_append rpath "$dir:"
    done
    eval "$runpath_var='${rpath}\${$runpath_var}'; export
$runpath_var"
fi
test -n "$dep_rpath" && deplibs="$dep_rpath $deplibs"
fi

shlibpath="$finalize_shlibpath"

```

```

    test "$opt_mode" != relink &&
shlibpath="$compile_shlibpath$shlibpath"
    if test -n "$shlibpath"; then
        eval "$shlibpath_var='$shlibpath\$$shlibpath_var'; export
$shlibpath_var"
    fi

    # Get the real and link names of the library.
eval shared_ext="\$shrext_cmds\"
eval library_names="\$library_names_spec\"
set dummy $library_names
shift
realname="$1"
shift

if test -n "$soname_spec"; then
    eval soname="\$soname_spec\"
else
    soname="$realname"
fi
if test -z "$dlname"; then
    dlname=$soname
fi

lib="$output_objdir/$realname"
linknames=
for link
do
    func_append linknames " $link"
done

# Use standard objects if they are pic
test -z "$pic_flag" && libobjs=`ECHO "$libobjs" | $SP2NL | $SED
"$lo2o" | $NL2SP`
test "X$libobjs" = "X " && libobjs=

delfiles=
if test -n "$export_symbols" && test -n "$include_expsyms"; then
    $opt_dry_run || cp "$export_symbols"
"$output_objdir/$libname.uexp"
    export_symbols="$output_objdir/$libname.uexp"
    func_append delfiles " $export_symbols"
fi

orig_export_symbols=
case $host_os in
cygwin* | mingw* | cegcc*)
    if test -n "$export_symbols" && test -z
"$export_symbols_regex"; then
        # exporting using user supplied symfile
        if test "x`$SED 1q $export_symbols`" != xEXPORTS; then
            # and it's NOT already a .def file. Must figure out

```

```

# which of the given symbols are data symbols and tag
# them as such. So, trigger use of export_symbols_cmds.
# export_symbols gets reassigned inside the "prepare
# the list of exported symbols" if statement, so the
# include_expsyms logic still works.
orig_export_symbols="$export_symbols"
export_symbols=
always_export_symbols=yes
fi
fi
;;
esac

# Prepare the list of exported symbols
if test -z "$export_symbols"; then
  if test "$always_export_symbols" = yes || test -n
"$export_symbols_regex"; then
    func_verbose "generating symbol list for `\$libname.la'"
    export_symbols="$output_objdir/$libname.exp"
    $opt_dry_run || $RM $export_symbols
    cmds=$export_symbols_cmds
    save_ifs="$IFS"; IFS='~'
    for cmd1 in $cmds; do
      IFS="$save_ifs"
      # Take the normal branch if the nm_file_list_spec branch
      # doesn't work or if tool conversion is not needed.
      case $nm_file_list_spec~$to_tool_file_cmd in
      *~func_convert_file_noop | *~func_convert_file_msys_to_w32
| ~*)
          try_normal_branch=yes
          eval cmd=\"$cmd1\"
          func_len " $cmd"
          len=$func_len_result
          ;;
      *)
          try_normal_branch=no
          ;;
      esac
      if test "$try_normal_branch" = yes \
&& { test "$len" -lt "$max_cmd_len" \
|| test "$max_cmd_len" -le -1; }
      then
        func_show_eval "$cmd" 'exit $?'
        skipped_export=false
        elif test -n "$nm_file_list_spec"; then
          func_basename "$output"
          output_la=$func_basename_result
          save_libobjs=$libobjs
          save_output=$output
          output=${output_objdir}/${output_la}.nm
          func_to_tool_file "$output"
          libobjs=$nm_file_list_spec$func_to_tool_file_result

```

```

func_append delfiles " $output"
func_verbose "creating $NM input file list: $output"
for obj in $save_libobjs; do
    func_to_tool_file "$obj"
    $ECHO "$func_to_tool_file_result"
done > "$output"
eval cmd="\ "$cmd1\"
func_show_eval "$cmd" 'exit $? '
output=$save_output
libobjs=$save_libobjs
skipped_export=false
else
    # The command line is too long to execute in one step.
    func_verbose "using reloadable object file for export
list..."
    skipped_export=:
    # Break out early, otherwise skipped_export may be
    # set to false by a later but shorter cmd.
    break
fi
done
IFS="$save_ifs"
if test -n "$export_symbols_regex" && test "X$skipped_export"
!= "X:"; then
    func_show_eval '$EGREP -e "$export_symbols_regex"
"$export_symbols" > "${export_symbols}T"'
    func_show_eval '$MV "${export_symbols}T" "$export_symbols"'
fi
fi
fi

if test -n "$export_symbols" && test -n "$include_expsyms"; then
    tmp_export_symbols="$export_symbols"
    test -n "$orig_export_symbols" &&
tmp_export_symbols="$orig_export_symbols"
    $opt_dry_run || eval '$ECHO "$include_expsyms" | $SP2NL >>
"$tmp_export_symbols"'
fi

if test "X$skipped_export" != "X:" && test -n
"$orig_export_symbols"; then
    # The given exports_symbols file has to be filtered, so filter
it.
    func_verbose "filter symbol list for \`${libname}.la' to tag DATA
exports"
    # FIXME: $output_objdir/$libname.filter potentially contains
lots of
    # 's' commands which not all seds can handle. GNU sed should be
fine
    # though. Also, the filter scales superlinearly with the number
of

```

```

    # global variables. join(1) would be nice here, but
    unfortunately
    # isn't a blessed tool.
    $opt_dry_run || $SED -e '/[ ,]DATA/!d;s,\(.*\)\[
\,].*\),s|^\\1$|\\1\\2|,' < $export_symbols >
$output_objdir/$libname.filter
    func_append delfiles " $export_symbols
$output_objdir/$libname.filter"
    export_symbols=$output_objdir/$libname.def
    $opt_dry_run || $SED -f $output_objdir/$libname.filter <
$orig_export_symbols > $export_symbols
fi

tmp_deplibs=
for test_deplib in $deplibs; do
    case " $convenience " in
        * $test_deplib *) ;;
    *)
        func_append tmp_deplibs " $test_deplib"
        ;;
    esac
done
deplibs="$tmp_deplibs"

if test -n "$convenience"; then
    if test -n "$whole_archive_flag_spec" &&
        test "$compiler_needs_object" = yes &&
        test -z "$libobjs"; then
        # extract the archives, so we have objects to list.
        # TODO: could optimize this to just extract one archive.
        whole_archive_flag_spec=
    fi
    if test -n "$whole_archive_flag_spec"; then
        save_libobjs=$libobjs
        eval libobjs=\"\$libobjs $whole_archive_flag_spec\"
        test "X$libobjs" = "X " && libobjs=
    else
        gentop="$output_objdir/${outputname}x"
        func_append generated " $gentop"

        func_extract_archives $gentop $convenience
        func_append libobjs " $func_extract_archives_result"
        test "X$libobjs" = "X " && libobjs=
    fi
fi

if test "$thread_safe" = yes && test -n "$thread_safe_flag_spec";
then
    eval flag=\"\$thread_safe_flag_spec\"
    func_append linker_flags " $flag"
fi

```

```

# Make a backup of the uninstalled library when relinking
if test "$opt_mode" = relink; then
    $opt_dry_run || eval '(cd $output_objdir && $RM ${realname}U &&
$MV $realname ${realname}U)' || exit $?
fi

# Do each of the archive commands.
if test "$module" = yes && test -n "$module_cmds" ; then
    if test -n "$export_symbols" && test -n "$module_expsym_cmds";
then
        eval test_cmds=\"$module_expsym_cmds\"
        cmds=$module_expsym_cmds
    else
        eval test_cmds=\"$module_cmds\"
        cmds=$module_cmds
    fi
else
    if test -n "$export_symbols" && test -n "$archive_expsym_cmds";
then
        eval test_cmds=\"$archive_expsym_cmds\"
        cmds=$archive_expsym_cmds
    else
        eval test_cmds=\"$archive_cmds\"
        cmds=$archive_cmds
    fi
fi

if test "X$skipped_export" != "X:" &&
func_len " $test_cmds" &&
len=$func_len_result &&
test "$len" -lt "$max_cmd_len" || test "$max_cmd_len" -le -1;
then
    :
else
# The command line is too long to link in one step, link
piecewise
# or, if using GNU ld and skipped_export is not :, use a linker
# script.

# Save the value of $output and $libobjs because we want to
# use them later.  If we have whole_archive_flag_spec, we
# want to use save_libobjs as it was before
# whole_archive_flag_spec was expanded, because we can't
# assume the linker understands whole_archive_flag_spec.
# This may have to be revisited, in case too many
# convenience libraries get linked in and end up exceeding
# the spec.
if test -z "$convenience" || test -z
"$whole_archive_flag_spec"; then
    save_libobjs=$libobjs
fi
save_output=$output

```



```

func_basename "$output"
output_la=${func_basename_result}

# Clear the reloadable object creation command queue and
# initialize k to one.
test_cmds=
concat_cmds=
objlist=
last_robj=
k=1

if test -n "$save_libobjs" && test "X$skipped_export" != "X:"
&& test "$with_gnu_ld" = yes; then
  output=${output_objdir}/${output_la}.lnkscript
  func_verbose "creating GNU ld script: $output"
  echo 'INPUT (' > $output
  for obj in $save_libobjs
  do
    func_to_tool_file "$obj"
    $ECHO "$func_to_tool_file_result" >> $output
  done
  echo ')' >> $output
  func_append delfiles " $output"
  func_to_tool_file "$output"
  output=${func_to_tool_file_result}
elif test -n "$save_libobjs" && test "X$skipped_export" != "X:"
&& test "X$file_list_spec" != X; then
  output=${output_objdir}/${output_la}.lnk
  func_verbose "creating linker input file list: $output"
  : > $output
  set x $save_libobjs
  shift
  firstobj=
  if test "$compiler_needs_object" = yes; then
    firstobj="$1"
    shift
  fi
  for obj
  do
    func_to_tool_file "$obj"
    $ECHO "$func_to_tool_file_result" >> $output
  done
  func_append delfiles " $output"
  func_to_tool_file "$output"
  output=${firstobj}\"$file_list_spec${func_to_tool_file_result}\"
else
  if test -n "$save_libobjs"; then
    func_verbose "creating reloadable object files..."
    output=$output_objdir/$output_la-${k}.$objext
    eval test_cmds=\"\$reload_cmds\"
    func_len " $test_cmds"
    len0=${func_len_result}

```

```

len=$len0

# Loop over the list of objects to be linked.
for obj in $save_libobjs
do
func_len " $obj"
func_arith $len + $func_len_result
len=$func_arith_result
if test "X$objlist" = X ||
    test "$len" -lt "$max_cmd_len"; then
    func_append objlist " $obj"
else
    # The command $test_cmds is almost too long, add a
    # command to the queue.
    if test "$k" -eq 1 ; then
        # The first file doesn't have a previous command to
add.

        reload_objs=$objlist
        eval concat_cmds="\$reload_cmds\"
    else
        # All subsequent reloadable object files will link in
        # the last one created.
        reload_objs="$objlist $last_robj"
        eval concat_cmds="\\"$concat_cmds~$reload_cmds~\$RM
$last_robj\"
    fi
    last_robj=$output_objdir/$output_la-${k}.$objext
    func_arith $k + 1
    k=$func_arith_result
    output=$output_objdir/$output_la-${k}.$objext
    objlist=" $obj"
    func_len " $last_robj"
    func_arith $len0 + $func_len_result
    len=$func_arith_result
fi
done
# Handle the remaining objects by creating one last
# reloadable object file. All subsequent reloadable object
# files will link in the last one created.
test -z "$concat_cmds" || concat_cmds=$concat_cmds~
reload_objs="$objlist $last_robj"
eval concat_cmds="\\"${concat_cmds}$reload_cmds\"
if test -n "$last_robj"; then
    eval concat_cmds="\\"${concat_cmds}~\$RM $last_robj\"
fi
func_append delfiles " $output"

else
    output=
fi

if ${skipped_export-false}; then

```

```

func_verbose "generating symbol list for \`${libname}.la'"
export_symbols="$output_objdir/${libname}.exp"
$opt_dry_run || $RM $export_symbols
libobjs=$output
# Append the command to create the export file.
test -z "$concat_cmds" || concat_cmds=$concat_cmds~
eval concat_cmds="\`${concat_cmds}$export_symbols_cmds\"
if test -n "$last_robj"; then
eval concat_cmds="\`${concat_cmds}~\`$RM $last_robj\"
fi
fi

test -n "$save_libobjs" &&
func_verbose "creating a temporary reloadable object file:
$output"

# Loop through the commands generated above and execute them.
save_ifs="$IFS"; IFS='~'
for cmd in $concat_cmds; do
IFS="$save_ifs"
$opt_silent || {
func_quote_for_expand "$cmd"
eval "func_echo $func_quote_for_expand_result"
}
$opt_dry_run || eval "$cmd" || {
lt_exit=$?

# Restore the uninstalled library and exit
if test "$opt_mode" = relink; then
( cd "$output_objdir" && \
$RM "${realname}T" && \
$MV "${realname}U" "$realname" )
fi

exit $lt_exit
}
done
IFS="$save_ifs"

if test -n "$export_symbols_regex" && ${skipped_export-
false}; then
func_show_eval '$EGREP -e "$export_symbols_regex"
"$export_symbols" > "${export_symbols}T"'
func_show_eval '$MV "${export_symbols}T" "$export_symbols"'
fi
fi

if ${skipped_export-false}; then
if test -n "$export_symbols" && test -n "$include_expsyms";
then
tmp_export_symbols="$export_symbols"

```

```

        test -n "$orig_export_symbols" &&
tmp_export_symbols="$orig_export_symbols"
        $opt_dry_run || eval '$ECHO "$include_expsyms" | $SP2NL >>
"$tmp_export_symbols"'
        fi

        if test -n "$orig_export_symbols"; then
            # The given exports_symbols file has to be filtered, so
            filter it.
            func_verbose "filter symbol list for \`$libname.la' to tag
            DATA exports"
            # FIXME: $output_objdir/$libname.filter potentially
            contains lots of
            # 's' commands which not all seds can handle. GNU sed
            should be fine
            # though. Also, the filter scales superlinearly with the
            number of
            # global variables. join(1) would be nice here, but
            unfortunately
            # isn't a blessed tool.
            $opt_dry_run || $SED -e '/[ ,]DATA/!d;s,\(.*\)\[
            \,].*\),s|^1$|1\2|,' < $export_symbols >
            $output_objdir/$libname.filter
            func_append delfiles " $export_symbols
            $output_objdir/$libname.filter"
            export_symbols=$output_objdir/$libname.def
            $opt_dry_run || $SED -f $output_objdir/$libname.filter <
            $orig_export_symbols > $export_symbols
            fi
        fi

        libobjs=$output
        # Restore the value of output.
        output=$save_output

        if test -n "$convenience" && test -n
"$whole_archive_flag_spec"; then
            eval libobjs="\`$libobjs $whole_archive_flag_spec\`"
            test "X$libobjs" = "X " && libobjs=
        fi
        # Expand the library linking commands again to reset the
        # value of $libobjs for piecewise linking.

        # Do each of the archive commands.
        if test "$module" = yes && test -n "$module_cmds" ; then
            if test -n "$export_symbols" && test -n
"$module_expsym_cmds"; then
                cmds=$module_expsym_cmds
            else
                cmds=$module_cmds
            fi
        else

```

```

        if test -n "$export_symbols" && test -n
"$archive_expsym_cmds"; then
            cmds=$archive_expsym_cmds
        else
            cmds=$archive_cmds
        fi
    fi
fi

if test -n "$delfiles"; then
    # Append the command to remove temporary files to $cmds.
    eval cmds="\ "$cmds~\ $RM $delfiles\"
fi

# Add any objects from preloaded convenience libraries
if test -n "$dlprefiles"; then
    gentop="$output_objdir/${outputname}x"
    func_append generated " $gentop"

    func_extract_archives $gentop $dlprefiles
    func_append libobjs " $func_extract_archives_result"
    test "X$libobjs" = "X " && libobjs=
fi

save_ifs="$IFS"; IFS='~'
for cmd in $cmds; do
    IFS="$save_ifs"
    eval cmd="\ "$cmd\"
    $opt_silent || {
        func_quote_for_expand "$cmd"
        eval "func_echo $func_quote_for_expand_result"
    }
    $opt_dry_run || eval "$cmd" || {
        lt_exit=$?

        # Restore the uninstalled library and exit
        if test "$opt_mode" = relink; then
            ( cd "$output_objdir" && \
              $RM "${realname}T" && \
              $MV "${realname}U" "$realname" )
        fi

        exit $lt_exit
    }
done
IFS="$save_ifs"

# Restore the uninstalled library and exit
if test "$opt_mode" = relink; then
    $opt_dry_run || eval '(cd $output_objdir && $RM ${realname}T &&
$MV $realname ${realname}T && $MV ${realname}U $realname)' || exit $?

```

```

    if test -n "$convenience"; then
        if test -z "$whole_archive_flag_spec"; then
            func_show_eval '${RM}r "$gentop"'
        fi
    fi

    exit $EXIT_SUCCESS
fi

# Create links to the real library.
for linkname in $linknames; do
    if test "$realname" != "$linkname"; then
        func_show_eval '(cd "$output_objdir" && $RM "$linkname" &&
$LN_S "$realname" "$linkname")' 'exit $?'
    fi
done

# If -module or -export-dynamic was specified, set the dlname.
if test "$module" = yes || test "$export_dynamic" = yes; then
    # On all known operating systems, these are identical.
    dlname="$soname"
fi
fi
;;

obj)
    if test -n "$dlfiles$dlpfiles" || test "$dlself" != no; then
        func_warning "\`-dlopen' is ignored for objects"
    fi

    case " $deplibs" in
        *\ -l* | *\ -L*)
            func_warning "\`-l' and \`-L' are ignored for objects" ;;
    esac

    test -n "$rpath" && \
        func_warning "\`-rpath' is ignored for objects"

    test -n "$xrpath" && \
        func_warning "\`-R' is ignored for objects"

    test -n "$vinfo" && \
        func_warning "\`-version-info' is ignored for objects"

    test -n "$release" && \
        func_warning "\`-release' is ignored for objects"

    case $output in
        *.lo)
            test -n "$objs$old_deplibs" && \
                func_fatal_error "cannot build library object \`${output}' from
non-libtool objects"
        ;;
    esac

```

```

libobj=$output
func_lo2o "$libobj"
obj=${func_lo2o_result}
;;
*)
libobj=
obj="$output"
;;
esac

# Delete the old objects.
$opt_dry_run || $RM $obj $libobj

# Objects from convenience libraries. This assumes
# single-version convenience libraries. Whenever we create
# different ones for PIC/non-PIC, this we'll have to duplicate
# the extraction.
reload_conv_objs=
gentop=
# reload_cmds runs $LD directly, so let us get rid of
# -Wl from whole_archive_flag_spec and hope we can get by with
# turning comma into space..
wl=

if test -n "$convenience"; then
if test -n "$whole_archive_flag_spec"; then
eval tmp_whole_archive_flags=\("$whole_archive_flag_spec\"
reload_conv_objs=$reload_objs\ ` $ECHO
"$tmp_whole_archive_flags" | $SED 's|,| |g' `
else
gentop="$output_objdir/${obj}x"
func_append generated " $gentop"

func_extract_archives $gentop $convenience
reload_conv_objs="$reload_objs $func_extract_archives_result"
fi
fi

# If we're not building shared, we need to use non_pic_objs
test "$build_libtool_libs" != yes && libobjs="$non_pic_objects"

# Create the old-style object.
reload_objs="$objs$old_deplibs "` $ECHO "$libobjs" | $SP2NL |
$SED "/\.${libext}$/d; /\.lib$/d; $lo2o" | $NL2SP ` "$reload_conv_objs"
### testsuite: skip nested quoting test

output="$obj"
func_execute_cmds "$reload_cmds" 'exit $?'

# Exit if we aren't doing a library object file.
if test -z "$libobj"; then

```

```

if test -n "$gentop"; then
  func_show_eval '${RM}r "$gentop"'
fi

exit $EXIT_SUCCESS
fi

if test "$build_libtool_libs" != yes; then
if test -n "$gentop"; then
  func_show_eval '${RM}r "$gentop"'
fi

# Create an invalid libtool object if no PIC, so that we don't
# accidentally link it into a program.
# $show "echo timestamp > $libobj"
# $opt_dry_run || eval "echo timestamp > $libobj" || exit $?
exit $EXIT_SUCCESS
fi

if test -n "$pic_flag" || test "$pic_mode" != default; then
# Only do commands if we really have different PIC objects.
reload_objs="$libobjs $reload_conv_objs"
output="$libobj"
func_execute_cmds "$reload_cmds" 'exit $?'
fi

if test -n "$gentop"; then
func_show_eval '${RM}r "$gentop"'
fi

exit $EXIT_SUCCESS
;;

prog)
  case $host in
    *cygwin*) func_stripname '' '.exe' "$output"
              output=$func_stripname_result.exe;;
  esac
  test -n "$vinfo" && \
func_warning "\`-version-info' is ignored for programs"

  test -n "$release" && \
func_warning "\`-release' is ignored for programs"

  test "$preload" = yes \
    && test "$dlopen_support" = unknown \
    && test "$dlopen_self" = unknown \
    && test "$dlopen_self_static" = unknown && \
    func_warning "\`LT_INIT([dlopen])' not used. Assuming no dlopen
support."

  case $host in

```



```

    *--rhapsody* | *--darwin1.[012])
    # On Rhapsody replace the C library is the System framework
    compile_deplibs=`$ECHO " $compile_deplibs" | $SED 's/ -lc /
System.ltframework /'`
    finalize_deplibs=`$ECHO " $finalize_deplibs" | $SED 's/ -lc /
System.ltframework /'`
    ;;
    esac

    case $host in
    *--darwin*)
    # Don't allow lazy linking, it breaks C++ global constructors
    # But is supposedly fixed on 10.4 or later (yay!).
    if test "$tagname" = CXX ; then
        case ${MACOSX_DEPLOYMENT_TARGET-10.0} in
        10.[0123])
            func_append compile_command " ${wl}-bind_at_load"
            func_append finalize_command " ${wl}-bind_at_load"
            ;;
        esac
    fi
    # Time to change all our "foo.ltframework" stuff back to "--
framework foo"
    compile_deplibs=`$ECHO " $compile_deplibs" | $SED 's% \([^
$]*\)\.ltframework% -framework \1%g'`
    finalize_deplibs=`$ECHO " $finalize_deplibs" | $SED 's% \([^
$]*\)\.ltframework% -framework \1%g'`
    ;;
    esac

    # move library search paths that coincide with paths to not yet
    # installed libraries to the beginning of the library search
list
    new_libs=
    for path in $notinst_path; do
    case " $new_libs " in
    *" -L$path/$objdir "*) ;;
    *)
        case " $compile_deplibs " in
        *" -L$path/$objdir "*)
            func_append new_libs " -L$path/$objdir" ;;
        esac
        ;;
    esac
    done
    for deplib in $compile_deplibs; do
    case $deplib in
    -L*)
        case " $new_libs " in
        *" $deplib "*) ;;
        *) func_append new_libs " $deplib" ;;
        esac
    esac
    done

```

```

    esac
    ;;
*) func_append new_libs " $deplib" ;;
esac
done
compile_deplibs="$new_libs"

func_append compile_command " $compile_deplibs"
func_append finalize_command " $finalize_deplibs"

if test -n "$rpath$xrpath"; then
# If the user specified any rpath flags, then add them.
for libdir in $rpath $xrpath; do
    # This is the magic to use -rpath.
    case "$finalize_rpath " in
    *" $libdir ") ;;
    *) func_append finalize_rpath " $libdir" ;;
    esac
done
fi

# Now hardcode the library paths
rpath=
hardcode_libdirs=
for libdir in $compile_rpath $finalize_rpath; do
if test -n "$hardcode_libdir_flag_spec"; then
    func_replace_sysroot "$libdir"
    libdir=$func_replace_sysroot_result
    func_stripname '=' ' ' "$libdir"
    libdir=$func_stripname_result
    if test -n "$hardcode_libdir_separator"; then
        if test -z "$hardcode_libdirs"; then
            hardcode_libdirs="$libdir"
        else
            # Just accumulate the unique libdirs.
            case
$hardcode_libdir_separator$hardcode_libdirs$hardcode_libdir_separator
in
*" $hardcode_libdir_separator$libdir$hardcode_libdir_separator"*)
                ;;
                *)
                func_append hardcode_libdirs
"$hardcode_libdir_separator$libdir"
                ;;
            esac
        fi
    else
        # We only want to hardcode in an rpath if it isn't in the
        # default dlsearch path.
        func_normal_abspath "$libdir"

```

```

        libdir_norm=$func_normal_abspath_result
        case " $sys_lib_dlsearch_path " in
        *" $libdir_norm "*) ;;
        *) eval flag="\$hardcode_libdir_flag_spec\"
            rpath+=" $flag"
            ;;
        esac
    fi
elif test -n "$runpath_var"; then
    case "$perm_rpath " in
    *" $libdir "*) ;;
    *) func_append perm_rpath " $libdir" ;;
    esac
fi
case $host in
*-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-cegcc*)
    testbindir=`${ECHO} "$libdir" | ${SED} -e 's*/lib$*/bin*'`
    case :$dllsearchpath: in
    *:$libdir:*) ;;
    ::) dllsearchpath=$libdir;;
    *) func_append dllsearchpath ":$libdir";;
    esac
    case :$dllsearchpath: in
    *:$testbindir:*) ;;
    ::) dllsearchpath=$testbindir;;
    *) func_append dllsearchpath ":$testbindir";;
    esac
    ;;
esac
done
# Substitute the hardcoded libdirs into the rpath.
if test -n "$hardcode_libdir_separator" &&
test -n "$hardcode_libdirs"; then
libdir="$hardcode_libdirs"
eval rpath="\ $hardcode_libdir_flag_spec\"
fi
compile_rpath="$rpath"

rpath=
hardcode_libdirs=
for libdir in $finalize_rpath; do
if test -n "$hardcode_libdir_flag_spec"; then
    if test -n "$hardcode_libdir_separator"; then
        if test -z "$hardcode_libdirs"; then
            hardcode_libdirs="$libdir"
        else
            # Just accumulate the unique libdirs.
            case
$hardcode_libdir_separator$hardcode_libdirs$hardcode_libdir_separator
in
*" $hardcode_libdir_separator$libdir$hardcode_libdir_separator"*)

```

```

        ;;
        *)
            func_append hardcoded_libdirs
"$shardcode_libdir_separator$libdir"
        ;;
    esac
fi
else
    # We only want to hardcode in an rpath if it isn't in the
    # default dlsearch path.
    case " $sys_lib_dlsearch_path " in
    *" $libdir ") ;;
    *) eval flag="\$shardcode_libdir_flag_spec\"
        func_append rpath " $flag"
        ;;
    esac
fi
elif test -n "$runpath_var"; then
    case "$finalize_perm_rpath " in
    *" $libdir ") ;;
    *) func_append finalize_perm_rpath " $libdir" ;;
    esac
fi
done
# Substitute the hardcoded libdirs into the rpath.
if test -n "$shardcode_libdir_separator" &&
test -n "$shardcode_libdirs"; then
libdir="$shardcode_libdirs"
eval rpath="\$shardcode_libdir_flag_spec\"
fi
finalize_rpath="$rpath"

if test -n "$libobjs" && test "$build_old_libs" = yes; then
# Transform all the library objects into standard objects.
compile_command=`$ECHO "$compile_command" | $SP2NL | $SED "$1o2o"
| $NL2SP`
finalize_command=`$ECHO "$finalize_command" | $SP2NL | $SED
"$1o2o" | $NL2SP`
fi

func_generate_dlsyms "$outputname" "@PROGRAM@" "no"

# template prelinking step
if test -n "$prelink_cmds"; then
func_execute_cmds "$prelink_cmds" 'exit $?'
fi

wrappers_required=yes
case $host in
*cegcc* | *mingw32ce*)
    # Disable wrappers for cegcc and mingw32ce hosts, we are cross
    compiling anyway.

```

```

        wrappers_required=no
    ;;
    *cygwin* | *mingw* )
        if test "$build_libtool_libs" != yes; then
            wrappers_required=no
        fi
    ;;
    *)
        if test "$need_relink" = no || test "$build_libtool_libs" !=
yes; then
            wrappers_required=no
        fi
    ;;
esac
if test "$wrappers_required" = no; then
# Replace the output file specification.
compile_command=`$ECHO "$compile_command" | $SED
's%@OUTPUT@%' "$output" '%g'`
link_command="$compile_command$compile_rpath"

# We have no uninstalled library dependencies, so finalize right
now.
exit_status=0
func_show_eval "$link_command" 'exit_status=$?'

if test -n "$postlink_cmds"; then
    func_to_tool_file "$output"
    postlink_cmds=`func_echo_all "$postlink_cmds" | $SED -e
's%@OUTPUT@%' "$output" '%g' -e
's%@TOOL_OUTPUT@%' "$func_to_tool_file_result" '%g'`
    func_execute_cmds "$postlink_cmds" 'exit $?'
fi

# Delete the generated files.
if test -f "$output_objdir/${outputname}S.${objext}"; then
    func_show_eval '$RM "$output_objdir/${outputname}S.${objext}"'
fi

exit $exit_status
fi

if test -n "$compile_shlibpath$finalize_shlibpath"; then
    compile_command="$shlibpath_var=\" $compile_shlibpath$finalize_shl
ibpath\$$shlibpath_var\" $compile_command"
fi
if test -n "$finalize_shlibpath"; then
    finalize_command="$shlibpath_var=\" $finalize_shlibpath\$$shlibpat
h_var\" $finalize_command"
fi

compile_var=
finalize_var=

```

```

if test -n "$runpath_var"; then
if test -n "$perm_rpath"; then
  # We should set the runpath_var.
  rpath=
  for dir in $perm_rpath; do
    func_append rpath "$dir:"
  done
  compile_var="$runpath_var=\"\$rpath\$$runpath_var\" "
fi
if test -n "$finalize_perm_rpath"; then
  # We should set the runpath_var.
  rpath=
  for dir in $finalize_perm_rpath; do
    func_append rpath "$dir:"
  done
  finalize_var="$runpath_var=\"\$rpath\$$runpath_var\" "
fi
fi

if test "$no_install" = yes; then
# We don't need to create a wrapper script.
link_command="$compile_var$compile_command$compile_rpath"
# Replace the output file specification.
link_command=`$ECHO "$link_command" | $SED
's%@OUTPUT@%' "$output"'%g'\`
# Delete the old output file.
$opt_dry_run || $RM $output
# Link the executable and exit
func_show_eval "$link_command" 'exit $?'

if test -n "$postlink_cmds"; then
  func_to_tool_file "$output"
  postlink_cmds=`func_echo_all "$postlink_cmds" | $SED -e
's%@OUTPUT@%' "$output"'%g' -e
's%@TOOL_OUTPUT@%' "$func_to_tool_file_result"'%g'\`
  func_execute_cmds "$postlink_cmds" 'exit $?'
fi

exit $EXIT_SUCCESS
fi

if test "$hardcode_action" = relink; then
# Fast installation is not supported
link_command="$compile_var$compile_command$compile_rpath"
relink_command="$finalize_var$finalize_command$finalize_rpath"

func_warning "this platform does not like uninstalled shared
libraries"
func_warning "\`$output' will be relinked during installation"
else
if test "$fast_install" != no; then
  link_command="$finalize_var$compile_command$finalize_rpath"

```

```

        if test "$fast_install" = yes; then
            relink_command=`$ECHO
"$compile_var$compile_command$compile_rpath" | $SED
's%@OUTPUT@%\$progdire/\$file%g'\`
        else
            # fast_install is set to needless
            relink_command=
        fi
    else
        link_command="$compile_var$compile_command$compile_rpath"
        relink_command="$finalize_var$finalize_command$finalize_rpath"
    fi
fi

# Replace the output file specification.
link_command=`$ECHO "$link_command" | $SED
's%@OUTPUT@%'"$output_objdir/$outputname"'%g'\`

# Delete the old output files.
$opt_dry_run || $RM $output $output_objdir/$outputname
$output_objdir/lt-$outputname

func_show_eval "$link_command" 'exit $?'

if test -n "$postlink_cmds"; then
    func_to_tool_file "$output_objdir/$outputname"
    postlink_cmds=`func_echo_all "$postlink_cmds" | $SED -e
's%@OUTPUT@%'"$output_objdir/$outputname"'%g' -e
's%@TOOL_OUTPUT@%'"$func_to_tool_file_result"'%g'\`
    func_execute_cmds "$postlink_cmds" 'exit $?'
fi

# Now create the wrapper script.
func_verbose "creating $output"

# Quote the relink command for shipping.
if test -n "$relink_command"; then
    # Preserve any variables that may affect compiler behavior
    for var in $variables_saved_for_relink; do
        if eval test -z \"\${$var+set}\"; then
            relink_command="{ test -z \"\${$var+set}\" || $lt_unset $var
|| { $var=; export $var; }; }; $relink_command"
        elif eval var_value=\${$var}; test -z "$var_value"; then
            relink_command="$var=; export $var; $relink_command"
        else
            func_quote_for_eval "$var_value"
            relink_command="$var=$func_quote_for_eval_result; export
$var; $relink_command"
        fi
    done
    relink_command="(cd `pwd`; $relink_command)"

```

```

    relink_command=`$ECHO "$relink_command" | $SED
"$sed_quote_subst"`
    fi

    # Only actually do things if not in dry run mode.
    $opt_dry_run || {
    # win32 will think the script is a binary if it has
    # a .exe suffix, so we strip it off here.
    case $output in
        *.exe) func_stripname '' '.exe' "$output"
            output=$(func_stripname_result) ;;
    esac
    # test for cygwin because mv fails w/o .exe extensions
    case $host in
        *cygwin*)
            exeext=.exe
            func_stripname '' '.exe' "$outputname"
            outputname=$(func_stripname_result) ;;
        *) exeext= ;;
    esac
    case $host in
        *cygwin* | *mingw* )
            func_dirname_and_basename "$output" "" "."
            output_name=$(func_basename_result)
            output_path=$(func_dirname_result)
            cwrappersource="$output_path/$objdir/lt-$output_name.c"
            cwrapper="$output_path/$output_name.exe"
            $RM $cwrappersource $cwrapper
            trap "$RM $cwrappersource $cwrapper; exit $EXIT_FAILURE" 1 2

```

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```

    func_emit_cwrappersource_src > $cwrappersource

    # The wrapper executable is built using the $host compiler,
    # because it contains $host paths and files. If cross-
    # compiling, it, like the target executable, must be
    # executed on the $host or under an emulation environment.
    $opt_dry_run || {
        $LTCC $LTCFLAGS -o $cwrapper $cwrappersource
        $STRIP $cwrapper
    }

    # Now, create the wrapper script for func_source use:
    func_ltwrapper_scriptname $cwrapper
    $RM $func_ltwrapper_scriptname_result
    trap "$RM $func_ltwrapper_scriptname_result; exit
$EXIT_FAILURE" 1 2 15
    $opt_dry_run || {
        # note: this script will not be executed, so do not chmod.
        if test "x$build" = "x$host" ; then
            $cwrapper --lt-dump-script >
$func_ltwrapper_scriptname_result

```



```

        else
        func_emit_wrapper no > $func_ltwrapper_scriptname_result
        fi
    }
    ;;
* )
    $RM $output
    trap "$RM $output; exit $EXIT_FAILURE" 1 2 15

    func_emit_wrapper no > $output
    chmod +x $output
    ;;
esac
}
exit $EXIT_SUCCESS
;;
esac

# See if we need to build an old-fashioned archive.
for oldlib in $oldlibs; do

    if test "$build_libtool_libs" = convenience; then
        oldobjs="$libobjs_save $symfileobj"
        addlibs="$convenience"
        build_libtool_libs=no
    else
        if test "$build_libtool_libs" = module; then
            oldobjs="$libobjs_save"
            build_libtool_libs=no
        else
            oldobjs="$old_deplibs $non_pic_objects"
            if test "$preload" = yes && test -f "$symfileobj"; then
                func_append oldobjs " $symfileobj"
            fi
        fi
        addlibs="$old_convenience"
    fi

    if test -n "$addlibs"; then
        gentop="$output_objdir/${outputname}x"
        func_append generated " $gentop"

        func_extract_archives $gentop $addlibs
        func_append oldobjs " $func_extract_archives_result"
    fi

    # Do each command in the archive commands.
    if test -n "$old_archive_from_new_cmds" && test
"$build_libtool_libs" = yes; then
        cmds=$old_archive_from_new_cmds
    else

```

```

# Add any objects from preloaded convenience libraries
if test -n "$dlprefiles"; then
    gentop="$output_objdir/${outputname}x"
    func_append generated " $gentop"

    func_extract_archives $gentop $dlprefiles
    func_append oldobjs " $func_extract_archives_result"
fi

# POSIX demands no paths to be encoded in archives. We have
# to avoid creating archives with duplicate basenames if we
# might have to extract them afterwards, e.g., when creating a
# static archive out of a convenience library, or when linking
# the entirety of a libtool archive into another (currently
# not supported by libtool).
if (for obj in $oldobjs
    do
        func_basename "$obj"
        $ECHO "$func_basename_result"
        done | sort | sort -uc >/dev/null 2>&1); then
    :
else
    echo "copying selected object files to avoid basename
conflicts..."
    gentop="$output_objdir/${outputname}x"
    func_append generated " $gentop"
    func_mkdir_p "$gentop"
    save_oldobjs=$oldobjs
    oldobjs=
    counter=1
    for obj in $save_oldobjs
    do
        func_basename "$obj"
        objbase="$func_basename_result"
        case " $oldobjs " in
            " ") oldobjs=$obj ;;
            *[\ /]"$objbase "*)
                while ;; do
                    # Make sure we don't pick an alternate name that also
                    # overlaps.
                    newobj=lt$counter-$objbase
                    func_arith $counter + 1
                    counter=$func_arith_result
                    case " $oldobjs " in
                        *[\ /]"$newobj "*) ;;
                        *) if test ! -f "$gentop/$newobj"; then break; fi ;;
                    esac
                done
                func_show_eval "ln $obj $gentop/$newobj || cp $obj
$gentop/$newobj"
                func_append oldobjs " $gentop/$newobj"
            ;;
        esac
    done
fi

```

```

        *) func_append oldobjs " $obj" ;;
    esac
done
fi
func_to_tool_file "$oldlib" func_convert_file_msys_to_w32
tool_oldlib=$func_to_tool_file_result
eval cmds=\"$old_archive_cmds\"

func_len " $cmds"
len=$func_len_result
if test "$len" -lt "$max_cmd_len" || test "$max_cmd_len" -le -1;
then
    cmds=$old_archive_cmds
elif test -n "$archiver_list_spec"; then
    func_verbose "using command file archive linking..."
    for obj in $oldobjs
    do
        func_to_tool_file "$obj"
        $ECHO "$func_to_tool_file_result"
        done > $output_objdir/$libname.libcmd
        func_to_tool_file "$output_objdir/$libname.libcmd"
        oldobjs=" $archiver_list_spec$func_to_tool_file_result"
        cmds=$old_archive_cmds
    else
        # the command line is too long to link in one step, link in
parts
        func_verbose "using piecewise archive linking..."
        save_RANLIB=$RANLIB
        RANLIB=:
        objlist=
        concat_cmds=
        save_oldobjs=$oldobjs
        oldobjs=
        # Is there a better way of finding the last object in the list?
        for obj in $save_oldobjs
        do
            last_oldobj=$obj
        done
        eval test_cmds=\"$old_archive_cmds\"
        func_len " $test_cmds"
        len0=$func_len_result
        len=$len0
        for obj in $save_oldobjs
        do
            func_len " $obj"
            func_arith $len + $func_len_result
            len=$func_arith_result
            func_append objlist " $obj"
            if test "$len" -lt "$max_cmd_len"; then
                :
            else
                # the above command should be used before it gets too long

```

```

        oldobjs=$objlist
        if test "$obj" = "$last_oldobj" ; then
        RANLIB=$save_RANLIB
        fi
        test -z "$concat_cmds" || concat_cmds=$concat_cmds~
        eval concat_cmds="\${concat_cmds}$old_archive_cmds\"
        objlist=
        len=$len0
        fi
    done
    RANLIB=$save_RANLIB
    oldobjs=$objlist
    if test "X$oldobjs" = "X" ; then
        eval cmds="\${concat_cmds}\"
    else
        eval cmds="\${concat_cmds}~\${old_archive_cmds}\"
    fi
fi
fi
func_execute_cmds "$cmds" 'exit $?'
done

test -n "$generated" && \
    func_show_eval "${RM}r$generated"

# Now create the libtool archive.
case $output in
*.la)
    old_library=
    test "$build_old_libs" = yes && old_library="$libname.$libext"
    func_verbose "creating $output"

    # Preserve any variables that may affect compiler behavior
    for var in $variables_saved_for_relink; do
    if eval test -z "\${$var+set}\"; then
        relink_command="{ test -z "\${$var+set}\" || $lt_unset $var ||
{ $var=; export $var; }; }; $relink_command"
        elif eval var_value=\${$var}; test -z "$var_value"; then
            relink_command="$var=; export $var; $relink_command"
        else
            func_quote_for_eval "$var_value"
            relink_command="$var=${func_quote_for_eval_result}; export $var;
$relink_command"
        fi
    done
    # Quote the link command for shipping.
    relink_command="(cd `pwd`; $SHELL $progpash $preserve_args --
mode=relink $libtool_args @inst_prefix_dir)"
    relink_command=`$ECHO "$relink_command" | $SED
"$sed_quote_subst"`
    if test "$hardcode_automatic" = yes ; then
        relink_command=

```

```

fi

# Only create the output if not a dry run.
$opt_dry_run || {
for installed in no yes; do
    if test "$installed" = yes; then
        if test -z "$install_libdir"; then
            break
        fi
        output="$output_objdir/$outputname"i
        # Replace all uninstalled libtool libraries with the
installed ones
        newdependency_libs=
        for deplib in $dependency_libs; do
            case $deplib in
                *.la)
                    func_basename "$deplib"
                    name="$func_basename_result"
                    func_resolve_sysroot "$deplib"
                    eval libdir=`${SED} -n -e 's/^libdir=\.*)$/\1/p'
$func_resolve_sysroot_result`
                    test -z "$libdir" && \
                        func_fatal_error "\`$deplib' is not a valid libtool
archive"
                    func_append newdependency_libs "
${lt_sysroot:+}$libdir/$name"
                    ;;
                -L*)
                    func_stripname -L '' "$deplib"
                    func_replace_sysroot "$func_stripname_result"
                    func_append newdependency_libs " -
L$func_replace_sysroot_result"
                    ;;
                -R*)
                    func_stripname -R '' "$deplib"
                    func_replace_sysroot "$func_stripname_result"
                    func_append newdependency_libs " -
R$func_replace_sysroot_result"
                    ;;
                *) func_append newdependency_libs " $deplib" ;;
            esac
        done
        dependency_libs="$newdependency_libs"
        newdlfiles=

        for lib in $dlfiles; do
            case $lib in
                *.la)
                    func_basename "$lib"
                    name="$func_basename_result"
                    eval libdir=`${SED} -n -e 's/^libdir=\.*)$/\1/p' $lib`
                    test -z "$libdir" && \

```

```

        func_fatal_error "`$lib' is not a valid libtool archive"
    func_append newdlfiles " ${lt_sysroot:+}$libdir/$name"
;;
    *) func_append newdlfiles " $lib" ;;
esac
done
dlfiles="$newdlfiles"
newdlprefiles=
for lib in $dlprefiles; do
    case $lib in
        *.la)
            # Only pass preopened files to the pseudo-archive (for
            # eventual linking with the app. that links it) if we
            # didn't already link the preopened objects directly into
            # the library:
            func_basename "$lib"
            name="$func_basename_result"
            eval libdir=`${SED} -n -e 's/^libdir=\.(\.*)$/\1/p' $lib`
            test -z "$libdir" && \
                func_fatal_error "`$lib' is not a valid libtool archive"
            func_append newdlprefiles " ${lt_sysroot:+}$libdir/$name"
        ;;
    esac
done
dlprefiles="$newdlprefiles"
else
newdlfiles=
for lib in $dlfiles; do
    case $lib in
        [\\/] * | [A-Za-z]:[\\/] *) abs="$lib" ;;
    *) abs=`pwd`"/$lib" ;;
    esac
    func_append newdlfiles " $abs"
done
dlfiles="$newdlfiles"
newdlprefiles=
for lib in $dlprefiles; do
    case $lib in
        [\\/] * | [A-Za-z]:[\\/] *) abs="$lib" ;;
    *) abs=`pwd`"/$lib" ;;
    esac
    func_append newdlprefiles " $abs"
done
dlprefiles="$newdlprefiles"
fi
$RM $output
# place dlname in correct position for cygwin
# In fact, it would be nice if we could use this code for all
target
# systems that can't hard-code library paths into their
executables

```

```

        # and that have no shared library path variable independent of
PATH,
        # but it turns out we can't easily determine that from
inspecting
        # libtool variables, so we have to hard-code the OSs to which
it
        # applies here; at the moment, that means platforms that use
the PE
        # object format with DLL files.  See the long comment at the
top of
        # tests/bindir.at for full details.
tdlname=$dlname
case $host,$output,$installed,$module,$dlname in
    *cygwin*,*lai,yes,no,*.dll | *mingw*,*lai,yes,no,*.dll |
*cegcc*,*lai,yes,no,*.dll)
        # If a -bindir argument was supplied, place the dll there.
        if test "x$bindir" != x ;
        then
            func_relative_path "$install_libdir" "$bindir"
            tdlname=$func_relative_path_result$dlname
        else
            # Otherwise fall back on heuristic.
            tdlname=../bin/$dlname
        fi
        ;;
    esac
    $ECHO > $output "\
# $outputname - a libtool library file
# Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION
#
# Please DO NOT delete this file!
# It is necessary for linking the library.

# The name that we can dlopen(3).
dlname='$tdlname'

# Names of this library.
library_names='$library_names'

# The name of the static archive.
old_library='$old_library'

# Linker flags that can not go in dependency_libs.
inherited_linker_flags='$new_inherited_linker_flags'

# Libraries that this one depends upon.
dependency_libs='$dependency_libs'

# Names of additional weak libraries provided by this library
weak_library_names='$weak_libs'

# Version information for $libname.

```

```

current=$current
age=$age
revision=$revision

# Is this an already installed library?
installed=$installed

# Should we warn about portability when linking against -modules?
shouldnotlink=$module

# Files to dlopen/dlpreopen
dlopen='$dlfiles'
dlpreopen='$dlprefiles'

# Directory that this library needs to be installed in:
libdir='$install_libdir'
    if test "$installed" = no && test "$need_relink" = yes; then
        $ECHO >> $output "\
relink_command=\""$relink_command\"\"
    fi
done
}

# Do a symbolic link so that the libtool archive can be found in
# LD_LIBRARY_PATH before the program is installed.
func_show_eval '( cd "$output_objdir" && $RM "$outputname" &&
$LN_S "../$outputname" "$outputname" )' 'exit $?'
;;
esac
exit $EXIT_SUCCESS
}

{ test "$opt_mode" = link || test "$opt_mode" = relink; } &&
    func_mode_link ${1+"$@"}

# func_mode_uninstall arg...
func_mode_uninstall ()
{
    $opt_debug
    RM="$nonopt"
    files=
    rmforce=
    exit_status=0

    # This variable tells wrapper scripts just to set variables rather
    # than running their programs.
    libtool_install_magic="$magic"

    for arg
    do
        case $arg in

```



```

    -f) func_append RM " $arg"; rmforce=yes ;;
    -*) func_append RM " $arg" ;;
    *) func_append files " $arg" ;;
  esac
done

test -z "$RM" && \
  func_fatal_help "you must specify an RM program"

rmdirs=

for file in $files; do
  func_dirname "$file" "" "."
  dir="$func_dirname_result"
  if test "X$dir" = X.; then
    odir="$objdir"
  else
    odir="$dir/$objdir"
  fi
  func_basename "$file"
  name="$func_basename_result"
  test "$opt_mode" = uninstall && odir="$dir"

  # Remember odir for removal later, being careful to avoid
duplicates
  if test "$opt_mode" = clean; then
    case " $rmdirs " in
      *" $odir ") ;;
      *) func_append rmdirs " $odir" ;;
    esac
  fi

  # Don't error if the file doesn't exist and rm -f was used.
  if { test -L "$file"; } >/dev/null 2>&1 ||
    { test -h "$file"; } >/dev/null 2>&1 ||
    test -f "$file"; then
    :
  elif test -d "$file"; then
    exit_status=1
    continue
  elif test "$rmforce" = yes; then
    continue
  fi

  rmfiles="$file"

  case $name in
    *.la)
      # Possibly a libtool archive, so verify it.
      if func_lalib_p "$file"; then
        func_source $dir/$name

```

```

# Delete the libtool libraries and symlinks.
for n in $library_names; do
  func_append rmfiles " $odir/$n"
done
test -n "$old_library" && func_append rmfiles "
$odir/$old_library"

case "$opt_mode" in
clean)
  case " $library_names " in
*" $dlname ") ;;
*) test -n "$dlname" && func_append rmfiles " $odir/$dlname"
;;

  esac
  test -n "$libdir" && func_append rmfiles " $odir/$name
$odir/${name}i"
  ;;
uninstall)
  if test -n "$library_names"; then
    # Do each command in the postuninstall commands.
    func_execute_cmds "$postuninstall_cmds" 'test "$rmforce" =
yes || exit_status=1'
    fi

    if test -n "$old_library"; then
      # Do each command in the old_postuninstall commands.
      func_execute_cmds "$old_postuninstall_cmds" 'test
"$rmforce" = yes || exit_status=1'
      fi
    # FIXME: should reinstall the best remaining shared library.
    ;;
  esac
fi
;;

*.lo)
# Possibly a libtool object, so verify it.
if func_lalib_p "$file"; then

  # Read the .lo file
  func_source $dir/$name

  # Add PIC object to the list of files to remove.
  if test -n "$pic_object" &&
    test "$pic_object" != none; then
    func_append rmfiles " $dir/$pic_object"
  fi

  # Add non-PIC object to the list of files to remove.
  if test -n "$non_pic_object" &&
    test "$non_pic_object" != none; then
    func_append rmfiles " $dir/$non_pic_object"

```

```

    fi
fi
;;

*)
if test "$opt_mode" = clean ; then
    noexename=$name
    case $file in
    *.exe)
        func_stripname '' '.exe' "$file"
        file=$func_stripname_result
        func_stripname '' '.exe' "$name"
        noexename=$func_stripname_result
        # $file with .exe has already been added to rmfiles,
        # add $file without .exe
        func_append rmfiles " $file"
        ;;
    esac
    # Do a test to see if this is a libtool program.
    if func_ltwrapper_p "$file"; then
        if func_ltwrapper_executable_p "$file"; then
            func_ltwrapper_scriptname "$file"
            relink_command=
            func_source $func_ltwrapper_scriptname_result
            func_append rmfiles " $func_ltwrapper_scriptname_result"
        else
            relink_command=
            func_source $dir/$noexename
        fi

        # note $name still contains .exe if it was in $file
        originally
        # as does the version of $file that was added into $rmfiles
        func_append rmfiles " $odir/$name $odir/${name}S.${objext}"
        if test "$fast_install" = yes && test -n "$relink_command";
    then
        func_append rmfiles " $odir/lt-$name"
        fi
        if test "X$noexename" != "X$name" ; then
            func_append rmfiles " $odir/lt-{$noexename}.c"
        fi
    fi
fi
;;
esac
func_show_eval "$RM $rmfiles" 'exit_status=1'
done

# Try to remove the ${objdir}s in the directories where we deleted
files
for dir in $rmdirs; do
    if test -d "$dir"; then

```

```

        func_show_eval "rmdir $dir >/dev/null 2>&1"
        fi
    done

    exit $exit_status
}

{ test "$opt_mode" = uninstall || test "$opt_mode" = clean; } &&
    func_mode_uninstall ${1+"$@"}

test -z "$opt_mode" && {
    help="$generic_help"
    func_fatal_help "you must specify a MODE"
}

test -z "$exec_cmd" && \
    func_fatal_help "invalid operation mode \`$opt_mode'"

if test -n "$exec_cmd"; then
    eval exec "$exec_cmd"
    exit $EXIT_FAILURE
fi

exit $exit_status

# The TAGs below are defined such that we never get into a situation
# in which we disable both kinds of libraries.  Given conflicting
# choices, we go for a static library, that is the most portable,
# since we can't tell whether shared libraries were disabled because
# the user asked for that or because the platform doesn't support
# them.  This is particularly important on AIX, because we don't
# support having both static and shared libraries enabled at the same
# time on that platform, so we default to a shared-only configuration.
# If a disable-shared tag is given, we'll fallback to a static-only
# configuration.  But we'll never go from static-only to shared-only.

# ### BEGIN LIBTOOL TAG CONFIG: disable-shared
build_libtool_libs=no
build_old_libs=yes
# ### END LIBTOOL TAG CONFIG: disable-shared

# ### BEGIN LIBTOOL TAG CONFIG: disable-static
build_old_libs=`case $build_libtool_libs in yes) echo no;; *) echo
yes;; esac`
# ### END LIBTOOL TAG CONFIG: disable-static

# Local Variables:
# mode:shell-script
# sh-indentation:2
# End:
# vi:sw=2

```

File = ltmain.sh.~1~

```
# libtool (GNU libtool) 2.4.2
# Written by Gordon Matzigkeit <gord@gnu.ai.mit.edu>, 1996

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# 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

# Usage: $progname [OPTION]... [MODE-ARG]...
#
# Provide generalized library-building support services.
#
#       --config                show all configuration variables
#       --debug                enable verbose shell tracing
#  -n, --dry-run              display commands without modifying any
files
#       --features              display basic configuration information
and exit
#       --mode=MODE            use operation mode MODE
#       --preserve-dup-deps    don't remove duplicate dependency
libraries
```

```

#      --quiet, --silent      don't print informational messages
#      --no-quiet, --no-silent
#                                print informational messages (default)
#      --no-warn              don't display warning messages
#      --tag=TAG              use configuration variables from tag TAG
#      -v, --verbose          print more informational messages than
default
#      --no-verbose           don't print the extra informational
messages
#      --version              print version information
#      -h, --help, --help-all  print short, long, or detailed help
message
#
# MODE must be one of the following:
#
#      clean                  remove files from the build directory
#      compile                compile a source file into a libtool
object
#      execute                automatically set library path, then run
a program
#      finish                 complete the installation of libtool
libraries
#      install                install libraries or executables
#      link                   create a library or an executable
#      uninstall              remove libraries from an installed
directory
#
# MODE-ARGS vary depending on the MODE.  When passed as first option,
# `--mode=MODE' may be abbreviated as `MODE' or a unique abbreviation
of that.
# Try `$progname --help --mode=MODE' for a more detailed description
of MODE.
#
# When reporting a bug, please describe a test case to reproduce it
and
# include the following information:
#
#      host-triplet:          $host
#      shell:                 $SHELL
#      compiler:              $LTC
#      compiler flags:        $LTCFLAGS
#      linker:                $LD (gnu? $with_gnu_ld)
#      $progname:             (GNU libtool) 2.4.2
#      automake:              $automake_version
#      autoconf:              $autoconf_version
#
# Report bugs to <bug-libtool@gnu.org>.
# GNU libtool home page: <http://www.gnu.org/software/libtool/>.
# General help using GNU software: <http://www.gnu.org/gethelp/>.

```

```

PROGRAM=libtool
PACKAGE=libtool

```

```

VERSION=2.4.2
TIMESTAMP=""
package_revision=1.3337

# Be Bourne compatible
if test -n "${ZSH_VERSION+set}" && (emulate sh) >/dev/null 2>&1; then
  emulate sh
  NULLCMD=:
  # Zsh 3.x and 4.x performs word splitting on ${1+"$@"}, which
  # is contrary to our usage.  Disable this feature.
  alias -g '${1+"$@"}'='"$@"'
  setopt NO_GLOB_SUBST
else
  case `(set -o) 2>/dev/null` in *posix*) set -o posix;; esac
fi
BIN_SH=xpg4; export BIN_SH # for Tru64
DUALCASE=1; export DUALCASE # for MKS sh

# A function that is used when there is no print builtin or printf.
func_fallback_echo ()
{
  eval 'cat <<_LTECHO_EOF'
  $1
  _LTECHO_EOF'
}

# NLS nuisances: We save the old values to restore during execute
mode.
lt_user_locale=
lt_safe_locale=
for lt_var in LANG LANGUAGE LC_ALL LC_CTYPE LC_COLLATE LC_MESSAGES
do
  eval "if test \"\${$lt_var+set}\" = set; then
    save_$lt_var=\${$lt_var}
    $lt_var=C
    export $lt_var
    lt_user_locale=\"\$lt_var=\\\$save_\$lt_var; \$lt_user_locale\"
    lt_safe_locale=\"\$lt_var=C; \$lt_safe_locale\"
  fi"
done
LC_ALL=C
LANGUAGE=C
export LANGUAGE LC_ALL

$lt_unset CDPATH

# Work around backward compatibility issue on IRIX 6.5. On IRIX 6.4+,
sh
# is ksh but when the shell is invoked as "sh" and the current value
of
# the _XPG environment variable is not equal to 1 (one), the special

```

```

# positional parameter $0, within a function call, is the name of the
# function.
progpach="$0"

: ${CP="cp -f"}
test "${ECHO+set}" = set || ECHO=${as_echo-'printf %s\n'}
: ${EGREP="egrep"}
: ${FGREP="fgrep"}
: ${GREP="grep"}
: ${LN_S="ln -s"}
: ${MAKE="make"}
: ${MKDIR="mkdir"}
: ${MV="mv -f"}
: ${RM="rm -f"}
: ${SED="sed"}
: ${SHELL="${CONFIG_SHELL-/bin/sh}"}
: ${Xsed="$SED -e 1s/^X//"}

# Global variables:
EXIT_SUCCESS=0
EXIT_FAILURE=1
EXIT_MISMATCH=63 # $? = 63 is used to indicate version mismatch to
missing.
EXIT_SKIP=77     # $? = 77 is used to indicate a skipped test to
automake.

exit_status=$EXIT_SUCCESS

# Make sure IFS has a sensible default
lt_nl='
'
IFS="      $lt_nl"

dirname="s,/[^/]*$,,"
basename="s,^.*/,,"

# func_dirname file append nondir_replacement
# Compute the dirname of FILE.  If nonempty, add APPEND to the result,
# otherwise set result to NONDIR_REPLACEMENT.
func_dirname ()
{
    func_dirname_result=`$ECHO "${1}" | $SED "$dirname" `
    if test "X$func_dirname_result" = "X${1}"; then
        func_dirname_result="${3}"
    else
        func_dirname_result="$func_dirname_result${2}"
    fi
} # func_dirname may be replaced by extended shell implementation

```



```

# func_basename file
func_basename ()
{
    func_basename_result=`$ECHO "${1}" | $SED "$basename"`
} # func_basename may be replaced by extended shell implementation

# func_dirname_and_basename file append nondir_replacement
# perform func_basename and func_dirname in a single function
# call:
#   dirname: Compute the dirname of FILE. If nonempty,
#             add APPEND to the result, otherwise set result
#             to NONDIR_REPLACEMENT.
#             value returned in "$func_dirname_result"
#   basename: Compute filename of FILE.
#             value returned in "$func_basename_result"
# Implementation must be kept synchronized with func_dirname
# and func_basename. For efficiency, we do not delegate to
# those functions but instead duplicate the functionality here.
func_dirname_and_basename ()
{
    # Extract subdirectory from the argument.
    func_dirname_result=`$ECHO "${1}" | $SED -e "$dirname"`
    if test "X$func_dirname_result" = "X${1}"; then
        func_dirname_result="${3}"
    else
        func_dirname_result="$func_dirname_result${2}"
    fi
    func_basename_result=`$ECHO "${1}" | $SED -e "$basename"`
} # func_dirname_and_basename may be replaced by extended shell
implementation

# func_stripname prefix suffix name
# strip PREFIX and SUFFIX off of NAME.
# PREFIX and SUFFIX must not contain globbing or regex special
# characters, hashes, percent signs, but SUFFIX may contain a leading
# dot (in which case that matches only a dot).
# func_stripname prefix suffix name
func_stripname ()
{
    case ${2} in
        .*) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%\\\\\\${2}\\$%%"`;;
        *) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%${2}\\$%%"`;;
    esac
} # func_stripname may be replaced by extended shell implementation

# These SED scripts presuppose an absolute path with a trailing slash.
pathcar='s,^\([^/]*\)$.*,\1,'

```

```

pathcdr='s,^[^/]*,, '
removedotparts=':dotsl
                s@/\./@/@g
                t dotsl
                s,/\..$,/, '
collapseslashes='s@/\{1,\}@/@g'
finalslash='s,/*$,/, '

# func_normal_abspath PATH
# Remove doubled-up and trailing slashes, "." path components,
# and cancel out any ".." path components in PATH after making
# it an absolute path.
#         value returned in "$func_normal_abspath_result"
func_normal_abspath ()
{
    # Start from root dir and reassemble the path.
    func_normal_abspath_result=
    func_normal_abspath_tpath=$1
    func_normal_abspath_altnamespace=
    case $func_normal_abspath_tpath in
        "")
            # Empty path, that just means $cwd.
            func_stripname '' '/' "`pwd`"
            func_normal_abspath_result=$func_stripname_result
            return
        ;;
        # The next three entries are used to spot a run of precisely
        # two leading slashes without using negated character classes;
        # we take advantage of case's first-match behaviour.
        ///*)
            # Unusual form of absolute path, do nothing.
        ;;
        //*)
            # Not necessarily an ordinary path; POSIX reserves leading '//'
            # and for example Cygwin uses it to access remote file shares
            # over CIFS/SMB, so we conserve a leading double slash if found.
            func_normal_abspath_altnamespace=/
        ;;
        /*)
            # Absolute path, do nothing.
        ;;
        *)
            # Relative path, prepend $cwd.
            func_normal_abspath_tpath=`pwd`/$func_normal_abspath_tpath
        ;;
    esac
    # Cancel out all the simple stuff to save iterations. We also want
    # the path to end with a slash for ease of parsing, so make sure
    # there is one (and only one) here.
    func_normal_abspath_tpath=`$ECHO "$func_normal_abspath_tpath" | $SED
\
        -e "$removedotparts" -e "$collapseslashes" -e "$finalslash"`

```

```

while ;; do
  # Processed it all yet?
  if test "$func_normal_abspath_tpath" = / ; then
    # If we ascended to the root using ".." the result may be empty
now.
    if test -z "$func_normal_abspath_result" ; then
      func_normal_abspath_result=/
    fi
    break
  fi
  func_normal_abspath_tcomponent=`$ECHO "$func_normal_abspath_tpath" |
| $SED \
  -e "$pathcar"`
  func_normal_abspath_tpath=`$ECHO "$func_normal_abspath_tpath" |
$SED \
  -e "$pathcdr"`
  # Figure out what to do with it
  case $func_normal_abspath_tcomponent in
    "")
      # Trailing empty path component, ignore it.
      ;;
    ..)
      # Parent dir; strip last assembled component from result.
      func_dirname "$func_normal_abspath_result"
      func_normal_abspath_result=$func_dirname_result
      ;;
    *)
      # Actual path component, append it.

func_normal_abspath_result=$func_normal_abspath_result/$func_normal_ab
spath_tcomponent
      ;;
  esac
done
# Restore leading double-slash if one was found on entry.

func_normal_abspath_result=$func_normal_abspath_altnamespace$func_norm
al_abspath_result
}

# func_relative_path SRCDIR DSTDIR
# generates a relative path from SRCDIR to DSTDIR, with a trailing
# slash if non-empty, suitable for immediately appending a filename
# without needing to append a separator.
# value returned in "$func_relative_path_result"
func_relative_path ()
{
  func_relative_path_result=
  func_normal_abspath "$1"
  func_relative_path_tlibdir=$func_normal_abspath_result
  func_normal_abspath "$2"
  func_relative_path_tbindir=$func_normal_abspath_result

```

```

# Ascend the tree starting from libdir
while ;; do
  # check if we have found a prefix of bindir
  case $func_relative_path_tbindir in
    $func_relative_path_tlibdir)
      # found an exact match
      func_relative_path_tcancelled=
      break
      ;;
    $func_relative_path_tlibdir*)
      # found a matching prefix
      func_stripname "$func_relative_path_tlibdir" ''
"$func_relative_path_tbindir"
      func_relative_path_tcancelled=$func_stripname_result
      if test -z "$func_relative_path_result"; then
        func_relative_path_result=.
      fi
      break
      ;;
  *)
    func_dirname $func_relative_path_tlibdir
    func_relative_path_tlibdir=${func_dirname_result}
    if test "x$func_relative_path_tlibdir" = x ; then
      # Have to descend all the way to the root!
      func_relative_path_result=../$func_relative_path_result
      func_relative_path_tcancelled=$func_relative_path_tbindir
      break
    fi
    func_relative_path_result=../$func_relative_path_result
    ;;
  esac
done

# Now calculate path; take care to avoid doubling-up slashes.
func_stripname '/' '/' "$func_relative_path_result"
func_relative_path_result=$func_stripname_result
func_stripname '/' '/' "$func_relative_path_tcancelled"
if test "x$func_stripname_result" != x ; then

func_relative_path_result=${func_relative_path_result}/${func_stripnam
e_result}
fi

# Normalisation. If bindir is libdir, return empty string,
# else relative path ending with a slash; either way, target
# file name can be directly appended.
if test ! -z "$func_relative_path_result"; then
  func_stripname './' '' "$func_relative_path_result/"
  func_relative_path_result=$func_stripname_result
fi
}

```

```

# The name of this program:
func_dirname_and_basename "$progpath"
progname=$func_basename_result

# Make sure we have an absolute path for reexecution:
case $progpath in
  [\\/] * | [A-Za-z]: \\ * ) ;;
  * [\\/] * )
    progdir=$func_dirname_result
    progdir=`cd "$progdir" && pwd`
    progpath="$progdir/$progname"
    ;;
  *)
    save_IFS="$IFS"
    IFS=${PATH_SEPARATOR:-;}
    for progdir in $PATH; do
      IFS="$save_IFS"
      test -x "$progdir/$progname" && break
    done
    IFS="$save_IFS"
    test -n "$progdir" || progdir=`pwd`
    progpath="$progdir/$progname"
    ;;
esac

# Sed substitution that helps us do robust quoting.  It backslashifies
# metacharacters that are still active within double-quoted strings.
Xsed="${SED}" -e 1s/^X//
sed_quote_subst='s/\([\"$\\]\)/\\\1/g'

# Same as above, but do not quote variable references.
double_quote_subst='s/\([\"`\\]\)/\\\1/g'

# Sed substitution that turns a string into a regex matching for the
# string literally.
sed_make_literal_regex='s,[^$\\*\/],\\&,g'

# Sed substitution that converts a w32 file name or path
# which contains forward slashes, into one that contains
# (escaped) backslashes.  A very naive implementation.
lt_sed_naive_backslashify='s|\\\\\\*|\\\\|g;s|/|\\\\|g;s|\\\\|\\\\\\\\|g'

# Re-`\\` parameter expansions in output of double_quote_subst that
# were
# `\\`-ed in input to the same.  If an odd number of `\\` preceded a '$'
# in input to double_quote_subst, that '$' was protected from
# expansion.
# Since each input `\\` is now two `\\`s, look for any number of runs of
# four `\\`s followed by two `\\`s and then a '$'.  `\\` that '$'.
bs=`\\`
bs2=`\\\\`

```

```

bs4='\\\\\\\\\\\\'
dollar='\$'
sed_double_backslash="\
s/$bs4/&\\
/g
s/^\$bs2$dollar/$bs&/
s/\\([^\$bs]\\\\)\$bs2$dollar/\\1\$bs2$bs$dollar/g
s/\\n//g"

# Standard options:
opt_dry_run=false
opt_help=false
opt_quiet=false
opt_verbose=false
opt_warning=:

# func_echo arg...
# Echo program name prefixed message, along with the current mode
# name if it has been set yet.
func_echo ()
{
    $ECHO "$progname: ${opt_mode+${opt_mode: }}$*"
}

# func_verbose arg...
# Echo program name prefixed message in verbose mode only.
func_verbose ()
{
    $opt_verbose && func_echo ${1+"$@"}

    # A bug in bash halts the script if the last line of a function
    # fails when set -e is in force, so we need another command to
    # work around that:
    :
}

# func_echo_all arg...
# Invoke $ECHO with all args, space-separated.
func_echo_all ()
{
    $ECHO "$*"
}

# func_error arg...
# Echo program name prefixed message to standard error.
func_error ()
{
    $ECHO "$progname: ${opt_mode+${opt_mode: }}"${1+"$@"} 1>&2
}

# func_warning arg...
# Echo program name prefixed warning message to standard error.

```

```

func_warning ()
{
    $opt_warning && $ECHO "$progname: ${opt_mode+$opt_mode: }warning:
"${1+"$@"} 1>&2

    # bash bug again:
    :
}

# func_fatal_error arg...
# Echo program name prefixed message to standard error, and exit.
func_fatal_error ()
{
    func_error "${1+"$@"}
    exit $EXIT_FAILURE
}

# func_fatal_help arg...
# Echo program name prefixed message to standard error, followed by
# a help hint, and exit.
func_fatal_help ()
{
    func_error "${1+"$@"}
    func_fatal_error "$help"
}
help="Try \`${progname} --help' for more information." ## default

# func_grep expression filename
# Check whether EXPRESSION matches any line of FILENAME, without
output.
func_grep ()
{
    $GREP "$1" "$2" >/dev/null 2>&1
}

# func_mkdir_p directory-path
# Make sure the entire path to DIRECTORY-PATH is available.
func_mkdir_p ()
{
    my_directory_path="$1"
    my_dir_list=

    if test -n "$my_directory_path" && test "$opt_dry_run" != ":";
then
        # Protect directory names starting with '-'
        case $my_directory_path in
            -*) my_directory_path="./$my_directory_path" ;;
        esac

```

```

    # While some portion of DIR does not yet exist...
    while test ! -d "$my_directory_path"; do
        # ...make a list in topmost first order. Use a colon
delimited
        # list incase some portion of path contains whitespace.
        my_dir_list="$my_directory_path:$my_dir_list"

        # If the last portion added has no slash in it, the list is
done
        case $my_directory_path in */*) ;; *) break ;; esac

        # ...otherwise throw away the child directory and loop
        my_directory_path=`$ECHO "$my_directory_path" | $SED -e
"$dirname" `
        done
        my_dir_list=`$ECHO "$my_dir_list" | $SED 's,:*$,,' `

        save_mkdir_p_IFS="$IFS"; IFS=':'
        for my_dir in $my_dir_list; do
            IFS="$save_mkdir_p_IFS"
            # mkdir can fail with a `File exist' error if two processes
            # try to create one of the directories concurrently. Don't
            # stop in that case!
            $MKDIR "$my_dir" 2>/dev/null || :
        done
        IFS="$save_mkdir_p_IFS"

        # Bail out if we (or some other process) failed to create a
directory.
        test -d "$my_directory_path" || \
            func_fatal_error "Failed to create \`$1'"
    fi
}

# func_mktempdir [string]
# Make a temporary directory that won't clash with other running
# libtool processes, and avoids race conditions if possible. If
# given, STRING is the basename for that directory.
func_mktempdir ()
{
    my_template="${TMPDIR-/tmp}/${1-$progname}"

    if test "$opt_dry_run" = ":"; then
        # Return a directory name, but don't create it in dry-run mode
        my_tmpdir="${my_template}-$$"
    else

        # If mktemp works, use that first and foremost
        my_tmpdir=`mktemp -d "${my_template}-XXXXXXXX" 2>/dev/null `

        if test ! -d "$my_tmpdir"; then

```



```

    # Failing that, at least try and use $RANDOM to avoid a race
    my_tmpdir="${my_template}-${RANDOM-0}$$"

    save_mktempdir_umask=`umask`
    umask 0077
    $MKDIR "$my_tmpdir"
    umask $save_mktempdir_umask
fi

# If we're not in dry-run mode, bomb out on failure
test -d "$my_tmpdir" || \
    func_fatal_error "cannot create temporary directory
\`$my_tmpdir'"
fi

$ECHO "$my_tmpdir"
}

# func_quote_for_eval arg
# Aesthetically quote ARG to be eval'd later.
# This function returns two values: FUNC_QUOTE_FOR_EVAL_RESULT
# is double-quoted, suitable for a subsequent eval, whereas
# FUNC_QUOTE_FOR_EVAL_UNQUOTED_RESULT has merely all characters
# which are still active within double quotes backslashified.
func_quote_for_eval ()
{
    case $1 in
        *[\`\\\"$]*)
            func_quote_for_eval_unquoted_result=`$ECHO "$1" | $SED
"$sed_quote_subst"` ;;
        *)
            func_quote_for_eval_unquoted_result="$1" ;;
    esac

    case $func_quote_for_eval_unquoted_result in
        # Double-quote args containing shell metacharacters to delay
        # word splitting, command substitution and and variable
        # expansion for a subsequent eval.
        # Many Bourne shells cannot handle close brackets correctly
        # in scan sets, so we specify it separately.
        *[[\~\#\^\&\*\(\)\{\}\|\|;\<\>\?\'\ \ ]*|*|*"")
            func_quote_for_eval_result="\`$func_quote_for_eval_unquoted_result\`"
            ;;
        *)
            func_quote_for_eval_result="$func_quote_for_eval_unquoted_result"
            esac
    }

```

```

# func_quote_for_expand arg
# Aesthetically quote ARG to be eval'd later; same as above,
# but do not quote variable references.
func_quote_for_expand ()
{
    case $1 in
        *[\$\`"]*)
            my_arg=`$ECHO "$1" | $SED \
                -e "$double_quote_subst" -e "$sed_double_backslash" ` ;;
        *)
            my_arg="$1" ;;
    esac

    case $my_arg in
        # Double-quote args containing shell metacharacters to delay
        # word splitting and command substitution for a subsequent eval.
        # Many Bourne shells cannot handle close brackets correctly
        # in scan sets, so we specify it separately.
        *[[\~\#\^\&\*\(\)\{\}\|\|;\<\>\?\'\ \ ]*|*|""])
            my_arg="\ "$my_arg\" "
            ;;
    esac

    func_quote_for_expand_result="$my_arg"
}

# func_show_eval cmd [fail_exp]
# Unless opt_silent is true, then output CMD. Then, if opt_dryrun is
# not true, evaluate CMD. If the evaluation of CMD fails, and
FAIL_EXP
# is given, then evaluate it.
func_show_eval ()
{
    my_cmd="$1"
    my_fail_exp="${2-}"

    ${opt_silent-false} || {
        func_quote_for_expand "$my_cmd"
        eval "func_echo $func_quote_for_expand_result"
    }

    if ${opt_dry_run-false}; then ;; else
        eval "$my_cmd"
        my_status=$?
        if test "$my_status" -eq 0; then ;; else
            eval "(exit $my_status); $my_fail_exp"
        fi
    fi
}

```

```

# func_show_eval_locale cmd [fail_exp]
# Unless opt_silent is true, then output CMD. Then, if opt_dryrun is
# not true, evaluate CMD. If the evaluation of CMD fails, and
FAIL_EXP
# is given, then evaluate it. Use the saved locale for evaluation.
func_show_eval_locale ()
{
    my_cmd="$1"
    my_fail_exp="${2-:}"

    ${opt_silent-false} || {
        func_quote_for_expand "$my_cmd"
        eval "func_echo $func_quote_for_expand_result"
    }

    if ${opt_dry_run-false}; then ;; else
        eval "$lt_user_locale
            $my_cmd"
        my_status=$?
        eval "$lt_safe_locale"
        if test "$my_status" -eq 0; then ;; else
            eval "(exit $my_status); $my_fail_exp"
        fi
    fi
}

# func_tr_sh
# Turn $1 into a string suitable for a shell variable name.
# Result is stored in $func_tr_sh_result. All characters
# not in the set a-zA-Z0-9_ are replaced with '_'. Further,
# if $1 begins with a digit, a '_' is prepended as well.
func_tr_sh ()
{
    case $1 in
        [0-9]* | *[^a-zA-Z0-9_]*)
            func_tr_sh_result=`$ECHO "$1" | $SED 's/^\([0-9]\)/_\1/; s/[^a-zA-Z0-9_]/_/g'`
            ;;
        * )
            func_tr_sh_result=$1
            ;;
    esac
}

# func_version
# Echo version message to standard output and exit.
func_version ()
{
    $opt_debug

    $SED -n '/(C)/!b go

```

```

:more
/\./!{
  N
  s/\n# / /
  b more
}
:go
/^# '$PROGRAM' (GNU /,/ # warranty; / {
  s/^# //
s/^# *$//
  s/\((C)\) [ 0-9,-]*\ ( [1-9][0-9]*\)/\1\2/
  p
}' < "$progpath"
exit $?
}

# func_usage
# Echo short help message to standard output and exit.
func_usage ()
{
  $opt_debug

  $SED -n '/^# Usage: /,/^# *.*--help/ {
    s/^# //
    s/^# *$//
    s/\$progname/'$progname'/
    p
  }' < "$progpath"
  echo
  $ECHO "run \"\$progname --help | more\" for full usage"
  exit $?
}

# func_help [NOEXIT]
# Echo long help message to standard output and exit,
# unless 'noexit' is passed as argument.
func_help ()
{
  $opt_debug

  $SED -n '/^# Usage: /,/^# Report bugs to/ {
    :print
    s/^# //
    s/^# *$//
    s*\$progname*'$progname'*
    s*\$host*'"$host"'*
    s*\$SHELL*'"$SHELL"'*
    s*\$LTCC*'"$LTCC"'*
    s*\$LTCCFLAGS*'"$LTCCFLAGS"'*
    s*\$LD*'"$LD"'*
    s/\$with_gnu_ld/'"$with_gnu_ld"'/

```

```

        s/\$automake_version/'" (`(${AUTOMAKE-automake} --version)
2>/dev/null |$SED 1q`"/
        s/\$autoconf_version/'" (`(${AUTOCONF-autoconf} --version)
2>/dev/null |$SED 1q`"/
    p
    d
}
/^# .* home page:/b print
/^# General help using/b print
' < "$progpath"
ret=$?
if test -z "$1"; then
    exit $ret
fi
}

# func_missing_arg argname
# Echo program name prefixed message to standard error and set global
# exit_cmd.
func_missing_arg ()
{
    $opt_debug

    func_error "missing argument for $1."
    exit_cmd=exit
}

# func_split_short_opt shortopt
# Set func_split_short_opt_name and func_split_short_opt_arg shell
# variables after splitting SHORTOPT after the 2nd character.
func_split_short_opt ()
{
    my_sed_short_opt='1s/^\(..\).*$/\1/;q'
    my_sed_short_rest='1s/^\..\.(\.*\)$/\1/;q'

    func_split_short_opt_name=`$ECHO "$1" | $SED "$my_sed_short_opt"`
    func_split_short_opt_arg=`$ECHO "$1" | $SED "$my_sed_short_rest"`
} # func_split_short_opt may be replaced by extended shell
implementation

# func_split_long_opt longopt
# Set func_split_long_opt_name and func_split_long_opt_arg shell
# variables after splitting LONGOPT at the '=' sign.
func_split_long_opt ()
{
    my_sed_long_opt='1s/^\(--[^\=]*\)=.*$/\1/;q'
    my_sed_long_arg='1s/^\--[^\=]*=// '

    func_split_long_opt_name=`$ECHO "$1" | $SED "$my_sed_long_opt"`
    func_split_long_opt_arg=`$ECHO "$1" | $SED "$my_sed_long_arg"`
}

```

```

} # func_split_long_opt may be replaced by extended shell
implementation

exit_cmd=:

magic="%%MAGIC variable%%"
magic_exe="%%MAGIC EXE variable%%"

# Global variables.
nonopt=
preserve_args=
lo2o="s/\\.lo\\$/.${objext}/"
o2lo="s/\\.\\${objext}\\.lo/"
extracted_archives=
extracted_serial=0

# If this variable is set in any of the actions, the command in it
# will be execed at the end. This prevents here-documents from being
# left over by shells.
exec_cmd=

# func_append var value
# Append VALUE to the end of shell variable VAR.
func_append ()
{
    eval "${1}=\${${1}}\${2}"
} # func_append may be replaced by extended shell implementation

# func_append_quoted var value
# Quote VALUE and append to the end of shell variable VAR, separated
# by a space.
func_append_quoted ()
{
    func_quote_for_eval "${2}"
    eval "${1}=\${${1}}\ \${func_quote_for_eval_result}"
} # func_append_quoted may be replaced by extended shell
implementation

# func_arith arithmetic-term...
func_arith ()
{
    func_arith_result=`expr "${@}"`
} # func_arith may be replaced by extended shell implementation

# func_len string
# STRING may not start with a hyphen.

```

```

func_len ()
{
    func_len_result=`expr "${1}" : ".*" 2>/dev/null || echo
$max_cmd_len`
} # func_len may be replaced by extended shell implementation

# func_lo2o object
func_lo2o ()
{
    func_lo2o_result=`$ECHO "${1}" | $SED "$lo2o"`
} # func_lo2o may be replaced by extended shell implementation

# func_xform libobj-or-source
func_xform ()
{
    func_xform_result=`$ECHO "${1}" | $SED 's/\.[^.]*$/lo/'`
} # func_xform may be replaced by extended shell implementation

# func_fatal_configuration arg...
# Echo program name prefixed message to standard error, followed by
# a configuration failure hint, and exit.
func_fatal_configuration ()
{
    func_error ${1+"$@"}
    func_error "See the $PACKAGE documentation for more information."
    func_fatal_error "Fatal configuration error."
}

# func_config
# Display the configuration for all the tags in this script.
func_config ()
{
    re_begincf='^# ### BEGIN LIBTOOL'
    re_endcf='^# ### END LIBTOOL'

    # Default configuration.
    $SED "1,/$re_begincf CONFIG/d;/$re_endcf CONFIG/,\,$d" <
"$proppath"

    # Now print the configurations for the tags.
    for tagname in $taglist; do
        $SED -n "/$re_begincf TAG CONFIG: $tagname\$/,$re_endcf TAG
CONFIG: $tagname\$/p" < "$proppath"
    done

    exit $?
}

```

```

# func_features
# Display the features supported by this script.
func_features ()
{
    echo "host: $host"
    if test "$build_libtool_libs" = yes; then
        echo "enable shared libraries"
    else
        echo "disable shared libraries"
    fi
    if test "$build_old_libs" = yes; then
        echo "enable static libraries"
    else
        echo "disable static libraries"
    fi

    exit $?
}

# func_enable_tag tagname
# Verify that TAGNAME is valid, and either flag an error and exit, or
# enable the TAGNAME tag.  We also add TAGNAME to the global $taglist
# variable here.
func_enable_tag ()
{
    # Global variable:
    tagname="$1"

    re_begincf="^# ### BEGIN LIBTOOL TAG CONFIG: $tagname\$"
    re_endcf="^# ### END LIBTOOL TAG CONFIG: $tagname\$"
    sed_extractcf="/$re_begincf/,/$re_endcf/p"

    # Validate tagname.
    case $tagname in
        *[_A-Za-z0-9,/]*)
            func_fatal_error "invalid tag name: $tagname"
            ;;
    esac

    # Don't test for the "default" C tag, as we know it's
    # there but not specially marked.
    case $tagname in
        CC) ;;
        *)
            if $GREP "$re_begincf" "$progp" >/dev/null 2>&1; then
                taglist="$taglist $tagname"
            fi

            # Evaluate the configuration.  Be careful to quote the path
            # and the sed script, to avoid splitting on whitespace, but
            # also don't use non-portable quotes within backquotes within
            # quotes we have to do it in 2 steps:
            extractedcf=`$SED -n -e "$sed_extractcf" < "$progp" `

```



```

    eval "$extractedcf"
    else
    func_error "ignoring unknown tag $tagname"
    fi
    ;;
esac
}

# func_check_version_match
# Ensure that we are using m4 macros, and libtool script from the same
# release of libtool.
func_check_version_match ()
{
    if test "$package_revision" != "$macro_revision"; then
        if test "$VERSION" != "$macro_version"; then
            if test -z "$macro_version"; then
                cat >&2 <<_LT_EOF
$progname: Version mismatch error.  This is $PACKAGE $VERSION, but the
$progname: definition of this LT_INIT comes from an older release.
$progname: You should recreate aclocal.m4 with macros from $PACKAGE
$VERSION
$progname: and run autoconf again.
_LT_EOF
            else
                cat >&2 <<_LT_EOF
$progname: Version mismatch error.  This is $PACKAGE $VERSION, but the
$progname: definition of this LT_INIT comes from $PACKAGE
$macro_version.
$progname: You should recreate aclocal.m4 with macros from $PACKAGE
$VERSION
$progname: and run autoconf again.
_LT_EOF
            fi
        else
            cat >&2 <<_LT_EOF
$progname: Version mismatch error.  This is $PACKAGE $VERSION,
revision $package_revision,
$progname: but the definition of this LT_INIT comes from revision
$macro_revision.
$progname: You should recreate aclocal.m4 with macros from revision
$package_revision
$progname: of $PACKAGE $VERSION and run autoconf again.
_LT_EOF
            fi

            exit $EXIT_MISMATCH
        fi
    }

# Shorthand for --mode=foo, only valid as the first argument
case $1 in

```

```

clean|clea|cle|cl)
    shift; set dummy --mode clean ${1+"$@"}; shift
    ;;
compile|compil|compi|comp|com|co|c)
    shift; set dummy --mode compile ${1+"$@"}; shift
    ;;
execute|execut|execu|exec|exe|ex|e)
    shift; set dummy --mode execute ${1+"$@"}; shift
    ;;
finish|finis|fini|fin|fi|f)
    shift; set dummy --mode finish ${1+"$@"}; shift
    ;;
install|instal|insta|inst|ins|in|i)
    shift; set dummy --mode install ${1+"$@"}; shift
    ;;
link|lin|li|l)
    shift; set dummy --mode link ${1+"$@"}; shift
    ;;
uninstall|uninstal|uninsta|uninst|unins|unin|uni|un|u)
    shift; set dummy --mode uninstall ${1+"$@"}; shift
    ;;
esac

```

```

# Option defaults:
opt_debug=:
opt_dry_run=false
opt_config=false
opt_preserve_dup_deps=false
opt_features=false
opt_finish=false
opt_help=false
opt_help_all=false
opt_silent=:
opt_warning=:
opt_verbose=:
opt_silent=false
opt_verbose=false

```

```

# Parse options once, thoroughly.  This comes as soon as possible in
the
# script to make things like `--version' happen as quickly as we can.
{
    # this just eases exit handling
    while test $# -gt 0; do
        opt="$1"
        shift
        case $opt in
            --debug|-x)    opt_debug='set -x'
                          func_echo "enabling shell trace mode"

```

```

        $opt_debug
        ;;
    --dry-run|--dryrun|-n)
        opt_dry_run=:
        ;;
    --config)
        opt_config=:
func_config
        ;;
    --dlopen|-dlopen)
        optarg="$1"
        opt_dlopen="${opt_dlopen+$opt_dlopen
}$optarg"
        shift
        ;;
    --preserve-dup-deps)
        opt_preserve_dup_deps=:
        ;;
    --features)
        opt_features=:
func_features
        ;;
    --finish)
        opt_finish=:
set dummy --mode finish ${1+"$@"}; shift
        ;;
    --help)
        opt_help=:
        ;;
    --help-all)
        opt_help_all=:
opt_help=': help-all'
        ;;
    --mode)
        test $# = 0 && func_missing_arg $opt && break
        optarg="$1"
        opt_mode="$optarg"
case $optarg in
    # Valid mode arguments:
    clean|compile|execute|finish|install|link|relink|uninstall) ;;

    # Catch anything else as an error
    *) func_error "invalid argument for $opt"
        exit_cmd=exit
        break
        ;;
esac
        shift
        ;;
    --no-silent|--no-quiet)
        opt_silent=false
func_append preserve_args " $opt"

```

```

                ;;
        --no-warning|--no-warn)
                opt_warning=false
func_append preserve_args " $opt"
                ;;
        --no-verbose)
                opt_verbose=false
func_append preserve_args " $opt"
                ;;
        --silent|--quiet)
                opt_silent=:
func_append preserve_args " $opt"
                opt_verbose=false
                ;;
        --verbose|-v)
                opt_verbose=:
func_append preserve_args " $opt"
                opt_silent=false
                ;;
        --tag)
                test $# = 0 && func_missing_arg $opt && break
                optarg="$1"
                opt_tag="$optarg"
func_append preserve_args " $opt $optarg"
func_enable_tag "$optarg"
                shift
                ;;

        -\?|-h)          func_usage          ;;
        --help)          func_help           ;;
        --version)      func_version        ;;

# Separate optargs to long options:
--*=*)
                func_split_long_opt "$opt"
                set dummy "$func_split_long_opt_name"
"$func_split_long_opt_arg" ${1+"$@"}
                shift
                ;;

# Separate non-argument short options:
-\?*|-h*|-n*|-v*)
                func_split_short_opt "$opt"
                set dummy "$func_split_short_opt_name" "$-
$func_split_short_opt_arg" ${1+"$@"}
                shift
                ;;

        --)          break          ;;
        -*)          func_fatal_help "unrecognized option `"$opt"'";;
        *)          set dummy "$opt" ${1+"$@"}; shift; break ;;
esac

```

```

done

# Validate options:

# save first non-option argument
if test "$#" -gt 0; then
    nonopt="$opt"
    shift
fi

# preserve --debug
test "$opt_debug" = : || func_append preserve_args " --debug"

case $host in
    *cygwin* | *mingw* | *pw32* | *cegcc*)
        # don't eliminate duplications in $postdeps and $predeps
        opt_duplicate_compiler_generated_deps=:
        ;;
    *)
        opt_duplicate_compiler_generated_deps=$opt_preserve_dup_deps
        ;;
esac

$opt_help || {
    # Sanity checks first:
    func_check_version_match

    if test "$build_libtool_libs" != yes && test "$build_old_libs" !=
yes; then
        func_fatal_configuration "not configured to build any kind of
library"
    fi

    # Darwin sucks
    eval std_shrext="\$shrext_cmds\"

    # Only execute mode is allowed to have -dlopen flags.
    if test -n "$opt_dlopen" && test "$opt_mode" != execute; then
        func_error "unrecognized option \`-dlopen'"
        $ECHO "$help" 1>&2
        exit $EXIT_FAILURE
    fi

    # Change the help message to a mode-specific one.
    generic_help="$help"
    help="Try \`$progname --help --mode=$opt_mode' for more
information."
}

# Bail if the options were screwed
$exit_cmd $EXIT_FAILURE

```

```
}
```

```
## ----- ##  
##   Main.   ##  
## ----- ##
```

```
# func_lalib_p file  
# True iff FILE is a libtool `.la' library or `.lo' object file.  
# This function is only a basic sanity check; it will hardly flush out  
# determined imposters.
```

```
func_lalib_p ()  
{  
    test -f "$1" &&  
        $SED -e 4q "$1" 2>/dev/null \  
            | $GREP "^# Generated by .*$PACKAGE" > /dev/null 2>&1  
}
```

```
# func_lalib_unsafe_p file  
# True iff FILE is a libtool `.la' library or `.lo' object file.  
# This function implements the same check as func_lalib_p without  
# resorting to external programs. To this end, it redirects stdin and  
# closes it afterwards, without saving the original file descriptor.  
# As a safety measure, use it only where a negative result would be  
# fatal anyway. Works if `file' does not exist.
```

```
func_lalib_unsafe_p ()  
{  
    lalib_p=no  
    if test -f "$1" && test -r "$1" && exec 5<&0 <"$1"; then  
        for lalib_p_1 in 1 2 3 4  
        do  
            read lalib_p_line  
            case "$lalib_p_line" in  
                \#\ Generated\ by\ *$PACKAGE* ) lalib_p=yes; break;;  
            esac  
        done  
        exec 0<&5 5<&-  
    fi  
    test "$lalib_p" = yes  
}
```

```
# func_ltwrapper_script_p file  
# True iff FILE is a libtool wrapper script  
# This function is only a basic sanity check; it will hardly flush out  
# determined imposters.
```

```
func_ltwrapper_script_p ()  
{  
    func_lalib_p "$1"  
}
```

```

# func_ltwrapper_executable_p file
# True iff FILE is a libtool wrapper executable
# This function is only a basic sanity check; it will hardly flush out
# determined imposters.
func_ltwrapper_executable_p ()
{
    func_ltwrapper_exec_suffix=
    case $1 in
        *.exe) ;;
        *) func_ltwrapper_exec_suffix=.exe ;;
    esac
    $GREP "$magic_exe" "$1$func_ltwrapper_exec_suffix" >/dev/null 2>&1
}

# func_ltwrapper_scriptname file
# Assumes file is an ltwrapper_executable
# uses $file to determine the appropriate filename for a
# temporary ltwrapper_script.
func_ltwrapper_scriptname ()
{
    func_dirname_and_basename "$1" "" "."
    func_stripname '' '.exe' "$func_basename_result"

func_ltwrapper_scriptname_result="$func_dirname_result/$objdir/${func_
stripname_result}_ltshwrapper"
}

# func_ltwrapper_p file
# True iff FILE is a libtool wrapper script or wrapper executable
# This function is only a basic sanity check; it will hardly flush out
# determined imposters.
func_ltwrapper_p ()
{
    func_ltwrapper_script_p "$1" || func_ltwrapper_executable_p "$1"
}

# func_execute_cmds commands fail_cmd
# Execute tilde-delimited COMMANDS.
# If FAIL_CMD is given, eval that upon failure.
# FAIL_CMD may read-access the current command in variable CMD!
func_execute_cmds ()
{
    $opt_debug
    save_ifs=$IFS; IFS='~'
    for cmd in $1; do
        IFS=$save_ifs
        eval cmd="\$cmd\"
        func_show_eval "$cmd" "${2-:}"
    done
    IFS=$save_ifs
}

```

```

# func_source file
# Source FILE, adding directory component if necessary.
# Note that it is not necessary on cygwin/mingw to append a dot to
# FILE even if both FILE and FILE.exe exist: automatic-append-.exe
# behavior happens only for exec(3), not for open(2)! Also, sourcing
# `FILE.' does not work on cygwin managed mounts.
func_source ()
{
    $opt_debug
    case $1 in
        /* | *\*) . "$1" ;;
        *) . "./$1" ;;
    esac
}

# func_resolve_sysroot PATH
# Replace a leading = in PATH with a sysroot. Store the result into
# func_resolve_sysroot_result
func_resolve_sysroot ()
{
    func_resolve_sysroot_result=$1
    case $func_resolve_sysroot_result in
    =*)
        func_stripname '=' '' "$func_resolve_sysroot_result"
        func_resolve_sysroot_result=$lt_sysroot$func_stripname_result
        ;;
    esac
}

# func_replace_sysroot PATH
# If PATH begins with the sysroot, replace it with = and
# store the result into func_replace_sysroot_result.
func_replace_sysroot ()
{
    case "$lt_sysroot:$1" in
    ?*:"$lt_sysroot"*)
        func_stripname "$lt_sysroot" '' "$1"
        func_replace_sysroot_result="=$func_stripname_result"
        ;;
    *)
        # Including no sysroot.
        func_replace_sysroot_result=$1
        ;;
    esac
}

# func_infer_tag arg
# Infer tagged configuration to use if any are available and
# if one wasn't chosen via the "--tag" command line option.

```



```

# Only attempt this if the compiler in the base compile
# command doesn't match the default compiler.
# arg is usually of the form 'gcc ...'
func_infer_tag ()
{
    $opt_debug
    if test -n "$available_tags" && test -z "$tagname"; then
        CC_quoted=
        for arg in $CC; do
            func_append_quoted CC_quoted "$arg"
        done
        CC_expanded=`func_echo_all $CC`
        CC_quoted_expanded=`func_echo_all $CC_quoted`
        case $@ in
            # Blanks in the command may have been stripped by the calling
shell,
            # but not from the CC environment variable when configure was
run.
            " $CC "*" | "$CC "*" | " $CC_expanded "*" | "$CC_expanded "*" | \
            " $CC_quoted"* | "$CC_quoted "*" | " $CC_quoted_expanded "*" |
"$CC_quoted_expanded "*" ) ;;
            # Blanks at the start of $base_compile will cause this to fail
            # if we don't check for them as well.
            *)
                for z in $available_tags; do
                    if $GREP "^# ### BEGIN LIBTOOL TAG CONFIG: $z$" < "$progp" >
/dev/null; then
                        # Evaluate the configuration.
                        eval "`${SED} -n -e '/^# ### BEGIN LIBTOOL TAG CONFIG:
'$z'$/,/^# ### END LIBTOOL TAG CONFIG: '$z'$/p' < $progp`"
                        CC_quoted=
                        for arg in $CC; do
                            # Double-quote args containing other shell metacharacters.
                            func_append_quoted CC_quoted "$arg"
                        done
                        CC_expanded=`func_echo_all $CC`
                        CC_quoted_expanded=`func_echo_all $CC_quoted`
                        case "$@" in
                            " $CC "*" | "$CC "*" | " $CC_expanded "*" | "$CC_expanded "*" | \
                            " $CC_quoted"* | "$CC_quoted "*" | " $CC_quoted_expanded "*" |
"$CC_quoted_expanded "*" )
                                # The compiler in the base compile command matches
                                # the one in the tagged configuration.
                                # Assume this is the tagged configuration we want.
                                tagname=$z
                                break
                            ;;
                        esac
                    fi
                done
                # If $tagname still isn't set, then no tagged configuration
                # was found and let the user know that the "--tag" command

```

```

    # line option must be used.
    if test -z "$tagname"; then
        func_echo "unable to infer tagged configuration"
        func_fatal_error "specify a tag with `--tag'"
    # else
    #     func_verbose "using $tagname tagged configuration"
    fi
    ;;
esac
fi
}

# func_write_libtool_object output_name pic_name nonpic_name
# Create a libtool object file (analogous to a ".la" file),
# but don't create it if we're doing a dry run.
func_write_libtool_object ()
{
    write_libobj=${1}
    if test "$build_libtool_libs" = yes; then
        write_lobj=\`${2}\`
    else
        write_lobj=none
    fi

    if test "$build_old_libs" = yes; then
        write_oldobj=\`${3}\`
    else
        write_oldobj=none
    fi

    $opt_dry_run || {
        cat >${write_libobj}T <<EOF
# $write_libobj - a libtool object file
# Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION
#
# Please DO NOT delete this file!
# It is necessary for linking the library.

# Name of the PIC object.
pic_object=${write_lobj}

# Name of the non-PIC object
non_pic_object=${write_oldobj}

EOF
        $MV "${write_libobj}T" "${write_libobj}"
    }
}

```

```

#####
# FILE NAME AND PATH CONVERSION HELPER FUNCTIONS #
#####

# func_convert_core_file_wine_to_w32 ARG
# Helper function used by file name conversion functions when $build
is *nix,
# and $host is mingw, cygwin, or some other w32 environment. Relies on
a
# correctly configured wine environment available, with the winepath
program
# in $build's $PATH.
#
# ARG is the $build file name to be converted to w32 format.
# Result is available in $func_convert_core_file_wine_to_w32_result,
and will
# be empty on error (or when ARG is empty)
func_convert_core_file_wine_to_w32 ()
{
    $opt_debug
    func_convert_core_file_wine_to_w32_result="$1"
    if test -n "$1"; then
        # Unfortunately, winepath does not exit with a non-zero error
code, so we
        # are forced to check the contents of stdout. On the other hand,
if the
        # command is not found, the shell will set an exit code of 127 and
print
        # *an error message* to stdout. So we must check for both error
code of
        # zero AND non-empty stdout, which explains the odd construction:
        func_convert_core_file_wine_to_w32_tmp=`winepath -w "$1"
2>/dev/null`
        if test "$?" -eq 0 && test -n
"${func_convert_core_file_wine_to_w32_tmp}"; then
            func_convert_core_file_wine_to_w32_result=`$ECHO
"${func_convert_core_file_wine_to_w32_tmp}" |
            $SED -e "$lt_sed_naive_backslashify"`
        else
            func_convert_core_file_wine_to_w32_result=
        fi
    fi
}
# end: func_convert_core_file_wine_to_w32

# func_convert_core_path_wine_to_w32 ARG
# Helper function used by path conversion functions when $build is
*nix, and
# $host is mingw, cygwin, or some other w32 environment. Relies on a
correctly

```

```

# configured wine environment available, with the winepath program in
$build's
# $PATH. Assumes ARG has no leading or trailing path separator
characters.
#
# ARG is path to be converted from $build format to win32.
# Result is available in $func_convert_core_path_wine_to_w32_result.
# Unconvertible file (directory) names in ARG are skipped; if no
directory names
# are convertible, then the result may be empty.
func_convert_core_path_wine_to_w32 ()
{
    $opt_debug
    # unfortunately, winepath doesn't convert paths, only file names
    func_convert_core_path_wine_to_w32_result=""
    if test -n "$1"; then
        oldIFS=$IFS
        IFS=:
        for func_convert_core_path_wine_to_w32_f in $1; do
            IFS=$oldIFS
            func_convert_core_file_wine_to_w32
"$func_convert_core_path_wine_to_w32_f"
            if test -n "$func_convert_core_file_wine_to_w32_result" ; then
                if test -z "$func_convert_core_path_wine_to_w32_result"; then

func_convert_core_path_wine_to_w32_result="$func_convert_core_file_wine_to_w32_result"
                else
                    func_append func_convert_core_path_wine_to_w32_result
";$func_convert_core_file_wine_to_w32_result"
                fi
            fi
        done
        IFS=$oldIFS
    fi
}
# end: func_convert_core_path_wine_to_w32

# func_cygpath ARGS...
# Wrapper around calling the cygpath program via LT_CYGPATH. This is
used when
# when (1) $build is *nix and Cygwin is hosted via a wine environment;
or (2)
# $build is MSYS and $host is Cygwin, or (3) $build is Cygwin. In case
(1) or
# (2), returns the Cygwin file name or path in func_cygpath_result
(input
# file name or path is assumed to be in w32 format, as previously
converted
# from $build's *nix or MSYS format). In case (3), returns the w32
file name

```

```

# or path in func_cygpath_result (input file name or path is assumed
to be in
# Cygwin format). Returns an empty string on error.
#
# ARGS are passed to cygpath, with the last one being the file name or
path to
# be converted.
#
# Specify the absolute *nix (or w32) name to cygpath in the LT_CYGPATH
# environment variable; do not put it in $PATH.
func_cygpath ()
{
    $opt_debug
    if test -n "$LT_CYGPATH" && test -f "$LT_CYGPATH"; then
        func_cygpath_result=`$LT_CYGPATH "$@" 2>/dev/null`
        if test "$?" -ne 0; then
            # on failure, ensure result is empty
            func_cygpath_result=
        fi
    else
        func_cygpath_result=
        func_error "LT_CYGPATH is empty or specifies non-existent file:
`$LT_CYGPATH'"
        fi
    }
#end: func_cygpath

# func_convert_core_msys_to_w32 ARG
# Convert file name or path ARG from MSYS format to w32 format.
Return
# result in func_convert_core_msys_to_w32_result.
func_convert_core_msys_to_w32 ()
{
    $opt_debug
    # awkward: cmd appends spaces to result
    func_convert_core_msys_to_w32_result=`( cmd //c echo "$1" )
2>/dev/null |
    $SED -e 's/[ ]*$//' -e "$lt_sed_naive_backslashify"`
}
#end: func_convert_core_msys_to_w32

# func_convert_file_check ARG1 ARG2
# Verify that ARG1 (a file name in $build format) was converted to
$host
# format in ARG2. Otherwise, emit an error message, but continue
(resetting
# func_to_host_file_result to ARG1).
func_convert_file_check ()
{
    $opt_debug

```

```

if test -z "$2" && test -n "$1" ; then
    func_error "Could not determine host file name corresponding to"
    func_error "  \`${1}'"
    func_error "Continuing, but uninstalled executables may not work."
    # Fallback:
    func_to_host_file_result="$1"
fi
}
# end func_convert_file_check

# func_convert_path_check FROM_PATHSEP TO_PATHSEP FROM_PATH TO_PATH
# Verify that FROM_PATH (a path in $build format) was converted to
$host
# format in TO_PATH. Otherwise, emit an error message, but continue,
resetting
# func_to_host_file_result to a simplistic fallback value (see below).
func_convert_path_check ()
{
    $opt_debug
    if test -z "$4" && test -n "$3"; then
        func_error "Could not determine the host path corresponding to"
        func_error "  \`${3}'"
        func_error "Continuing, but uninstalled executables may not work."
        # Fallback. This is a deliberately simplistic "conversion" and
        # should not be "improved". See libtool.info.
        if test "x$1" != "x$2"; then
            lt_replace_pathsep_chars="s|$1|$2|g"
            func_to_host_path_result=`echo "$3" |
                $SED -e "$lt_replace_pathsep_chars"`
        else
            func_to_host_path_result="$3"
        fi
    fi
}
# end func_convert_path_check

# func_convert_path_front_back_pathsep FRONTPAT BACKPAT REPL ORIG
# Modifies func_to_host_path_result by prepending REPL if ORIG matches
FRONTPAT
# and appending REPL if ORIG matches BACKPAT.
func_convert_path_front_back_pathsep ()
{
    $opt_debug
    case $4 in
    $1 ) func_to_host_path_result="$3$func_to_host_path_result"
        ;;
    esac
    case $4 in
    $2 ) func_append func_to_host_path_result "$3"
        ;;
    esac
}

```

```

    esac
}
# end func_convert_path_front_back_pathsep

#####
# $build to $host FILE NAME CONVERSION FUNCTIONS #
#####
# invoked via `sto_host_file_cmd ARG'
#
# In each case, ARG is the path to be converted from $build to $host
format.
# Result will be available in $func_to_host_file_result.

# func_to_host_file ARG
# Converts the file name ARG from $build format to $host format.
Return result
# in func_to_host_file_result.
func_to_host_file ()
{
    $opt_debug
    sto_host_file_cmd "$1"
}
# end func_to_host_file

# func_to_tool_file ARG LAZY
# converts the file name ARG from $build format to toolchain format.
Return
# result in func_to_tool_file_result. If the conversion in use is
listed
# in (the comma separated) LAZY, no conversion takes place.
func_to_tool_file ()
{
    $opt_debug
    case , $2, in
        *, "$sto_tool_file_cmd", *)
            func_to_tool_file_result=$1
            ;;
        *)
            sto_tool_file_cmd "$1"
            func_to_tool_file_result=$func_to_host_file_result
            ;;
    esac
}
# end func_to_tool_file

# func_convert_file_noop ARG
# Copy ARG to func_to_host_file_result.
func_convert_file_noop ()

```

```

{
  func_to_host_file_result="$1"
}
# end func_convert_file_noop

# func_convert_file_msys_to_w32 ARG
# Convert file name ARG from (mingw) MSYS to (mingw) w32 format;
automatic
# conversion to w32 is not available inside the cwrapper. Returns
result in
# func_to_host_file_result.
func_convert_file_msys_to_w32 ()
{
  $opt_debug
  func_to_host_file_result="$1"
  if test -n "$1"; then
    func_convert_core_msys_to_w32 "$1"
    func_to_host_file_result="$func_convert_core_msys_to_w32_result"
  fi
  func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_msys_to_w32

# func_convert_file_cygwin_to_w32 ARG
# Convert file name ARG from Cygwin to w32 format. Returns result in
# func_to_host_file_result.
func_convert_file_cygwin_to_w32 ()
{
  $opt_debug
  func_to_host_file_result="$1"
  if test -n "$1"; then
    # because $build is cygwin, we call "the" cygpath in $PATH; no
need to use
    # LT_CYGPATH in this case.
    func_to_host_file_result=`cygpath -m "$1"`
  fi
  func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_cygwin_to_w32

# func_convert_file_nix_to_w32 ARG
# Convert file name ARG from *nix to w32 format. Requires a wine
environment
# and a working winepath. Returns result in func_to_host_file_result.
func_convert_file_nix_to_w32 ()
{
  $opt_debug
  func_to_host_file_result="$1"
  if test -n "$1"; then

```



```

    func_convert_core_file_wine_to_w32 "$1"

func_to_host_file_result="$func_convert_core_file_wine_to_w32_result"
fi
    func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_nix_to_w32

# func_convert_file_msys_to_cygwin ARG
# Convert file name ARG from MSYS to Cygwin format.  Requires
LT_CYGPATH set.
# Returns result in func_to_host_file_result.
func_convert_file_msys_to_cygwin ()
{
    $opt_debug
    func_to_host_file_result="$1"
    if test -n "$1"; then
        func_convert_core_msys_to_w32 "$1"
        func_cygpath -u "$func_convert_core_msys_to_w32_result"
        func_to_host_file_result="$func_cygpath_result"
    fi
    func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_msys_to_cygwin

# func_convert_file_nix_to_cygwin ARG
# Convert file name ARG from *nix to Cygwin format.  Requires Cygwin
installed
# in a wine environment, working winepath, and LT_CYGPATH set.
Returns result
# in func_to_host_file_result.
func_convert_file_nix_to_cygwin ()
{
    $opt_debug
    func_to_host_file_result="$1"
    if test -n "$1"; then
        # convert from *nix to w32, then use cygpath to convert from w32
to cygwin.
        func_convert_core_file_wine_to_w32 "$1"
        func_cygpath -u "$func_convert_core_file_wine_to_w32_result"
        func_to_host_file_result="$func_cygpath_result"
    fi
    func_convert_file_check "$1" "$func_to_host_file_result"
}
# end func_convert_file_nix_to_cygwin

#####
# $build to $host PATH CONVERSION FUNCTIONS #
#####

```

```

# invoked via `sto_host_path_cmd ARG'
#
# In each case, ARG is the path to be converted from $build to $host
format.
# The result will be available in $func_to_host_path_result.
#
# Path separators are also converted from $build format to $host
format. If
# ARG begins or ends with a path separator character, it is preserved
(but
# converted to $host format) on output.
#
# All path conversion functions are named using the following
convention:
#   file name conversion function      : func_convert_file_X_to_Y ()
#   path conversion function           : func_convert_path_X_to_Y ()
# where, for any given $build/$host combination the 'X_to_Y' value is
the
# same. If conversion functions are added for new $build/$host
combinations,
# the two new functions must follow this pattern, or
func_init_to_host_path_cmd
# will break.

# func_init_to_host_path_cmd
# Ensures that function "pointer" variable $to_host_path_cmd is set to
the
# appropriate value, based on the value of $to_host_file_cmd.
to_host_path_cmd=
func_init_to_host_path_cmd ()
{
    $opt_debug
    if test -z "$to_host_path_cmd"; then
        func_stripname 'func_convert_file_' '' "$to_host_file_cmd"
        to_host_path_cmd="func_convert_path_${func_stripname_result}"
    fi
}

# func_to_host_path ARG
# Converts the path ARG from $build format to $host format. Return
result
# in func_to_host_path_result.
func_to_host_path ()
{
    $opt_debug
    func_init_to_host_path_cmd
    $to_host_path_cmd "$1"
}
# end func_to_host_path

```

```

# func_convert_path_noop ARG
# Copy ARG to func_to_host_path_result.
func_convert_path_noop ()
{
    func_to_host_path_result="$1"
}
# end func_convert_path_noop

# func_convert_path_msys_to_w32 ARG
# Convert path ARG from (mingw) MSYS to (mingw) w32 format; automatic
# conversion to w32 is not available inside the cwrapper. Returns
# result in
# func_to_host_path_result.
func_convert_path_msys_to_w32 ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # Remove leading and trailing path separator characters from ARG.
MSYS
        # behavior is inconsistent here; cygpath turns them into '.' and
';.';
        # and winepath ignores them completely.
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_convert_core_msys_to_w32 "$func_to_host_path_tmp1"
        func_to_host_path_result="$func_convert_core_msys_to_w32_result"
        func_convert_path_check : ";" \
            "$func_to_host_path_tmp1" "$func_to_host_path_result"
        func_convert_path_front_back_pathsep ":*" "':" ";" "$1"
    fi
}
# end func_convert_path_msys_to_w32

# func_convert_path_cygwin_to_w32 ARG
# Convert path ARG from Cygwin to w32 format. Returns result in
# func_to_host_file_result.
func_convert_path_cygwin_to_w32 ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # See func_convert_path_msys_to_w32:
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_to_host_path_result=`cygpath -m -p "$func_to_host_path_tmp1"`
        func_convert_path_check : ";" \
            "$func_to_host_path_tmp1" "$func_to_host_path_result"
        func_convert_path_front_back_pathsep ":*" "':" ";" "$1"
    fi
}

```

```

    fi
}
# end func_convert_path_cygwin_to_w32

# func_convert_path_nix_to_w32 ARG
# Convert path ARG from *nix to w32 format.  Requires a wine
environment and
# a working winepath.  Returns result in func_to_host_file_result.
func_convert_path_nix_to_w32 ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # See func_convert_path_msys_to_w32:
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_convert_core_path_wine_to_w32 "$func_to_host_path_tmp1"

    func_to_host_path_result="$func_convert_core_path_wine_to_w32_result"
    func_convert_path_check : ; \
        "$func_to_host_path_tmp1" "$func_to_host_path_result"
    func_convert_path_front_back_pathsep " :* " " * : " ; " "$1"
    fi
}
# end func_convert_path_nix_to_w32

# func_convert_path_msys_to_cygwin ARG
# Convert path ARG from MSYS to Cygwin format.  Requires LT_CYGPATH
set.
# Returns result in func_to_host_file_result.
func_convert_path_msys_to_cygwin ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # See func_convert_path_msys_to_w32:
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_convert_core_msys_to_w32 "$func_to_host_path_tmp1"
        func_cygpath -u -p "$func_convert_core_msys_to_w32_result"
        func_to_host_path_result="$func_cygpath_result"
        func_convert_path_check : : \
            "$func_to_host_path_tmp1" "$func_to_host_path_result"
        func_convert_path_front_back_pathsep " :* " " * : " : "$1"
    fi
}
# end func_convert_path_msys_to_cygwin

# func_convert_path_nix_to_cygwin ARG

```

```

# Convert path ARG from *nix to Cygwin format.  Requires Cygwin
installed in a
# a wine environment, working winepath, and LT_CYGPATH set.  Returns
result in
# func_to_host_file_result.
func_convert_path_nix_to_cygwin ()
{
    $opt_debug
    func_to_host_path_result="$1"
    if test -n "$1"; then
        # Remove leading and trailing path separator characters from
        # ARG. msys behavior is inconsistent here, cygpath turns them
        # into '.;' and ';.', and winepath ignores them completely.
        func_stripname : : "$1"
        func_to_host_path_tmp1=$func_stripname_result
        func_convert_core_path_wine_to_w32 "$func_to_host_path_tmp1"
        func_cygpath -u -p "$func_convert_core_path_wine_to_w32_result"
        func_to_host_path_result="$func_cygpath_result"
        func_convert_path_check : : \
            "$func_to_host_path_tmp1" "$func_to_host_path_result"
        func_convert_path_front_back_pathsep ":*" "*::" : "$1"
    fi
}
# end func_convert_path_nix_to_cygwin

```

```

# func_mode_compile arg...
func_mode_compile ()
{
    $opt_debug
    # Get the compilation command and the source file.
    base_compile=
    srcfile="$nonopt" # always keep a non-empty value in "srcfile"
    suppress_opt=yes
    suppress_output=
    arg_mode=normal
    libobj=
    later=
    pie_flag=

    for arg
    do
        case $arg_mode in
            arg )
                # do not "continue".  Instead, add this to base_compile
                lastarg="$arg"
                arg_mode=normal
                ;;

            target )
                libobj="$arg"
                arg_mode=normal

```

```

continue
;;

normal )
# Accept any command-line options.
case $arg in
-o)
    test -n "$libobj" && \
        func_fatal_error "you cannot specify \`-o' more than once"
    arg_mode=target
    continue
    ;;

-pie | -fpie | -fPIE)
    func_append pie_flag " $arg"
    continue
    ;;

-shared | -static | -prefer-pic | -prefer-non-pic)
    func_append later " $arg"
    continue
    ;;

-no-suppress)
    suppress_opt=no
    continue
    ;;

-Xcompiler)
    arg_mode=arg # the next one goes into the "base_compile" arg
list
    continue # The current "srcfile" will either be retained
or
    ;; # replaced later. I would guess that would be a
bug.

-Wc,*)
    func_stripname '-Wc,' '' "$arg"
    args=$func_stripname_result
    lastarg=
    save_ifs="$IFS"; IFS=', '
    for arg in $args; do
        IFS="$save_ifs"
        func_append_quoted lastarg "$arg"
    done
    IFS="$save_ifs"
    func_stripname ' ' '' "$lastarg"
    lastarg=$func_stripname_result

# Add the arguments to base_compile.
func_append base_compile " $lastarg"
continue

```

```

;;

*)
# Accept the current argument as the source file.
# The previous "srcfile" becomes the current argument.
#
lastarg="$srcfile"
srcfile="$arg"
;;
esac # case $arg
;;
esac # case $arg_mode

# Aesthetically quote the previous argument.
func_append_quoted base_compile "$lastarg"
done # for arg

case $arg_mode in
arg)
func_fatal_error "you must specify an argument for -Xcompile"
;;
target)
func_fatal_error "you must specify a target with \`-o'"
;;
*)
# Get the name of the library object.
test -z "$libobj" && {
func_basename "$srcfile"
libobj="$func_basename_result"
}
;;
esac

# Recognize several different file suffixes.
# If the user specifies -o file.o, it is replaced with file.lo
case $libobj in
*.[cCFSifmso] | \
*.ada | *.adb | *.ads | *.asm | \
*.c++ | *.cc | *.ii | *.class | *.cpp | *.cxx | \
*.[fF][09]? | *.for | *.java | *.go | *.obj | *.sx | *.cu | *.cup)
func_xform "$libobj"
libobj=$func_xform_result
;;
esac

case $libobj in
*.lo) func_lo2o "$libobj"; obj=$func_lo2o_result ;;
*)
func_fatal_error "cannot determine name of library object from
\`$libobj'"
;;
esac

```

```

func_infer_tag $base_compile

for arg in $later; do
  case $arg in
    -shared)
      test "$build_libtool_libs" != yes && \
        func_fatal_configuration "can not build a shared library"
      build_old_libs=no
      continue
      ;;

    -static)
      build_libtool_libs=no
      build_old_libs=yes
      continue
      ;;

    -prefer-pic)
      pic_mode=yes
      continue
      ;;

    -prefer-non-pic)
      pic_mode=no
      continue
      ;;
  esac
done

func_quote_for_eval "$libobj"
test "X$libobj" != "X$func_quote_for_eval_result" \
  && $ECHO "X$libobj" | $GREP '[~#^*{};<>?'"'"' &()|`$[]' \
  && func_warning "libobj name `'$libobj`' may not contain shell
special characters."
func_dirname_and_basename "$obj" "/" ""
objname="$func_basename_result"
xdir="$func_dirname_result"
lobj=${xdir}$objdir/$objname

test -z "$base_compile" && \
  func_fatal_help "you must specify a compilation command"

# Delete any leftover library objects.
if test "$build_old_libs" = yes; then
  removelist="$obj $lobj $libobj ${libobj}T"
else
  removelist="$lobj $libobj ${libobj}T"
fi

# On Cygwin there's no "real" PIC flag so we must build both
object types

```



```

case $host_os in
cygwin* | mingw* | pw32* | os2* | cegcc*)
    pic_mode=default
    ;;
esac
if test "$pic_mode" = no && test "$deplibs_check_method" !=
pass_all; then
    # non-PIC code in shared libraries is not supported
    pic_mode=default
fi

# Calculate the filename of the output object if compiler does
# not support -o with -c
if test "$compiler_c_o" = no; then
    output_obj=`$ECHO "$srcfile" | $SED 's%^.*/%%;
s%\.([\^.]*)$%%'\`.$objext}
    lockfile="$output_obj.lock"
else
    output_obj=
    need_locks=no
    lockfile=
fi

# Lock this critical section if it is needed
# We use this script file to make the link, it avoids creating a
new file
if test "$need_locks" = yes; then
    until $opt_dry_run || ln "$proppath" "$lockfile" 2>/dev/null; do
        func_echo "Waiting for $lockfile to be removed"
        sleep 2
    done
elif test "$need_locks" = warn; then
    if test -f "$lockfile"; then
        $ECHO "\
*** ERROR, $lockfile exists and contains:
`cat $lockfile 2>/dev/null`

```

This indicates that another process is trying to use the same temporary object file, and libtool could not work around it because your compiler does not support \'-c' and \'-o' together. If you repeat this compilation, it may succeed, by chance, but you had better avoid parallel builds (make -j) in this platform, or get a better compiler."

```

    $opt_dry_run || $RM $removelist
    exit $EXIT_FAILURE
fi
    func_append removelist " $output_obj"
    $ECHO "$srcfile" > "$lockfile"
fi

$opt_dry_run || $RM $removelist

```

```

func_append removelist " $lockfile"
trap '$opt_dry_run || $RM $removelist; exit $EXIT_FAILURE' 1 2 15

func_to_tool_file "$srcfile" func_convert_file_msys_to_w32
srcfile=$func_to_tool_file_result
func_quote_for_eval "$srcfile"
qsrcfile=$func_quote_for_eval_result

# Only build a PIC object if we are building libtool libraries.
if test "$build_libtool_libs" = yes; then
  # Without this assignment, base_compile gets emptied.
  fbsd_hideous_sh_bug=$base_compile

  if test "$pic_mode" != no; then
    command="$base_compile $qsrcfile $pic_flag"
  else
    # Don't build PIC code
    command="$base_compile $qsrcfile"
  fi

  func_mkdir_p "$xdir$objdir"

  if test -z "$output_obj"; then
    # Place PIC objects in $objdir
    func_append command " -o $lobj"
  fi

  func_show_eval_locale "$command" \
    'test -n "$output_obj" && $RM $removelist; exit
$EXIT_FAILURE'

  if test "$need_locks" = warn &&
    test "X`cat $lockfile 2>/dev/null`" != "X$srcfile"; then
    $ECHO "\
*** ERROR, $lockfile contains:
`cat $lockfile 2>/dev/null`

```

but it should contain:
\$srcfile

This indicates that another process is trying to use the same temporary object file, and libtool could not work around it because your compiler does not support \'-c' and \'-o' together. If you repeat this compilation, it may succeed, by chance, but you had better avoid parallel builds (make -j) in this platform, or get a better compiler."

```

$opt_dry_run || $RM $removelist
exit $EXIT_FAILURE
fi

```

```

    # Just move the object if needed, then go on to compile the next
one
    if test -n "$output_obj" && test "X$output_obj" != "X$objj";
then
    func_show_eval '$MV "$output_obj" "$objj"' \
        'error=$?; $opt_dry_run || $RM $removelist; exit $error'
    fi

    # Allow error messages only from the first compilation.
    if test "$suppress_opt" = yes; then
    suppress_output=' >/dev/null 2>&1'
    fi
fi

# Only build a position-dependent object if we build old
libraries.
if test "$build_old_libs" = yes; then
    if test "$pic_mode" != yes; then
    # Don't build PIC code
    command="$base_compile $qsrcfile$pie_flag"
    else
    command="$base_compile $qsrcfile $pic_flag"
    fi
    if test "$compiler_c_o" = yes; then
    func_append command " -o $objj"
    fi

    # Suppress compiler output if we already did a PIC compilation.
    func_append command "$suppress_output"
    func_show_eval_locale "$command" \
        '$opt_dry_run || $RM $removelist; exit $EXIT_FAILURE'

    if test "$need_locks" = warn &&
        test "X`cat $lockfile 2>/dev/null`" != "X$srcfile"; then
    $ECHO "\
*** ERROR, $lockfile contains:
`cat $lockfile 2>/dev/null`

but it should contain:
$srcfile

This indicates that another process is trying to use the same
temporary object file, and libtool could not work around it because
your compiler does not support \'-c' and \'-o' together.  If you
repeat this compilation, it may succeed, by chance, but you had better
avoid parallel builds (make -j) in this platform, or get a better
compiler."

    $opt_dry_run || $RM $removelist
    exit $EXIT_FAILURE
    fi

```

```

    # Just move the object if needed
    if test -n "$output_obj" && test "X$output_obj" != "X$obj"; then
func_show_eval '$MV "$output_obj" "$obj"' \
    'error=$?; $opt_dry_run || $RM $removelist; exit $error'
    fi
fi

$opt_dry_run || {
    func_write_libtool_object "$libobj" "$objdir/$objname"
"$objname"

    # Unlock the critical section if it was locked
    if test "$need_locks" != no; then
removelist=$lockfile
        $RM "$lockfile"
    fi
}

exit $EXIT_SUCCESS
}

$opt_help || {
    test "$opt_mode" = compile && func_mode_compile ${1+"$@"}
}

func_mode_help ()
{
    # We need to display help for each of the modes.
    case $opt_mode in
        "")
            # Generic help is extracted from the usage comments
            # at the start of this file.
            func_help
            ;;

        clean)
            $ECHO \
"Usage: $progname [OPTION]... --mode=clean RM [RM-OPTION]... FILE...

Remove files from the build directory.

RM is the name of the program to use to delete files associated with
each FILE
(typically `"/bin/rm').  RM-OPTIONS are options (such as `-f') to be
passed
to RM.

If FILE is a libtool library, object or program, all the files
associated
with it are deleted.  Otherwise, only FILE itself is deleted using RM."
            ;;
    esac
}

```

```
    compile)
    $ECHO \
"Usage: $progname [OPTION]... --mode=compile COMPILE-COMMAND...
SOURCEFILE
```

Compile a source file into a libtool library object.

This mode accepts the following additional options:

```
    -o OUTPUT-FILE      set the output file name to OUTPUT-FILE
    -no-suppress        do not suppress compiler output for multiple
passes
    -prefer-pic         try to build PIC objects only
    -prefer-non-pic    try to build non-PIC objects only
    -shared             do not build a ``.o' file suitable for static
linking
    -static            only build a ``.o' file suitable for static
linking
    -Wc,FLAG           pass FLAG directly to the compiler
```

COMPILE-COMMAND is a command to be used in creating a 'standard' object file from the given SOURCEFILE.

The output file name is determined by removing the directory component from SOURCEFILE, then substituting the C source code suffix '.c' with the library object suffix, '.lo'."

;;

```
    execute)
    $ECHO \
"Usage: $progname [OPTION]... --mode=execute COMMAND [ARGS]...
```

Automatically set library path, then run a program.

This mode accepts the following additional options:

```
    -dlopen FILE       add the directory containing FILE to the library
path
```

This mode sets the library path environment variable according to '-dlopen' flags.

If any of the ARGS are libtool executable wrappers, then they are translated into their corresponding uninstalled binary, and any of their required library directories are added to the library path.

Then, COMMAND is executed, with ARGS as arguments."

;;

```
finish)
    $ECHO \
"Usage: $progname [OPTION]... --mode=finish [LIBDIR]...
```

Complete the installation of libtool libraries.

Each LIBDIR is a directory that contains libtool libraries.

The commands that this mode executes may require superuser privileges.

Use

the '--dry-run' option if you just want to see what would be executed."

;;

```
install)
    $ECHO \
"Usage: $progname [OPTION]... --mode=install INSTALL-COMMAND...
```

Install executables or libraries.

INSTALL-COMMAND is the installation command. The first component should be either the 'install' or 'cp' program.

The following components of INSTALL-COMMAND are treated specially:

-inst-prefix-dir PREFIX-DIR Use PREFIX-DIR as a staging area for installation

The rest of the components are interpreted as arguments to that command (only BSD-compatible install options are recognized)."

;;

```
link)
    $ECHO \
"Usage: $progname [OPTION]... --mode=link LINK-COMMAND...
```

Link object files or libraries together to form another library, or to create an executable program.

LINK-COMMAND is a command using the C compiler that you would use to create a program from several object files.

The following components of LINK-COMMAND are treated specially:

-all-static do not do any dynamic linking at all
-avoid-version do not add a version suffix if possible

-bindir BINDIR specify path to binaries directory (for systems where libraries must be found in the PATH setting at runtime)

-dlopen FILE \'-dlpreopen' FILE if it cannot be dlopened at runtime

-dlpreopen FILE link in FILE and add its symbols to lt_preloaded_symbols

-export-dynamic allow symbols from OUTPUT-FILE to be resolved with dlsym(3)

-export-symbols SYMFILE try to export only the symbols listed in SYMFILE

-export-symbols-regex REGEX try to export only the symbols matching REGEX

-LLIBDIR search LIBDIR for required installed libraries

-lname OUTPUT-FILE requires the installed library libNAME

-module build a library that can dlopened

-no-fast-install disable the fast-install mode

-no-install link a not-installable executable

-no-undefined declare that a library does not refer to external symbols

-o OUTPUT-FILE create OUTPUT-FILE from the specified objects

-objectlist FILE Use a list of object files found in FILE to specify objects

-precious-files-regex REGEX don't remove output files matching REGEX

-release RELEASE specify package release information

-rpath LIBDIR the created library will eventually be installed in LIBDIR

-R[]LIBDIR add LIBDIR to the runtime path of programs and libraries

-shared only do dynamic linking of libtool libraries

-shrext SUFFIX override the standard shared library file extension

-static do not do any dynamic linking of uninstalled libtool libraries

-static-libtool-libs do not do any dynamic linking of libtool libraries

-version-info CURRENT[:REVISION[:AGE]] specify library version info [each variable defaults to 0]

-weak LIBNAME declare that the target provides the LIBNAME interface

-Wc,FLAG pass linker-specific FLAG directly to the compiler

-Xcompiler FLAG pass linker-specific FLAG directly to the compiler

-Wl,FLAG pass linker-specific FLAG directly to the linker

-Xlinker FLAG pass linker-specific FLAG directly to the linker

-XCc linker FLAG pass link-specific FLAG to the compiler driver (CC)

All other options (arguments beginning with \'-') are ignored.

Every other argument is treated as a filename. Files ending in ``.la'` are treated as uninstalled libtool libraries, other files are standard or library object files.

If the OUTPUT-FILE ends in ``.la'`, then a libtool library is created, only library objects (``.lo'` files) may be specified, and ``.rpath'` is required, except when creating a convenience library.

If OUTPUT-FILE ends in ``.a'` or ``.lib'`, then a standard library is created using ``.ar'` and ``.ranlib'`, or on Windows using ``.lib'`.

If OUTPUT-FILE ends in ``.lo'` or ``.${objext}'`, then a reloadable object file is created, otherwise an executable program is created."

```
;;

    uninstall)
    $ECHO \
"Usage: $progname [OPTION]... --mode=uninstall RM [RM-OPTION]...
FILE..."
```

Remove libraries from an installation directory.

RM is the name of the program to use to delete files associated with each FILE (typically ``.bin/rm'`). RM-OPTIONS are options (such as ``.f'`) to be passed to RM.

If FILE is a libtool library, all the files associated with it are deleted.

Otherwise, only FILE itself is deleted using RM."

```
;;

    *)
    func_fatal_help "invalid operation mode \`${opt_mode}'"
    ;;
esac

    echo
    $ECHO "Try \`${progname} --help' for more information about other
modes."
}
```

Now that we've collected a possible --mode arg, show help if necessary

```
if $opt_help; then
  if test "$opt_help" = :; then
    func_mode_help
```



```

else
{
    func_help noexit
    for opt_mode in compile link execute install finish uninstall
clean; do
    func_mode_help
    done
} | sed -n '1p; 2,$s/^Usage:/ or: /p'
{
    func_help noexit
    for opt_mode in compile link execute install finish uninstall
clean; do
    echo
    func_mode_help
    done
} |
sed '1d
/^When reporting/,/^Report/{
H
d
}
$x
/information about other modes/d
/more detailed .*MODE/d
s/^Usage:.*--mode=\([^ ]*\) .*/Description of \1 mode:/'
fi
exit $?
fi

```

```

# func_mode_execute arg...
func_mode_execute ()
{
    $opt_debug
    # The first argument is the command name.
    cmd="$nonopt"
    test -z "$cmd" && \
        func_fatal_help "you must specify a COMMAND"

    # Handle -dlopen flags immediately.
    for file in $opt_dlopen; do
        test -f "$file" \
            || func_fatal_help "`$file' is not a file"

        dir=
        case $file in
            *.la)
                func_resolve_sysroot "$file"
                file=$func_resolve_sysroot_result

                # Check to see that this really is a libtool archive.
                func_lalib_unsafe_p "$file" \

```

```

    || func_fatal_help "\`$lib' is not a valid libtool archive"

# Read the libtool library.
dlname=
library_names=
func_source "$file"

# Skip this library if it cannot be dlopened.
if test -z "$dlname"; then
  # Warn if it was a shared library.
  test -n "$library_names" && \
    func_warning "\`$file' was not linked with \`-export-
dynamic'"
  continue
fi

func_dirname "$file" "" "."
dir="$func_dirname_result"

if test -f "$dir/$objdir/$dlname"; then
  func_append dir "/$objdir"
else
  if test ! -f "$dir/$dlname"; then
    func_fatal_error "cannot find \`$dlname' in \`$dir' or
\`$dir/$objdir'"
  fi
fi
;;

*.lo)
# Just add the directory containing the .lo file.
func_dirname "$file" "" "."
dir="$func_dirname_result"
;;

*)
func_warning "\`-dlopen' is ignored for non-libtool libraries and
objects"
continue
;;
esac

# Get the absolute pathname.
absdir=`cd "$dir" && pwd`
test -n "$absdir" && dir="$absdir"

# Now add the directory to shlibpath_var.
if eval "test -z \"\`$$shlibpath_var\`"; then
eval "$shlibpath_var=\"\`$dir\`"
else
eval "$shlibpath_var=\"\`$dir:\`$$shlibpath_var\`"
fi

```

```

done

# This variable tells wrapper scripts just to set shlibpath_var
# rather than running their programs.
libtool_execute_magic="$magic"

# Check if any of the arguments is a wrapper script.
args=
for file
do
  case $file in
    -* | *.la | *.lo ) ;;
    *)
      # Do a test to see if this is really a libtool program.
      if func_ltwrapper_script_p "$file"; then
        func_source "$file"
        # Transform arg to wrapped name.
        file="$progdir/$program"
      elif func_ltwrapper_executable_p "$file"; then
        func_ltwrapper_scriptname "$file"
        func_source "$func_ltwrapper_scriptname_result"
        # Transform arg to wrapped name.
        file="$progdir/$program"
      fi
    ;;
  esac
  # Quote arguments (to preserve shell metacharacters).
  func_append_quoted args "$file"
done

if test "X$opt_dry_run" = Xfalse; then
  if test -n "$shlibpath_var"; then
    # Export the shlibpath_var.
    eval "export $shlibpath_var"
  fi

  # Restore saved environment variables
  for lt_var in LANG LANGUAGE LC_ALL LC_CTYPE LC_COLLATE
LC_MESSAGES
  do
    eval "if test \"\${save_$lt_var+set}\" = set; then
      $lt_var=\$save_$lt_var; export $lt_var
    else
      $lt_unset $lt_var
    fi"
  done

  # Now prepare to actually exec the command.
  exec_cmd="\$cmd$args"
else
  # Display what would be done.
  if test -n "$shlibpath_var"; then

```

```

    eval "\$ECHO \"\$shlibpath_var=\$\$shlibpath_var\""
    echo "export \$shlibpath_var"
    fi
    \$ECHO "\$cmd$args"
    exit \$EXIT_SUCCESS
fi
}

test "\$opt_mode" = execute && func_mode_execute ${1+"$@"}

# func_mode_finish arg...
func_mode_finish ()
{
    $opt_debug
    libs=
    libdirs=
    admincmds=

    for opt in "$nonopt" ${1+"$@"}
    do
        if test -d "$opt"; then
            func_append libdirs " $opt"

            elif test -f "$opt"; then
                if func_lalib_unsafe_p "$opt"; then
                    func_append libs " $opt"
                else
                    func_warning "\`$opt' is not a valid libtool archive"
                fi

            else
                func_fatal_error "invalid argument \`$opt'"
            fi
        done

        if test -n "$libs"; then
            if test -n "$lt_sysroot"; then
                sysroot_regex=`$ECHO "$lt_sysroot" | $SED
"$sed_make_literal_regex"`
                sysroot_cmd="s/\([ ']\)\$sysroot_regex/\1/g;"
            else
                sysroot_cmd=
            fi

            # Remove sysroot references
            if $opt_dry_run; then
                for lib in $libs; do
                    echo "removing references to $lt_sysroot and `=' prefixes
from $lib"
                done
            else

```

```

        tmpdir=`func_mktempdir`
        for lib in $libs; do
            sed -e "${sysroot_cmd} s/\([ ']-[LR]\)=/\1/g; s/\([ ']\)=/\1/g"
$lib \
            > $tmpdir/tmp-la
            mv -f $tmpdir/tmp-la $lib
        done
        ${RM}r "$tmpdir"
    fi
fi

if test -n "$finish_cmds$finish_eval" && test -n "$libdirs"; then
    for libdir in $libdirs; do
        if test -n "$finish_cmds"; then
            # Do each command in the finish commands.
            func_execute_cmds "$finish_cmds" 'admincmds="$admincmds
'"$cmd"''
            fi
        if test -n "$finish_eval"; then
            # Do the single finish_eval.
            eval cmds="\$finish_eval\"
            $opt_dry_run || eval "$cmds" || func_append admincmds "
            $cmds"
        fi
    done
fi

# Exit here if they wanted silent mode.
$opt_silent && exit $EXIT_SUCCESS

if test -n "$finish_cmds$finish_eval" && test -n "$libdirs"; then
    echo "-----"
    echo "Libraries have been installed in:"
    for libdir in $libdirs; do
        $ECHO "    $libdir"
    done
    echo
    echo "If you ever happen to want to link against installed
libraries"
    echo "in a given directory, LIBDIR, you must either use libtool,
and"
    echo "specify the full pathname of the library, or use the \`-
LLIBDIR'"
    echo "flag during linking and do at least one of the following:"
    if test -n "$shlibpath_var"; then
        echo "    - add LIBDIR to the `\$shlibpath_var' environment
variable"
        echo "    during execution"
    fi
    if test -n "$runpath_var"; then

```

```

        echo "    - add LIBDIR to the `\$runpath_var' environment
variable"
        echo "        during linking"
        fi
        if test -n "$hardcode_libdir_flag_spec"; then
        libdir=LIBDIR
        eval flag="\$hardcode_libdir_flag_spec\"

        $ECHO "    - use the `\$flag' linker flag"
        fi
        if test -n "$admincmds"; then
        $ECHO "    - have your system administrator run these
commands:$admincmds"
        fi
        if test -f /etc/ld.so.conf; then
        echo "    - have your system administrator add LIBDIR to
`/etc/ld.so.conf'"
        fi
        echo

        echo "See any operating system documentation about shared
libraries for"
        case $host in
        solaris2.[6789]|solaris2.1[0-9])
        echo "more information, such as the ld(1), crle(1) and ld.so(8)
manual"
        echo "pages."
        ;;
        *)
        echo "more information, such as the ld(1) and ld.so(8) manual
pages."
        ;;
        esac
        echo "-----"
        -----"
        fi
        exit $EXIT_SUCCESS
    }

test "$opt_mode" = finish && func_mode_finish ${1+"$@"}

# func_mode_install arg...
func_mode_install ()
{
    $opt_debug
    # There may be an optional sh(1) argument at the beginning of
    # install_prog (especially on Windows NT).
    if test "$nonopt" = "$SHELL" || test "$nonopt" = /bin/sh ||
        # Allow the use of GNU shtool's install command.
        case $nonopt in *shtool*) :;; *) false;; esac; then
        # Aesthetically quote it.

```

```

    func_quote_for_eval "$nonopt"
    install_prog="$func_quote_for_eval_result "
    arg=$1
    shift
else
    install_prog=
    arg=$nonopt
fi

# The real first argument should be the name of the installation
program.
# Aesthetically quote it.
func_quote_for_eval "$arg"
func_append install_prog "$func_quote_for_eval_result"
install_shared_prog=$install_prog
case " $install_prog " in
    *[\ \ /]cp\ *) install_cp=: ;;
    *) install_cp=false ;;
esac

# We need to accept at least all the BSD install flags.
dest=
files=
opts=
prev=
install_type=
isdir=no
stripme=
no_mode=:
for arg
do
    arg2=
    if test -n "$dest"; then
        func_append files " $dest"
        dest=$arg
        continue
    fi

    case $arg in
        -d) isdir=yes ;;
        -f)
            if $install_cp; then :; else
                prev=$arg
            fi
            ;;
        -g | -m | -o)
            prev=$arg
            ;;
        -s)
            stripme=" -s"
            continue
            ;;
    esac
done

```

```

    -*)
  ;;
  *)
  # If the previous option needed an argument, then skip it.
  if test -n "$prev"; then
    if test "x$prev" = x-m && test -n "$install_override_mode";
then
      arg2=$install_override_mode
      no_mode=false
    fi
    prev=
  else
    dest=$arg
    continue
  fi
  ;;
esac

  # Aesthetically quote the argument.
  func_quote_for_eval "$arg"
  func_append install_prog " $func_quote_for_eval_result"
  if test -n "$arg2"; then
    func_quote_for_eval "$arg2"
  fi
  func_append install_shared_prog " $func_quote_for_eval_result"
done

test -z "$install_prog" && \
  func_fatal_help "you must specify an install program"

test -n "$prev" && \
  func_fatal_help "the \"\$prev' option requires an argument"

if test -n "$install_override_mode" && $no_mode; then
  if $install_cp; then ;; else
    func_quote_for_eval "$install_override_mode"
    func_append install_shared_prog " -m $func_quote_for_eval_result"
  fi
fi

if test -z "$files"; then
  if test -z "$dest"; then
    func_fatal_help "no file or destination specified"
  else
    func_fatal_help "you must specify a destination"
  fi
fi

# Strip any trailing slash from the destination.
func_stripname '' '/' "$dest"
dest=$func_stripname_result

```



```

# Check to see that the destination is a directory.
test -d "$dest" && isdir=yes
if test "$isdir" = yes; then
    destdir="$dest"
    destname=
else
    func_dirname_and_basename "$dest" "" "."
    destdir="$func_dirname_result"
    destname="$func_basename_result"

    # Not a directory, so check to see that there is only one file
specified.
    set dummy $files; shift
    test "$#" -gt 1 && \
func_fatal_help "`$dest' is not a directory"
fi
case $destdir in
[\\/*]* | [A-Za-z]:[\\/*]*) ;;
*)
    for file in $files; do
        case $file in
*.lo) ;;
*)
        func_fatal_help "`$destdir' must be an absolute directory
name"
            ;;
        esac
    done
    ;;
esac

# This variable tells wrapper scripts just to set variables rather
# than running their programs.
libtool_install_magic="$magic"

staticlibs=
future_libdirs=
current_libdirs=
for file in $files; do

    # Do each installation.
    case $file in
*.$libext)
        # Do the static libraries later.
        func_append staticlibs " $file"
        ;;

*.la)
        func_resolve_sysroot "$file"
        file=$func_resolve_sysroot_result

        # Check to see that this really is a libtool archive.

```

```

func_lalib_unsafe_p "$file" \
  || func_fatal_help "\`$file' is not a valid libtool archive"

library_names=
old_library=
relink_command=
func_source "$file"

# Add the libdir to current_libdirs if it is the destination.
if test "X$destdir" = "X$libdir"; then
  case "$current_libdirs " in
    *" $libdir ") ;;
    *) func_append current_libdirs " $libdir" ;;
  esac
else
  # Note the libdir as a future libdir.
  case "$future_libdirs " in
    *" $libdir ") ;;
    *) func_append future_libdirs " $libdir" ;;
  esac
fi

func_dirname "$file" "/" ""
dir="$func_dirname_result"
func_append dir "$objdir"

if test "$fast_install" = no && test -n "$relink_command"; then
  # Strip any trailing slash from the destination.
  func_stripname ' ' '/' "$libdir"
  destlibdir=$func_stripname_result

  func_stripname ' ' '/' "$destdir"
  s_destdir=$func_stripname_result

  # Determine the prefix the user has applied to our future dir.
  inst_prefix_dir=`$ECHO "X$s_destdir" | $Xsed -e
"s%$destlibdir\$%%"`

  # Don't allow the user to place us outside of our expected
  # location b/c this prevents finding dependent libraries that
  # are installed to the same prefix.
  # At present, this check doesn't affect windows .dll's that
  # are installed into $libdir/./bin (currently, that works
fine)
  # but it's something to keep an eye on.
  test "$inst_prefix_dir" = "$destdir" && \
    func_fatal_error "error: cannot install \`$file' to a
directory not ending in $libdir"

  if test -n "$inst_prefix_dir"; then
    # Stick the inst_prefix_dir data into the link command.

```

```

        relink_command=`$ECHO "$relink_command" | $SED
"s%@inst_prefix_dir@%-inst-prefix-dir $inst_prefix_dir%"`
        else
            relink_command=`$ECHO "$relink_command" | $SED
"s%@inst_prefix_dir@%%%"`
        fi

        func_warning "relinking \`${file}`"
        func_show_eval "$relink_command" \
            'func_fatal_error "error: relink \`${file}`" with the above
command before installing it"'
        fi

# See the names of the shared library.
set dummy $library_names; shift
if test -n "$1"; then
    realname="$1"
    shift

    srcname="$realname"
    test "$fast_install" = no && test -n "$relink_command" &&
srcname="$realname"

# Install the shared library and build the symlinks.
func_show_eval "$install_shared_prog $dir/$srcname
$destdir/$realname" \
    'exit $?'
tstripme="$stripme"
case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
    case $realname in
*.dll.a)
        tstripme=""
        ;;
    esac
    ;;
esac
if test -n "$tstripme" && test -n "$striplib"; then
    func_show_eval "$striplib $destdir/$realname" 'exit $?'
fi

if test "$#" -gt 0; then
# Delete the old symlinks, and create new ones.
# Try `ln -sf' first, because the `ln' binary might depend on
# the symlink we replace! Solaris /bin/ln does not
understand -f,
# so we also need to try rm && ln -s.
for linkname
do
    test "$linkname" != "$realname" \
        && func_show_eval "(cd $destdir && { $LN_S -f $realname
$linkname || { $RM $linkname && $LN_S $realname $linkname; } })"

```

```

        done
    fi

    # Do each command in the postinstall commands.
    lib="$destdir/$realname"
    func_execute_cmds "$postinstall_cmds" 'exit $?'
fi

# Install the pseudo-library for information purposes.
func_basename "$file"
name="$func_basename_result"
instname="$dir/$name"i
func_show_eval "$install_prog $instname $destdir/$name" 'exit $?'

# Maybe install the static library, too.
test -n "$old_library" && func_append staticlibs "
$dir/$old_library"
;;

*.lo)
# Install (i.e. copy) a libtool object.

# Figure out destination file name, if it wasn't already
specified.
if test -n "$destname"; then
    destfile="$destdir/$destname"
else
    func_basename "$file"
    destfile="$func_basename_result"
    destfile="$destdir/$destfile"
fi

# Deduce the name of the destination old-style object file.
case $destfile in
*.lo)
    func_lo2o "$destfile"
    staticdest=$func_lo2o_result
    ;;
*.$objext)
    staticdest="$destfile"
    destfile=
    ;;
*)
    func_fatal_help "cannot copy a libtool object to `\$destfile'"
    ;;
esac

# Install the libtool object if requested.
test -n "$destfile" && \
    func_show_eval "$install_prog $file $destfile" 'exit $?'

# Install the old object if enabled.

```

```

if test "$build_old_libs" = yes; then
    # Deduce the name of the old-style object file.
    func_lo2o "$file"
    staticobj=$func_lo2o_result
    func_show_eval "$install_prog \$staticobj \$staticdest" 'exit
$?'
fi
exit $EXIT_SUCCESS
;;

*)
# Figure out destination file name, if it wasn't already
specified.
if test -n "$destname"; then
    destfile="$destdir/$destname"
else
    func_basename "$file"
    destfile="$func_basename_result"
    destfile="$destdir/$destfile"
fi

# If the file is missing, and there is a .exe on the end, strip
it
# because it is most likely a libtool script we actually want to
# install
stripped_ext=""
case $file in
    *.exe)
        if test ! -f "$file"; then
            func_stripname '' '.exe' "$file"
            file=$func_stripname_result
            stripped_ext=".exe"
        fi
        ;;
    esac

# Do a test to see if this is really a libtool program.
case $host in
    *cygwin* | *mingw*)
        if func_ltwrapper_executable_p "$file"; then
            func_ltwrapper_scriptname "$file"
            wrapper=$func_ltwrapper_scriptname_result
        else
            func_stripname '' '.exe' "$file"
            wrapper=$func_stripname_result
        fi
        ;;
    *)
        wrapper=$file
        ;;
    esac
if func_ltwrapper_script_p "$wrapper"; then

```

```

notinst_deplibs=
relink_command=

func_source "$wrapper"

# Check the variables that should have been set.
test -z "$generated_by_libtool_version" && \
  func_fatal_error "invalid libtool wrapper script \`${wrapper}`"

finalize=yes
for lib in $notinst_deplibs; do
  # Check to see that each library is installed.
  libdir=
  if test -f "$lib"; then
    func_source "$lib"
  fi
  libfile="$libdir/"`$ECHO "$lib" | $SED 's%^.*/%g`' ###
testsuite: skip nested quoting test
  if test -n "$libdir" && test ! -f "$libfile"; then
    func_warning "\`${lib}` has not been installed in \`${libdir}`"
    finalize=no
  fi
done

relink_command=
func_source "$wrapper"

outputname=
if test "$fast_install" = no && test -n "$relink_command"; then
  $opt_dry_run || {
    if test "$finalize" = yes; then
      tmpdir=`func_mkdir`
      func_basename "$file$stripped_ext"
      file="$func_basename_result"
      outputname="$tmpdir/$file"
      # Replace the output file specification.
      relink_command=`$ECHO "$relink_command" | $SED
's%@OUTPUT@%' "$outputname"'%g`\`

      $opt_silent || {
        func_quote_for_expand "$relink_command"
        eval "func_echo $func_quote_for_expand_result"
      }
      if eval "$relink_command"; then :
        else
          func_error "error: relink \`${file}` with the above command
before installing it"
          $opt_dry_run || ${RM}r "$tmpdir"
          continue
        fi
        file="$outputname"
      else

```

```

        func_warning "cannot relink \`${file}'"
    fi
}
else
    # Install the binary that we compiled earlier.
    file=`$ECHO "$file$stripped_ext" | $SED
"s%\([^/]*\)%%$objdir/\1%"`
    fi
fi

# remove .exe since cygwin /usr/bin/install will append another
# one anyway
case $install_prog,$host in
*/usr/bin/install*,*cygwin*)
    case $file:$destfile in
*.exe:*.exe)
        # this is ok
        ;;
*.exe:*)
        destfile=$destfile.exe
        ;;
*:*.exe)
        func_stripname '' '.exe' "$destfile"
        destfile=$func_stripname_result
        ;;
    esac
    ;;
esac

func_show_eval "$install_prog\${stripme} \`${file} \`${destfile}" 'exit
$?'

$opt_dry_run || if test -n "$outputname"; then
    ${RM}r "$tmpdir"
fi
;;
esac
done

for file in $staticlibs; do
    func_basename "$file"
    name="$func_basename_result"

    # Set up the ranlib parameters.
    oldlib="$destdir/$name"
    func_to_tool_file "$oldlib" func_convert_file_msys_to_w32
    tool_oldlib=$func_to_tool_file_result

    func_show_eval "$install_prog \`${file} \`${oldlib}" 'exit $?'

    if test -n "$stripme" && test -n "$old_striplib"; then
        func_show_eval "$old_striplib $tool_oldlib" 'exit $?'
    fi

```

```

    # Do each command in the postinstall commands.
    func_execute_cmds "$old_postinstall_cmds" 'exit $?'
done

test -n "$future_libdirs" && \
    func_warning "remember to run \`${$progname} --
finish$future_libdirs'"

if test -n "$current_libdirs"; then
    # Maybe just do a dry run.
    $opt_dry_run && current_libdirs=" -n$current_libdirs"
    exec_cmd='$SHELL $progpam $preserve_args --
finish$current_libdirs'
else
    exit $EXIT_SUCCESS
fi
}

test "$opt_mode" = install && func_mode_install ${1+"$@"}

# func_generate_dlsyms outputname originator pic_p
# Extract symbols from dlprefiles and create ${outputname}.S.o with
# a dlpreopen symbol table.
func_generate_dlsyms ()
{
    $opt_debug
    my_outputname="$1"
    my_originator="$2"
    my_pic_p="${3-no}"
    my_prefix=`$ECHO "$my_originator" | sed 's%[^a-zA-Z0-9]%%g'`
    my_dlsyms=

    if test -n "$dlfiles$dlprefiles" || test "$dlself" != no; then
        if test -n "$NM" && test -n "$global_symbol_pipe"; then
            my_dlsyms="${my_outputname}.S.c"
        else
            func_error "not configured to extract global symbols from
dlpreopened files"
        fi
    fi

    if test -n "$my_dlsyms"; then
        case $my_dlsyms in
            "") ;;
            *.c)
                # Discover the nlist of each of the dlfiles.
                nlist="$output_objdir/${my_outputname}.nm"

                func_show_eval "$RM $nlist ${nlist}.S ${nlist}.T"

                # Parse the name list into a source file.

```



```

func_verbose "creating $output_objdir/$my_dlsyms"

$opt_dry_run || $ECHO > "$output_objdir/$my_dlsyms" "\
/* $my_dlsyms - symbol resolution table for \`$my_outputname' dlsym
emulation. */
/* Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION */

#ifdef __cplusplus
extern \"C\" {
#endif

#ifdef defined(__GNUC__) && (((__GNUC__ == 4) && (__GNUC_MINOR__ >= 4))
|| (__GNUC__ > 4))
#pragma GCC diagnostic ignored \"-Wstrict-prototypes\"
#endif

/* Keep this code in sync between libtool.m4, ltmain, lt_system.h, and
tests. */
#ifdef defined(_WIN32) || defined(__CYGWIN__) || defined(_WIN32_WCE)
/* DATA imports from DLLs on WIN32 can't be const, because runtime
relocations are performed -- see ld's documentation on pseudo-
relocs. */
# define LT_DLSYM_CONST
#elif defined(__osf__)
/* This system does not cope well with relocations in const data. */
# define LT_DLSYM_CONST
#else
# define LT_DLSYM_CONST const
#endif

/* External symbol declarations for the compiler. */\
"

if test "$dlsym" = yes; then
  func_verbose "generating symbol list for \`$output'"

  $opt_dry_run || echo ': @PROGRAM@ ' > "$nlist"

  # Add our own program objects to the symbol list.
  progfiles=`$ECHO "$objs$dold_deplibs" | $SP2NL | $SED "$lo2o" |
$NL2SP`
  for progfile in $progfiles; do
    func_to_tool_file "$progfile" func_convert_file_msys_to_w32
    func_verbose "extracting global C symbols from
\`$func_to_tool_file_result'"
    $opt_dry_run || eval "$NM $func_to_tool_file_result |
$global_symbol_pipe >> '$nlist'"
  done

  if test -n "$exclude_expsyms"; then
    $opt_dry_run || {

```

```

        eval '$EGREP -v " ($exclude_expsyms)$" "$nlist" >
"$nlist"T'
        eval '$MV "$nlist"T "$nlist"'
    }
fi

if test -n "$export_symbols_regex"; then
    $opt_dry_run || {
        eval '$EGREP -e "$export_symbols_regex" "$nlist" >
"$nlist"T'
        eval '$MV "$nlist"T "$nlist"'
    }
fi

# Prepare the list of exported symbols
if test -z "$export_symbols"; then
    export_symbols="$output_objdir/$outputname.exp"
    $opt_dry_run || {
        $RM $export_symbols
        eval "${SED} -n -e '/^: @PROGRAM@ $/d' -e 's/^.*
\(.*\)$/\1/p' "'< "$nlist" > "$export_symbols"'
        case $host in
            *cygwin* | *mingw* | *cegcc* )
                eval "echo EXPORTS "'>
"$output_objdir/$outputname.def"'
                eval 'cat "$export_symbols" >>
"$output_objdir/$outputname.def"'
                ;;
            esac
        }
    else
        $opt_dry_run || {
            eval "${SED} -e 's/\([[].[*^$]\)/\[\[\1/g' -e 's/^/ /' -e
's/$/$/'" < "$export_symbols" > "$output_objdir/$outputname.exp"'
            eval '$GREP -f "$output_objdir/$outputname.exp" < "$nlist"
> "$nlist"T'
            eval '$MV "$nlist"T "$nlist"'
            case $host in
                *cygwin* | *mingw* | *cegcc* )
                    eval "echo EXPORTS "'>
"$output_objdir/$outputname.def"'
                    eval 'cat "$nlist" >> "$output_objdir/$outputname.def"'
                    ;;
                esac
            }
        fi
    fi

for dlprefile in $dlprefiles; do
    func_verbose "extracting global C symbols from \"\$dlprefile\""
    func_basename "$dlprefile"
    name="$func_basename_result"

```

```

    case $host in
    *cygwin* | *mingw* | *cegcc* )
        # if an import library, we need to obtain dlname
        if func_win32_import_lib_p "$dlprefile"; then
            func_tr_sh "$dlprefile"
            eval "curr_lafile=\$libfile_$func_tr_sh_result"
            dlprefile_dlname=""
            if test -n "$curr_lafile" && func_lalib_p "$curr_lafile";
then
                # Use subshell, to avoid clobbering current variable
values
                dlprefile_dlname=`source "$curr_lafile" && echo
"$dlname"`
                if test -n "$dlprefile_dlname" ; then
                    func_basename "$dlprefile_dlname"
                    dlprefile_dlname="$func_basename_result"
                else
                    # no lafile. user explicitly requested -dlpreopen
<import library>.
                    $sharedlib_from_linklib_cmd "$dlprefile"
                    dlprefile_dlname=$sharedlib_from_linklib_result
                fi
                fi
                $opt_dry_run || {
                    if test -n "$dlprefile_dlname" ; then
                        eval '$ECHO ": $dlprefile_dlname" >> "$nlist"'
                    else
                        func_warning "Could not compute DLL name from $name"
                        eval '$ECHO ": $name " >> "$nlist"'
                    fi
                    func_to_tool_file "$dlprefile"
func_convert_file_msys_to_w32
                    eval "$NM \"\$func_to_tool_file_result\" 2>/dev/null |
$global_symbol_pipe |
                    $SED -e '/I __imp/d' -e 's/I __nm_/D /;s/_nm_/' >>
'$nlist'"
                }
            else # not an import lib
                $opt_dry_run || {
                    eval '$ECHO ": $name " >> "$nlist"'
                    func_to_tool_file "$dlprefile"
func_convert_file_msys_to_w32
                    eval "$NM \"\$func_to_tool_file_result\" 2>/dev/null |
$global_symbol_pipe >> '$nlist'"
                }
            fi
        ;;
    *)
        $opt_dry_run || {
            eval '$ECHO ": $name " >> "$nlist"'
            func_to_tool_file "$dlprefile"
func_convert_file_msys_to_w32

```

```

        eval "$NM \"\$func_to_tool_file_result\" 2>/dev/null |
$global_symbol_pipe >> '$nlist'"
    }
    ;;
    esac
done

$opt_dry_run || {
# Make sure we have at least an empty file.
test -f "$nlist" || : > "$nlist"

if test -n "$exclude_expsyms"; then
    $EGREP -v " ($exclude_expsyms)$" "$nlist" > "$nlist.T"
    $MV "$nlist.T" "$nlist"
fi

# Try sorting and uniquifying the output.
if $GREP -v "^: " < "$nlist" |
    if sort -k 3 </dev/null >/dev/null 2>&1; then
        sort -k 3
    else
        sort +2
    fi |
    uniq > "$nlist.S"; then
:
else
    $GREP -v "^: " < "$nlist" > "$nlist.S"
fi

if test -f "$nlist.S"; then
    eval "$global_symbol_to_cdecl" < "$nlist.S" >>
"$output_objdir/$my_dlsyms"
else
    echo '/* NONE */' >> "$output_objdir/$my_dlsyms"
fi

echo >> "$output_objdir/$my_dlsyms" "\

/* The mapping between symbol names and symbols. */
typedef struct {
    const char *name;
    void *address;
} lt_dlsymlist;
extern LT_DLSYM_CONST lt_dlsymlist
lt_${my_prefix}_LTX_preloaded_symbols[];
LT_DLSYM_CONST lt_dlsymlist
lt_${my_prefix}_LTX_preloaded_symbols[] =
{\
    { \"$my_originator\", (void *) 0 },"

    case $need_lib_prefix in
no)

```

```

        eval "$global_symbol_to_c_name_address" < "$nlist" >>
"$output_objdir/$my_dlsyms"
        ;;
    *)
        eval "$global_symbol_to_c_name_address_lib_prefix" < "$nlist"
>> "$output_objdir/$my_dlsyms"
        ;;
    esac
    echo >> "$output_objdir/$my_dlsyms" "\
{0, (void *) 0}
};

/* This works around a problem in FreeBSD linker */
#ifdef FREEBSD_WORKAROUND
static const void *lt_preloaded_setup() {
    return lt_${my_prefix}_LTX_preloaded_symbols;
}
#endif

#ifdef __cplusplus
}
#endif\
"

    } # !$opt_dry_run

pic_flag_for_symtable=
case "$compile_command " in
*" -static ") ;;
*)
    case $host in
    # compiling the symbol table file with pic_flag works around
    # a FreeBSD bug that causes programs to crash when -lm is
    # linked before any other PIC object.  But we must not use
    # pic_flag when linking with -static.  The problem exists in
    # FreeBSD 2.2.6 and is fixed in FreeBSD 3.1.
    *-*-freebsd2.*|*-*-freebsd3.0*|*-*-freebsdelf3.0*)
        pic_flag_for_symtable=" $pic_flag -DFREEBSD_WORKAROUND" ;;
    *-*-hpux*)
        pic_flag_for_symtable=" $pic_flag" ;;
    *)
        if test "X$my_pic_p" != Xno; then
            pic_flag_for_symtable=" $pic_flag"
        fi
        ;;
    esac
    ;;
esac

symtab_cflags=
for arg in $LTCFLAGS; do
    case $arg in
    -pie | -fpie | -fPIE) ;;
    *) func_append symtab_cflags " $arg" ;;

```

```

    esac
done

# Now compile the dynamic symbol file.
func_show_eval '(cd $output_objdir && $LTCC$symtab_cflags -
c$no_builtin_flag$pic_flag_for_symtable "$my_dlsyms")' 'exit $?'

# Clean up the generated files.
func_show_eval '$RM "$output_objdir/$my_dlsyms" "$nlist"
"${nlist}S" "${nlist}T"'

# Transform the symbol file into the correct name.
symfileobj="$output_objdir/${my_outputname}S.$objext"
case $host in
*cygwin* | *mingw* | *cegcc* )
    if test -f "$output_objdir/$my_outputname.def"; then
        compile_command=`$ECHO "$compile_command" | $SED
"s%@SYMFIL@%$output_objdir/$my_outputname.def $symfileobj%"`
        finalize_command=`$ECHO "$finalize_command" | $SED
"s%@SYMFIL@%$output_objdir/$my_outputname.def $symfileobj%"`
    else
        compile_command=`$ECHO "$compile_command" | $SED
"s%@SYMFIL@%$symfileobj%"`
        finalize_command=`$ECHO "$finalize_command" | $SED
"s%@SYMFIL@%$symfileobj%"`
    fi
    ;;
*)
    compile_command=`$ECHO "$compile_command" | $SED
"s%@SYMFIL@%$symfileobj%"`
    finalize_command=`$ECHO "$finalize_command" | $SED
"s%@SYMFIL@%$symfileobj%"`
    ;;
esac
;;
*)
func_fatal_error "unknown suffix for \`${my_dlsyms}'"
;;
esac
else
# We keep going just in case the user didn't refer to
# lt_preloaded_symbols. The linker will fail if
global_symbol_pipe
# really was required.

# Nullify the symbol file.
compile_command=`$ECHO "$compile_command" | $SED "s%
@SYMFIL@%%"`
finalize_command=`$ECHO "$finalize_command" | $SED "s%
@SYMFIL@%%"`
fi
}

```

```

# func_win32_libid arg
# return the library type of file 'arg'
#
# Need a lot of goo to handle *both* DLLs and import libs
# Has to be a shell function in order to 'eat' the argument
# that is supplied when $file_magic_command is called.
# Despite the name, also deal with 64 bit binaries.
func_win32_libid ()
{
    $opt_debug
    win32_libid_type="unknown"
    win32_fileres=`file -L $1 2>/dev/null`
    case $win32_fileres in
        *ar\ archive\ import\ library*) # definitely import
            win32_libid_type="x86 archive import"
            ;;
        *ar\ archive*) # could be an import, or static
            # Keep the egrep pattern in sync with the one in
            _LT_CHECK_MAGIC_METHOD.
            if eval $OBJDUMP -f $1 | $SED -e '10q' 2>/dev/null |
                $EGREP 'file format (pei*-i386(.?architecture: i386)?|pe-arm-
wince|pe-x86-64)' >/dev/null; then
                func_to_tool_file "$1" func_convert_file_msys_to_w32
                win32_nmres=`eval $NM -f posix -A \"\$func_to_tool_file_result\"
|
                $SED -n -e '
                    1,100{
                        / I /{
                            s,.*,import,
                            p
                            q
                        }
                    }'`
                case $win32_nmres in
                    import*) win32_libid_type="x86 archive import";;
                    *) win32_libid_type="x86 archive static";;
                esac
            fi
            ;;
        *DLL*)
            win32_libid_type="x86 DLL"
            ;;
        *executable*) # but shell scripts are "executable" too...
            case $win32_fileres in
                *MS\ Windows\ PE\ Intel*)
                    win32_libid_type="x86 DLL"
                    ;;
            esac
            ;;
    esac
    $ECHO "$win32_libid_type"
}

```

```

}

# func_cygming_dll_for_implib ARG
#
# Platform-specific function to extract the
# name of the DLL associated with the specified
# import library ARG.
# Invoked by eval'ing the libtool variable
#   $sharedlib_from_linklib_cmd
# Result is available in the variable
#   $sharedlib_from_linklib_result
func_cygming_dll_for_implib ()
{
    $opt_debug
    sharedlib_from_linklib_result=`$DLLTOOL --identify-strict --identify
"$1" `
}

# func_cygming_dll_for_implib_fallback_core SECTION_NAME LIBNAMEs
#
# This is the core of a fallback implementation of a
# platform-specific function to extract the name of the
# DLL associated with the specified import library LIBNAME.
#
# SECTION_NAME is either .idata$6 or .idata$7, depending
# on the platform and compiler that created the implib.
#
# Echoes the name of the DLL associated with the
# specified import library.
func_cygming_dll_for_implib_fallback_core ()
{
    $opt_debug
    match_literal=`$ECHO "$1" | $SED "$sed_make_literal_regex"`
    $OBJDUMP -s --section "$1" "$2" 2>/dev/null |
        $SED '/^Contents of section '"$match_literal"':/{
            # Place marker at beginning of archive member dllname section
            s/./====MARK====/
            p
            d
        }
    # These lines can sometimes be longer than 43 characters, but
    # are always uninteresting
    /:[ ]*file format pe[i]\{,1\}-/d
    /^In archive [^:]*:/d
    # Ensure marker is printed
    /^====MARK====/p
    # Remove all lines with less than 43 characters
    /^.\{43\}//!d
    # From remaining lines, remove first 43 characters
    s/^.\{43\} //' |
    $SED -n '
        # Join marker and all lines until next marker into a single line

```



```

/^====MARK====/ b para
H
$ b para
b
:para
x
s/\n//g
# Remove the marker
s/^====MARK====//
# Remove trailing dots and whitespace
s/[\. \t]*$//
# Print
./p' |
# we now have a list, one entry per line, of the stringified
# contents of the appropriate section of all members of the
# archive which possess that section. Heuristic: eliminate
# all those which have a first or second character that is
# a '.' (that is, objdump's representation of an unprintable
# character.) This should work for all archives with less than
# 0x302f exports -- but will fail for DLLs whose name actually
# begins with a literal '.' or a single character followed by
# a '.'.
#
# Of those that remain, print the first one.
$SED -e '/^\./d;/^\./d;q'
}

# func_cygming_gnu_implib_p ARG
# This predicate returns with zero status (TRUE) if
# ARG is a GNU/binutils-style import library. Returns
# with nonzero status (FALSE) otherwise.
func_cygming_gnu_implib_p ()
{
    $opt_debug
    func_to_tool_file "$1" func_convert_file_msys_to_w32
    func_cygming_gnu_implib_tmp=`$NM "$func_to_tool_file_result" | eval
"$global_symbol_pipe" | $EGREP ' (_head_[A-Za-z0-9_]+_[ad]l*|[A-Za-z0-
9_]+_[ad]l*_iname)$'`
    test -n "$func_cygming_gnu_implib_tmp"
}

# func_cygming_ms_implib_p ARG
# This predicate returns with zero status (TRUE) if
# ARG is an MS-style import library. Returns
# with nonzero status (FALSE) otherwise.
func_cygming_ms_implib_p ()
{
    $opt_debug
    func_to_tool_file "$1" func_convert_file_msys_to_w32
    func_cygming_ms_implib_tmp=`$NM "$func_to_tool_file_result" | eval
"$global_symbol_pipe" | $GREP '_NULL_IMPORT_DESCRIPTOR'`
    test -n "$func_cygming_ms_implib_tmp"
}

```

```

}

# func_cygming_dll_for_implib_fallback ARG
# Platform-specific function to extract the
# name of the DLL associated with the specified
# import library ARG.
#
# This fallback implementation is for use when $DLLTOOL
# does not support the --identify-strict option.
# Invoked by eval'ing the libtool variable
#   $sharedlib_from_linklib_cmd
# Result is available in the variable
#   $sharedlib_from_linklib_result
func_cygming_dll_for_implib_fallback ()
{
    $opt_debug
    if func_cygming_gnu_implib_p "$1" ; then
        # binutils import library

sharedlib_from_linklib_result=`func_cygming_dll_for_implib_fallback_core '.idata$7' "$1"`
        elif func_cygming_ms_implib_p "$1" ; then
            # ms-generated import library

sharedlib_from_linklib_result=`func_cygming_dll_for_implib_fallback_core '.idata$6' "$1"`
        else
            # unknown
            sharedlib_from_linklib_result=""
        fi
    }

# func_extract_an_archive dir oldlib
func_extract_an_archive ()
{
    $opt_debug
    f_ex_an_ar_dir="$1"; shift
    f_ex_an_ar_oldlib="$1"
    if test "$lock_old_archive_extraction" = yes; then
        lockfile=$f_ex_an_ar_oldlib.lock
        until $opt_dry_run || ln "$proppath" "$lockfile" 2>/dev/null; do
            func_echo "Waiting for $lockfile to be removed"
            sleep 2
        done
    fi
    func_show_eval "(cd \"$f_ex_an_ar_dir\" && $AR x
\"$f_ex_an_ar_oldlib\")" \
        'stat=?; rm -f "$lockfile"; exit $stat'
    if test "$lock_old_archive_extraction" = yes; then
        $opt_dry_run || rm -f "$lockfile"
    fi
}

```

```

        if ($AR t "$f_ex_an_ar_oldlib" | sort | sort -uc >/dev/null 2>&1);
then
    :
else
    func_fatal_error "object name conflicts in archive:
$f_ex_an_ar_dir/$f_ex_an_ar_oldlib"
fi
}

# func_extract_archives gentop oldlib ...
func_extract_archives ()
{
    $opt_debug
    my_gentop="$1"; shift
    my_oldlibs=${1+"$@"}
    my_oldobjs=""
    my_xlib=""
    my_xabs=""
    my_xdir=""

    for my_xlib in $my_oldlibs; do
        # Extract the objects.
        case $my_xlib in
            [\\/*] | [A-Za-z]:[\\/*]*) my_xabs="$my_xlib" ;;
            *) my_xabs=`pwd`"/$my_xlib" ;;
        esac
        func_basename "$my_xlib"
        my_xlib="$func_basename_result"
        my_xlib_u=$my_xlib
        while ;; do
            case " $extracted_archives " in
                *" $my_xlib_u "*)
                    func_arith $extracted_serial + 1
                    extracted_serial=$func_arith_result
                    my_xlib_u=lt$extracted_serial-$my_xlib ;;
                *) break ;;
            esac
        done
        extracted_archives="$extracted_archives $my_xlib_u"
        my_xdir="$my_gentop/$my_xlib_u"

        func_mkdir_p "$my_xdir"

        case $host in
            *-darwin*)
                func_verbose "Extracting $my_xabs"
                # Do not bother doing anything if just a dry run
                $opt_dry_run || {
                    darwin_orig_dir=`pwd`
                    cd $my_xdir || exit $?
                    darwin_archive=$my_xabs
                }
            esac
        done
    done
}

```

```

darwin_curdir=`pwd`
darwin_base_archive=`basename "$darwin_archive"`
darwin_arches=`$LIPO -info "$darwin_archive" 2>/dev/null |
$GREP Architectures 2>/dev/null || true`
if test -n "$darwin_arches"; then
    darwin_arches=`$ECHO "$darwin_arches" | $SED -e 's/.*are:/'`
    darwin_arch=
    func_verbose "$darwin_base_archive has multiple architectures
$darwin_arches"
    for darwin_arch in $darwin_arches ; do
        func_mkdir_p "unfat-$$/${darwin_base_archive}-
${darwin_arch}"
        $LIPO -thin $darwin_arch -output "unfat-
$$/${darwin_base_archive}-${darwin_arch}/${darwin_base_archive}"
"${darwin_archive}"
        cd "unfat-$$/${darwin_base_archive}-${darwin_arch}"
        func_extract_an_archive "`pwd`" "${darwin_base_archive}"
        cd "$darwin_curdir"
        $RM "unfat-$$/${darwin_base_archive}-
${darwin_arch}/${darwin_base_archive}"
    done # $darwin_arches
    ## Okay now we've a bunch of thin objects, gotta fatten
them up :)
    darwin_filelist=`find unfat-$$ -type f -name \*.o -print -o -
name \*.lo -print | $SED -e "$basename" | sort -u`
    darwin_file=
    darwin_files=
    for darwin_file in $darwin_filelist; do
        darwin_files=`find unfat-$$ -name $darwin_file -print |
sort | $NL2SP`
        $LIPO -create -output "$darwin_file" $darwin_files
    done # $darwin_filelist
    $RM -rf unfat-$$
    cd "$darwin_orig_dir"
else
    cd $darwin_orig_dir
    func_extract_an_archive "$my_xdir" "$my_xabs"
    fi # $darwin_arches
} # !$opt_dry_run
;;
*)
    func_extract_an_archive "$my_xdir" "$my_xabs"
;;
esac
my_oldobjs="$my_oldobjs "`find $my_xdir -name \*.$objext -print
-o -name \*.lo -print | sort | $NL2SP`
done

func_extract_archives_result="$my_oldobjs"
}

```

```

# func_emit_wrapper [arg=no]
#
# Emit a libtool wrapper script on stdout.
# Don't directly open a file because we may want to
# incorporate the script contents within a cygwin/mingw
# wrapper executable. Must ONLY be called from within
# func_mode_link because it depends on a number of variables
# set therein.
#
# ARG is the value that the WRAPPER_SCRIPT_BELONGS_IN_OBJDIR
# variable will take. If 'yes', then the emitted script
# will assume that the directory in which it is stored is
# the $objdir directory. This is a cygwin/mingw-specific
# behavior.
func_emit_wrapper ()
{
    func_emit_wrapper_arg1=${1-no}

    $ECHO "\
#! $SHELL

# $output - temporary wrapper script for $objdir/$outputname
# Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION
#
# The $output program cannot be directly executed until all the
# libtool
# libraries that it depends on are installed.
#
# This wrapper script should never be moved out of the build
# directory.
# If it is, it will not operate correctly.

# Sed substitution that helps us do robust quoting. It backslashifies
# metacharacters that are still active within double-quoted strings.
sed_quote_subst='$sed_quote_subst'

# Be Bourne compatible
if test -n \"\${ZSH_VERSION+set}\" && (emulate sh) >/dev/null 2>&1;
then
    emulate sh
    NULLCMD=:
    # Zsh 3.x and 4.x performs word splitting on \"\${1+\"$@\"}\", which
    # is contrary to our usage. Disable this feature.
    alias -g \"\${1+\"$@\"}\"='\"$@\"'
    setopt NO_GLOB_SUBST
else
    case \"(set -o) 2>/dev/null\" in
        *posix*) set -o posix;;
    esac
fi
BIN_SH=xpg4; export BIN_SH # for Tru64
DUALCASE=1; export DUALCASE # for MKS sh

# The HP-UX ksh and POSIX shell print the target directory to stdout

```

```

# if CDPATH is set.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

relink_command="\$relink_command\"

# This environment variable determines our operation mode.
if test \"\$libtool_install_magic\" = \"\$magic\"; then
  # install mode needs the following variables:
  generated_by_libtool_version='\$macro_version'
  notinst_deplibs='\$notinst_deplibs'
else
  # When we are sourced in execute mode, \$file and \$ECHO are already
  set.
  if test \"\$libtool_execute_magic\" != \"\$magic\"; then
    file=\"\$0\"

    qECHO=`$ECHO \"$ECHO\" | $SED \"$sed_quote_subst\"`
    $ECHO \"\

# A function that is used when there is no print builtin or printf.
func_fallback_echo ()
{
  eval 'cat <<_LTECHO_EOF
\$1
_LTECHO_EOF'
}
  ECHO=\"\$qECHO\"
  fi

# Very basic option parsing. These options are (a) specific to
# the libtool wrapper, (b) are identical between the wrapper
# /script/ and the wrapper /executable/ which is used only on
# windows platforms, and (c) all begin with the string "--lt-"
# (application programs are unlikely to have options which match
# this pattern).
#
# There are only two supported options: --lt-debug and
# --lt-dump-script. There is, deliberately, no --lt-help.
#
# The first argument to this parsing function should be the
# script's $0 value, followed by "$@".
lt_option_debug=
func_parse_lt_options ()
{
  lt_script_arg0=\$0
  shift
  for lt_opt
  do
    case \"\$lt_opt\" in
      --lt-debug) lt_option_debug=1 ;;
      --lt-dump-script)

```

```

        lt_dump_D=`\`$ECHO `X`$lt_script_arg0`" | $SED -e 's/^X//' -e
's%/[^/]*$%%'\`
        test `X`$lt_dump_D`" = `X`$lt_script_arg0`" && lt_dump_D=.
        lt_dump_F=`\`$ECHO `X`$lt_script_arg0`" | $SED -e 's/^X//' -e
's%^.*/%%\`
        cat `"$lt_dump_D/$lt_dump_F`"
        exit 0
    ;;
--lt-*)
    `ECHO `Unrecognized --lt- option: '$lt_opt`" 1>&2
    exit 1
    ;;
esac
done

# Print the debug banner immediately:
if test -n `"$lt_option_debug`; then
    echo `"$outputname}:${output}:\${LINENO}: libtool wrapper (GNU
$PACKAGE$TIMESTAMP) $VERSION`" 1>&2
fi
}

# Used when --lt-debug. Prints its arguments to stdout
# (redirection is the responsibility of the caller)
func_lt_dump_args ()
{
    lt_dump_args_N=1;
    for lt_arg
    do
        `ECHO `"$outputname}:${output}:\${LINENO}:
newargv[$lt_dump_args_N]: $lt_arg`"
        lt_dump_args_N=`expr $lt_dump_args_N + 1`
    done
}

# Core function for launching the target application
func_exec_program_core ()
{
"
    case $host in
    # Backslashes separate directories on plain windows
    *-mingw | *-os2* | *-cegcc*)
        `ECHO `"\
            if test -n `"$lt_option_debug`; then
                `ECHO `"$outputname}:${output}:\${LINENO}: newargv[0]:
\${progdir}\\\\\\$program`" 1>&2
                func_lt_dump_args ${1+`"$@"`} 1>&2
            fi
            exec `"$progdir"\\\\\\$program`" ${1+`"$@"`}
"
    ;;
;;

```

```

*)
    $ECHO "\
        if test -n \"\$lt_option_debug\"; then
            \$ECHO \"\${outputname}:\${output}:\${LINENO}: newargv[0]:
\${progdir}/\${program}\" 1>&2
            func_lt_dump_args \${1+\"\$@\"} 1>&2
        fi
        exec \"\${progdir}/\${program}\" \${1+\"\$@\"}
    \"
;;
esac
$ECHO "\
    \$ECHO \"\${0}: cannot exec \${program} \${*}\" 1>&2
    exit 1
}

# A function to encapsulate launching the target application
# Strips options in the --lt-* namespace from \@ and
# launches target application with the remaining arguments.
func_exec_program ()
{
    case \" \${*} \" in
    *\\ --lt-*)
        for lt_wr_arg
        do
            case \"\$lt_wr_arg in
            --lt-*) ;;
            *) set x \"\$@\" \"\$lt_wr_arg\"; shift;;
            esac
            shift
        done ;;
    esac
    func_exec_program_core \${1+\"\$@\"}
}

# Parse options
func_parse_lt_options \"\$0\" \${1+\"\$@\"}

# Find the directory that this script lives in.
thisdir=\\\$ECHO \"\${file}\" | $SED 's%/[^/]*$%%'\`
test \"x\$thisdir\" = \"x\${file}\" && thisdir=.

# Follow symbolic links until we get to the real thisdir.
file=\\ls -ld \"\${file}\" | $SED -n 's/.*-> //p'\`
while test -n \"\${file}\"; do
    destdir=\\\$ECHO \"\${file}\" | $SED 's%/[^/]*$%%'\`

    # If there was a directory component, then change thisdir.
    if test \"x\$destdir\" != \"x\${file}\"; then
        case \"\${destdir}\" in
        [\\\\\\/] * | [A-Za-z]:[\\\\\\/]*) thisdir=\\\"\${destdir}\" ;;
        *) thisdir=\\\"\${thisdir}/\${destdir}\" ;;
        esac
    fi
done

```



```

    esac
fi

file=\\$ECHO "\\$file\" | $SED 's%^.*/%%'`
file=\\ls -ld "\\$thisdir/\$file\" | $SED -n 's/.*-> //p'`
done

# Usually 'no', except on cygwin/mingw when embedded into
# the cwrapper.
WRAPPER_SCRIPT_BELONGS_IN_OBJDIR=$func_emit_wrapper_arg1
if test "\\$WRAPPER_SCRIPT_BELONGS_IN_OBJDIR\" = \"yes\"; then
    # special case for '.'
    if test "\\$thisdir\" = \".\"; then
        thisdir=`pwd`
    fi
    # remove .libs from thisdir
    case "\\$thisdir\" in
    *[\|\\|/]$objdir ) thisdir=\\$ECHO "\\$thisdir\" | $SED
's%[\|\\|/][^\\|\\|/]*$%'` ;;
    $objdir ) thisdir=. ;;
    esac
fi

# Try to get the absolute directory name.
absdir=`cd "\\$thisdir\" && pwd`
test -n "\\$absdir\" && thisdir=\"\\$absdir\"
"

    if test "$fast_install" = yes; then
        $ECHO "\
program=lt-'$outputname'$exeext
progdir=\"\\$thisdir/$objdir\"

if test ! -f "\\$progdir/\$program\" ||
{ file=\\ls -ldt "\\$progdir/\$program\"
\\$progdir/../../\$program\" 2>/dev/null | ${SED} 1q`; \\
test \"X$file\" != \"X\\$progdir/\$program\"; } then

file=\"\\$-$-\\$program\"

if test ! -d "\\$progdir\"; then
    $MKDIR "\\$progdir\"
else
    $RM "\\$progdir/\$file\"
fi"

        $ECHO "\

# relink executable if necessary
if test -n "\\$relink_command\"; then
    if relink_command_output=`eval \\$relink_command 2>&1`; then :
    else

```

```

$ECHO "\"$relink_command_output\" >&2
$RM "\"$progdire/\$file\"
exit 1
fi
fi

$MV "\"$progdire/\$file\" "\"$progdire/\$program\" 2>/dev/null ||
{ $RM "\"$progdire/\$program\";
  $MV "\"$progdire/\$file\" "\"$progdire/\$program\"; }
$RM "\"$progdire/\$file\"
fi"
else
  $ECHO "\
program='$outputname'
progdire=\"\"$thisdir/$objdir\"
"
  fi

  $ECHO "\

if test -f "\"$progdire/\$program\"; then"

  # fixup the dll searchpath if we need to.
  #
  # Fix the DLL searchpath if we need to. Do this before
prepending
  # to shlibpath, because on Windows, both are PATH and uninstalled
  # libraries must come first.
  if test -n "$dllsearchpath"; then
    $ECHO "\
# Add the dll search path components to the executable PATH
PATH=$dllsearchpath:\$PATH
"
    fi

    # Export our shlibpath_var if we have one.
    if test "$shlibpath_overrides_runpath" = yes && test -n
"$shlibpath_var" && test -n "$temp_rpath"; then
      $ECHO "\
# Add our own library path to $shlibpath_var
$shlibpath_var=\"$temp_rpath\$$shlibpath_var\"

# Some systems cannot cope with colon-terminated $shlibpath_var
# The second colon is a workaround for a bug in BeOS R4 sed
$shlibpath_var=\"\"$ECHO "\"\$$shlibpath_var\" | $SED 's/::*\$//'\`

export $shlibpath_var
"
    fi

    $ECHO "\
if test "\"$libtool_execute_magic\" != \"$magic\"; then

```

```

        # Run the actual program with our arguments.
        func_exec_program \${1+\\"$@"}
    fi
else
    # The program doesn't exist.
    \${ECHO} \\"$0: error: \\\"$progdir/\$program' does not exist\"
1>&2
    \${ECHO} \\"This script is just a wrapper for \$program.\" 1>&2
    \${ECHO} \\"See the $PACKAGE documentation for more information.\"
1>&2
    exit 1
fi
fi\
"
}

```

```

# func_emit_cwrapperexe_src
# emit the source code for a wrapper executable on stdout
# Must ONLY be called from within func_mode_link because
# it depends on a number of variable set therein.
func_emit_cwrapperexe_src ()
{

```

```

    cat <<EOF

```

```

/* $cwrappersource - temporary wrapper executable for
$objdir/$outputname
Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION

```

```

The $output program cannot be directly executed until all the
libtool
libraries that it depends on are installed.

```

```

This wrapper executable should never be moved out of the build
directory.
If it is, it will not operate correctly.
*/
EOF

```

```

    cat <<"EOF"
#ifdef _MSC_VER
# define _CRT_SECURE_NO_DEPRECATED 1
#endif
#include <stdio.h>
#include <stdlib.h>
#ifdef _MSC_VER
# include <direct.h>
# include <process.h>
# include <io.h>
#else
# include <unistd.h>
# include <stdint.h>
# ifdef __CYGWIN__

```

```

# include <io.h>
# endif
#endif
#include <malloc.h>
#include <stdarg.h>
#include <assert.h>
#include <string.h>
#include <ctype.h>
#include <errno.h>
#include <fcntl.h>
#include <sys/stat.h>

/* declarations of non-ANSI functions */
#if defined(__MINGW32__)
# ifdef __STRICT_ANSI__
int _putenv (const char *);
# endif
#elif defined(__CYGWIN__)
# ifdef __STRICT_ANSI__
char *realpath (const char *, char *);
int putenv (char *);
int setenv (const char *, const char *, int);
# endif
/* #elif defined (other platforms) ... */
#endif

/* portability defines, excluding path handling macros */
#if defined(_MSC_VER)
# define setmode _setmode
# define stat _stat
# define chmod _chmod
# define getcwd _getcwd
# define putenv _putenv
# define S_IXUSR _S_IXEXEC
# ifndef _INTPTR_T_DEFINED
# define _INTPTR_T_DEFINED
# define intptr_t int
# endif
#elif defined(__MINGW32__)
# define setmode _setmode
# define stat _stat
# define chmod _chmod
# define getcwd _getcwd
# define putenv _putenv
#elif defined(__CYGWIN__)
# define HAVE_SETENV
# define FOPEN_WB "wb"
/* #elif defined (other platforms) ... */
#endif

#if defined(PATH_MAX)
# define LT_PATHMAX PATH_MAX

```

```

#elif defined(MAXPATHLEN)
# define LT_PATHMAX MAXPATHLEN
#else
# define LT_PATHMAX 1024
#endif

#ifndef S_IXOTH
# define S_IXOTH 0
#endif
#ifndef S_IXGRP
# define S_IXGRP 0
#endif

/* path handling portability macros */
#ifndef DIR_SEPARATOR
# define DIR_SEPARATOR '/'
# define PATH_SEPARATOR ':'
#endif

#if defined (__WIN32) || defined (__MSDOS__) || defined (__DJGPP__) ||
\
    defined (__OS2__)
# define HAVE_DOS_BASED_FILE_SYSTEM
# define FOPEN_WB "wb"
# ifndef DIR_SEPARATOR_2
#   define DIR_SEPARATOR_2 '\\\
'
# endif
# ifndef PATH_SEPARATOR_2
#   define PATH_SEPARATOR_2 ';'
# endif
#endif

#ifndef DIR_SEPARATOR_2
# define IS_DIR_SEPARATOR(ch) ((ch) == DIR_SEPARATOR)
#else /* DIR_SEPARATOR_2 */
# define IS_DIR_SEPARATOR(ch) \
    (((ch) == DIR_SEPARATOR) || ((ch) == DIR_SEPARATOR_2))
#endif /* DIR_SEPARATOR_2 */

#ifndef PATH_SEPARATOR_2
# define IS_PATH_SEPARATOR(ch) ((ch) == PATH_SEPARATOR)
#else /* PATH_SEPARATOR_2 */
# define IS_PATH_SEPARATOR(ch) ((ch) == PATH_SEPARATOR_2)
#endif /* PATH_SEPARATOR_2 */

#ifndef FOPEN_WB
# define FOPEN_WB "w"
#endif
#ifndef _O_BINARY
# define _O_BINARY 0
#endif

```

```

#define XMALLOC(type, num)      ((type *) xmalloc ((num) *
sizeof(type)))
#define XFREE(stale) do { \
    if (stale) { free ((void *) stale); stale = 0; } \
} while (0)

#if defined(LT_DEBUGWRAPPER)
static int lt_debug = 1;
#else
static int lt_debug = 0;
#endif

const char *program_name = "libtool-wrapper"; /* in case xstrdup fails
*/

void *xmalloc (size_t num);
char *xstrdup (const char *string);
const char *base_name (const char *name);
char *find_executable (const char *wrapper);
char *chase_symlinks (const char *pathspec);
int make_executable (const char *path);
int check_executable (const char *path);
char *strendzap (char *str, const char *pat);
void lt_debugprintf (const char *file, int line, const char *fmt,
...);
void lt_fatal (const char *file, int line, const char *message, ...);
static const char *nonnull (const char *s);
static const char *nonempty (const char *s);
void lt_setenv (const char *name, const char *value);
char *lt_extend_str (const char *orig_value, const char *add, int
to_end);
void lt_update_exe_path (const char *name, const char *value);
void lt_update_lib_path (const char *name, const char *value);
char **prepare_spawn (char **argv);
void lt_dump_script (FILE *f);
EOF

        cat <<EOF
volatile const char * MAGIC_EXE = "$magic_exe";
const char * LIB_PATH_VARNAME = "$shlibpath_var";
EOF

        if test "$shlibpath_overrides_runpath" = yes && test -n
"$shlibpath_var" && test -n "$temp_rpath"; then
            func_to_host_path "$temp_rpath"
            cat <<EOF
const char * LIB_PATH_VALUE      = "$func_to_host_path_result";
EOF
        else
            cat <<"EOF"
const char * LIB_PATH_VALUE      = "";
EOF

```

```

fi

if test -n "$dllsearchpath"; then
    func_to_host_path "$dllsearchpath:"
    cat <<EOF
const char * EXE_PATH_VARNAME = "PATH";
const char * EXE_PATH_VALUE   = "$func_to_host_path_result";
EOF
else
    cat <<"EOF"
const char * EXE_PATH_VARNAME = "";
const char * EXE_PATH_VALUE   = "";
EOF
fi

if test "$fast_install" = yes; then
    cat <<EOF
const char * TARGET_PROGRAM_NAME = "lt-$outputname"; /* hopefully, no
.exe */
EOF
else
    cat <<EOF
const char * TARGET_PROGRAM_NAME = "$outputname"; /* hopefully, no
.exe */
EOF
fi

cat <<"EOF"

#define LTWRAPPER_OPTION_PREFIX      "--lt-"

static const char *ltwrapper_option_prefix = LTWRAPPER_OPTION_PREFIX;
static const char *dumpscrip_opt         = LTWRAPPER_OPTION_PREFIX
"dump-script";
static const char *debug_opt              = LTWRAPPER_OPTION_PREFIX
"debug";

int
main (int argc, char *argv[])
{
    char **newargz;
    int newargc;
    char *tmp_pathspec;
    char *actual_cwrapper_path;
    char *actual_cwrapper_name;
    char *target_name;
    char *lt_argv_zero;
    intptr_t rval = 127;

    int i;

```

```

program_name = (char *) xstrdup (base_name (argv[0]));
newargz = XMALLOC (char *, argc + 1);

/* very simple arg parsing; don't want to rely on getopt
 * also, copy all non cwrapper options to newargz, except
 * argz[0], which is handled differently
 */
newargc=0;
for (i = 1; i < argc; i++)
{
    if (strcmp (argv[i], dumpscript_opt) == 0)
    {
EOF
        case "$host" in
            *mingw* | *cygwin* )
                # make stdout use "unix" line endings
                echo "          setmode(1, _O_BINARY);"
                ;;
            esac

            cat <<"EOF"
            lt_dump_script (stdout);
            return 0;
        }
        if (strcmp (argv[i], debug_opt) == 0)
        {
            lt_debug = 1;
            continue;
        }
        if (strcmp (argv[i], ltwrapper_option_prefix) == 0)
        {
            /* however, if there is an option in the
LTWRAPPER_OPTION_PREFIX
            namespace, but it is not one of the ones we know about
and
            have already dealt with, above (including dump-script),
then
            report an error. Otherwise, targets might begin to
believe
            they are allowed to use options in the
LTWRAPPER_OPTION_PREFIX
            namespace. The first time any user complains about this,
we'll
            need to make LTWRAPPER_OPTION_PREFIX a configure-time
option
            or a configure.ac-settable value.
            */
            lt_fatal (__FILE__, __LINE__,
                "unrecognized %s option: '%s'",
                    ltwrapper_option_prefix, argv[i]);
        }
        /* otherwise ... */
    }
}

```



```

        newargz[++newargc] = xstrdup (argv[i]);
    }
    newargz[++newargc] = NULL;

EOF
    cat <<EOF
    /* The GNU banner must be the first non-error debug message */
    lt_debugprintf (__FILE__, __LINE__, "libtool wrapper (GNU
$PACKAGE$TIMESTAMP) $VERSION\n");
EOF
    cat <<"EOF"
    lt_debugprintf (__FILE__, __LINE__, "(main) argv[0]: %s\n",
argv[0]);
    lt_debugprintf (__FILE__, __LINE__, "(main) program_name: %s\n",
program_name);

    tmp_pathspec = find_executable (argv[0]);
    if (tmp_pathspec == NULL)
        lt_fatal (__FILE__, __LINE__, "couldn't find %s", argv[0]);
    lt_debugprintf (__FILE__, __LINE__,
                    "(main) found exe (before symlink chase) at: %s\n",
                    tmp_pathspec);

    actual_cwrapper_path = chase_symlinks (tmp_pathspec);
    lt_debugprintf (__FILE__, __LINE__,
                    "(main) found exe (after symlink chase) at: %s\n",
                    actual_cwrapper_path);
    XFREE (tmp_pathspec);

    actual_cwrapper_name = xstrdup (base_name (actual_cwrapper_path));
    strendzap (actual_cwrapper_path, actual_cwrapper_name);

    /* wrapper name transforms */
    strendzap (actual_cwrapper_name, ".exe");
    tmp_pathspec = lt_extend_str (actual_cwrapper_name, ".exe", 1);
    XFREE (actual_cwrapper_name);
    actual_cwrapper_name = tmp_pathspec;
    tmp_pathspec = 0;

    /* target_name transforms -- use actual target program name; might
have lt- prefix */
    target_name = xstrdup (base_name (TARGET_PROGRAM_NAME));
    strendzap (target_name, ".exe");
    tmp_pathspec = lt_extend_str (target_name, ".exe", 1);
    XFREE (target_name);
    target_name = tmp_pathspec;
    tmp_pathspec = 0;

    lt_debugprintf (__FILE__, __LINE__,
                    "(main) libtool target name: %s\n",
                    target_name);
EOF

```

```

        cat <<EOF
newargz[0] =
    XMALLOC (char, (strlen (actual_cwrapper_path) +
        strlen ("$objdir") + 1 + strlen (actual_cwrapper_name)
+ 1));
strcpy (newargz[0], actual_cwrapper_path);
strcat (newargz[0], "$objdir");
strcat (newargz[0], "/");
EOF

```

```

        cat <<"EOF"
/* stop here, and copy so we don't have to do this twice */
tmp_pathspec = xstrdup (newargz[0]);

/* do NOT want the lt- prefix here, so use actual_cwrapper_name */
strcat (newargz[0], actual_cwrapper_name);

/* DO want the lt- prefix here if it exists, so use target_name */
lt_argv_zero = lt_extend_str (tmp_pathspec, target_name, 1);
XFREE (tmp_pathspec);
tmp_pathspec = NULL;
EOF

```

```

        case $host_os in
            mingw*)
                cat <<"EOF"
{
    char* p;
    while ((p = strchr (newargz[0], '\\')) != NULL)
        {
            *p = '/';
        }
    while ((p = strchr (lt_argv_zero, '\\')) != NULL)
        {
            *p = '/';
        }
}
EOF

```

```

        ;;
    esac

```

```

        cat <<"EOF"
XFREE (target_name);
XFREE (actual_cwrapper_path);
XFREE (actual_cwrapper_name);

lt_setenv ("BIN_SH", "xpg4"); /* for Tru64 */
lt_setenv ("DUALCASE", "1"); /* for MSK sh */
/* Update the DLL searchpath. EXE_PATH_VALUE ($dllsearchpath) must
    be prepended before (that is, appear after) LIB_PATH_VALUE
($temp_rpath)

```

```

        because on Windows, both *_VARNAMES are PATH but uninstalled
        libraries must come first. */
lt_update_exe_path (EXE_PATH_VARNAME, EXE_PATH_VALUE);
lt_update_lib_path (LIB_PATH_VARNAME, LIB_PATH_VALUE);

lt_debugprintf (__FILE__, __LINE__, "(main) lt_argv_zero: %s\n",
                nonnull (lt_argv_zero));
for (i = 0; i < newargc; i++)
{
    lt_debugprintf (__FILE__, __LINE__, "(main) newargz[%d]: %s\n",
                    i, nonnull (newargz[i]));
}

EOF

        case $host_os in
            mingw*)
                cat <<"EOF"
/* execv doesn't actually work on mingw as expected on unix */
newargz = prepare_spawn (newargz);
rval = _spawnv (_P_WAIT, lt_argv_zero, (const char * const *)
newargz);
if (rval == -1)
{
    /* failed to start process */
    lt_debugprintf (__FILE__, __LINE__,
                    "(main) failed to launch target \"%s\": %s\n",
                    lt_argv_zero, nonnull (strerror (errno)));
    return 127;
}
return rval;
EOF

                ;;
            *)
                cat <<"EOF"
execv (lt_argv_zero, newargz);
return rval; /* =127, but avoids unused variable warning */
EOF

                ;;
            esac

        cat <<"EOF"
}

void *
xmalloc (size_t num)
{
    void *p = (void *) malloc (num);
    if (!p)
        lt_fatal (__FILE__, __LINE__, "memory exhausted");

    return p;
}

```

```

}

char *
xstrdup (const char *string)
{
    return string ? strcpy ((char *) xmalloc (strlen (string) + 1),
        string) : NULL;
}

const char *
base_name (const char *name)
{
    const char *base;

#ifdef HAVE_DOS_BASED_FILE_SYSTEM
    /* Skip over the disk name in MSDOS pathnames. */
    if (isalpha ((unsigned char) name[0]) && name[1] == ':')
        name += 2;
#endif

    for (base = name; *name; name++)
        if (IS_DIR_SEPARATOR (*name))
            base = name + 1;
    return base;
}

int
check_executable (const char *path)
{
    struct stat st;

    lt_debugprintf (__FILE__, __LINE__, "(check_executable): %s\n",
        nonempty (path));
    if ((!path) || (!*path))
        return 0;

    if ((stat (path, &st) >= 0)
        && (st.st_mode & (S_IXUSR | S_IXGRP | S_IXOTH)))
        return 1;
    else
        return 0;
}

int
make_executable (const char *path)
{
    int rval = 0;
    struct stat st;

    lt_debugprintf (__FILE__, __LINE__, "(make_executable): %s\n",
        nonempty (path));
    if ((!path) || (!*path))

```

```

    return 0;

    if (stat (path, &st) >= 0)
    {
        rval = chmod (path, st.st_mode | S_IXOTH | S_IXGRP | S_IXUSR);
    }
    return rval;
}

/* Searches for the full path of the wrapper. Returns
   newly allocated full path name if found, NULL otherwise
   Does not chase symlinks, even on platforms that support them.
*/
char *
find_executable (const char *wrapper)
{
    int has_slash = 0;
    const char *p;
    const char *p_next;
    /* static buffer for getcwd */
    char tmp[LT_PATHMAX + 1];
    int tmp_len;
    char *concat_name;

    lt_debugprintf (__FILE__, __LINE__, "(find_executable): %s\n",
                    nonempty (wrapper));

    if ((wrapper == NULL) || (*wrapper == '\\0'))
        return NULL;

    /* Absolute path? */
#ifdef HAVE_DOS_BASED_FILE_SYSTEM
    if (isalpha ((unsigned char) wrapper[0]) && wrapper[1] == ':')
    {
        concat_name = xstrdup (wrapper);
        if (check_executable (concat_name))
            return concat_name;
        XFREE (concat_name);
    }
    else
    {
#endif
        if (IS_DIR_SEPARATOR (wrapper[0]))
        {
            concat_name = xstrdup (wrapper);
            if (check_executable (concat_name))
                return concat_name;
            XFREE (concat_name);
        }
#ifdef HAVE_DOS_BASED_FILE_SYSTEM
    }
#endif
}
#endif

```

```

for (p = wrapper; *p; p++)
    if (*p == '/')
        {
            has_slash = 1;
            break;
        }
if (!has_slash)
    {
        /* no slashes; search PATH */
        const char *path = getenv ("PATH");
        if (path != NULL)
            {
                for (p = path; *p; p = p_next)
                    {
                        const char *q;
                        size_t p_len;
                        for (q = p; *q; q++)
                            if (IS_PATH_SEPARATOR (*q))
                                break;
                        p_len = q - p;
                        p_next = (*q == '\\0' ? q : q + 1);
                        if (p_len == 0)
                            {
                                /* empty path: current directory */
                                if (getcwd (tmp, LT_PATHMAX) == NULL)
                                    lt_fatal (__FILE__, __LINE__, "getcwd failed: %s",
                                                nonnull (strerror (errno)));
                                tmp_len = strlen (tmp);
                                concat_name =
                                    XMALLOC (char, tmp_len + 1 + strlen (wrapper) + 1);
                                memcpy (concat_name, tmp, tmp_len);
                                concat_name[tmp_len] = '/';
                                strcpy (concat_name + tmp_len + 1, wrapper);
                            }
                        else
                            {
                                concat_name =
                                    XMALLOC (char, p_len + 1 + strlen (wrapper) + 1);
                                memcpy (concat_name, p, p_len);
                                concat_name[p_len] = '/';
                                strcpy (concat_name + p_len + 1, wrapper);
                            }
                        if (check_executable (concat_name))
                            return concat_name;
                        XFREE (concat_name);
                    }
            }
        /* not found in PATH; assume curdir */
    }
/* Relative path | not found in path: prepend cwd */
if (getcwd (tmp, LT_PATHMAX) == NULL)

```

```

    lt_fatal (__FILE__, __LINE__, "getcwd failed: %s",
              nonnull (strerror (errno)));
tmp_len = strlen (tmp);
concat_name = XMALLOC (char, tmp_len + 1 + strlen (wrapper) + 1);
memcpy (concat_name, tmp, tmp_len);
concat_name[tmp_len] = '/';
strcpy (concat_name + tmp_len + 1, wrapper);

if (check_executable (concat_name))
    return concat_name;
XFREE (concat_name);
return NULL;
}

char *
chase_symlinks (const char *pathspec)
{
#ifdef S_ISLNK
    return xstrdup (pathspec);
#else
    char buf[LT_PATHMAX];
    struct stat s;
    char *tmp_pathspec = xstrdup (pathspec);
    char *p;
    int has_symlinks = 0;
    while (strlen (tmp_pathspec) && !has_symlinks)
    {
        lt_debugprintf (__FILE__, __LINE__,
                        "checking path component for symlinks: %s\n",
                        tmp_pathspec);
        if (lstat (tmp_pathspec, &s) == 0)
        {
            if (S_ISLNK (s.st_mode) != 0)
            {
                has_symlinks = 1;
                break;
            }

            /* search backwards for last DIR_SEPARATOR */
            p = tmp_pathspec + strlen (tmp_pathspec) - 1;
            while ((p > tmp_pathspec) && (!IS_DIR_SEPARATOR (*p)))
                p--;
            if ((p == tmp_pathspec) && (!IS_DIR_SEPARATOR (*p)))
            {
                /* no more DIR_SEPARATORS left */
                break;
            }
            *p = '\0';
        }
        else
        {
            lt_fatal (__FILE__, __LINE__,

```

```

        "error accessing file \"%s\": %s",
        tmp_pathspec, nonnull (strerror (errno)));
    }
}
XFREE (tmp_pathspec);

if (!has_symlinks)
{
    return xstrdup (pathspec);
}

tmp_pathspec = realpath (pathspec, buf);
if (tmp_pathspec == 0)
{
    lt_fatal (__FILE__, __LINE__,
              "could not follow symlinks for %s", pathspec);
}
return xstrdup (tmp_pathspec);
#endif
}

char *
strendzap (char *str, const char *pat)
{
    size_t len, patlen;

    assert (str != NULL);
    assert (pat != NULL);

    len = strlen (str);
    patlen = strlen (pat);

    if (patlen <= len)
    {
        str += len - patlen;
        if (strcmp (str, pat) == 0)
            *str = '\0';
    }
    return str;
}

void
lt_debugprintf (const char *file, int line, const char *fmt, ...)
{
    va_list args;
    if (lt_debug)
    {
        (void) fprintf (stderr, "%s:%s:%d: ", program_name, file, line);
        va_start (args, fmt);
        (void) vfprintf (stderr, fmt, args);
        va_end (args);
    }
}

```



```

}

static void
lt_error_core (int exit_status, const char *file,
               int line, const char *mode,
               const char *message, va_list ap)
{
    fprintf (stderr, "%s:%s:%d: %s: ", program_name, file, line, mode);
    vfprintf (stderr, message, ap);
    fprintf (stderr, ".\n");

    if (exit_status >= 0)
        exit (exit_status);
}

void
lt_fatal (const char *file, int line, const char *message, ...)
{
    va_list ap;
    va_start (ap, message);
    lt_error_core (EXIT_FAILURE, file, line, "FATAL", message, ap);
    va_end (ap);
}

static const char *
nonnull (const char *s)
{
    return s ? s : "(null)";
}

static const char *
nonempty (const char *s)
{
    return (s && !*s) ? "(empty)" : nonnull (s);
}

void
lt_setenv (const char *name, const char *value)
{
    lt_debugprintf (__FILE__, __LINE__,
                   "(lt_setenv) setting '%s' to '%s'\n",
                   nonnull (name), nonnull (value));
    {
#ifdef HAVE_SETENV
        /* always make a copy, for consistency with !HAVE_SETENV */
        char *str = xstrdup (value);
        setenv (name, str, 1);
#else
        int len = strlen (name) + 1 + strlen (value) + 1;
        char *str = XMALLOC (char, len);
        sprintf (str, "%s=%s", name, value);
        if (putenv (str) != EXIT_SUCCESS)

```

```

        {
            XFREE (str);
        }
#endif
    }
}

char *
lt_extend_str (const char *orig_value, const char *add, int to_end)
{
    char *new_value;
    if (orig_value && *orig_value)
    {
        int orig_value_len = strlen (orig_value);
        int add_len = strlen (add);
        new_value = XMALLOC (char, add_len + orig_value_len + 1);
        if (to_end)
        {
            strcpy (new_value, orig_value);
            strcpy (new_value + orig_value_len, add);
        }
        else
        {
            strcpy (new_value, add);
            strcpy (new_value + add_len, orig_value);
        }
    }
    else
    {
        new_value = xstrdup (add);
    }
    return new_value;
}

void
lt_update_exe_path (const char *name, const char *value)
{
    lt_debugprintf (__FILE__, __LINE__,
                    "(lt_update_exe_path) modifying '%s' by prepending
'%s'\n",
                    nonnull (name), nonnull (value));

    if (name && *name && value && *value)
    {
        char *new_value = lt_extend_str (getenv (name), value, 0);
        /* some systems can't cope with a ':'-terminated path '#' */
        int len = strlen (new_value);
        while (((len = strlen (new_value)) > 0) && IS_PATH_SEPARATOR
              (new_value[len-1]))
        {
            new_value[len-1] = '\0';
        }
    }
}

```

```

        lt_setenv (name, new_value);
        XFREE (new_value);
    }
}

void
lt_update_lib_path (const char *name, const char *value)
{
    lt_debugprintf (__FILE__, __LINE__,
        "(lt_update_lib_path) modifying '%s' by prepending
'%s'\n",
        nonnull (name), nonnull (value));

    if (name && *name && value && *value)
    {
        char *new_value = lt_extend_str (getenv (name), value, 0);
        lt_setenv (name, new_value);
        XFREE (new_value);
    }
}

EOF

    case $host_os in
        mingw*)
            cat <<"EOF"

/* Prepares an argument vector before calling spawn().
Note that spawn() does not by itself call the command interpreter
(getenv ("COMSPEC") != NULL ? getenv ("COMSPEC") :
({ OSVERSIONINFO v; v.dwOSVersionInfoSize =
sizeof(OSVERSIONINFO);
    GetVersionEx(&v);
    v.dwPlatformId == VER_PLATFORM_WIN32_NT;
    }) ? "cmd.exe" : "command.com").
Instead it simply concatenates the arguments, separated by ' ', and
calls
CreateProcess(). We must quote the arguments since Win32
CreateProcess()
interprets characters like ' ', '\t', '\\', '"' (but not '<' and
'>') in a
special way:
- Space and tab are interpreted as delimiters. They are not treated
as
delimiters if they are surrounded by double quotes: "...".
- Unescaped double quotes are removed from the input. Their only
effect is
that within double quotes, space and tab are treated like normal
characters.
- Backslashes not followed by double quotes are not special.
- But 2*n+1 backslashes followed by a double quote become
n backslashes followed by a double quote (n >= 0):
\" -> "

```



```

        else
            backslashes = 0;
    }
    if (quote_around)
        length += backslashes + 1;

    quoted_string = XMALLOC (char, length + 1);

    p = quoted_string;
    backslashes = 0;
    if (quote_around)
        *p++ = '"';
    for (s = string; *s != '\0'; s++)
    {
        char c = *s;
        if (c == '"')
        {
            unsigned int j;
            for (j = backslashes + 1; j > 0; j--)
                *p++ = '\\';
        }
        *p++ = c;
        if (c == '\\')
            backslashes++;
        else
            backslashes = 0;
    }
    if (quote_around)
    {
        unsigned int j;
        for (j = backslashes; j > 0; j--)
            *p++ = '\\';
        *p++ = '"';
    }
    *p = '\0';

    new_argv[i] = quoted_string;
}
else
    new_argv[i] = (char *) string;
}
new_argv[argc] = NULL;

return new_argv;
}
EOF

;;
esac

cat <<"EOF"
void lt_dump_script (FILE* f)
{

```

```

EOF
        func_emit_wrapper yes |
            $SED -n -e '
s/^\(.\{79\}\)\(.*\)/\1\
\2/
h
s/\([\\" ]\)/\\\1/g
s/\$/\\n/
s/\([\^n]*\).* / fputs ("\1", f);/p
g
D'
            cat <<"EOF"
    }
EOF
}
# end: func_emit_cwrapperexe_src

# func_win32_import_lib_p ARG
# True if ARG is an import lib, as indicated by $file_magic_cmd
func_win32_import_lib_p ()
{
    $opt_debug
    case `eval $file_magic_cmd "\$1" 2>/dev/null | $SED -e 10q` in
    *import*) : ;;
    *) false ;;
    esac
}

# func_mode_link arg...
func_mode_link ()
{
    $opt_debug
    case $host in
    *-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-*-cegcc*)
        # It is impossible to link a dll without this setting, and
        # we shouldn't force the makefile maintainer to figure out
        # which system we are compiling for in order to pass an extra
        # flag for every libtool invocation.
        # allow_undefined=no

        # FIXME: Unfortunately, there are problems with the above when
trying
        # to make a dll which has undefined symbols, in which case not
        # even a static library is built.  For now, we need to specify
        # -no-undefined on the libtool link line when we can be certain
        # that all symbols are satisfied, otherwise we get a static
library.
        allow_undefined=yes
        ;;
    *)
        allow_undefined=yes
        ;;
    esac
}

```

```
esac
libtool_args=$nonopt
base_compile="$nonopt $@"
compile_command=$nonopt
finalize_command=$nonopt

compile_rpath=
finalize_rpath=
compile_shlibpath=
finalize_shlibpath=
convenience=
old_convenience=
deplibs=
old_deplibs=
compiler_flags=
linker_flags=
dllsearchpath=
lib_search_path=`pwd`
inst_prefix_dir=
new_inherited_linker_flags=

avoid_version=no
bindir=
dlfiles=
dlprefiles=
dlself=no
export_dynamic=no
export_symbols=
export_symbols_regex=
generated=
libobjs=
ltlibs=
module=no
no_install=no
objs=
non_pic_objects=
precious_files_regex=
prefer_static_libs=no
preload=no
prev=
prevarg=
release=
rpath=
xrpath=
perm_rpath=
temp_rpath=
thread_safe=no
vinfo=
vinfo_number=no
weak_libs=
single_module="{wl}-single_module"
func_infer_tag $base_compile
```

```

# We need to know -static, to get the right output filenames.
for arg
do
  case $arg in
    -shared)
      test "$build_libtool_libs" != yes && \
        func_fatal_configuration "can not build a shared library"
      build_old_libs=no
      break
    ;;
    -all-static | -static | -static-libtool-libs)
      case $arg in
        -all-static)
          if test "$build_libtool_libs" = yes && test -z
"$link_static_flag"; then
            func_warning "complete static linking is impossible in this
configuration"
          fi
          if test -n "$link_static_flag"; then
            dlopen_self=$dlopen_self_static
          fi
          prefer_static_libs=yes
        ;;
        -static)
          if test -z "$pic_flag" && test -n "$link_static_flag"; then
            dlopen_self=$dlopen_self_static
          fi
          prefer_static_libs=built
        ;;
        -static-libtool-libs)
          if test -z "$pic_flag" && test -n "$link_static_flag"; then
            dlopen_self=$dlopen_self_static
          fi
          prefer_static_libs=yes
        ;;
      esac
      build_libtool_libs=no
      build_old_libs=yes
      break
    ;;
  esac
done

# See if our shared archives depend on static archives.
test -n "$old_archive_from_new_cmds" && build_old_libs=yes

# Go through the arguments, transforming them on the way.
while test "$#" -gt 0; do
  arg="$1"
  shift
  func_quote_for_eval "$arg"

```



```

qarg=$func_quote_for_eval_unquoted_result
func_append libtool_args " $func_quote_for_eval_result"

# If the previous option needs an argument, assign it.
if test -n "$prev"; then
case $prev in
output)
    func_append compile_command " @OUTPUT@"
    func_append finalize_command " @OUTPUT@"
    ;;
esac

case $prev in
bindir)
    bindir="$qarg"
    prev=
    continue
    ;;
dlfiles|dlprefiles)
    if test "$preload" = no; then
        # Add the symbol object into the linking commands.
        func_append compile_command " @SYMFIL@"
        func_append finalize_command " @SYMFIL@"
        preload=yes
    fi
    case $qarg in
*.la | *.lo) ;; # We handle these cases below.
force)
    if test "$dlsel" = no; then
        dlsel=needless
        export_dynamic=yes
    fi
    prev=
    continue
    ;;
self)
    if test "$prev" = dlprefiles; then
        dlsel=yes
    elif test "$prev" = dlfiles && test "$dlopen_self" != yes;
then
        dlsel=yes
    else
        dlsel=needless
        export_dynamic=yes
    fi
    prev=
    continue
    ;;
*)
    if test "$prev" = dlfiles; then
        func_append dlfiles " $qarg"
    else

```

```

        func_append dlprefiles " $arg"
    fi
    prev=
    continue
    ;;
esac
;;
expsyms)
    export_symbols="$arg"
    test -f "$arg" \
        || func_fatal_error "symbol file ``$arg' does not exist"
    prev=
    continue
    ;;
expsyms_regex)
    export_symbols_regex="$arg"
    prev=
    continue
    ;;
framework)
    case $host in
        *--darwin*)
            case "$deplibs " in
                *" $qarg.ltframework "*) ;;
                *) func_append deplibs " $qarg.ltframework" # this is fixed
            later
            ;;
            esac
            ;;
        esac
    prev=
    continue
    ;;
inst_prefix)
    inst_prefix_dir="$arg"
    prev=
    continue
    ;;
objectlist)
    if test -f "$arg"; then
        save_arg=$arg
        moreargs=
        for fil in `cat "$save_arg"`
        do
            #
            func_append moreargs " $fil"
            arg=$fil
            # A libtool-controlled object.

            # Check to see that this really is a libtool object.
            if func_lalib_unsafe_p "$arg"; then
                pic_object=
                non_pic_object=
            fi
        done
    fi

```

```

# Read the .lo file
func_source "$arg"

if test -z "$pic_object" ||
    test -z "$non_pic_object" ||
    test "$pic_object" = none &&
    test "$non_pic_object" = none; then
    func_fatal_error "cannot find name of object for ``$arg'"
fi

# Extract subdirectory from the argument.
func_dirname "$arg" "/" ""
xdir="$func_dirname_result"

if test "$pic_object" != none; then
    # Prepend the subdirectory the object is found in.
    pic_object="$xdir$pic_object"

    if test "$prev" = dlfiles; then
        if test "$build_libtool_libs" = yes && test
"$dlopen_support" = yes; then
            func_append dlfiles " $pic_object"
            prev=
            continue
        else
            # If libtool objects are unsupported, then we need to
preload.
            prev=dlprefiles
        fi
    fi

    # CHECK ME: I think I busted this. -Ossama
    if test "$prev" = dlprefiles; then
        # Preload the old-style object.
        func_append dlprefiles " $pic_object"
        prev=
    fi

    # A PIC object.
    func_append libobjs " $pic_object"
    arg="$pic_object"
fi

# Non-PIC object.
if test "$non_pic_object" != none; then
    # Prepend the subdirectory the object is found in.
    non_pic_object="$xdir$non_pic_object"

    # A standard non-PIC object
    func_append non_pic_objects " $non_pic_object"

```

```

then
    if test -z "$pic_object" || test "$pic_object" = none ;
        arg="$non_pic_object"
    fi
else
    # If the PIC object exists, use it instead.
    # $xdir was prepended to $pic_object above.
    non_pic_object="$pic_object"
    func_append non_pic_objects " $non_pic_object"
fi
else
    # Only an error if not doing a dry-run.
    if $opt_dry_run; then
        # Extract subdirectory from the argument.
        func_dirname "$arg" "/" ""
        xdir="$func_dirname_result"

        func_lo2o "$arg"
        pic_object=$xdir$objdir/$func_lo2o_result
        non_pic_object=$xdir$func_lo2o_result
        func_append libobjs " $pic_object"
        func_append non_pic_objects " $non_pic_object"
    else
        func_fatal_error "\`$arg' is not a valid libtool object"
    fi
fi
done
else
    func_fatal_error "link input file \`$arg' does not exist"
fi
arg=$save_arg
prev=
continue
;;
precious_regex)
    precious_files_regex="$arg"
    prev=
    continue
    ;;
release)
    release="-$arg"
    prev=
    continue
    ;;
rpath | xrpath)
    # We need an absolute path.
    case $arg in
    [\\/] * | [A-Za-z]:[\\/] *) ;;
    *)
        func_fatal_error "only absolute run-paths are allowed"
        ;;
    esac

```

```

if test "$prev" = rpath; then
  case "$rpath " in
    *" $arg ") ;;
    *) func_append rpath " $arg" ;;
  esac
else
  case "$xspath " in
    *" $arg ") ;;
    *) func_append xspath " $arg" ;;
  esac
fi
prev=
continue
;;
shrext)
shrext_cmds="$arg"
prev=
continue
;;
weak)
func_append weak_libs " $arg"
prev=
continue
;;
xcclinker)
func_append linker_flags " $qarg"
func_append compiler_flags " $qarg"
prev=
func_append compile_command " $qarg"
func_append finalize_command " $qarg"
continue
;;
xcompiler)
func_append compiler_flags " $qarg"
prev=
func_append compile_command " $qarg"
func_append finalize_command " $qarg"
continue
;;
xlinker)
func_append linker_flags " $qarg"
func_append compiler_flags " $wl$qarg"
prev=
func_append compile_command " $wl$qarg"
func_append finalize_command " $wl$qarg"
continue
;;
*)
eval "$prev=\"\$arg\""
prev=
continue
;;

```

```

esac
fi # test -n "$prev"

prevarg="$arg"

case $arg in
-all-static)
if test -n "$link_static_flag"; then
    # See comment for -static flag below, for more details.
    func_append compile_command " $link_static_flag"
    func_append finalize_command " $link_static_flag"
fi
continue
;;

-allow-undefined)
# FIXME: remove this flag sometime in the future.
func_fatal_error "\`-allow-undefined' must not be used because it
is the default"
;;

-avoid-version)
avoid_version=yes
continue
;;

-bindir)
prev=bindir
continue
;;

-dlopen)
prev=dlfiles
continue
;;

-dlpreopen)
prev=dlprefiles
continue
;;

-export-dynamic)
export_dynamic=yes
continue
;;

-export-symbols | -export-symbols-regex)
if test -n "$export_symbols" || test -n "$export_symbols_regex";
then
    func_fatal_error "more than one -exported-symbols argument is
not allowed"
fi

```

```

if test "X$arg" = "X-export-symbols"; then
    prev=expsyms
else
    prev=expsyms_regex
fi
continue
;;

-framework)
prev=framework
continue
;;

-inst-prefix-dir)
prev=inst_prefix
continue
;;

# The native IRIX linker understands -LANG:*, -LIST:* and -LNO:*
# so, if we see these flags be careful not to treat them like -L
-L[A-Z][A-Z]*:*)
case $with_gcc/$host in
no/*-*-irix* | /*-*-irix*)
    func_append compile_command " $arg"
    func_append finalize_command " $arg"
    ;;
esac
continue
;;

-L*)
func_stripname "-L" '' "$arg"
if test -z "$func_stripname_result"; then
    if test "$#" -gt 0; then
        func_fatal_error "require no space between \`-L' and \`$1'"
    else
        func_fatal_error "need path for \`-L' option"
    fi
fi
func_resolve_sysroot "$func_stripname_result"
dir=${func_resolve_sysroot_result}
# We need an absolute path.
case $dir in
[\\/] * | [A-Za-z]:[\\/] *) ;;
*)
    absdir=`cd "$dir" && pwd`
    test -z "$absdir" && \
        func_fatal_error "cannot determine absolute directory name of
\`$dir'"
    dir="$absdir"
    ;;
esac

```

```

case "$deplibs " in
*" -L$dir "*" | "*" $arg "*)
    # Will only happen for absolute or sysroot arguments
    ;;
*)
    # Preserve sysroot, but never include relative directories
    case $dir in
        [\\/] * | [A-Za-z]:[\\/] * | =*) func_append deplibs " $arg" ;;
        *) func_append deplibs " -L$dir" ;;
    esac
    func_append lib_search_path " $dir"
    ;;
esac
case $host in
*-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-cegcc*)
    testbindir=`$ECHO "$dir" | $SED 's*/lib$*/bin*'`
    case :$dllsearchpath: in
        *:$dir:*) ;;
        :*) dllsearchpath=$dir;;
    *) func_append dllsearchpath " :$dir";;
    esac
    case :$dllsearchpath: in
        *:$testbindir:*) ;;
        :*) dllsearchpath=$testbindir;;
    *) func_append dllsearchpath " :$testbindir";;
    esac
    ;;
esac
continue
;;

-l*)
if test "X$arg" = "X-lc" || test "X$arg" = "X-lm"; then
    case $host in
        *-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-beos* | *-cegcc* |
*-*-haiku*)
            # These systems don't actually have a C or math library (as
such)
            continue
            ;;
        *-*-os2*)
            # These systems don't actually have a C library (as such)
            test "X$arg" = "X-lc" && continue
            ;;
        *-*-openbsd* | *-*-freebsd* | *-*-dragonfly*)
            # Do not include libc due to us having libc/libc_r.
            test "X$arg" = "X-lc" && continue
            ;;
        *-*-rhapsody* | *-*-darwin1.[012])
            # Rhapsody C and math libraries are in the System framework
            func_append deplibs " System.ltframework"
            continue

```



```

    ;;
    *-*--sco3.2v5* | *-*--sco5v6*)
    # Causes problems with __ctype
    test "X$arg" = "X-lc" && continue
    ;;
    *-*--sysv4.2uw2* | *-*--sysv5* | *-*--unixware* | *-*--OpenUNIX*)
    # Compiler inserts libc in the correct place for threads to
work
    test "X$arg" = "X-lc" && continue
    ;;
    esac
elif test "X$arg" = "X-lc_r"; then
    case $host in
    *-*--openbsd* | *-*--freebsd* | *-*--dragonfly*)
        # Do not include libc_r directly, use -pthread flag.
        continue
        ;;
    esac
fi
func_append deplibs " $arg"
continue
;;

-module)
module=yes
continue
;;

# Tru64 UNIX uses -model [arg] to determine the layout of C++
# classes, name mangling, and exception handling.
# Darwin uses the -arch flag to determine output architecture.
-model|-arch|-isysroot|--sysroot)
func_append compiler_flags " $arg"
func_append compile_command " $arg"
func_append finalize_command " $arg"
prev=xcompiler
continue
;;

-mt|-mthreads|-kthread|-Kthread|-pthread|-pthreads|--thread-safe
\
|-threads|-fopenmp|-openmp|-mp|-xopenmp|-omp|-qsmpr=*)
func_append compiler_flags " $arg"
func_append compile_command " $arg"
func_append finalize_command " $arg"
case "$new_inherited_linker_flags" in
    * " $arg" *) ;;
    * ) func_append new_inherited_linker_flags " $arg" ;;
esac
continue
;;

```

```

-multi_module)
single_module="{wl}-multi_module"
continue
;;

-no-fast-install)
fast_install=no
continue
;;

-no-install)
case $host in
*-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-*-darwin* |
*-cegcc*)
# The PATH hackery in wrapper scripts is required on Windows
# and Darwin in order for the loader to find any dlls it needs.
func_warning "`-no-install' is ignored for $host"
func_warning "assuming `-no-fast-install' instead"
fast_install=no
;;
*) no_install=yes ;;
esac
continue
;;

-no-undefined)
allow_undefined=no
continue
;;

-objectlist)
prev=objectlist
continue
;;

-o) prev=output ;;

-precious-files-regex)
prev=precious_regex
continue
;;

-release)
prev=release
continue
;;

-rpath)
prev=rpath
continue
;;

```

```

-R)
prev=xrpath
continue
;;

-R*)
func_stripname '-R' '' "$arg"
dir=${func_stripname_result}
# We need an absolute path.
case $dir in
[\\/] * | [A-Za-z]:[\\/] *) ;;
=*)
    func_stripname '=' '' "$dir"
    dir=${lt_sysroot}${func_stripname_result}
    ;;
*)
    func_fatal_error "only absolute run-paths are allowed"
    ;;
esac
case "$xrpath " in
*" $dir "*) ;;
*) func_append xrpath " $dir" ;;
esac
continue
;;

-shared)
# The effects of -shared are defined in a previous loop.
continue
;;

-shrext)
prev=shrext
continue
;;

-static | -static-libtool-libs)
# The effects of -static are defined in a previous loop.
# We used to do the same as -all-static on platforms that
# didn't have a PIC flag, but the assumption that the effects
# would be equivalent was wrong. It would break on at least
# Digital Unix and AIX.
continue
;;

-thread-safe)
thread_safe=yes
continue
;;

-version-info)
prev=vinfo

```

```

continue
;;

-version-number)
prev=vinfo
vinfo_number=yes
continue
;;

-weak)
prev=weak
continue
;;

-Wc,*)
func_stripname '-Wc,' '' "$arg"
args=$func_stripname_result
arg=
save_ifs="$IFS"; IFS=', '
for flag in $args; do
IFS="$save_ifs"
func_quote_for_eval "$flag"
func_append arg " $func_quote_for_eval_result"
func_append compiler_flags " $func_quote_for_eval_result"
done
IFS="$save_ifs"
func_stripname ' ' '' "$arg"
arg=$func_stripname_result
;;

-Wl,*)
func_stripname '-Wl,' '' "$arg"
args=$func_stripname_result
arg=
save_ifs="$IFS"; IFS=', '
for flag in $args; do
IFS="$save_ifs"
func_quote_for_eval "$flag"
func_append arg " $wl$func_quote_for_eval_result"
func_append compiler_flags " $wl$func_quote_for_eval_result"
func_append linker_flags " $func_quote_for_eval_result"
done
IFS="$save_ifs"
func_stripname ' ' '' "$arg"
arg=$func_stripname_result
;;

-Xcompiler)
prev=xcompiler
continue
;;

```

```

-Xlinker)
prev=xlinker
continue
;;

-XCCLinker)
prev=xcclinker
continue
;;

# -msg_* for osf cc
-msg_*)
func_quote_for_eval "$arg"
arg="$func_quote_for_eval_result"
;;

# Flags to be passed through unchanged, with rationale:
# -64, -mips[0-9]      enable 64-bit mode for the SGI compiler
# -r[0-9][0-9]*      specify processor for the SGI compiler
# -xarch=*, -xtarget=* enable 64-bit mode for the Sun compiler
# +DA*, +DD*         enable 64-bit mode for the HP compiler
# -q*                compiler args for the IBM compiler
# -m*, -t[45]*, -txscale* architecture-specific flags for GCC
# -F/path            path to uninstalled frameworks, gcc on
darwin
# -p, -pg, --coverage, -fprofile-* profiling flags for GCC
# -fstack-protector* stack protector flags for GCC
# @file              GCC response files
# -tp=*              Portland pgcc target processor selection
# --sysroot=*        for sysroot support
# -O*, -flto*, -fwhopr*, -fuse-linker-plugin GCC link-time
optimization
-64|-mips[0-9]|-r[0-9][0-9]*|-xarch=*|-xtarget=*|+DA*|+DD*|-q*|-
m*| \
-t[45]*|-txscale*|-p|-pg|--coverage|-fprofile-*|-F*|@*|-tp=*|--
sysroot=*| \
-O*|-flto*|-fwhopr*|-fuse-linker-plugin|-fstack-protector*)
func_quote_for_eval "$arg"
arg="$func_quote_for_eval_result"
func_append compile_command " $arg"
func_append finalize_command " $arg"
func_append compiler_flags " $arg"
continue
;;

# Some other compiler flag.
-* | +*)
func_quote_for_eval "$arg"
arg="$func_quote_for_eval_result"
;;

*.$objext)

```

```

# A standard object.
func_append objs " $arg"
;;

*.lo)
# A libtool-controlled object.

# Check to see that this really is a libtool object.
if func_lalib_unsafe_p "$arg"; then
  pic_object=
  non_pic_object=

  # Read the .lo file
  func_source "$arg"

  if test -z "$pic_object" ||
     test -z "$non_pic_object" ||
     test "$pic_object" = none &&
     test "$non_pic_object" = none; then
    func_fatal_error "cannot find name of object for ``$arg'"
  fi

  # Extract subdirectory from the argument.
  func_dirname "$arg" "/" ""
  xdir="$func_dirname_result"

  if test "$pic_object" != none; then
    # Prepend the subdirectory the object is found in.
    pic_object="$xdir$pic_object"

    if test "$prev" = dlfiles; then
      if test "$build_libtool_libs" = yes && test
"$dlopen_support" = yes; then
        func_append dlfiles " $pic_object"
        prev=
        continue
      else
        # If libtool objects are unsupported, then we need to
preload.
        prev=dlprefiles
      fi
    fi

    # CHECK ME: I think I busted this. -Ossama
    if test "$prev" = dlprefiles; then
      # Preload the old-style object.
      func_append dlprefiles " $pic_object"
      prev=
    fi

    # A PIC object.
    func_append libobjs " $pic_object"

```

```

    arg="$pic_object"
fi

# Non-PIC object.
if test "$non_pic_object" != none; then
    # Prepend the subdirectory the object is found in.
    non_pic_object="$xdir$non_pic_object"

    # A standard non-PIC object
    func_append non_pic_objects " $non_pic_object"
    if test -z "$pic_object" || test "$pic_object" = none ; then
        arg="$non_pic_object"
    fi
else
    # If the PIC object exists, use it instead.
    # $xdir was prepended to $pic_object above.
    non_pic_object="$pic_object"
    func_append non_pic_objects " $non_pic_object"
fi
else
    # Only an error if not doing a dry-run.
    if $opt_dry_run; then
        # Extract subdirectory from the argument.
        func_dirname "$arg" "/" ""
        xdir="$func_dirname_result"

        func_lo2o "$arg"
        pic_object=$xdir$objdir/$func_lo2o_result
        non_pic_object=$xdir$func_lo2o_result
        func_append libobjs " $pic_object"
        func_append non_pic_objects " $non_pic_object"
    else
        func_fatal_error "`$arg' is not a valid libtool object"
    fi
fi
;;

*.$libext)
# An archive.
func_append deplibs " $arg"
func_append old_deplibs " $arg"
continue
;;

*.la)
# A libtool-controlled library.

func_resolve_sysroot "$arg"
if test "$prev" = dlfiles; then
    # This library was specified with -dlopen.
    func_append dlfiles " $func_resolve_sysroot_result"
    prev=

```

```

elif test "$prev" = dlprefiles; then
    # The library was specified with -dlpreopen.
    func_append dlprefiles " $func_resolve_sysroot_result"
    prev=
else
    func_append deplibs " $func_resolve_sysroot_result"
fi
continue
;;

# Some other compiler argument.
*)
# Unknown arguments in both finalize_command and compile_command
need # to be aesthetically quoted because they are eval'd later.
func_quote_for_eval "$arg"
arg="$func_quote_for_eval_result"
;;
esac # arg

# Now actually substitute the argument into the commands.
if test -n "$arg"; then
    func_append compile_command " $arg"
    func_append finalize_command " $arg"
fi
done # argument parsing loop

test -n "$prev" && \
    func_fatal_help "the `'$prevarg'` option requires an argument"

if test "$export_dynamic" = yes && test -n
"$export_dynamic_flag_spec"; then
    eval arg="\$export_dynamic_flag_spec\"
    func_append compile_command " $arg"
    func_append finalize_command " $arg"
fi

oldlibs=
# calculate the name of the file, without its directory
func_basename "$output"
outputname="$func_basename_result"
libobjs_save="$libobjs"

if test -n "$shlibpath_var"; then
    # get the directories listed in $shlibpath_var
    eval shlib_search_path=\`\$ECHO "\${$shlibpath_var}" \| \${SED
\'s/:/ /g\' \| \
else
    shlib_search_path=
fi
eval sys_lib_search_path="\$sys_lib_search_path_spec"
eval sys_lib_dlsearch_path="\$sys_lib_dlsearch_path_spec"

```



```

func_dirname "$output" "/" ""
output_objdir="$func_dirname_result$objdir"
func_to_tool_file "$output_objdir/"
tool_output_objdir=$func_to_tool_file_result
# Create the object directory.
func_mkdir_p "$output_objdir"

# Determine the type of output
case $output in
"" )
    func_fatal_help "you must specify an output file"
    ;;
*.${libext}) linkmode=oldlib ;;
*.lo | *.${objext}) linkmode=obj ;;
*.la) linkmode=lib ;;
*) linkmode=prog ;; # Anything else should be a program.
esac

specialdeplibs=

libs=
# Find all interdependent deplibs by searching for libraries
# that are linked more than once (e.g. -la -lb -la)
for deplib in $deplibs; do
    if $opt_preserve_dup_deps ; then
        case "$libs " in
*" $deplib ") func_append specialdeplibs " $deplib" ;;
        esac
    fi
    func_append libs " $deplib"
done

if test "$linkmode" = lib; then
    libs="$predeps $libs $compiler_lib_search_path $postdeps"

    # Compute libraries that are listed more than once in $predeps
    # $postdeps and mark them as special (i.e., whose duplicates are
    # not to be eliminated).
    pre_post_deps=
    if $opt_duplicate_compiler_generated_deps; then
        for pre_post_dep in $predeps $postdeps; do
            case "$pre_post_deps " in
*" $pre_post_dep ") func_append specialdeplibs "
$pre_post_deps" ;;
            esac
            func_append pre_post_deps " $pre_post_dep"
        done
    fi
    pre_post_deps=
fi

```

```

deplibs=
newdependency_libs=
newlib_search_path=
need_relink=no # whether we're linking any uninstalled libtool
libraries
notinst_deplibs= # not-installed libtool libraries
notinst_path= # paths that contain not-installed libtool libraries

case $linkmode in
lib)
  passes="conv dlpreopen link"
  for file in $dlfiles $dlprefiles; do
    case $file in
*.la) ;;
*)
      func_fatal_help "libraries can \`-dlopen' only libtool
libraries: $file"
      ;;
    esac
  done
  ;;
prog)
  compile_deplibs=
  finalize_deplibs=
  alldeplibs=no
  newdlfiles=
  newdlprefiles=
  passes="conv scan dlopen dlpreopen link"
  ;;
*) passes="conv"
  ;;
esac

for pass in $passes; do
  # The preopen pass in lib mode reverses $deplibs; put it back
here
  # so that -L comes before libs that need it for instance...
  if test "$linkmode,$pass" = "lib,link"; then
    ## FIXME: Find the place where the list is rebuilt in the wrong
    ## order, and fix it there properly
    tmp_deplibs=
    for deplib in $deplibs; do
      tmp_deplibs="$deplib $tmp_deplibs"
    done
    deplibs="$tmp_deplibs"
  fi

  if test "$linkmode,$pass" = "lib,link" ||
  test "$linkmode,$pass" = "prog,scan"; then
    libs="$deplibs"
    deplibs=
  fi

```

```

if test "$linkmode" = prog; then
case $pass in
dlopen) libs="$dlfiles" ;;
dlpreopen) libs="$dlprefiles" ;;
link) libs="$deplibs %DEPLIBS% $dependency_libs" ;;
esac
fi
if test "$linkmode,$pass" = "lib,dlpreopen"; then
# Collect and forward deplibs of preopened libtool libs
for lib in $dlprefiles; do
# Ignore non-libtool-libs
dependency_libs=
func_resolve_sysroot "$lib"
case $lib in
*.la) func_source "$func_resolve_sysroot_result" ;;
esac

# Collect preopened libtool deplibs, except any this library
# has declared as weak libs
for deplib in $dependency_libs; do
func_basename "$deplib"
deplib_base=$func_basename_result
case " $weak_libs " in
*" $deplib_base ") ;;
*) func_append deplibs " $deplib" ;;
esac
done
done
libs="$dlprefiles"
fi
if test "$pass" = dlopen; then
# Collect dlpreopened libraries
save_deplibs="$deplibs"
deplibs=
fi

for deplib in $libs; do
lib=
found=no
case $deplib in
-mt|-mthreads|-kthread|-Kthread|-pthread|-pthreads|--thread-safe
|-threads|-fopenmp|-openmp|-mp|-xopenmp|-omp|-qsmp=*)
if test "$linkmode,$pass" = "prog,link"; then
compile_deplibs="$deplib $compile_deplibs"
finalize_deplibs="$deplib $finalize_deplibs"
else
func_append compiler_flags " $deplib"
if test "$linkmode" = lib ; then
case "$new_inherited_linker_flags " in
*" $deplib ") ;;

```

```

        * ) func_append new_inherited_linker_flags " $deplib"
;;
    esac
    fi
    fi
    continue
;;
-1*)
    if test "$linkmode" != lib && test "$linkmode" != prog; then
        func_warning "`-1' is ignored for archives/objects"
        continue
    fi
    func_stripname '-1' '' "$deplib"
    name=$func_stripname_result
    if test "$linkmode" = lib; then
        searchdirs="$newlib_search_path $lib_search_path
$compiler_lib_search_dirs $sys_lib_search_path $shlib_search_path"
    else
        searchdirs="$newlib_search_path $lib_search_path
$sys_lib_search_path $shlib_search_path"
    fi
    for searchdir in $searchdirs; do
        for search_ext in .la $std_shrext .so .a; do
            # Search the libtool library
            lib="$searchdir/lib${name}${search_ext}"
            if test -f "$lib"; then
                if test "$search_ext" = ".la"; then
                    found=yes
                else
                    found=no
                fi
                break 2
            fi
        done
        done
        if test "$found" != yes; then
            # deplib doesn't seem to be a libtool library
            if test "$linkmode,$pass" = "prog,link"; then
                compile_deplibs="$deplib $compile_deplibs"
                finalize_deplibs="$deplib $finalize_deplibs"
            else
                deplibs="$deplib $deplibs"
                test "$linkmode" = lib && newdependency_libs="$deplib
$newdependency_libs"
            fi
            continue
        else # deplib is a libtool library
            # If $allow_libtool_libs_with_static_runtimes && $deplib is a
stdlib,
            # We need to do some special things here, and not later.
            if test "X$allow_libtool_libs_with_static_runtimes" = "Xyes"
; then

```

```

        case " $predeps $postdeps " in
        *" $deplib ")
        if func_lalib_p "$lib"; then
            library_names=
            old_library=
            func_source "$lib"
            for l in $old_library $library_names; do
                ll="$l"
            done
            if test "X$ll" = "X$old_library" ; then # only static
version available
                found=no
                func_dirname "$lib" "" "."
                ladir="$func_dirname_result"
                lib=$ladir/$old_library
                if test "$linkmode,$pass" = "prog,link"; then
                    compile_deplibs="$deplib $compile_deplibs"
                    finalize_deplibs="$deplib $finalize_deplibs"
                else
                    deplibs="$deplib $deplibs"
                    test "$linkmode" = lib && newdependency_libs="$deplib
$newdependency_libs"
                fi
                continue
            fi
        fi
        ;;
        *) ;;
        esac
    fi
fi
;; # -l
*.ltframework)
    if test "$linkmode,$pass" = "prog,link"; then
        compile_deplibs="$deplib $compile_deplibs"
        finalize_deplibs="$deplib $finalize_deplibs"
    else
        deplibs="$deplib $deplibs"
        if test "$linkmode" = lib ; then
            case "$new_inherited_linker_flags " in
            *" $deplib ") ;;
            * ) func_append new_inherited_linker_flags " $deplib"
            ;;
            esac
        fi
        continue
    ;;
-L*)
    case $linkmode in
    lib)
        deplibs="$deplib $deplibs"

```

```

    test "$pass" = conv && continue
    newdependency_libs="$deplib $newdependency_libs"
    func_stripname '-L' '' "$deplib"
    func_resolve_sysroot "$func_stripname_result"
    func_append newlib_search_path "
$func_resolve_sysroot_result"
    ;;
prog)
  if test "$pass" = conv; then
    deplibs="$deplib $deplibs"
    continue
  fi
  if test "$pass" = scan; then
    deplibs="$deplib $deplibs"
  else
    compile_deplibs="$deplib $compile_deplibs"
    finalize_deplibs="$deplib $finalize_deplibs"
  fi
  func_stripname '-L' '' "$deplib"
  func_resolve_sysroot "$func_stripname_result"
  func_append newlib_search_path "
$func_resolve_sysroot_result"
  ;;
*)
  func_warning "\`-L' is ignored for archives/objects"
  ;;
esac # linkmode
continue
;; # -L
-R*)
  if test "$pass" = link; then
    func_stripname '-R' '' "$deplib"
    func_resolve_sysroot "$func_stripname_result"
    dir=$func_resolve_sysroot_result
    # Make sure the xrpah contains only unique directories.
    case "$xrpah " in
    *" $dir "*) ;;
    *) func_append xrpah " $dir" ;;
    esac
  fi
  deplibs="$deplib $deplibs"
  continue
  ;;
*.la)
  func_resolve_sysroot "$deplib"
  lib=$func_resolve_sysroot_result
  ;;
*.$libext)
  if test "$pass" = conv; then
    deplibs="$deplib $deplibs"
    continue
  fi

```

```

        case $linkmode in
        lib)
            # Linking convenience modules into shared libraries is
allowed,
            # but linking other static libraries is non-portable.
            case " $dlpreconveniencelibs " in
            *" $deplib ") ;;
            *)
                valid_a_lib=no
                case $deplibs_check_method in
                match_pattern*)
                    set dummy $deplibs_check_method; shift
                    match_pattern_regex=`expr "$deplibs_check_method" : "$1
\(.*\)"`
                    if eval "\$ECHO \"$deplib\"" 2>/dev/null | $SED 10q \
                        | $EGREP "$match_pattern_regex" > /dev/null; then
                        valid_a_lib=yes
                    fi
                ;;
                pass_all)
                    valid_a_lib=yes
                ;;
                esac
                if test "$valid_a_lib" != yes; then
                    echo
                    $ECHO "*** Warning: Trying to link with static lib archive
$deplib."
                    echo "*** I have the capability to make that library
automatically link in when"
                    echo "*** you link to this library.  But I can only do this
if you have a"
                    echo "*** shared version of the library, which you do not
appear to have"
                    echo "*** because the file extensions .$libext of this
argument makes me believe"
                    echo "*** that it is just a static archive that I should
not use here."
                else
                    echo
                    $ECHO "*** Warning: Linking the shared library $output
against the"
                    $ECHO "*** static library $deplib is not portable!"
                    deplibs="$deplib $deplibs"
                fi
                ;;
            esac
            continue
        ;;
    prog)
        if test "$pass" != link; then
            deplibs="$deplib $deplibs"
        else

```

```

        compile_deplibs="$deplib $compile_deplibs"
        finalize_deplibs="$deplib $finalize_deplibs"
    fi
    continue
    ;;
    esac # linkmode
    ;; # *.$libext
*.lo | *.$objext)
    if test "$pass" = conv; then
        deplibs="$deplib $deplibs"
    elif test "$linkmode" = prog; then
        if test "$pass" = dlpreopen || test "$dlopen_support" != yes
|| test "$build_libtool_libs" = no; then
            # If there is no dlopen support or we're linking
statically,
            # we need to preload.
            func_append newdlprefiles " $deplib"
            compile_deplibs="$deplib $compile_deplibs"
            finalize_deplibs="$deplib $finalize_deplibs"
        else
            func_append newdlfiles " $deplib"
        fi
    fi
    continue
    ;;
%DEPLIBS%)
    alldeplibs=yes
    continue
    ;;
esac # case $deplib

if test "$found" = yes || test -f "$lib"; then :
else
    func_fatal_error "cannot find the library \`$lib' or unhandled
argument \`$deplib'"
fi

# Check to see that this really is a libtool archive.
func_lalib_unsafe_p "$lib" \
    || func_fatal_error "\`$lib' is not a valid libtool archive"

func_dirname "$lib" "" "."
ladir="$func_dirname_result"

dlname=
dlopen=
dlpreopen=
libdir=
library_names=
old_library=
inherited_linker_flags=
# If the library was installed with an old release of libtool,

```



```

# it will not redefine variables installed, or shouldnotlink
installed=yes
shouldnotlink=no
avoidtemprpath=

# Read the .la file
func_source "$lib"

# Convert "-framework foo" to "foo.ltframework"
if test -n "$inherited_linker_flags"; then
  tmp_inherited_linker_flags=`$ECHO "$inherited_linker_flags" |
$SED 's/-framework \([^ $]*\)\/\1.ltframework/g'\`
  for tmp_inherited_linker_flag in $tmp_inherited_linker_flags;
do
  case " $new_inherited_linker_flags " in
    *" $tmp_inherited_linker_flag ") ;;
    *) func_append new_inherited_linker_flags "
$tmp_inherited_linker_flag";;
  esac
done
fi
dependency_libs=`$ECHO " $dependency_libs" | $SED 's% \([^
$]*\)\.ltframework% -framework \1%g'\`
if test "$linkmode,$pass" = "lib,link" ||
  test "$linkmode,$pass" = "prog,scan" ||
  { test "$linkmode" != prog && test "$linkmode" != lib; }; then
  test -n "$dlopen" && func_append dlfiles " $dlopen"
  test -n "$dlpreopen" && func_append dlprefiles " $dlpreopen"
fi

if test "$pass" = conv; then
  # Only check for convenience libraries
  deplibs="$lib $deplibs"
  if test -z "$libdir"; then
    if test -z "$old_library"; then
      func_fatal_error "cannot find name of link library for
\`$lib'"
    fi
    # It is a libtool convenience library, so add in its objects.
    func_append convenience " $ladir/$objdir/$old_library"
    func_append old_convenience " $ladir/$objdir/$old_library"
  elif test "$linkmode" != prog && test "$linkmode" != lib; then
    func_fatal_error "\`$lib' is not a convenience library"
  fi
  tmp_libs=
  for deplib in $dependency_libs; do
    deplibs="$deplib $deplibs"
    if $opt_preserve_dup_deps ; then
      case "$tmp_libs " in
        *" $deplib ") func_append specialdeplibs " $deplib" ;;
      esac
    fi
  done
fi

```

```

        fi
        func_append tmp_libs " $deplib"
    done
    continue
fi # $pass = conv

# Get the name of the library we link against.
linklib=
if test -n "$old_library" &&
    { test "$prefer_static_libs" = yes ||
      test "$prefer_static_libs,$installed" = "built,no"; }; then
    linklib=$old_library
else
    for l in $old_library $library_names; do
        linklib="$l"
    done
fi
if test -z "$linklib"; then
    func_fatal_error "cannot find name of link library for ``$lib'"
fi

# This library was specified with -dlopen.
if test "$pass" = dlopen; then
    if test -z "$libdir"; then
        func_fatal_error "cannot -dlopen a convenience library:
``$lib'"
    fi
    if test -z "$dlname" ||
        test "$dlopen_support" != yes ||
        test "$build_libtool_libs" = no; then
        # If there is no dlname, no dlopen support or we're linking
        # statically, we need to preload.  We also need to preload
any
        # dependent libraries so libltdl's deplib preloader doesn't
        # bomb out in the load deplibs phase.
        func_append dlprefiles " $lib $dependency_libs"
    else
        func_append newdlfiles " $lib"
    fi
    continue
fi # $pass = dlopen

# We need an absolute path.
case $ladir in
[\\/] * | [A-Za-z]:[\\/] *) abs_ladir="$ladir" ;;
*)
    abs_ladir=`cd "$ladir" && pwd`
    if test -z "$abs_ladir"; then
        func_warning "cannot determine absolute directory name of
``$ladir'"
    fi
fi

```

```

        func_warning "passing it literally to the linker, although it
might fail"
        abs_ladir="$ladir"
    fi
    ;;
esac
func_basename "$lib"
laname="$func_basename_result"

# Find the relevant object directory and library name.
if test "X$installed" = Xyes; then
    if test ! -f "$lt_sysroot$libdir/$linklib" && test -f
"$abs_ladir/$linklib"; then
        func_warning "library \`$lib' was moved."
        dir="$ladir"
        absdir="$abs_ladir"
        libdir="$abs_ladir"
    else
        dir="$lt_sysroot$libdir"
        absdir="$lt_sysroot$libdir"
    fi
    test "X$hardcode_automatic" = Xyes && avoidtempdir=yes
else
    if test ! -f "$ladir/$objdir/$linklib" && test -f
"$abs_ladir/$linklib"; then
        dir="$ladir"
        absdir="$abs_ladir"
        # Remove this search path later
        func_append notinst_path " $abs_ladir"
    else
        dir="$ladir/$objdir"
        absdir="$abs_ladir/$objdir"
        # Remove this search path later
        func_append notinst_path " $abs_ladir"
    fi
fi # $installed = yes
func_stripname 'lib' '.la' "$laname"
name=$func_stripname_result

# This library was specified with -dlpreopen.
if test "$pass" = dlpreopen; then
    if test -z "$libdir" && test "$linkmode" = prog; then
        func_fatal_error "only libraries may -dlpreopen a convenience
library: \`$lib'"
    fi
    case "$host" in
        # special handling for platforms with PE-DLLs.
        *cygwin* | *mingw* | *cegcc* )
            # Linker will automatically link against shared library if
both
            # static and shared are present.  Therefore, ensure we
extract

```

```

present      # symbols from the import library if a shared library is
             # (otherwise, the dlopen module name will be incorrect).
We do
             # this by putting the import library name into
$newdlprefiles.
             # We recover the dlopen module name by 'saving' the la file
             # name in a special purpose variable, and (later)
extracting the
             # dlname from the la file.
             if test -n "$dlname"; then
                 func_tr_sh "$dir/$linklib"
                 eval "libfile_$func_tr_sh_result=\$abs_ladir/\$lname"
                 func_append newdlprefiles " $dir/$linklib"
             else
                 func_append newdlprefiles " $dir/$old_library"
                 # Keep a list of preopened convenience libraries to check
                 # that they are being used correctly in the link pass.
                 test -z "$libdir" && \
                     func_append dlpreconveniencelibs " $dir/$old_library"
             fi
             ;;
* )
             # Prefer using a static library (so that no silly _DYNAMIC
symbols      # are required to link).
             if test -n "$old_library"; then
                 func_append newdlprefiles " $dir/$old_library"
                 # Keep a list of preopened convenience libraries to check
                 # that they are being used correctly in the link pass.
                 test -z "$libdir" && \
                     func_append dlpreconveniencelibs " $dir/$old_library"
                 # Otherwise, use the dlname, so that lt_dlopen finds it.
             elif test -n "$dlname"; then
                 func_append newdlprefiles " $dir/$dlname"
             else
                 func_append newdlprefiles " $dir/$linklib"
             fi
             ;;
esac
fi # $pass = dlpreopen

if test -z "$libdir"; then
    # Link the convenience library
    if test "$linkmode" = lib; then
        deplibs="$dir/$old_library $deplibs"
    elif test "$linkmode,$pass" = "prog,link"; then
        compile_deplibs="$dir/$old_library $compile_deplibs"
        finalize_deplibs="$dir/$old_library $finalize_deplibs"
    else
        deplibs="$lib $deplibs" # used for prog,scan pass
    fi
fi

```

```

    continue
fi

if test "$linkmode" = prog && test "$pass" != link; then
    func_append newlib_search_path " $ladir"
    deplibs="$lib $deplibs"

    linkalldeplibs=no
    if test "$link_all_deplibs" != no || test -z "$library_names"
||
        test "$build_libtool_libs" = no; then
            linkalldeplibs=yes
        fi

    tmp_libs=
    for deplib in $dependency_libs; do
        case $deplib in
            -L*) func_stripname '-L' '' "$deplib"
                func_resolve_sysroot "$func_stripname_result"
                func_append newlib_search_path "
$func_resolve_sysroot_result"
                ;;
            esac
            # Need to link against all dependency_libs?
            if test "$linkalldeplibs" = yes; then
                deplibs="$deplib $deplibs"
            else
                # Need to hardcode shared library paths
                # or/and link against static libraries
                newdependency_libs="$deplib $newdependency_libs"
            fi
            if $opt_preserve_dup_deps ; then
                case "$tmp_libs " in
                    *" $deplib "*) func_append specialdeplibs " $deplib" ;;
                esac
            fi
            func_append tmp_libs " $deplib"
        done # for deplib
        continue
    fi # $linkmode = prog...

    if test "$linkmode,$pass" = "prog,link"; then
        if test -n "$library_names" &&
            { { test "$prefer_static_libs" = no ||
                test "$prefer_static_libs,$installed" = "built,yes"; }
||
                test -z "$old_library"; }; then
            # We need to hardcode the library path
            if test -n "$shlibpath_var" && test -z "$avoidtemprpath" ;
then
                # Make sure the rpath contains only unique directories.

```

```

        case "$temp_rpath:" in
        *"$absdir:") ;;
        *) func_append temp_rpath "$absdir:" ;;
        esac
    fi

    # Hardcode the library path.
    # Skip directories that are in the system default run-time
    # search path.
    #case " $sys_lib_dlsearch_path " in
    #*" $absdir ") ;;
    #*)
    # case "$compile_rpath " in
    # *" $absdir ") ;;
    # *) func_append compile_rpath " $absdir" ;;
    # esac
    # ;;
    #esac
    case " $sys_lib_dlsearch_path " in
    *" $libdir ") ;;
    *)
        case "$finalize_rpath " in
        *" $libdir ") ;;
        *) func_append finalize_rpath " $libdir" ;;
        esac
        ;;
    esac
fi # $linkmode,$pass = prog,link...

if test "$alldeplibs" = yes &&
{ test "$deplibs_check_method" = pass_all ||
  { test "$build_libtool_libs" = yes &&
    test -n "$library_names"; }; }; then
# We only need to search for static libraries
continue
fi
fi

link_static=no # Whether the deplib will be linked statically
use_static_libs=$prefer_static_libs
if test "$use_static_libs" = built && test "$installed" = yes;
then
  use_static_libs=no
fi
if test -n "$library_names" &&
{ test "$use_static_libs" = no || test -z "$old_library"; };
then
  case $host in
  *cygwin* | *mingw* | *cegcc*)
    # No point in relinking DLLs because paths are not encoded
    func_append notinst_deplibs " $lib"
    need_relink=no
  
```

```

    ;;
*)
    if test "$installed" = no; then
        func_append notinst_deplibs " $lib"
        need_relink=yes
    fi
    ;;
esac
# This is a shared library

# Warn about portability, can't link against -module's on some
# systems (darwin). Don't bleat about dlopened modules though!
dlopenmodule=""
for dlpmoduletest in $dlpfiles; do
    if test "X$dlpmoduletest" = "X$lib"; then
        dlopenmodule="$dlpmoduletest"
        break
    fi
done
if test -z "$dlopenmodule" && test "$shouldnotlink" = yes &&
test "$pass" = link; then
    echo
    if test "$linkmode" = prog; then
        $ECHO "*** Warning: Linking the executable $output against
the loadable module"
    else
        $ECHO "*** Warning: Linking the shared library $output
against the loadable module"
    fi
    $ECHO "*** $linklib is not portable!"
fi
if test "$linkmode" = lib &&
    test "$hardcode_into_libs" = yes; then
    # Hardcode the library path.
    # Skip directories that are in the system default run-time
    # search path.
    #case " $sys_lib_dlsearch_path " in
    #" $absdir ") ;;
    #)
    # case "$compile_rpath " in
    # *) $absdir ") ;;
    # *) func_append compile_rpath " $absdir" ;;
    # esac
    # ;;
#esac
case " $sys_lib_dlsearch_path " in
*" $libdir ") ;;
*)
    case "$finalize_rpath " in
    *" $libdir ") ;;
    *) func_append finalize_rpath " $libdir" ;;
    esac

```

```

        ;;
    esac
fi

if test -n "$old_archive_from_expsyms_cmds"; then
    # figure out the soname
    set dummy $library_names
    shift
    realname="$1"
    shift
    libname=`eval "\\$ECHO \"\$libname_spec\""`
    # use dlname if we got it. it's perfectly good, no?
    if test -n "$dlname"; then
        soname="$dlname"
    elif test -n "$soname_spec"; then
        # bleh windows
        case $host in
            *cygwin* | mingw* | *cegcc*)
                func_arith $current - $age
                major=$func_arith_result
                versuffix="-${major}"
                ;;
            esac
        eval soname="\$soname_spec\"
    else
        soname="$realname"
    fi

    # Make a new name for the extract_expsyms_cmds to use
    soroot="$soname"
    func_basename "$soroot"
    soname="$func_basename_result"
    func_stripname 'lib' '.dll' "$soname"
    newlib=libimp-$func_stripname_result.a

    # If the library has no export list, then create one now
    if test -f "$output_objdir/$soname-def"; then :
    else
        func_verbose "extracting exported symbol list from
\`$soname'"
        func_execute_cmds "$extract_expsyms_cmds" 'exit $?'
    fi

    # Create $newlib
    if test -f "$output_objdir/$newlib"; then :; else
        func_verbose "generating import library for \`$soname'"
        func_execute_cmds "$old_archive_from_expsyms_cmds" 'exit
$?'
    fi

    # make sure the library variables are pointing to the new
library
    dir=$output_objdir

```



```

    linklib=$newlib
fi # test -n "$old_archive_from_expsyms_cmds"

if test "$linkmode" = prog || test "$opt_mode" != relink; then
    add_shlibpath=
    add_dir=
    add=
    lib_linked=yes
    case $hardcode_action in
    immediate | unsupported)
        if test "$hardcode_direct" = no; then
            add="$dir/$linklib"
            case $host in
            *--sco3.2v5.0.[024]*) add_dir="-L$dir" ;;
            *--sysv4*uw2*) add_dir="-L$dir" ;;
            *--sysv5OpenUNIX* | *--sysv5UnixWare7.[01].[10]* | \
            *--unixware7*) add_dir="-L$dir" ;;
            *--darwin* )
                # if the lib is a (non-dlopened) module then we can not
                # link against it, someone is ignoring the earlier
                warnings
                if /usr/bin/file -L $add 2> /dev/null |
                    $GREP ": [^:]* bundle" >/dev/null ; then
                    if test "$dlopenmodule" != "$lib"; then
                        $ECHO "*** Warning: lib $linklib is a module, not a
shared library"
                    fi
                    if test -z "$old_library" ; then
                        echo
                        echo "*** And there doesn't seem to be a static
archive available"
                        echo "*** The link will probably fail, sorry"
                    else
                        add="$dir/$old_library"
                    fi
                    elif test -n "$old_library"; then
                        add="$dir/$old_library"
                    fi
                fi
            esac
            elif test "$hardcode_minus_L" = no; then
                case $host in
                *--sunos*) add_shlibpath="$dir" ;;
                esac
                add_dir="-L$dir"
                add="-l$name"
                elif test "$hardcode_shlibpath_var" = no; then
                    add_shlibpath="$dir"
                    add="-l$name"
                else
                    lib_linked=no
                fi
            ;;

```

```

relink)
  if test "$hardcode_direct" = yes &&
    test "$hardcode_direct_absolute" = no; then
add="$dir/$linklib"
  elif test "$hardcode_minus_L" = yes; then
add_dir="-L$absdir"
  # Try looking first in the location we're being installed
to.
  if test -n "$inst_prefix_dir"; then
    case $libdir in
      [\\/]*)
        func_append add_dir " -L$inst_prefix_dir$libdir"
        ;;
    esac
  fi
add="-l$name"
  elif test "$hardcode_shlibpath_var" = yes; then
add_shlibpath="$dir"
add="-l$name"
  else
lib_linked=no
  fi
  ;;
*) lib_linked=no ;;
esac

if test "$lib_linked" != yes; then
  func_fatal_configuration "unsupported hardcode properties"
fi

if test -n "$add_shlibpath"; then
  case :$compile_shlibpath: in
    *:$add_shlibpath:*) ;;
    *) func_append compile_shlibpath "$add_shlibpath:" ;;
  esac
fi
if test "$linkmode" = prog; then
  test -n "$add_dir" && compile_deplibs="$add_dir
$compile_deplibs"
  test -n "$add" && compile_deplibs="$add $compile_deplibs"
else
  test -n "$add_dir" && deplibs="$add_dir $deplibs"
  test -n "$add" && deplibs="$add $deplibs"
  if test "$hardcode_direct" != yes &&
    test "$hardcode_minus_L" != yes &&
    test "$hardcode_shlibpath_var" = yes; then
    case :$finalize_shlibpath: in
      *:$libdir:*) ;;
      *) func_append finalize_shlibpath "$libdir:" ;;
    esac
  fi
fi

```

```

fi

if test "$linkmode" = prog || test "$opt_mode" = relink; then
  add_shlibpath=
  add_dir=
  add=
  # Finalize command for both is simple: just hardcode it.
  if test "$hardcode_direct" = yes &&
    test "$hardcode_direct_absolute" = no; then
    add="$libdir/$linklib"
  elif test "$hardcode_minus_L" = yes; then
    add_dir="-L$libdir"
    add="-l$name"
  elif test "$hardcode_shlibpath_var" = yes; then
    case :$finalize_shlibpath: in
      *:$libdir:*) ;;
      *) func_append finalize_shlibpath "$libdir:" ;;
    esac
    add="-l$name"
  elif test "$hardcode_automatic" = yes; then
    if test -n "$inst_prefix_dir" &&
      test -f "$inst_prefix_dir$libdir/$linklib" ; then
      add="$inst_prefix_dir$libdir/$linklib"
    else
      add="$libdir/$linklib"
    fi
  else
    # We cannot seem to hardcode it, guess we'll fake it.
    add_dir="-L$lt_sysroot$libdir"
    # Try looking first in the location we're being installed
to.

    if test -n "$inst_prefix_dir"; then
      case $libdir in
        [\\/]*)
          func_append add_dir " -L$inst_prefix_dir$libdir"
          ;;
      esac
    fi
    add="-l$name"
  fi

  if test "$linkmode" = prog; then
    test -n "$add_dir" && finalize_deplibs="$add_dir
$finalize_deplibs"
    test -n "$add" && finalize_deplibs="$add $finalize_deplibs"
  else
    test -n "$add_dir" && deplibs="$add_dir $deplibs"
    test -n "$add" && deplibs="$add $deplibs"
  fi
fi
elif test "$linkmode" = prog; then

```

```

        # Here we assume that one of hardcode_direct or
hardcode_minus_L
        # is not unsupported.  This is valid on all known static and
        # shared platforms.
        if test "$hardcode_direct" != unsupported; then
            test -n "$old_library" && linklib="$old_library"
            compile_deplibs="$dir/$linklib $compile_deplibs"
            finalize_deplibs="$dir/$linklib $finalize_deplibs"
        else
            compile_deplibs="-l$name -L$dir $compile_deplibs"
            finalize_deplibs="-l$name -L$dir $finalize_deplibs"
        fi
    elif test "$build_libtool_libs" = yes; then
        # Not a shared library
        if test "$deplibs_check_method" != pass_all; then
            # We're trying link a shared library against a static one
            # but the system doesn't support it.

            # Just print a warning and add the library to dependency_libs
so
            # that the program can be linked against the static library.
            echo
            $ECHO "**** Warning: This system can not link to static lib
archive $lib."
            echo "**** I have the capability to make that library
automatically link in when"
            echo "**** you link to this library.  But I can only do this
if you have a"
            echo "**** shared version of the library, which you do not
appear to have."
            if test "$module" = yes; then
                echo "**** But as you try to build a module library, libtool
will still create "
                echo "**** a static module, that should work as long as the
dlopening application"
                echo "**** is linked with the -dlopen flag to resolve
symbols at runtime."
                if test -z "$global_symbol_pipe"; then
                    echo
                    echo "**** However, this would only work if libtool was able
to extract symbol"
                    echo "**** lists from a program, using `nm' or equivalent,
but libtool could"
                    echo "**** not find such a program.  So, this module is
probably useless."
                    echo "**** `nm' from GNU binutils and a full rebuild may
help."
                fi
            fi
            if test "$build_old_libs" = no; then
                build_libtool_libs=module
                build_old_libs=yes
            else

```

```

        build_libtool_libs=no
    fi
fi
else
    deplibs="$dir/$old_library $deplibs"
    link_static=yes
fi
fi # link shared/static library?

if test "$linkmode" = lib; then
if test -n "$dependency_libs" &&
    { test "$hardcode_into_libs" != yes ||
      test "$build_old_libs" = yes ||
      test "$link_static" = yes; }; then
# Extract -R from dependency_libs
temp_deplibs=
for libdir in $dependency_libs; do
    case $libdir in
    -R*) func_stripname '-R' '' "$libdir"
        temp_xrpath=$func_stripname_result
        case " $xrpath " in
        *" $temp_xrpath ") ;;
        *) func_append xrpath " $temp_xrpath";;
        esac;;
    *) func_append temp_deplibs " $libdir";;
    esac
done
dependency_libs="$temp_deplibs"
fi

func_append newlib_search_path " $absdir"
# Link against this library
test "$link_static" = no &&
newdependency_libs="$abs_ladir/$lname $newdependency_libs"
# ... and its dependency_libs
tmp_libs=
for deplib in $dependency_libs; do
    newdependency_libs="$deplib $newdependency_libs"
    case $deplib in
    -L*) func_stripname '-L' '' "$deplib"
        func_resolve_sysroot "$func_stripname_result";;
    *) func_resolve_sysroot "$deplib" ;;
    esac
if $opt_preserve_dup_deps ; then
    case "$tmp_libs " in
    *" $func_resolve_sysroot_result ")
        func_append specialdeplibs "
$func_resolve_sysroot_result" ;;
    esac
fi
func_append tmp_libs " $func_resolve_sysroot_result"
done

```

```

if test "$link_all_deplibs" != no; then
  # Add the search paths of all dependency libraries
  for deplib in $dependency_libs; do
    path=
    case $deplib in
      -L*) path="$deplib" ;;
      *.la)
        func_resolve_sysroot "$deplib"
        deplib=$func_resolve_sysroot_result
        func_dirname "$deplib" "" "."
        dir=$func_dirname_result
        # We need an absolute path.
        case $dir in
          [\\/] * | [A-Za-z]:[\\/] *) absdir="$dir" ;;
          *)
            absdir=`cd "$dir" && pwd`
            if test -z "$absdir"; then
              func_warning "cannot determine absolute directory name
of `\$dir'"
            fi
            absdir="$dir"
          fi
        ;;
      esac
      if $GREP "^installed=no" $deplib > /dev/null; then
        case $host in
          *-*-darwin*)
            depdepl=
            eval deplib_names=`${SED} -n -e
's/^library_names=(.*)$/\1/p' $deplib`
            if test -n "$deplib_names" ; then
              for tmp in $deplib_names ; do
                depdepl=$tmp
              done
              if test -f "$absdir/$objdir/$depdepl" ; then
                depdepl="$absdir/$objdir/$depdepl"
                darwin_install_name=`${OTOOL} -L $depdepl | awk '{if
(NR == 2) {print $1;exit}}'`
                if test -z "$darwin_install_name"; then
                  darwin_install_name=`${OTOOL64} -L $depdepl
| awk '{if (NR == 2) {print $1;exit}}'`
                fi
                func_append compiler_flags " ${wl}-dylib_file
${wl}${darwin_install_name}:${depdepl}"
                func_append linker_flags " -dylib_file
${darwin_install_name}:${depdepl}"
                path=
              fi
            fi
          ;;
          *)
            path="-L$absdir/$objdir"
        ;;
      esac
    done
  done

```

```

        ;;
    esac
else
    eval libdir=`${SED} -n -e 's/^libdir=(.*)$/\1/p'
$deplib`
    test -z "$libdir" && \
        func_fatal_error "`$deplib' is not a valid libtool
archive"
    #test "$absdir" != "$libdir" && \
    # func_warning "`$deplib' seems to be moved"

    path="-L$absdir"
fi
;;
esac
case " $deplibs " in
*" $path ") ;;
*) deplibs="$path $deplibs" ;;
esac
done
fi # link_all_deplibs != no
fi # linkmode = lib
done # for deplib in $libs
if test "$pass" = link; then
if test "$linkmode" = "prog"; then
    compile_deplibs="$new_inherited linker_flags $compile_deplibs"
    finalize_deplibs="$new_inherited linker_flags
$finalize_deplibs"
else
    compiler_flags="$compiler_flags "`$ECHO "
$new_inherited_linker_flags" | ${SED} 's% \([^ $]*\).ltframework% -
framework \1%g'`
fi
fi
dependency_libs="$newdependency_libs"
if test "$pass" = dlpreopen; then
# Link the dlpreopened libraries before other libraries
for deplib in $save_deplibs; do
    deplibs="$deplib $deplibs"
done
fi
if test "$pass" != dlopen; then
if test "$pass" != conv; then
    # Make sure lib_search_path contains only unique directories.
    lib_search_path=
    for dir in $newlib_search_path; do
        case "$lib_search_path " in
*" $dir ") ;;
*) func_append lib_search_path " $dir" ;;
esac
done
newlib_search_path=

```

```

fi

if test "$linkmode,$pass" != "prog,link"; then
  vars="deplibs"
else
  vars="compile_deplibs finalize_deplibs"
fi
for var in $vars dependency_libs; do
  # Add libraries to $var in reverse order
  eval tmp_libs="\`$var\`"
  new_libs=
  for deplib in $tmp_libs; do
    # FIXME: Pedantically, this is the right thing to do, so
    #         that some nasty dependency loop isn't accidentally
    #         broken:
    #new_libs="$deplib $new_libs"
    # Pragmatically, this seems to cause very few problems in
    # practice:
    case $deplib in
    -L*) new_libs="$deplib $new_libs" ;;
    -R*) ;;
    *)
      # And here is the reason: when a library appears more
      # than once as an explicit dependence of a library, or
      # is implicitly linked in more than once by the
      # compiler, it is considered special, and multiple
      # occurrences thereof are not removed. Compare this
      # with having the same library being listed as a
      # dependency of multiple other libraries: in this case,
      # we know (pedantically, we assume) the library does not
      # need to be listed more than once, so we keep only the
      # last copy. This is not always right, but it is rare
      # enough that we require users that really mean to play
      # such unportable linking tricks to link the library
      # using -Wl,-lname, so that libtool does not consider it
      # for duplicate removal.
      case " $specialdeplibs " in
      *" $deplib "*) new_libs="$deplib $new_libs" ;;
      *)
        case " $new_libs " in
        *" $deplib "*) ;;
        *) new_libs="$deplib $new_libs" ;;
        esac
      ;;
      esac
    ;;
  esac
done
tmp_libs=
for deplib in $new_libs; do
  case $deplib in
  -L*)

```



```

        case " $tmp_libs " in
        *" $deplib ") ;;
        *) func_append tmp_libs " $deplib" ;;
        esac
        ;;
        *) func_append tmp_libs " $deplib" ;;
        esac
    done
    eval $var="\$tmp_libs\"
done # for var
fi
# Last step: remove runtime libs from dependency_libs
# (they stay in deplibs)
tmp_libs=
for i in $dependency_libs ; do
case " $predeps $postdeps $compiler_lib_search_path " in
*" $i ")
    i=""
    ;;
esac
if test -n "$i" ; then
    func_append tmp_libs " $i"
fi
done
dependency_libs=$tmp_libs
done # for pass
if test "$linkmode" = prog; then
    dlfiles="$newdlfiles"
fi
if test "$linkmode" = prog || test "$linkmode" = lib; then
    dlprefiles="$newdlprefiles"
fi

case $linkmode in
oldlib)
    if test -n "$dlfiles$dlprefiles" || test "$dlself" != no; then
        func_warning "\`-dlopen' is ignored for archives"
    fi

    case " $deplibs" in
    *\ -l* | *\ -L*)
        func_warning "\`-l' and \`-L' are ignored for archives" ;;
    esac

    test -n "$rpath" && \
        func_warning "\`-rpath' is ignored for archives"

    test -n "$xrpath" && \
        func_warning "\`-R' is ignored for archives"

    test -n "$vinfo" && \

```

```

func_warning "\`-version-info/-version-number' is ignored for
archives"

test -n "$release" && \
func_warning "\`-release' is ignored for archives"

test -n "$export_symbols$export_symbols_regex" && \
func_warning "\`-export-symbols' is ignored for archives"

# Now set the variables for building old libraries.
build_libtool_libs=no
oldlibs="$output"
func_append objs "$old_deplibs"
;;

lib)
# Make sure we only generate libraries of the form `libNAME.la'.
case $outputname in
lib*)
func_stripname 'lib' '.la' "$outputname"
name=$func_stripname_result
eval shared_ext="\`$shrext_cmds\"
eval libname="\`$libname_spec\"
;;
*)
test "$module" = no && \
func_fatal_help "libtool library \`${output}' must begin with
\`lib'"

if test "$need_lib_prefix" != no; then
# Add the "lib" prefix for modules if required
func_stripname ' ' '.la' "$outputname"
name=$func_stripname_result
eval shared_ext="\`$shrext_cmds\"
eval libname="\`$libname_spec\"
else
func_stripname ' ' '.la' "$outputname"
libname=$func_stripname_result
fi
;;
esac

if test -n "$objs"; then
if test "$deplibs_check_method" != pass_all; then
func_fatal_error "cannot build libtool library \`${output}' from
non-libtool objects on this host:$objs"
else
echo
$ECHO "*** Warning: Linking the shared library $output against
the non-libtool"
$ECHO "*** objects $objs is not portable!"
func_append libobjs " $objs"

```

```

fi
fi

test "$dlsel" != no && \
func_warning "\`-dlopen self' is ignored for libtool libraries"

set dummy $rpath
shift
test "$#" -gt 1 && \
func_warning "ignoring multiple \`-rpath's for a libtool library"

install_libdir="$1"

oldlibs=
if test -z "$rpath"; then
if test "$build_libtool_libs" = yes; then
# Building a libtool convenience library.
# Some compilers have problems with a `.al' extension so
# convenience libraries should have the same extension an
# archive normally would.
oldlibs="$output_objdir/$libname.$libext $oldlibs"
build_libtool_libs=convenience
build_old_libs=yes
fi
fi

test -n "$vinfo" && \
func_warning "\`-version-info/-version-number' is ignored for
convenience libraries"

test -n "$release" && \
func_warning "\`-release' is ignored for convenience libraries"
else

# Parse the version information argument.
save_ifs="$IFS"; IFS=:
set dummy $vinfo 0 0 0
shift
IFS="$save_ifs"

test -n "$7" && \
func_fatal_help "too many parameters to \`-version-info'"

# convert absolute version numbers to libtool ages
# this retains compatibility with .la files and attempts
# to make the code below a bit more comprehensible

case $vinfo_number in
yes)
number_major="$1"
number_minor="$2"
number_revision="$3"
#

```

```

# There are really only two kinds -- those that
# use the current revision as the major version
# and those that subtract age and use age as
# a minor version.  But, then there is irix
# which has an extra 1 added just for fun
#
case $version_type in
# correct linux to gnu/linux during the next big refactor
darwin|linux|osf|windows|none)
    func_arith $number_major + $number_minor
    current=$func_arith_result
    age="$number_minor"
    revision="$number_revision"
    ;;
freebsd-aout|freebsd-elf|qnx|sunos)
    current="$number_major"
    revision="$number_minor"
    age="0"
    ;;
irix|nonstopux)
    func_arith $number_major + $number_minor
    current=$func_arith_result
    age="$number_minor"
    revision="$number_minor"
    lt_irix_increment=no
    ;;
esac
;;
no)
    current="$1"
    revision="$2"
    age="$3"
    ;;
esac

# Check that each of the things are valid numbers.
case $current in
0|[1-9]|[1-9][0-9]|[1-9][0-9][0-9]|[1-9][0-9][0-9][0-9]|[1-9][0-9][0-9][0-9][0-9]) ;;
*)
    func_error "CURRENT \`${current}' must be a nonnegative integer"
    func_fatal_error "\`${vinfo}' is not valid version information"
    ;;
esac

case $revision in
0|[1-9]|[1-9][0-9]|[1-9][0-9][0-9]|[1-9][0-9][0-9][0-9]|[1-9][0-9][0-9][0-9][0-9]) ;;
*)
    func_error "REVISION \`${revision}' must be a nonnegative
integer"
    func_fatal_error "\`${vinfo}' is not valid version information"

```

```

    ;;
esac

case $age in
0|[1-9]|[1-9][0-9]|[1-9][0-9][0-9]|[1-9][0-9][0-9][0-9]|[1-9][0-9][0-9][0-9][0-9]) ;;
*)
    func_error "AGE \`${age}' must be a nonnegative integer"
    func_fatal_error "\`${vinfo}' is not valid version information"
    ;;
esac

if test "$age" -gt "$current"; then
    func_error "AGE \`${age}' is greater than the current interface
number \`${current}'"
    func_fatal_error "\`${vinfo}' is not valid version information"
fi

# Calculate the version variables.
major=
versuffix=
verstring=
case $version_type in
none) ;;

darwin)
    # Like Linux, but with the current version available in
    # verstring for coding it into the library header
    func_arith $current - $age
    major=.$func_arith_result
    versuffix="$major.$age.$revision"
    # Darwin ld doesn't like 0 for these options...
    func_arith $current + 1
    minor_current=$func_arith_result
    xlcverstring="${wl}-compatibility_version ${wl}$minor_current
${wl}-current_version ${wl}$minor_current.$revision"
    verstring="-compatibility_version $minor_current -
current_version $minor_current.$revision"
    ;;

freebsd-aout)
    major=".$current"
    versuffix=".$current.$revision";
    ;;

freebsd-elf)
    major=".$current"
    versuffix=".$current"
    ;;

irix | nonstopux)
    if test "X$lt_irix_increment" = "Xno"; then

```

```

    func_arith $current - $age
else
    func_arith $current - $age + 1
fi
major=$func_arith_result

case $version_type in
    nonstopux) verstring_prefix=nonstopux ;;
    *)         verstring_prefix=sgi ;;
esac
verstring="$verstring_prefix$major.$revision"

# Add in all the interfaces that we are compatible with.
loop=$revision
while test "$loop" -ne 0; do
    func_arith $revision - $loop
    iface=$func_arith_result
    func_arith $loop - 1
    loop=$func_arith_result
    verstring="$verstring_prefix$major.$iface:$verstring"
done

# Before this point, $major must not contain `.'.
major=.$major
versuffix="$major.$revision"
;;

linux) # correct to gnu/linux during the next big refactor
    func_arith $current - $age
    major=.$func_arith_result
    versuffix="$major.$age.$revision"
    ;;

osf)
    func_arith $current - $age
    major=.$func_arith_result
    versuffix=".$current.$age.$revision"
    verstring="$current.$age.$revision"

# Add in all the interfaces that we are compatible with.
loop=$age
while test "$loop" -ne 0; do
    func_arith $current - $loop
    iface=$func_arith_result
    func_arith $loop - 1
    loop=$func_arith_result
    verstring="$verstring:${iface}.0"
done

# Make executables depend on our current version.
func_append verstring ":{current}.0"
;;

```

```

gnx)
    major=".$current"
    versuffix=".$current"
    ;;

sunos)
    major=".$current"
    versuffix=".$current.$revision"
    ;;

windows)
    # Use '-' rather than '.', since we only want one
    # extension on DOS 8.3 filesystems.
    func_arith $current - $age
    major=${func_arith_result}
    versuffix="-${major}"
    ;;

*)
    func_fatal_configuration "unknown library version type
\\$version_type"
    ;;
esac

# Clear the version info if we defaulted, and they specified a
release.
if test -z "$vinfo" && test -n "$release"; then
    major=
    case $version_type in
    darwin)
        # we can't check for "0.0" in archive_cmds due to quoting
        # problems, so we reset it completely
        verstring=
        ;;
    *)
        verstring="0.0"
        ;;
    esac
    if test "$need_version" = no; then
        versuffix=
    else
        versuffix=".0.0"
    fi
fi

# Remove version info from name if versioning should be avoided
if test "$avoid_version" = yes && test "$need_version" = no; then
    major=
    versuffix=
    verstring=""
fi

```

```

# Check to see if the archive will have undefined symbols.
if test "$allow_undefined" = yes; then
  if test "$allow_undefined_flag" = unsupported; then
    func_warning "undefined symbols not allowed in $host shared
libraries"
    build_libtool_libs=no
    build_old_libs=yes
  fi
else
  # Don't allow undefined symbols.
  allow_undefined_flag="$no_undefined_flag"
fi

fi

func_generate_dlsyms "$libname" "$libname" "yes"
func_append libobjs " $symfileobj"
test "X$libobjs" = "X " && libobjs=

if test "$opt_mode" != relink; then
# Remove our outputs, but don't remove object files since they
# may have been created when compiling PIC objects.
removelist=
tempremovelist=`$ECHO "$output_objdir/*" `
for p in $tempremovelist; do
  case $p in
    *.$objext | *.gcno)
      ;;
    $output_objdir/$outputname | $output_objdir/$libname.* |
$output_objdir/${libname}${release}.* )
      if test "X$precious_files_regex" != "X"; then
        if $ECHO "$p" | $EGREP -e "$precious_files_regex"
>/dev/null 2>&1
        then
          continue
        fi
      fi
      func_append removelist " $p"
      ;;
    *) ;;
  esac
done
test -n "$removelist" && \
  func_show_eval "${RM}r \${removelist}"
fi

# Now set the variables for building old libraries.
if test "$build_old_libs" = yes && test "$build_libtool_libs" !=
convenience ; then
  func_append oldlibs " $output_objdir/$libname.$libext"

```



```

# Transform .lo files to .o files.
oldobjs="$objs "`$ECHO "$libobjs" | $SP2NL | $SED
"/\.${libext}$/d; $lo2o" | $NL2SP`
fi

# Eliminate all temporary directories.
#for path in $notinst_path; do
#  lib_search_path=`$ECHO "$lib_search_path " | $SED "s% $path
% %g"`
#  deplibs=`$ECHO "$deplibs " | $SED "s% -L$path % %g"`
#  dependency_libs=`$ECHO "$dependency_libs " | $SED "s% -
L$path % %g"`
#done

if test -n "$xrpath"; then
# If the user specified any rpath flags, then add them.
temp_xrpath=
for libdir in $xrpath; do
  func_replace_sysroot "$libdir"
  func_append temp_xrpath " -R$func_replace_sysroot_result"
  case "$finalize_rpath " in
    *" $libdir ") ;;
    *) func_append finalize_rpath " $libdir" ;;
  esac
done
if test "$hardcode_into_libs" != yes || test "$build_old_libs" =
yes; then
  dependency_libs="$temp_xrpath $dependency_libs"
fi
fi

# Make sure dlfiles contains only unique files that won't be
dlpreopened
old_dlfiles="$dlfiles"
dlfiles=
for lib in $old_dlfiles; do
case " $dlprefiles $dlfiles " in
*" $lib ") ;;
*) func_append dlfiles " $lib" ;;
esac
done

# Make sure dlprefiles contains only unique files
old_dlprefiles="$dlprefiles"
dlprefiles=
for lib in $old_dlprefiles; do
case "$dlprefiles " in
*" $lib ") ;;
*) func_append dlprefiles " $lib" ;;
esac
done

```

```

    if test "$build_libtool_libs" = yes; then
    if test -n "$rpath"; then
        case $host in
            *-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-*-beos* |
*-cegcc* | *-*-haiku*)
                # these systems don't actually have a c library (as such)!
                ;;
            *-*-rhapsody* | *-*-darwin1.[012])
                # Rhapsody C library is in the System framework
                func_append deplibs " System.ltframework"
                ;;
            *-*-netbsd*)
                # Don't link with libc until the a.out ld.so is fixed.
                ;;
            *-*-openbsd* | *-*-freebsd* | *-*-dragonfly*)
                # Do not include libc due to us having libc/libc_r.
                ;;
            *-*-sco3.2v5* | *-*-sco5v6*)
                # Causes problems with __ctype
                ;;
            *-*-sysv4.2uw2* | *-*-sysv5* | *-*-unixware* | *-*-OpenUNIX*)
                # Compiler inserts libc in the correct place for threads to
work
                ;;
            *)
                # Add libc to deplibs on all other systems if necessary.
                if test "$build_libtool_need_lc" = "yes"; then
                    func_append deplibs " -lc"
                fi
                ;;
        esac
    fi

    # Transform deplibs into only deplibs that can be linked in
shared.
    name_save=$name
    libname_save=$libname
    release_save=$release
    versuffix_save=$versuffix
    major_save=$major
    # I'm not sure if I'm treating the release correctly.  I think
    # release should show up in the -l (ie -lgmp5) so we don't want
to
    # add it in twice.  Is that correct?
    release=""
    versuffix=""
    major=""
    newdeplibs=
    droppeddeps=no
    case $deplibs_check_method in
    pass_all)
        # Don't check for shared/static.  Everything works.

```

```

# This might be a little naive. We might want to check
# whether the library exists or not. But this is on
# osf3 & osf4 and I'm not really sure... Just
# implementing what was already the behavior.
newdeplibs=$deplibs
;;
test_compile)
# This code stresses the "libraries are programs" paradigm to
its
# limits. Maybe even breaks it. We compile a program, linking
it
# against the deplibs as a proxy for the library. Then we can
check
# whether they linked in statically or dynamically with ldd.
$opt_dry_run || $RM conftest.c
cat > conftest.c <<EOF
int main() { return 0; }
EOF
$opt_dry_run || $RM conftest
if $LTCC $LTCCFLAGS -o conftest conftest.c $deplibs; then
  ldd_output=`ldd conftest`
  for i in $deplibs; do
    case $i in
      -l*)
        func_stripname -l '' "$i"
        name=$func_stripname_result
        if test "X$allow_libtool_libs_with_static_runtimes" =
"Xyes" ; then
          case " $predeps $postdeps " in
            *" $i "*)
              func_append newdeplibs " $i"
              i=""
            ;;
          esac
        fi
        if test -n "$i" ; then
          libname=`eval "\\$ECHO \"\$libname_spec\""`
          deplib_matches=`eval "\\$ECHO \"\$library_names_spec\""`
          set dummy $deplib_matches; shift
          deplib_match=$1
          if test `expr "$ldd_output" : ".*$deplib_match" -ne 0` ;
then
            func_append newdeplibs " $i"
          else
            droppeddeps=yes
            echo
            $ECHO "*** Warning: dynamic linker does not accept
needed library $i."
            echo "*** I have the capability to make that library
automatically link in when"
            echo "*** you link to this library. But I can only do
this if you have a"

```

```

                echo "*** shared version of the library, which I
believe you do not have"
                echo "*** because a test_compile did reveal that the
linker did not use it for"
                echo "*** its dynamic dependency list that programs get
resolved with at runtime."
            fi
        fi
        ;;
    *)
        func_append newdeplibs " $i"
        ;;
    esac
done
else
# Error occurred in the first compile.  Let's try to salvage
# the situation: Compile a separate program for each library.
for i in $deplibs; do
    case $i in
        -l*)
            func_stripname -l '' "$i"
            name=$func_stripname_result
            $opt_dry_run || $RM conftest
            if $LTCC $LTCCFLAGS -o conftest conftest.c $i; then
                ldd_output=`ldd conftest`
                if test "X$allow_libtool_libs_with_static_runtimes" =
"Xyes" ; then
                    case " $predeps $postdeps " in
                        *" $i "*)
                            func_append newdeplibs " $i"
                            i=""
                            ;;
                        esac
                    fi
                    if test -n "$i" ; then
                        libname=`eval "\\$ECHO \"\$libname_spec\""`
                        deplib_matches=`eval "\\$ECHO \"\$library_names_spec\""`
                        set dummy $deplib_matches; shift
                        deplib_match=$1
                        if test `expr "$ldd_output" : ".*$deplib_match"` -ne 0
; then
                            func_append newdeplibs " $i"
                        else
                            droppeddeps=yes
                            echo
                            $ECHO "*** Warning: dynamic linker does not accept
needed library $i."
                            echo "*** I have the capability to make that library
automatically link in when"
                            echo "*** you link to this library.  But I can only
do this if you have a"

```

```

        echo "*** shared version of the library, which you do
not appear to have"
        echo "*** because a test_compile did reveal that the
linker did not use this one"
        echo "*** as a dynamic dependency that programs can
get resolved with at runtime."
    fi
    fi
else
    droppeddeps=yes
    echo
    $ECHO "*** Warning! Library $i is needed by this library
but I was not able to"
    echo "*** make it link in! You will probably need to
install it or some"
    echo "*** library that it depends on before this library
will be fully"
    echo "*** functional. Installing it before continuing
would be even better."
    fi
    ;;
    *)
    func_append newdeplibs " $i"
    ;;
esac
done
fi
;;
file_magic*)
set dummy $deplibs_check_method; shift
file_magic_regex=`expr "$deplibs_check_method" : "$1 \(.*\)"`
for a_deplib in $deplibs; do
    case $a_deplib in
    -l*)
        func_stripname -l '' "$a_deplib"
        name=$func_stripname_result
        if test "X$allow_libtool_libs_with_static_runtimes" =
"Xyes" ; then
            case " $predeps $postdeps " in
            *" $a_deplib "*)
                func_append newdeplibs " $a_deplib"
                a_deplib=""
                ;;
            esac
        fi
        if test -n "$a_deplib" ; then
            libname=`eval "\\$ECHO \"$libname_spec\""`
            if test -n "$file_magic_glob"; then
                libnameglob=`func_echo_all "$libname" | $SED -e
$file_magic_glob`
            else
                libnameglob=$libname
            fi
        fi
    esac
done
fi

```

```

        fi
        test "$want_nocaseglob" = yes && nocaseglob=`shopt -p
nocaseglob`
        for i in $lib_search_path $sys_lib_search_path
$shlib_search_path; do
            if test "$want_nocaseglob" = yes; then
                shopt -s nocaseglob
                potential_libs=`ls $i/$libnameglob[.]* 2>/dev/null`
                $nocaseglob
            else
                potential_libs=`ls $i/$libnameglob[.]* 2>/dev/null`
            fi
            for potent_lib in $potential_libs; do
                # Follow soft links.
                if ls -lLd "$potent_lib" 2>/dev/null |
                $GREP " -> " >/dev/null; then
                    continue
                fi
                # The statement above tries to avoid entering an
                # endless loop below, in case of cyclic links.
                # We might still enter an endless loop, since a link
                # loop can be closed while we follow links,
                # but so what?
                potlib="$potent_lib"
                while test -h "$potlib" 2>/dev/null; do
                    potliblink=`ls -ld $potlib | ${SED} 's/. * -> //'`
                    case $potliblink in
                    [\\/*] * | [A-Za-z]:[\\/*]*) potlib="$potliblink";;
                    *) potlib=`$ECHO "$potlib" | $SED
's,[^/]*$,,'`"$potliblink";;
                    esac
                done
                if eval $file_magic_cmd `"\`$potlib\`" 2>/dev/null |
                $SED -e 10q |
                $EGREP "$file_magic_regex" > /dev/null; then
                    func_append newdeplibs " $a_deplib"
                    a_deplib=""
                    break 2
                fi
            done
        done
        fi
        if test -n "$a_deplib" ; then
            droppeddeps=yes
            echo
            $ECHO "*** Warning: linker path does not have real file for
library $a_deplib."
            echo "*** I have the capability to make that library
automatically link in when"
            echo "*** you link to this library. But I can only do this
if you have a"

```



```

        a_deplib=""
        break 2
    fi
done
done
fi
if test -n "$a_deplib" ; then
droppeddeps=yes
echo
$ECHO "*** Warning: linker path does not have real file for
library $a_deplib."
echo "*** I have the capability to make that library
automatically link in when"
echo "*** you link to this library. But I can only do this
if you have a"
echo "*** shared version of the library, which you do not
appear to have"
echo "*** because I did check the linker path looking for a
file starting"
    if test -z "$spotlib" ; then
        $ECHO "*** with $libname but no candidates were found.
(...for regex pattern test)"
    else
        $ECHO "*** with $libname and none of the candidates
passed a file format test"
        $ECHO "*** using a regex pattern. Last file checked:
$spotlib"
    fi
fi
fi
;;
*)
# Add a -L argument.
func_append newdeplibs " $a_deplib"
;;
esac
done # Gone through all deplibs.
;;
none | unknown | *)
newdeplibs=""
tmp_deplibs=`$ECHO " $deplibs" | $SED 's/ -lc$//; s/ -[LR][^
]*//g'`
if test "X$allow_libtool_libs_with_static_runtimes" = "Xyes" ;
then
    for i in $predeps $postdeps ; do
        # can't use Xsed below, because $i might contain '/'
        tmp_deplibs=`$ECHO " $tmp_deplibs" | $SED "s,$i,,"`
    done
fi
case $tmp_deplibs in
*[\ \ \ ]*)
    echo
    if test "X$deplibs_check_method" = "Xnone"; then

```



```

        echo "*** Warning: inter-library dependencies are not
supported in this platform."
    else
        echo "*** Warning: inter-library dependencies are not known
to be supported."
    fi
    echo "*** All declared inter-library dependencies are being
dropped."
    droppeddeps=yes
    ;;
esac
    ;;
esac
versuffix=$versuffix_save
major=$major_save
release=$release_save
libname=$libname_save
name=$name_save

case $host in
*-*-rhapsody* | *-*-darwin1.[012])
    # On Rhapsody replace the C library with the System framework
    newdeplibs=`$ECHO " $newdeplibs" | $SED 's/ -lc /
System.ltframework /'`
    ;;
esac

if test "$droppeddeps" = yes; then
    if test "$module" = yes; then
        echo
        echo "*** Warning: libtool could not satisfy all declared
inter-library"
        $ECHO "*** dependencies of module $libname.  Therefore,
libtool will create"
        echo "*** a static module, that should work as long as the
dlopening"
        echo "*** application is linked with the -dlopen flag."
        if test -z "$global_symbol_pipe"; then
            echo
            echo "*** However, this would only work if libtool was able
to extract symbol"
            echo "*** lists from a program, using `nm' or equivalent,
but libtool could"
            echo "*** not find such a program.  So, this module is
probably useless."
            echo "*** `nm' from GNU binutils and a full rebuild may
help."
        fi
        if test "$build_old_libs" = no; then
            oldlibs="$output_objdir/$libname.$libext"
            build_libtool_libs=module
            build_old_libs=yes
        fi
    fi
fi

```

```

        else
            build_libtool_libs=no
        fi
    else
        echo "*** The inter-library dependencies that have been
dropped here will be"
        echo "*** automatically added whenever a program is linked
with this library"
        echo "*** or is declared to -dlopen it."

        if test "$allow_undefined" = no; then
            echo
            echo "*** Since this library must not contain undefined
symbols,"
            echo "*** because either the platform does not support them
or"
            echo "*** it was explicitly requested with -no-undefined,"
            echo "*** libtool will only create a static version of it."
            if test "$build_old_libs" = no; then
                oldlibs="$output_objdir/$libname.$libext"
                build_libtool_libs=module
                build_old_libs=yes
            else
                build_libtool_libs=no
            fi
        fi
    fi
fi
fi
# Done checking deplibs!
deplibs=$newdeplibs
fi
# Time to change all our "foo.ltframework" stuff back to "-
framework foo"
case $host in
*-*-darwin*)
    newdeplibs=`$ECHO " $newdeplibs" | $SED 's% \([^
$]*\)\.ltframework% -framework \1%g'\`
    new_inherited_linker_flags=`$ECHO "
$new_inherited_linker_flags" | $SED 's% \([^ $]*\)\.ltframework% -
framework \1%g'\`
    deplibs=`$ECHO " $deplibs" | $SED 's% \([^ $]*\)\.ltframework% -
framework \1%g'\`
    ;;
esac

# move library search paths that coincide with paths to not yet
# installed libraries to the beginning of the library search
list
new_libs=
for path in $notinst_path; do
case " $new_libs " in
*" -L$path/$objdir "*) ;;

```

```

*)
  case " $deplibs " in
    *" -L$path/$objdir "*)
      func_append new_libs " -L$path/$objdir" ;;
  esac
  ;;
esac
done
for deplib in $deplibs; do
case $deplib in
-L*)
  case " $new_libs " in
    *" $deplib "*) ;;
    *) func_append new_libs " $deplib" ;;
  esac
  ;;
*) func_append new_libs " $deplib" ;;
esac
done
deplibs="$new_libs"

# All the library-specific variables (install_libdir is set
above).
library_names=
old_library=
dlname=

# Test again, we may have decided not to build it any more
if test "$build_libtool_libs" = yes; then
# Remove ${wl} instances when linking with ld.
# FIXME: should test the right _cmds variable.
case $archive_cmds in
*\$LD\ *) wl= ;;
esac
if test "$hardcode_into_libs" = yes; then
# Hardcode the library paths
hardcode_libdirs=
dep_rpath=
rpath="$finalize_rpath"
test "$opt_mode" != relink && rpath="$compile_rpath$rpath"
for libdir in $rpath; do
  if test -n "$hardcode_libdir_flag_spec"; then
    func_replace_sysroot "$libdir"
    libdir=$func_replace_sysroot_result
    func_stripname '=' ' ' "$libdir"
    libdir=$func_stripname_result
    if test -n "$hardcode_libdir_separator"; then
      if test -z "$hardcode_libdirs"; then
        hardcode_libdirs="$libdir"
      else
        # Just accumulate the unique libdirs.

```

```

        case
$hardcode_libdir_separator$hardcode_libdirs$hardcode_libdir_separator
in
*"${hardcode_libdir_separator}$libdir${hardcode_libdir_separator}"*)
    ;;
    *)
        func_append hardcode_libdirs
"$hardcode_libdir_separator$libdir"
    ;;
esac
fi
else
    # We only want to hardcode in an rpath if it isn't in
the
    # default dlsearch path.
    func_normal_abspath "$libdir"
    libdir_norm=${func_normal_abspath_result}
    case " $sys_lib_dlsearch_path " in
*" $libdir_norm "*) ;;
    *) eval flag="\${hardcode_libdir_flag_spec}\\"
        func_append dep_rpath " $flag"
        ;;
    esac
fi
elif test -n "$runpath_var"; then
    case "$perm_rpath " in
*" $libdir "*) ;;
    *) func_append perm_rpath " $libdir" ;;
    esac
fi
done
# Substitute the hardcoded libdirs into the rpath.
if test -n "$hardcode_libdir_separator" &&
test -n "$hardcode_libdirs"; then
    libdir="$hardcode_libdirs"
    eval "dep_rpath=\${hardcode_libdir_flag_spec}\\"
fi
if test -n "$runpath_var" && test -n "$perm_rpath"; then
    # We should set the runpath_var.
    rpath=
    for dir in $perm_rpath; do
        func_append rpath "$dir:"
    done
    eval "$runpath_var='${rpath}\${$runpath_var}'; export
$runpath_var"
fi
test -n "$dep_rpath" && deplibs="$dep_rpath $deplibs"
fi

shlibpath="$finalize_shlibpath"

```

```

    test "$opt_mode" != relink &&
shlibpath="$compile_shlibpath$shlibpath"
    if test -n "$shlibpath"; then
        eval "$shlibpath_var='$shlibpath\$$shlibpath_var'; export
$shlibpath_var"
    fi

    # Get the real and link names of the library.
eval shared_ext="\$shrext_cmds\"
eval library_names="\$library_names_spec\"
set dummy $library_names
shift
realname="$1"
shift

if test -n "$soname_spec"; then
    eval soname="\$soname_spec\"
else
    soname="$realname"
fi
if test -z "$dlname"; then
    dlname=$soname
fi

lib="$output_objdir/$realname"
linknames=
for link
do
    func_append linknames " $link"
done

# Use standard objects if they are pic
test -z "$pic_flag" && libobjs=`ECHO "$libobjs" | $SP2NL | $SED
"$lo2o" | $NL2SP`
test "X$libobjs" = "X " && libobjs=

delfiles=
if test -n "$export_symbols" && test -n "$include_expsyms"; then
    $opt_dry_run || cp "$export_symbols"
"$output_objdir/$libname.uexp"
    export_symbols="$output_objdir/$libname.uexp"
    func_append delfiles " $export_symbols"
fi

orig_export_symbols=
case $host_os in
cygwin* | mingw* | cegcc*)
    if test -n "$export_symbols" && test -z
"$export_symbols_regex"; then
        # exporting using user supplied symfile
        if test "x`$SED 1q $export_symbols`" != xEXPORTS; then
            # and it's NOT already a .def file. Must figure out

```

```

    # which of the given symbols are data symbols and tag
    # them as such. So, trigger use of export_symbols_cmds.
    # export_symbols gets reassigned inside the "prepare
    # the list of exported symbols" if statement, so the
    # include_expsyms logic still works.
    orig_export_symbols="$export_symbols"
    export_symbols=
    always_export_symbols=yes
  fi
fi
;;
esac

# Prepare the list of exported symbols
if test -z "$export_symbols"; then
  if test "$always_export_symbols" = yes || test -n
"$export_symbols_regex"; then
    func_verbose "generating symbol list for `\$libname.la'"
    export_symbols="$output_objdir/$libname.exp"
    $opt_dry_run || $RM $export_symbols
    cmds=$export_symbols_cmds
    save_ifs="$IFS"; IFS='~'
    for cmd1 in $cmds; do
      IFS="$save_ifs"
      # Take the normal branch if the nm_file_list_spec branch
      # doesn't work or if tool conversion is not needed.
      case $nm_file_list_spec~$to_tool_file_cmd in
      *~func_convert_file_noop | *~func_convert_file_msys_to_w32
| ~*)
          try_normal_branch=yes
          eval cmd=\"$cmd1\"
          func_len " $cmd"
          len=$func_len_result
          ;;
      *)
          try_normal_branch=no
          ;;
      esac
      if test "$try_normal_branch" = yes \
&& { test "$len" -lt "$max_cmd_len" \
|| test "$max_cmd_len" -le -1; }
      then
        func_show_eval "$cmd" 'exit $?'
        skipped_export=false
        elif test -n "$nm_file_list_spec"; then
          func_basename "$output"
          output_la=$func_basename_result
          save_libobjs=$libobjs
          save_output=$output
          output=${output_objdir}/${output_la}.nm
          func_to_tool_file "$output"
          libobjs=$nm_file_list_spec$func_to_tool_file_result

```

```

func_append delfiles " $output"
func_verbose "creating $NM input file list: $output"
for obj in $save_libobjs; do
    func_to_tool_file "$obj"
    $ECHO "$func_to_tool_file_result"
done > "$output"
eval cmd="\ "$cmd1\"
func_show_eval "$cmd" 'exit $? '
output=$save_output
libobjs=$save_libobjs
skipped_export=false
else
    # The command line is too long to execute in one step.
    func_verbose "using reloadable object file for export
list..."
    skipped_export=:
    # Break out early, otherwise skipped_export may be
    # set to false by a later but shorter cmd.
    break
fi
done
IFS="$save_ifs"
if test -n "$export_symbols_regex" && test "X$skipped_export"
!= "X:"; then
    func_show_eval '$EGREP -e "$export_symbols_regex"
"$export_symbols" > "${export_symbols}T"'
    func_show_eval '$MV "${export_symbols}T" "$export_symbols"'
fi
fi
fi

if test -n "$export_symbols" && test -n "$include_expsyms"; then
    tmp_export_symbols="$export_symbols"
    test -n "$orig_export_symbols" &&
tmp_export_symbols="$orig_export_symbols"
    $opt_dry_run || eval '$ECHO "$include_expsyms" | $SP2NL >>
"$tmp_export_symbols"'
fi

if test "X$skipped_export" != "X:" && test -n
"$orig_export_symbols"; then
    # The given exports_symbols file has to be filtered, so filter
it.
    func_verbose "filter symbol list for \`${libname}.la' to tag DATA
exports"
    # FIXME: $output_objdir/$libname.filter potentially contains
lots of
    # 's' commands which not all seds can handle. GNU sed should be
fine
    # though. Also, the filter scales superlinearly with the number
of

```

```

        # global variables. join(1) would be nice here, but
unfortunately
        # isn't a blessed tool.
        $opt_dry_run || $SED -e '/[ ,]DATA/!d;s,\(.*\)\[
\,].*\),s|^\\1$|\\1\\2|,' < $export_symbols >
$output_objdir/$libname.filter
        func_append delfiles " $export_symbols
$output_objdir/$libname.filter"
        export_symbols=$output_objdir/$libname.def
        $opt_dry_run || $SED -f $output_objdir/$libname.filter <
$orig_export_symbols > $export_symbols
        fi

tmp_deplibs=
for test_deplib in $deplibs; do
    case " $convenience " in
        *$test_deplib *) ;;
        *)
            func_append tmp_deplibs " $test_deplib"
            ;;
    esac
done
deplibs="$tmp_deplibs"

if test -n "$convenience"; then
    if test -n "$whole_archive_flag_spec" &&
        test "$compiler_needs_object" = yes &&
        test -z "$libobjs"; then
        # extract the archives, so we have objects to list.
        # TODO: could optimize this to just extract one archive.
        whole_archive_flag_spec=
    fi
    if test -n "$whole_archive_flag_spec"; then
        save_libobjs=$libobjs
        eval libobjs=\"\$libobjs $whole_archive_flag_spec\"
        test "X$libobjs" = "X " && libobjs=
    else
        gentop="$output_objdir/${outputname}x"
        func_append generated " $gentop"

        func_extract_archives $gentop $convenience
        func_append libobjs " $func_extract_archives_result"
        test "X$libobjs" = "X " && libobjs=
    fi
fi

if test "$thread_safe" = yes && test -n "$thread_safe_flag_spec";
then
    eval flag=\"\$thread_safe_flag_spec\"
    func_append linker_flags " $flag"
fi

```



```

# Make a backup of the uninstalled library when relinking
if test "$opt_mode" = relink; then
    $opt_dry_run || eval '(cd $output_objdir && $RM ${realname}U &&
$MV $realname ${realname}U)' || exit $?
fi

# Do each of the archive commands.
if test "$module" = yes && test -n "$module_cmds" ; then
    if test -n "$export_symbols" && test -n "$module_expsym_cmds";
then
        eval test_cmds=\"$module_expsym_cmds\"
        cmds=$module_expsym_cmds
    else
        eval test_cmds=\"$module_cmds\"
        cmds=$module_cmds
    fi
else
    if test -n "$export_symbols" && test -n "$archive_expsym_cmds";
then
        eval test_cmds=\"$archive_expsym_cmds\"
        cmds=$archive_expsym_cmds
    else
        eval test_cmds=\"$archive_cmds\"
        cmds=$archive_cmds
    fi
fi

if test "X$skipped_export" != "X:" &&
func_len " $test_cmds" &&
len=$func_len_result &&
test "$len" -lt "$max_cmd_len" || test "$max_cmd_len" -le -1;
then
    :
else
# The command line is too long to link in one step, link
piecewise
# or, if using GNU ld and skipped_export is not :, use a linker
# script.

# Save the value of $output and $libobjs because we want to
# use them later.  If we have whole_archive_flag_spec, we
# want to use save_libobjs as it was before
# whole_archive_flag_spec was expanded, because we can't
# assume the linker understands whole_archive_flag_spec.
# This may have to be revisited, in case too many
# convenience libraries get linked in and end up exceeding
# the spec.
if test -z "$convenience" || test -z
"$whole_archive_flag_spec"; then
    save_libobjs=$libobjs
fi
save_output=$output

```

```

func_basename "$output"
output_la=${func_basename_result}

# Clear the reloadable object creation command queue and
# initialize k to one.
test_cmds=
concat_cmds=
objlist=
last_robj=
k=1

if test -n "$save_libobjs" && test "X$skipped_export" != "X:"
&& test "$with_gnu_ld" = yes; then
  output=${output_objdir}/${output_la}.lnkscript
  func_verbose "creating GNU ld script: $output"
  echo 'INPUT (' > $output
  for obj in $save_libobjs
  do
    func_to_tool_file "$obj"
    $ECHO "$func_to_tool_file_result" >> $output
  done
  echo ')' >> $output
  func_append delfiles " $output"
  func_to_tool_file "$output"
  output=${func_to_tool_file_result}
elif test -n "$save_libobjs" && test "X$skipped_export" != "X:"
&& test "X$file_list_spec" != X; then
  output=${output_objdir}/${output_la}.lnk
  func_verbose "creating linker input file list: $output"
  : > $output
  set x $save_libobjs
  shift
  firstobj=
  if test "$compiler_needs_object" = yes; then
    firstobj="$1"
    shift
  fi
  for obj
  do
    func_to_tool_file "$obj"
    $ECHO "$func_to_tool_file_result" >> $output
  done
  func_append delfiles " $output"
  func_to_tool_file "$output"
  output=${firstobj}\"$file_list_spec${func_to_tool_file_result}\"
else
  if test -n "$save_libobjs"; then
    func_verbose "creating reloadable object files..."
    output=$output_objdir/$output_la-${k}.$objext
    eval test_cmds=\"\$reload_cmds\"
    func_len " $test_cmds"
    len0=${func_len_result}

```

```

len=$len0

# Loop over the list of objects to be linked.
for obj in $save_libobjs
do
func_len " $obj"
func_arith $len + $func_len_result
len=$func_arith_result
if test "X$objlist" = X ||
    test "$len" -lt "$max_cmd_len"; then
    func_append objlist " $obj"
else
    # The command $test_cmds is almost too long, add a
    # command to the queue.
    if test "$k" -eq 1 ; then
        # The first file doesn't have a previous command to
add.

        reload_objs=$objlist
        eval concat_cmds="\$reload_cmds\"
    else
        # All subsequent reloadable object files will link in
        # the last one created.
        reload_objs="$objlist $last_robj"
        eval concat_cmds="\\"$concat_cmds~$reload_cmds~\$RM
$last_robj\"
    fi
    last_robj=$output_objdir/$output_la-${k}.$objext
    func_arith $k + 1
    k=$func_arith_result
    output=$output_objdir/$output_la-${k}.$objext
    objlist=" $obj"
    func_len " $last_robj"
    func_arith $len0 + $func_len_result
    len=$func_arith_result
fi
done
# Handle the remaining objects by creating one last
# reloadable object file. All subsequent reloadable object
# files will link in the last one created.
test -z "$concat_cmds" || concat_cmds=$concat_cmds~
reload_objs="$objlist $last_robj"
eval concat_cmds="\\"${concat_cmds}$reload_cmds\"
if test -n "$last_robj"; then
    eval concat_cmds="\\"${concat_cmds}~\$RM $last_robj\"
fi
func_append delfiles " $output"

else
    output=
fi

if ${skipped_export-false}; then

```

```

func_verbose "generating symbol list for \`${libname}.la'"
export_symbols="$output_objdir/${libname}.exp"
$opt_dry_run || $RM $export_symbols
libobjs=$output
# Append the command to create the export file.
test -z "$concat_cmds" || concat_cmds=$concat_cmds~
eval concat_cmds="\`${concat_cmds}$export_symbols_cmds\"
if test -n "$last_robj"; then
eval concat_cmds="\`${concat_cmds}~\`$RM $last_robj\"
fi
fi

test -n "$save_libobjs" &&
func_verbose "creating a temporary reloadable object file:
$output"

# Loop through the commands generated above and execute them.
save_ifs="$IFS"; IFS='~'
for cmd in $concat_cmds; do
IFS="$save_ifs"
$opt_silent || {
func_quote_for_expand "$cmd"
eval "func_echo $func_quote_for_expand_result"
}
$opt_dry_run || eval "$cmd" || {
lt_exit=$?

# Restore the uninstalled library and exit
if test "$opt_mode" = relink; then
( cd "$output_objdir" && \
$RM "${realname}T" && \
$MV "${realname}U" "$realname" )
fi

exit $lt_exit
}
done
IFS="$save_ifs"

if test -n "$export_symbols_regex" && ${skipped_export-
false}; then
func_show_eval '$EGREP -e "$export_symbols_regex"
"$export_symbols" > "${export_symbols}T"'
func_show_eval '$MV "${export_symbols}T" "$export_symbols"'
fi
fi

if ${skipped_export-false}; then
if test -n "$export_symbols" && test -n "$include_expsyms";
then
tmp_export_symbols="$export_symbols"

```

```

        test -n "$orig_export_symbols" &&
tmp_export_symbols="$orig_export_symbols"
        $opt_dry_run || eval '$ECHO "$include_expsyms" | $SP2NL >>
"$tmp_export_symbols"'
        fi

        if test -n "$orig_export_symbols"; then
            # The given exports_symbols file has to be filtered, so
            filter it.
            func_verbose "filter symbol list for \`$libname.la' to tag
            DATA exports"
            # FIXME: $output_objdir/$libname.filter potentially
            contains lots of
            # 's' commands which not all seds can handle. GNU sed
            should be fine
            # though. Also, the filter scales superlinearly with the
            number of
            # global variables. join(1) would be nice here, but
            unfortunately
            # isn't a blessed tool.
            $opt_dry_run || $SED -e '/[ ,]DATA/!d;s,\(.*\)\[
            \,].*\),s|^1$|1\2|,' < $export_symbols >
            $output_objdir/$libname.filter
            func_append delfiles " $export_symbols
            $output_objdir/$libname.filter"
            export_symbols=$output_objdir/$libname.def
            $opt_dry_run || $SED -f $output_objdir/$libname.filter <
            $orig_export_symbols > $export_symbols
            fi
        fi

        libobjs=$output
        # Restore the value of output.
        output=$save_output

        if test -n "$convenience" && test -n
"$whole_archive_flag_spec"; then
            eval libobjs="\`$libobjs $whole_archive_flag_spec\`"
            test "X$libobjs" = "X " && libobjs=
            fi
            # Expand the library linking commands again to reset the
            # value of $libobjs for piecewise linking.

            # Do each of the archive commands.
            if test "$module" = yes && test -n "$module_cmds" ; then
                if test -n "$export_symbols" && test -n
"$module_expsym_cmds"; then
                    cmds=$module_expsym_cmds
                else
                    cmds=$module_cmds
                fi
            else
                fi
        fi

```

```

        if test -n "$export_symbols" && test -n
"$archive_expsym_cmds"; then
            cmds=$archive_expsym_cmds
        else
            cmds=$archive_cmds
        fi
    fi
fi

if test -n "$delfiles"; then
    # Append the command to remove temporary files to $cmds.
    eval cmds="\ "$cmds~\ $RM $delfiles\"
fi

# Add any objects from preloaded convenience libraries
if test -n "$dlprefiles"; then
    gentop="$output_objdir/${outputname}x"
    func_append generated " $gentop"

    func_extract_archives $gentop $dlprefiles
    func_append libobjs " $func_extract_archives_result"
    test "X$libobjs" = "X " && libobjs=
fi

save_ifs="$IFS"; IFS='~'
for cmd in $cmds; do
    IFS="$save_ifs"
    eval cmd="\ "$cmd\"
    $opt_silent || {
        func_quote_for_expand "$cmd"
        eval "func_echo $func_quote_for_expand_result"
    }
    $opt_dry_run || eval "$cmd" || {
        lt_exit=$?

        # Restore the uninstalled library and exit
        if test "$opt_mode" = relink; then
            ( cd "$output_objdir" && \
              $RM "${realname}T" && \
              $MV "${realname}U" "$realname" )
        fi

        exit $lt_exit
    }
done
IFS="$save_ifs"

# Restore the uninstalled library and exit
if test "$opt_mode" = relink; then
    $opt_dry_run || eval '(cd $output_objdir && $RM ${realname}T &&
$MV $realname ${realname}T && $MV ${realname}U $realname)' || exit $?

```

```

    if test -n "$convenience"; then
        if test -z "$whole_archive_flag_spec"; then
            func_show_eval '${RM}r "$gentop"'
        fi
    fi

    exit $EXIT_SUCCESS
fi

# Create links to the real library.
for linkname in $linknames; do
    if test "$realname" != "$linkname"; then
        func_show_eval '(cd "$output_objdir" && $RM "$linkname" &&
$LN_S "$realname" "$linkname")' 'exit $?'
    fi
done

# If -module or -export-dynamic was specified, set the dlname.
if test "$module" = yes || test "$export_dynamic" = yes; then
    # On all known operating systems, these are identical.
    dlname="$soname"
fi
fi
;;

obj)
    if test -n "$dlfiles$dlpfiles" || test "$dlself" != no; then
        func_warning "\`-dlopen' is ignored for objects"
    fi

    case " $deplibs" in
        *\ -l* | *\ -L*)
            func_warning "\`-l' and \`-L' are ignored for objects" ;;
    esac

    test -n "$rpath" && \
        func_warning "\`-rpath' is ignored for objects"

    test -n "$xrpath" && \
        func_warning "\`-R' is ignored for objects"

    test -n "$vinfo" && \
        func_warning "\`-version-info' is ignored for objects"

    test -n "$release" && \
        func_warning "\`-release' is ignored for objects"

    case $output in
        *.lo)
            test -n "$objs$old_deplibs" && \
                func_fatal_error "cannot build library object \`${output}' from
non-libtool objects"

```

```

libobj=$output
func_lo2o "$libobj"
obj=$func_lo2o_result
;;
*)
libobj=
obj="$output"
;;
esac

# Delete the old objects.
$opt_dry_run || $RM $obj $libobj

# Objects from convenience libraries. This assumes
# single-version convenience libraries. Whenever we create
# different ones for PIC/non-PIC, this we'll have to duplicate
# the extraction.
reload_conv_objs=
gentop=
# reload_cmds runs $LD directly, so let us get rid of
# -Wl from whole_archive_flag_spec and hope we can get by with
# turning comma into space..
wl=

if test -n "$convenience"; then
if test -n "$whole_archive_flag_spec"; then
eval tmp_whole_archive_flags="\`$whole_archive_flag_spec\`"
reload_conv_objs=$reload_objs\ ` $ECHO
"$tmp_whole_archive_flags" | $SED 's|,| |g'`
else
gentop="$output_objdir/${obj}x"
func_append generated " $gentop"

func_extract_archives $gentop $convenience
reload_conv_objs="$reload_objs $func_extract_archives_result"
fi
fi

# If we're not building shared, we need to use non_pic_objs
test "$build_libtool_libs" != yes && libobjs="$non_pic_objects"

# Create the old-style object.
reload_objs="$objs$old_deplibs "` $ECHO "$libobjs" | $SP2NL |
$SED "/\.$libext\$/d; /\.lib\$/d; $lo2o" | $NL2SP`" $reload_conv_objs"
### testsuite: skip nested quoting test

output="$obj"
func_execute_cmds "$reload_cmds" 'exit $?'

# Exit if we aren't doing a library object file.
if test -z "$libobj"; then

```



```

if test -n "$gentop"; then
  func_show_eval '${RM}r "$gentop"'
fi

exit $EXIT_SUCCESS
fi

if test "$build_libtool_libs" != yes; then
if test -n "$gentop"; then
  func_show_eval '${RM}r "$gentop"'
fi

# Create an invalid libtool object if no PIC, so that we don't
# accidentally link it into a program.
# $show "echo timestamp > $libobj"
# $opt_dry_run || eval "echo timestamp > $libobj" || exit $?
exit $EXIT_SUCCESS
fi

if test -n "$pic_flag" || test "$pic_mode" != default; then
# Only do commands if we really have different PIC objects.
reload_objs="$libobjs $reload_conv_objs"
output="$libobj"
func_execute_cmds "$reload_cmds" 'exit $?'
fi

if test -n "$gentop"; then
func_show_eval '${RM}r "$gentop"'
fi

exit $EXIT_SUCCESS
;;

prog)
  case $host in
    *cygwin*) func_stripname '' '.exe' "$output"
              output=$func_stripname_result.exe;;
  esac
  test -n "$vinfo" && \
func_warning "\`-version-info' is ignored for programs"

  test -n "$release" && \
func_warning "\`-release' is ignored for programs"

  test "$preload" = yes \
    && test "$dlopen_support" = unknown \
    && test "$dlopen_self" = unknown \
    && test "$dlopen_self_static" = unknown && \
    func_warning "\`LT_INIT([dlopen])' not used. Assuming no dlopen
support."

  case $host in

```

```

    *--rhapsody* | *--darwin1.[012])
    # On Rhapsody replace the C library is the System framework
    compile_deplibs=`$ECHO " $compile_deplibs" | $SED 's/ -lc /
System.ltframework /'`
    finalize_deplibs=`$ECHO " $finalize_deplibs" | $SED 's/ -lc /
System.ltframework /'`
    ;;
    esac

    case $host in
    *--darwin*)
    # Don't allow lazy linking, it breaks C++ global constructors
    # But is supposedly fixed on 10.4 or later (yay!).
    if test "$tagname" = CXX ; then
        case ${MACOSX_DEPLOYMENT_TARGET-10.0} in
        10.[0123])
            func_append compile_command " ${wl}-bind_at_load"
            func_append finalize_command " ${wl}-bind_at_load"
            ;;
        esac
    fi
    # Time to change all our "foo.ltframework" stuff back to "--
framework foo"
    compile_deplibs=`$ECHO " $compile_deplibs" | $SED 's% \([^
$]*\)\.ltframework% -framework \1%g'`
    finalize_deplibs=`$ECHO " $finalize_deplibs" | $SED 's% \([^
$]*\)\.ltframework% -framework \1%g'`
    ;;
    esac

    # move library search paths that coincide with paths to not yet
    # installed libraries to the beginning of the library search
list
    new_libs=
    for path in $notinst_path; do
    case " $new_libs " in
    *" -L$path/$objdir "*) ;;
    *)
        case " $compile_deplibs " in
        *" -L$path/$objdir "*)
            func_append new_libs " -L$path/$objdir" ;;
        esac
        ;;
    esac
    done
    for deplib in $compile_deplibs; do
    case $deplib in
    -L*)
        case " $new_libs " in
        *" $deplib "*) ;;
        *) func_append new_libs " $deplib" ;;
        esac
    esac
    done

```

```

    esac
    ;;
*) func_append new_libs " $deplib" ;;
esac
done
compile_deplibs="$new_libs"

func_append compile_command " $compile_deplibs"
func_append finalize_command " $finalize_deplibs"

if test -n "$rpath$xrpath"; then
# If the user specified any rpath flags, then add them.
for libdir in $rpath $xrpath; do
    # This is the magic to use -rpath.
    case "$finalize_rpath " in
    *" $libdir ") ;;
    *) func_append finalize_rpath " $libdir" ;;
    esac
done
fi

# Now hardcode the library paths
rpath=
hardcode_libdirs=
for libdir in $compile_rpath $finalize_rpath; do
if test -n "$hardcode_libdir_flag_spec"; then
    func_replace_sysroot "$libdir"
    libdir=$func_replace_sysroot_result
    func_stripname '=' ' ' "$libdir"
    libdir=$func_stripname_result
    if test -n "$hardcode_libdir_separator"; then
        if test -z "$hardcode_libdirs"; then
            hardcode_libdirs="$libdir"
        else
            # Just accumulate the unique libdirs.
            case
$hardcode_libdir_separator$hardcode_libdirs$hardcode_libdir_separator
in
*" $hardcode_libdir_separator$libdir$hardcode_libdir_separator"*)
                ;;
                *)
                func_append hardcode_libdirs
"$hardcode_libdir_separator$libdir"
                ;;
            esac
        fi
    else
        # We only want to hardcode in an rpath if it isn't in the
        # default dlsearch path.
        func_normal_abspath "$libdir"

```

```

        libdir_norm=$func_normal_abspath_result
        case " $sys_lib_dlsearch_path " in
        *" $libdir_norm ") ;;
        *) eval flag="\$hardcode_libdir_flag_spec\"
            rpath+=" $flag"
            ;;
        esac
    fi
elif test -n "$runpath_var"; then
    case "$perm_rpath " in
    *" $libdir ") ;;
    *) func_append perm_rpath " $libdir" ;;
    esac
fi
case $host in
*-*-cygwin* | *-*-mingw* | *-*-pw32* | *-*-os2* | *-cegcc*)
    testbindir=`${ECHO} "$libdir" | ${SED} -e 's*/lib$*/bin*'`
    case :$dllsearchpath: in
    *:$libdir:*) ;;
    : :) dllsearchpath=$libdir;;
    *) func_append dllsearchpath ":$libdir";;
    esac
    case :$dllsearchpath: in
    *:$testbindir:*) ;;
    : :) dllsearchpath=$testbindir;;
    *) func_append dllsearchpath ":$testbindir";;
    esac
    ;;
esac
done
# Substitute the hardcoded libdirs into the rpath.
if test -n "$hardcode_libdir_separator" &&
test -n "$hardcode_libdirs"; then
libdir="$hardcode_libdirs"
eval rpath="\ $hardcode_libdir_flag_spec\"
fi
compile_rpath="$rpath"

rpath=
hardcode_libdirs=
for libdir in $finalize_rpath; do
if test -n "$hardcode_libdir_flag_spec"; then
    if test -n "$hardcode_libdir_separator"; then
        if test -z "$hardcode_libdirs"; then
            hardcode_libdirs="$libdir"
        else
            # Just accumulate the unique libdirs.
            case
$hardcode_libdir_separator$hardcode_libdirs$hardcode_libdir_separator
in
*" $hardcode_libdir_separator$libdir$hardcode_libdir_separator"*)

```

```

        ;;
        *)
            func_append hardcoded_libdirs
"$shardcode_libdir_separator$libdir"
        ;;
    esac
fi
else
    # We only want to hardcode in an rpath if it isn't in the
    # default dlsearch path.
    case " $sys_lib_dlsearch_path " in
    *" $libdir ") ;;
    *) eval flag="\$shardcode_libdir_flag_spec\"
        func_append rpath " $flag"
        ;;
    esac
fi
elif test -n "$runpath_var"; then
    case "$finalize_perm_rpath " in
    *" $libdir ") ;;
    *) func_append finalize_perm_rpath " $libdir" ;;
    esac
fi
done
# Substitute the hardcoded libdirs into the rpath.
if test -n "$shardcode_libdir_separator" &&
test -n "$shardcode_libdirs"; then
libdir="$shardcode_libdirs"
eval rpath="\$shardcode_libdir_flag_spec\"
fi
finalize_rpath="$rpath"

if test -n "$libobjs" && test "$build_old_libs" = yes; then
# Transform all the library objects into standard objects.
compile_command=`$ECHO "$compile_command" | $SP2NL | $SED "$1o2o"
| $NL2SP`
finalize_command=`$ECHO "$finalize_command" | $SP2NL | $SED
"$1o2o" | $NL2SP`
fi

func_generate_dlsyms "$outputname" "@PROGRAM@" "no"

# template prelinking step
if test -n "$prelink_cmds"; then
func_execute_cmds "$prelink_cmds" 'exit $?'
fi

wrappers_required=yes
case $host in
*cegcc* | *mingw32ce*)
    # Disable wrappers for cegcc and mingw32ce hosts, we are cross
    compiling anyway.

```

```

        wrappers_required=no
    ;;
    *cygwin* | *mingw* )
        if test "$build_libtool_libs" != yes; then
            wrappers_required=no
        fi
    ;;
    *)
        if test "$need_relink" = no || test "$build_libtool_libs" !=
yes; then
            wrappers_required=no
        fi
    ;;
esac
if test "$wrappers_required" = no; then
# Replace the output file specification.
compile_command=`$ECHO "$compile_command" | $SED
's%@OUTPUT@%' "$output" '%g'`
link_command="$compile_command$compile_rpath"

# We have no uninstalled library dependencies, so finalize right
now.
exit_status=0
func_show_eval "$link_command" 'exit_status=$?'

if test -n "$postlink_cmds"; then
    func_to_tool_file "$output"
    postlink_cmds=`func_echo_all "$postlink_cmds" | $SED -e
's%@OUTPUT@%' "$output" '%g' -e
's%@TOOL_OUTPUT@%' "$func_to_tool_file_result" '%g'`
    func_execute_cmds "$postlink_cmds" 'exit $?'
fi

# Delete the generated files.
if test -f "$output_objdir/${outputname}S.${objext}"; then
    func_show_eval '$RM "$output_objdir/${outputname}S.${objext}"'
fi

exit $exit_status
fi

if test -n "$compile_shlibpath$finalize_shlibpath"; then
    compile_command="$shlibpath_var=\" $compile_shlibpath$finalize_shl
ibpath\$$shlibpath_var\" $compile_command"
fi
if test -n "$finalize_shlibpath"; then
    finalize_command="$shlibpath_var=\" $finalize_shlibpath\$$shlibpat
h_var\" $finalize_command"
fi

compile_var=
finalize_var=

```

```

if test -n "$runpath_var"; then
if test -n "$perm_rpath"; then
    # We should set the runpath_var.
    rpath=
    for dir in $perm_rpath; do
        func_append rpath "$dir:"
    done
    compile_var="$runpath_var=\"\$rpath\$$runpath_var\" "
fi
if test -n "$finalize_perm_rpath"; then
    # We should set the runpath_var.
    rpath=
    for dir in $finalize_perm_rpath; do
        func_append rpath "$dir:"
    done
    finalize_var="$runpath_var=\"\$rpath\$$runpath_var\" "
fi
fi

if test "$no_install" = yes; then
# We don't need to create a wrapper script.
link_command="$compile_var$compile_command$compile_rpath"
# Replace the output file specification.
link_command=`$ECHO "$link_command" | $SED
's%@OUTPUT@%' "$output"'%g'\`
# Delete the old output file.
$opt_dry_run || $RM $output
# Link the executable and exit
func_show_eval "$link_command" 'exit $?'

if test -n "$postlink_cmds"; then
    func_to_tool_file "$output"
    postlink_cmds=`func_echo_all "$postlink_cmds" | $SED -e
's%@OUTPUT@%' "$output"'%g' -e
's%@TOOL_OUTPUT@%' "$func_to_tool_file_result"'%g'\`
    func_execute_cmds "$postlink_cmds" 'exit $?'
fi

exit $EXIT_SUCCESS
fi

if test "$hardcode_action" = relink; then
# Fast installation is not supported
link_command="$compile_var$compile_command$compile_rpath"
relink_command="$finalize_var$finalize_command$finalize_rpath"

func_warning "this platform does not like uninstalled shared
libraries"
func_warning "\`$output' will be relinked during installation"
else
if test "$fast_install" != no; then
    link_command="$finalize_var$compile_command$finalize_rpath"

```

```

        if test "$fast_install" = yes; then
            relink_command=`$ECHO
"$compile_var$compile_command$compile_rpath" | $SED
's%@OUTPUT@%\$progdire/\$file%g'\`
        else
            # fast_install is set to needless
            relink_command=
        fi
    else
        link_command="$compile_var$compile_command$compile_rpath"
        relink_command="$finalize_var$finalize_command$finalize_rpath"
    fi
fi

# Replace the output file specification.
link_command=`$ECHO "$link_command" | $SED
's%@OUTPUT@%'"$output_objdir/$outputname"'%g'\`

# Delete the old output files.
$opt_dry_run || $RM $output $output_objdir/$outputname
$output_objdir/lt-$outputname

func_show_eval "$link_command" 'exit $?'

if test -n "$postlink_cmds"; then
    func_to_tool_file "$output_objdir/$outputname"
    postlink_cmds=`func_echo_all "$postlink_cmds" | $SED -e
's%@OUTPUT@%'"$output_objdir/$outputname"'%g' -e
's%@TOOL_OUTPUT@%'"$func_to_tool_file_result"'%g'\`
    func_execute_cmds "$postlink_cmds" 'exit $?'
fi

# Now create the wrapper script.
func_verbose "creating $output"

# Quote the relink command for shipping.
if test -n "$relink_command"; then
    # Preserve any variables that may affect compiler behavior
    for var in $variables_saved_for_relink; do
        if eval test -z \"\${$var+set}\"; then
            relink_command="{ test -z \"\${$var+set}\" || $lt_unset $var
|| { $var=; export $var; }; }; $relink_command"
        elif eval var_value=\${$var}; test -z "$var_value"; then
            relink_command="$var=; export $var; $relink_command"
        else
            func_quote_for_eval "$var_value"
            relink_command="$var=$func_quote_for_eval_result; export
$var; $relink_command"
        fi
    done
    relink_command="(cd `pwd`; $relink_command)"

```



```

    relink_command=`$ECHO "$relink_command" | $SED
"$sed_quote_subst"`
    fi

    # Only actually do things if not in dry run mode.
    $opt_dry_run || {
    # win32 will think the script is a binary if it has
    # a .exe suffix, so we strip it off here.
    case $output in
        *.exe) func_stripname ' ' '.exe' "$output"
            output=$(func_stripname_result) ;;
    esac
    # test for cygwin because mv fails w/o .exe extensions
    case $host in
        *cygwin*)
            exeext=.exe
            func_stripname ' ' '.exe' "$outputname"
            outputname=$(func_stripname_result) ;;
        *) exeext= ;;
    esac
    case $host in
        *cygwin* | *mingw* )
            func_dirname_and_basename "$output" "" "."
            output_name=$(func_basename_result)
            output_path=$(func_dirname_result)
            cwrappersource="$output_path/$objdir/lt-$output_name.c"
            cwrapper="$output_path/$output_name.exe"
            $RM $cwrappersource $cwrapper
            trap "$RM $cwrappersource $cwrapper; exit $EXIT_FAILURE" 1 2

```

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```

    func_emit_cwrappersource_src > $cwrappersource

    # The wrapper executable is built using the $host compiler,
    # because it contains $host paths and files. If cross-
    # compiling, it, like the target executable, must be
    # executed on the $host or under an emulation environment.
    $opt_dry_run || {
        $LTCC $LTCFLAGS -o $cwrapper $cwrappersource
        $STRIP $cwrapper
    }

    # Now, create the wrapper script for func_source use:
    func_ltwrapper_scriptname $cwrapper
    $RM $func_ltwrapper_scriptname_result
    trap "$RM $func_ltwrapper_scriptname_result; exit
$EXIT_FAILURE" 1 2 15
    $opt_dry_run || {
        # note: this script will not be executed, so do not chmod.
        if test "x$build" = "x$host" ; then
            $cwrapper --lt-dump-script >
$func_ltwrapper_scriptname_result

```

```

        else
        func_emit_wrapper no > $func_ltwrapper_scriptname_result
        fi
    }
;;
* )
$RM $output
trap "$RM $output; exit $EXIT_FAILURE" 1 2 15

func_emit_wrapper no > $output
chmod +x $output
;;
esac
}
exit $EXIT_SUCCESS
;;
esac

# See if we need to build an old-fashioned archive.
for oldlib in $oldlibs; do

    if test "$build_libtool_libs" = convenience; then
        oldobjs="$libobjs_save $symfileobj"
        addlibs="$convenience"
        build_libtool_libs=no
    else
        if test "$build_libtool_libs" = module; then
            oldobjs="$libobjs_save"
            build_libtool_libs=no
        else
            oldobjs="$old_deplibs $non_pic_objects"
            if test "$preload" = yes && test -f "$symfileobj"; then
                func_append oldobjs " $symfileobj"
            fi
        fi
        addlibs="$old_convenience"
    fi

    if test -n "$addlibs"; then
        gentop="$output_objdir/${outputname}x"
        func_append generated " $gentop"
    fi

    func_extract_archives $gentop $addlibs
    func_append oldobjs " $func_extract_archives_result"
    fi

    # Do each command in the archive commands.
    if test -n "$old_archive_from_new_cmds" && test
"$build_libtool_libs" = yes; then
        cmds=$old_archive_from_new_cmds
    else

```

```

# Add any objects from preloaded convenience libraries
if test -n "$dlprefiles"; then
    gentop="$output_objdir/${outputname}x"
    func_append generated " $gentop"

    func_extract_archives $gentop $dlprefiles
    func_append oldobjs " $func_extract_archives_result"
fi

# POSIX demands no paths to be encoded in archives. We have
# to avoid creating archives with duplicate basenames if we
# might have to extract them afterwards, e.g., when creating a
# static archive out of a convenience library, or when linking
# the entirety of a libtool archive into another (currently
# not supported by libtool).
if (for obj in $oldobjs
    do
        func_basename "$obj"
        $ECHO "$func_basename_result"
        done | sort | sort -uc >/dev/null 2>&1); then
    :
else
    echo "copying selected object files to avoid basename
conflicts..."
    gentop="$output_objdir/${outputname}x"
    func_append generated " $gentop"
    func_mkdir_p "$gentop"
    save_oldobjs=$oldobjs
    oldobjs=
    counter=1
    for obj in $save_oldobjs
    do
        func_basename "$obj"
        objbase="$func_basename_result"
        case " $oldobjs " in
            " ") oldobjs=$obj ;;
            *[\ /]"$objbase "*)
                while ;; do
                    # Make sure we don't pick an alternate name that also
                    # overlaps.
                    newobj=lt$counter-$objbase
                    func_arith $counter + 1
                    counter=$func_arith_result
                    case " $oldobjs " in
                        *[\ /]"$newobj "*) ;;
                        *) if test ! -f "$gentop/$newobj"; then break; fi ;;
                    esac
                done
                func_show_eval "ln $obj $gentop/$newobj || cp $obj
$gentop/$newobj"
                func_append oldobjs " $gentop/$newobj"
            ;;
        esac
    done
fi

```

```

        *) func_append oldobjs " $obj" ;;
    esac
done
fi
func_to_tool_file "$oldlib" func_convert_file_msys_to_w32
tool_oldlib=$func_to_tool_file_result
eval cmds=\"$old_archive_cmds\"

func_len " $cmds"
len=$func_len_result
if test "$len" -lt "$max_cmd_len" || test "$max_cmd_len" -le -1;
then
    cmds=$old_archive_cmds
elif test -n "$archiver_list_spec"; then
    func_verbose "using command file archive linking..."
    for obj in $oldobjs
    do
        func_to_tool_file "$obj"
        $ECHO "$func_to_tool_file_result"
done > $output_objdir/$libname.libcmd
        func_to_tool_file "$output_objdir/$libname.libcmd"
        oldobjs=" $archiver_list_spec$func_to_tool_file_result"
        cmds=$old_archive_cmds
    else
        # the command line is too long to link in one step, link in
parts
        func_verbose "using piecewise archive linking..."
        save_RANLIB=$RANLIB
        RANLIB=:
        objlist=
        concat_cmds=
        save_oldobjs=$oldobjs
        oldobjs=
        # Is there a better way of finding the last object in the list?
        for obj in $save_oldobjs
        do
            last_oldobj=$obj
        done
        eval test_cmds=\"$old_archive_cmds\"
        func_len " $test_cmds"
        len0=$func_len_result
        len=$len0
        for obj in $save_oldobjs
        do
            func_len " $obj"
            func_arith $len + $func_len_result
            len=$func_arith_result
            func_append objlist " $obj"
            if test "$len" -lt "$max_cmd_len"; then
                :
            else
                # the above command should be used before it gets too long

```

```

        oldobjs=$objlist
        if test "$obj" = "$last_oldobj" ; then
        RANLIB=$save_RANLIB
        fi
        test -z "$concat_cmds" || concat_cmds=$concat_cmds~
        eval concat_cmds="\${concat_cmds}$old_archive_cmds\"
        objlist=
        len=$len0
        fi
    done
    RANLIB=$save_RANLIB
    oldobjs=$objlist
    if test "X$oldobjs" = "X" ; then
        eval cmds="\${concat_cmds}\"
    else
        eval cmds="\${concat_cmds}~\${old_archive_cmds}\"
    fi
fi
fi
func_execute_cmds "$cmds" 'exit $?'
done

test -n "$generated" && \
    func_show_eval "${RM}r$generated"

# Now create the libtool archive.
case $output in
*.la)
    old_library=
    test "$build_old_libs" = yes && old_library="$libname.$libext"
    func_verbose "creating $output"

    # Preserve any variables that may affect compiler behavior
    for var in $variables_saved_for_relink; do
    if eval test -z "\${$var+set}\"; then
        relink_command="{ test -z "\${$var+set}\" || $lt_unset $var ||
{ $var=; export $var; }; }; $relink_command"
        elif eval var_value=\${$var}; test -z "$var_value"; then
            relink_command="$var=; export $var; $relink_command"
        else
            func_quote_for_eval "$var_value"
            relink_command="$var=${func_quote_for_eval_result}; export $var;
$relink_command"
        fi
    done
    # Quote the link command for shipping.
    relink_command="(cd `pwd`; $SHELL $progpash $preserve_args --
mode=relink $libtool_args @inst_prefix_dir)"
    relink_command=`$ECHO "$relink_command" | $SED
"$sed_quote_subst"`
    if test "$hardcode_automatic" = yes ; then
        relink_command=

```

```

fi

# Only create the output if not a dry run.
$opt_dry_run || {
for installed in no yes; do
    if test "$installed" = yes; then
        if test -z "$install_libdir"; then
            break
        fi
        output="$output_objdir/$outputname"i
        # Replace all uninstalled libtool libraries with the
installed ones
        newdependency_libs=
        for deplib in $dependency_libs; do
            case $deplib in
                *.la)
                    func_basename "$deplib"
                    name="$func_basename_result"
                    func_resolve_sysroot "$deplib"
                    eval libdir=`${SED} -n -e 's/^libdir=\.(\.*\)$/\1/p'
$func_resolve_sysroot_result`
                    test -z "$libdir" && \
                        func_fatal_error "`$deplib' is not a valid libtool
archive"
                    func_append newdependency_libs "
${lt_sysroot:+})$libdir/$name"
                    ;;
                -L*)
                    func_stripname -L '' "$deplib"
                    func_replace_sysroot "$func_stripname_result"
                    func_append newdependency_libs " -
L$func_replace_sysroot_result"
                    ;;
                -R*)
                    func_stripname -R '' "$deplib"
                    func_replace_sysroot "$func_stripname_result"
                    func_append newdependency_libs " -
R$func_replace_sysroot_result"
                    ;;
                *) func_append newdependency_libs " $deplib" ;;
            esac
        done
        dependency_libs="$newdependency_libs"
        newdlfiles=

        for lib in $dlfiles; do
            case $lib in
                *.la)
                    func_basename "$lib"
                    name="$func_basename_result"
                    eval libdir=`${SED} -n -e 's/^libdir=\.(\.*\)$/\1/p' $lib`
                    test -z "$libdir" && \

```

```

        func_fatal_error "\`$lib' is not a valid libtool archive"
    func_append newdlfiles " ${lt_sysroot:+}$libdir/$name"
;;
*) func_append newdlfiles " $lib" ;;
esac
done
dlfiles="$newdlfiles"
newdlprefiles=
for lib in $dlprefiles; do
    case $lib in
        *.la)
            # Only pass preopened files to the pseudo-archive (for
            # eventual linking with the app. that links it) if we
            # didn't already link the preopened objects directly into
            # the library:
            func_basename "$lib"
            name="$func_basename_result"
            eval libdir=`${SED} -n -e 's/^libdir=\.(\.*)$/\1/p' $lib`
            test -z "$libdir" && \
                func_fatal_error "\`$lib' is not a valid libtool archive"
            func_append newdlprefiles " ${lt_sysroot:+}$libdir/$name"
;;
        esac
    done
    dlprefiles="$newdlprefiles"
else
    newdlfiles=
    for lib in $dlfiles; do
        case $lib in
            [\\/] * | [A-Za-z]:[\\/] *) abs="$lib" ;;
            *) abs=`pwd`"/$lib" ;;
        esac
        func_append newdlfiles " $abs"
    done
    dlfiles="$newdlfiles"
    newdlprefiles=
    for lib in $dlprefiles; do
        case $lib in
            [\\/] * | [A-Za-z]:[\\/] *) abs="$lib" ;;
            *) abs=`pwd`"/$lib" ;;
        esac
        func_append newdlprefiles " $abs"
    done
    dlprefiles="$newdlprefiles"
fi
$RM $output
# place dlname in correct position for cygwin
# In fact, it would be nice if we could use this code for all
target
# systems that can't hard-code library paths into their
executables

```

```

        # and that have no shared library path variable independent of
PATH,
        # but it turns out we can't easily determine that from
inspecting
        # libtool variables, so we have to hard-code the OSs to which
it
        # applies here; at the moment, that means platforms that use
the PE
        # object format with DLL files.  See the long comment at the
top of
        # tests/bindir.at for full details.
        tdlname=$dlname
        case $host,$output,$installed,$module,$dlname in
          *cygwin*,*lai,yes,no,*.dll | *mingw*,*lai,yes,no,*.dll |
*cegcc*,*lai,yes,no,*.dll)
            # If a -bindir argument was supplied, place the dll there.
            if test "x$bindir" != x ;
            then
                func_relative_path "$install_libdir" "$bindir"
                tdlname=$func_relative_path_result$dlname
            else
                # Otherwise fall back on heuristic.
                tdlname=../bin/$dlname
            fi
            ;;
        esac
        $ECHO > $output "\
# $outputname - a libtool library file
# Generated by $PROGRAM (GNU $PACKAGE$TIMESTAMP) $VERSION
#
# Please DO NOT delete this file!
# It is necessary for linking the library.

# The name that we can dlopen(3).
dlname='$tdlname'

# Names of this library.
library_names='$library_names'

# The name of the static archive.
old_library='$old_library'

# Linker flags that can not go in dependency_libs.
inherited_linker_flags='$new_inherited_linker_flags'

# Libraries that this one depends upon.
dependency_libs='$dependency_libs'

# Names of additional weak libraries provided by this library
weak_library_names='$weak_libs'

# Version information for $libname.

```



```

current=$current
age=$age
revision=$revision

# Is this an already installed library?
installed=$installed

# Should we warn about portability when linking against -modules?
shouldnotlink=$module

# Files to dlopen/dlpreopen
dlopen='$dlfiles'
dlpreopen='$dlprefiles'

# Directory that this library needs to be installed in:
libdir='$install_libdir'
    if test "$installed" = no && test "$need_relink" = yes; then
        $ECHO >> $output "\
relink_command=\"\${relink_command}\""
    fi
done
}

# Do a symbolic link so that the libtool archive can be found in
# LD_LIBRARY_PATH before the program is installed.
func_show_eval '( cd "$output_objdir" && $RM "$outputname" &&
$LN_S "../$outputname" "$outputname" )' 'exit $?'
;;
esac
exit $EXIT_SUCCESS
}

{ test "$opt_mode" = link || test "$opt_mode" = relink; } &&
    func_mode_link ${1+"$@"}

# func_mode_uninstall arg...
func_mode_uninstall ()
{
    $opt_debug
    RM="$nonopt"
    files=
    rmforce=
    exit_status=0

    # This variable tells wrapper scripts just to set variables rather
    # than running their programs.
    libtool_install_magic="$magic"

    for arg
    do
        case $arg in

```

```

    -f) func_append RM " $arg"; rmforce=yes ;;
    -*) func_append RM " $arg" ;;
    *) func_append files " $arg" ;;
  esac
done

test -z "$RM" && \
  func_fatal_help "you must specify an RM program"

rmdirs=

for file in $files; do
  func_dirname "$file" "" "."
  dir="$func_dirname_result"
  if test "X$dir" = X.; then
    odir="$objdir"
  else
    odir="$dir/$objdir"
  fi
  func_basename "$file"
  name="$func_basename_result"
  test "$opt_mode" = uninstall && odir="$dir"

  # Remember odir for removal later, being careful to avoid
duplicates
  if test "$opt_mode" = clean; then
    case " $rmdirs " in
      *" $odir ") ;;
      *) func_append rmdirs " $odir" ;;
    esac
  fi

  # Don't error if the file doesn't exist and rm -f was used.
  if { test -L "$file"; } >/dev/null 2>&1 ||
    { test -h "$file"; } >/dev/null 2>&1 ||
    test -f "$file"; then
    :
  elif test -d "$file"; then
    exit_status=1
    continue
  elif test "$rmforce" = yes; then
    continue
  fi

  rmfiles="$file"

  case $name in
    *.la)
      # Possibly a libtool archive, so verify it.
      if func_lalib_p "$file"; then
        func_source $dir/$name

```

```

# Delete the libtool libraries and symlinks.
for n in $library_names; do
  func_append rmfiles " $odir/$n"
done
test -n "$old_library" && func_append rmfiles "
$odir/$old_library"

case "$opt_mode" in
clean)
  case " $library_names " in
*" $dlname ") ;;
*) test -n "$dlname" && func_append rmfiles " $odir/$dlname"
;;

  esac
  test -n "$libdir" && func_append rmfiles " $odir/$name
$odir/${name}i"
  ;;
uninstall)
  if test -n "$library_names"; then
    # Do each command in the postuninstall commands.
    func_execute_cmds "$postuninstall_cmds" 'test "$rmforce" =
yes || exit_status=1'
    fi

    if test -n "$old_library"; then
      # Do each command in the old_postuninstall commands.
      func_execute_cmds "$old_postuninstall_cmds" 'test
"$rmforce" = yes || exit_status=1'
      fi
    # FIXME: should reinstall the best remaining shared library.
    ;;
  esac
fi
;;

*.lo)
# Possibly a libtool object, so verify it.
if func_lalib_p "$file"; then

  # Read the .lo file
  func_source $dir/$name

  # Add PIC object to the list of files to remove.
  if test -n "$pic_object" &&
    test "$pic_object" != none; then
    func_append rmfiles " $dir/$pic_object"
  fi

  # Add non-PIC object to the list of files to remove.
  if test -n "$non_pic_object" &&
    test "$non_pic_object" != none; then
    func_append rmfiles " $dir/$non_pic_object"

```

```

    fi
fi
;;

*)
if test "$opt_mode" = clean ; then
    noexename=$name
    case $file in
    *.exe)
        func_stripname '' '.exe' "$file"
        file=$func_stripname_result
        func_stripname '' '.exe' "$name"
        noexename=$func_stripname_result
        # $file with .exe has already been added to rmfiles,
        # add $file without .exe
        func_append rmfiles " $file"
        ;;
    esac
    # Do a test to see if this is a libtool program.
    if func_ltwrapper_p "$file"; then
        if func_ltwrapper_executable_p "$file"; then
            func_ltwrapper_scriptname "$file"
            relink_command=
            func_source $func_ltwrapper_scriptname_result
            func_append rmfiles " $func_ltwrapper_scriptname_result"
        else
            relink_command=
            func_source $dir/$noexename
        fi

        # note $name still contains .exe if it was in $file
        originally
        # as does the version of $file that was added into $rmfiles
        func_append rmfiles " $odir/$name $odir/${name}S.${objext}"
        if test "$fast_install" = yes && test -n "$relink_command";
    then
        func_append rmfiles " $odir/lt-$name"
        fi
        if test "X$noexename" != "X$name" ; then
            func_append rmfiles " $odir/lt-${noexename}.c"
        fi
    fi
fi
;;
esac
func_show_eval "$RM $rmfiles" 'exit_status=1'
done

# Try to remove the ${objdir}s in the directories where we deleted
files
for dir in $rmdirs; do
    if test -d "$dir"; then

```

```

        func_show_eval "rmdir $dir >/dev/null 2>&1"
        fi
    done

    exit $exit_status
}

{ test "$opt_mode" = uninstall || test "$opt_mode" = clean; } &&
    func_mode_uninstall ${1+"$@"}

test -z "$opt_mode" && {
    help="$generic_help"
    func_fatal_help "you must specify a MODE"
}

test -z "$exec_cmd" && \
    func_fatal_help "invalid operation mode \`$opt_mode'"

if test -n "$exec_cmd"; then
    eval exec "$exec_cmd"
    exit $EXIT_FAILURE
fi

exit $exit_status

# The TAGs below are defined such that we never get into a situation
# in which we disable both kinds of libraries.  Given conflicting
# choices, we go for a static library, that is the most portable,
# since we can't tell whether shared libraries were disabled because
# the user asked for that or because the platform doesn't support
# them.  This is particularly important on AIX, because we don't
# support having both static and shared libraries enabled at the same
# time on that platform, so we default to a shared-only configuration.
# If a disable-shared tag is given, we'll fallback to a static-only
# configuration.  But we'll never go from static-only to shared-only.

# ### BEGIN LIBTOOL TAG CONFIG: disable-shared
build_libtool_libs=no
build_old_libs=yes
# ### END LIBTOOL TAG CONFIG: disable-shared

# ### BEGIN LIBTOOL TAG CONFIG: disable-static
build_old_libs=`case $build_libtool_libs in yes) echo no;; *) echo
yes;; esac`
# ### END LIBTOOL TAG CONFIG: disable-static

# Local Variables:
# mode:shell-script
# sh-indentation:2
# End:
# vi:sw=2

```

File = MacroGetenvWinPath.cmake

```
MACRO (MACRO_GETENV_WIN_PATH var name)
    set(${var} $ENV{${name}})
    STRING(REGEX REPLACE "\\\\" "/" ${var} "${${var}}")
ENDMACRO (MACRO_GETENV_WIN_PATH var name)
```

File = MacroLibrary.cmake

```
# - include MacroLibrary offers a collection of macros which extend
the built-in cmake commands
# OPTIONAL_FIND_PACKAGE( <name> [QUIT] )

INCLUDE(MacroOptionalFindPackage)
#include(MacroAdditionalCleanFiles)
#include(MacroAddFileDependencies)
#include(MacroGetenvWinPath)
#include(MacroEnsureOutOfSourceBuild)
```

File = MacroOptionalFindPackage.cmake

```
# - MACRO_OPTIONAL_FIND_PACKAGE() combines FIND_PACKAGE() with an
OPTION()
# MACRO_OPTIONAL_FIND_PACKAGE( <name> [QUIT] )
# This macro is a combination of OPTION() and FIND_PACKAGE(), it
# works like FIND_PACKAGE(), but additionally it automatically creates
# an option name WITH_<name>, which can be disabled via the cmake GUI.
# or via -DWITH_<name>=OFF
# The standard <name>_FOUND variables can be used in the same way
# as when using the normal FIND_PACKAGE()
```

```
MACRO (MACRO_OPTIONAL_FIND_PACKAGE _name )
    OPTION(WITH_${_name} "Search for ${_name} package" ON)
    if (WITH_${_name})
        FIND_PACKAGE(${_name} ${ARGN})
    else (WITH_${_name})
        set(${_name}_FOUND)
        set(${_name}_INCLUDE_DIR)
        set(${_name}_INCLUDES)
        set(${_name}_LIBRARY)
        set(${_name}_LIBRARIES)
    endif (WITH_${_name})
endmacro (MACRO_OPTIONAL_FIND_PACKAGE)
```

```
ENDMACRO (MACRO_OPTIONAL_FIND_PACKAGE)
```

```
File = Macros.cmake
```

```
MACRO(TIMESTAMP RESULT)
  IF(WIN32)
    EXECUTE_PROCESS(COMMAND "cmd" " /C date /T" OUTPUT_VARIABLE
DATE)
    string(REGEX REPLACE "(..)[/](..)[/](....).*" "\\3\\2\\1"
DATE ${DATE})
    EXECUTE_PROCESS(COMMAND "cmd" " /C time /T" OUTPUT_VARIABLE
TIME)
    string(REGEX REPLACE "(.):(.)" "\\1\\2" TIME ${TIME})
    set (${RESULT} "${DATE}${TIME}")
  ELSEIF(UNIX)
    EXECUTE_PROCESS(COMMAND "date" "+%Y%m%d%H%M" OUTPUT_VARIABLE
${RESULT})
  ELSE()
    MESSAGE(SEND_ERROR "date not implemented")
    SET(${RESULT} 000000000000)
  ENDIF()
ENDMACRO()
```

```
File = MacrosAutotools.cmake
```

```
#
# @Author Ralf Habacker
#
# extracts version information from autoconf config file
# and set related cmake variables
#
# returns
#   ${prefix}_VERSION
#   ${prefix}_VERSION_STRING
#   ${prefix}_MAJOR_VERSION
#   ${prefix}_MINOR_VERSION
#   ${prefix}_MICRO_VERSION
#
macro(autoversion config prefix)
  file (READ ${config} _configure_ac)
  string(TOUPPER ${prefix} prefix_upper)
  string (REGEX REPLACE ".*${prefix}_major_version], .([0-9]+).*"
"\1" ${prefix_upper}_MAJOR_VERSION ${_configure_ac})
  string (REGEX REPLACE ".*${prefix}_minor_version], .([0-9]+).*"
"\1" ${prefix_upper}_MINOR_VERSION ${_configure_ac})
```

```

        string (REGEX REPLACE ".*${prefix}_micro_version], .([0-9]+).*"
"\1" ${prefix_upper}_MICRO_VERSION ${_configure_ac})
        set (${prefix_upper}_VERSION
${${prefix_upper}_MAJOR_VERSION}.${${prefix_upper}_MINOR_VERSION}.${${
prefix_upper}_MICRO_VERSION})
        set (${prefix_upper}_VERSION_STRING "${${prefix_upper}_VERSION}")

endmacro()

#
# parses config.h template and create cmake equivalent
# not implemented yet
#
macro(autoconfig template output)
    file(READ ${template} contents)
    # Convert file contents into a CMake list (where each element in
the list
    # is one line of the file)
    STRING(REGEX REPLACE ";" "\\\\";" contents "${contents}")
    STRING(REGEX REPLACE "\n" ";" contents "${contents}")
    foreach(line contents)
        message(STATUS ${line})
        # find #undef lines
        # append to config.h #define <variable-name> <variable-
content>
    endforeach()
endmacro()

```

File = main.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* main.c main() for message bus
*
* Copyright (C) 2003 Red Hat, Inc.
*
* Licensed under the Academic Free License version 2.1
*
* This program is free software; you can redistribute it and/or
modify
* it under the terms of the GNU General Public License as published
by
* the Free Software Foundation; either version 2 of the License, or
* (at your option) any later version.
*
* This program is distributed in the hope that it will be useful,
* but WITHOUT ANY WARRANTY; without even the implied warranty of
* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
* GNU General Public License for more details.
*
* You should have received a copy of the GNU General Public License

```



```
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include <config.h>
#include "bus.h"
#include "driver.h"
#include <dbus/dbus-internals.h>
#include <dbus/dbus-watch.h>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#ifdef HAVE_SIGNAL_H
#include <signal.h>
#endif
#ifdef HAVE_ERRNO_H
#include <errno.h>
#endif
#ifdef HAVE_UNISTD_H
#include <unistd.h> /* for write() and STDERR_FILENO */
#endif
#include "selinux.h"
```

```
static BusContext *context;
```

```
#ifdef DBUS_UNIX
```

```
static int reload_pipe[2];
#define RELOAD_READ_END 0
#define RELOAD_WRITE_END 1
```

```
static void close_reload_pipe (DBusWatch **);
```

```
typedef enum
{
    ACTION_RELOAD = 'r',
    ACTION_QUIT = 'q'
} SignalAction;
```

```
static void
signal_handler (int sig)
{
    switch (sig)
    {
#ifdef DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX
        case SIGIO:
            /* explicit fall-through */
#endif /* DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX */
#ifdef SIGHUP
        case SIGHUP:

```

```

    {
        DBusString str;
        char action[2] = { ACTION_RELOAD, '\0' };

        _dbus_string_init_const (&str, action);
        if ((reload_pipe[RELOAD_WRITE_END] > 0) &&
            !_dbus_write_socket (reload_pipe[RELOAD_WRITE_END], &str,
0, 1))
        {
            /* If we receive SIGHUP often enough to fill the pipe
buffer (4096
            * times on old Linux, 65536 on modern Linux) before it
can be
            * drained, let's just warn and ignore. The configuration
will be
            * reloaded while draining the pipe buffer, which is what
we
            * wanted. It's harmless that it will be reloaded fewer
times than
            * we asked for, since the reload is delayed anyway, so
new changes
            * will be picked up.
            *
            * We use write() because _dbus_warn uses vfprintf, which
isn't
            * async-signal-safe.
            *
            * This is necessarily Unix-specific, but so are POSIX
signals,
            * so... */
            static const char message[] =
                "Unable to write to reload pipe - buffer full?\n";

            write (STDERR_FILENO, message, strlen (message));
        }
    }
    break;
#endif

    case SIGTERM:
    {
        DBusString str;
        char action[2] = { ACTION_QUIT, '\0' };
        _dbus_string_init_const (&str, action);
        if ((reload_pipe[RELOAD_WRITE_END] < 0) ||
            !_dbus_write_socket (reload_pipe[RELOAD_WRITE_END], &str,
0, 1))
        {
            /* If we can't write to the socket, dying seems a more
            * important response to SIGTERM than cleaning up sockets,
            * so we exit. We'd use exit(), but that's not async-
signal-safe,

```

```

        * so we'll have to resort to _exit(). */
static const char message[] =
    "Unable to write termination signal to pipe - buffer
full?\n"
    "Will exit instead.\n";

    write (STDERR_FILENO, message, strlen (message));
    _exit (1);
}
}
break;
}
}
#endif /* DBUS_UNIX */

static void
usage (void)
{
    fprintf (stderr, DBUS_DAEMON_NAME " [--version] [--session] [--
system] [--config-file=FILE] [--print-address[=DESCRIPTOR]] [--print-
pid[=DESCRIPTOR]] [--fork] [--nofork] [--introspect] [--
address=ADDRESS] [--systemd-activation] [--nopicfile]\n");
    exit (1);
}

static void
version (void)
{
    printf ("D-Bus Message Bus Daemon %s\n"
           "Copyright (C) 2002, 2003 Red Hat, Inc., CodeFactory AB, and
others\n"
           "This is free software; see the source for copying
conditions.\n"
           "There is NO warranty; not even for MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE.\n",
           DBUS_VERSION_STRING);
    exit (0);
}

static void
introspect (void)
{
    DBusString xml;
    const char *v_STRING;

    if (!_dbus_string_init (&xml))
        goto oom;

    if (!bus_driver_generate_introspect_string (&xml))
    {
        _dbus_string_free (&xml);
        goto oom;
    }
}

```

```

    }

    v_STRING = _dbus_string_get_const_data (&xml);
    printf ("%s\n", v_STRING);

    exit (0);

oom:
    _dbus_warn ("Can not introspect - Out of memory\n");
    exit (1);
}

static void
check_two_config_files (const DBusString *config_file,
                       const char      *extra_arg)
{
    if (_dbus_string_get_length (config_file) > 0)
        {
            fprintf (stderr, "--%s specified but configuration file %s
already requested\n",
                    extra_arg, _dbus_string_get_const_data (config_file));
            exit (1);
        }
}

static void
check_two_addresses (const DBusString *address,
                    const char      *extra_arg)
{
    if (_dbus_string_get_length (address) > 0)
        {
            fprintf (stderr, "--%s specified but address %s already
requested\n",
                    extra_arg, _dbus_string_get_const_data (address));
            exit (1);
        }
}

static void
check_two_addr_descriptors (const DBusString *addr_fd,
                            const char      *extra_arg)
{
    if (_dbus_string_get_length (addr_fd) > 0)
        {
            fprintf (stderr, "--%s specified but printing address to %s
already requested\n",
                    extra_arg, _dbus_string_get_const_data (addr_fd));
            exit (1);
        }
}

static void

```

```

check_two_pid_descriptors (const DBusString *pid_fd,
                           const char      *extra_arg)
{
    if (_dbus_string_get_length (pid_fd) > 0)
        {
            fprintf (stderr, "--%s specified but printing pid to %s already
requested\n",
                    extra_arg, _dbus_string_get_const_data (pid_fd));
            exit (1);
        }
}

#ifdef DBUS_UNIX
static dbus_bool_t
handle_reload_watch (DBusWatch      *watch,
                    unsigned int  flags,
                    void          *data)
{
    DBusError error;
    DBusString str;
    char *action_str;
    char action = '\0';

    while (!_dbus_string_init (&str))
        _dbus_wait_for_memory ();

    if ((reload_pipe[RELOAD_READ_END] > 0) &&
        _dbus_read_socket (reload_pipe[RELOAD_READ_END], &str, 1) != 1)
        {
            _dbus_warn ("Couldn't read from reload pipe.\n");
            close_reload_pipe (&watch);
            return TRUE;
        }

    action_str = _dbus_string_get_data (&str);
    if (action_str != NULL)
        {
            action = action_str[0];
        }
    _dbus_string_free (&str);

    /* this can only fail if we don't understand the config file
    * or OOM.  Either way we should just stick with the currently
    * loaded config.
    */
    dbus_error_init (&error);

    switch (action)
        {
            case ACTION_RELOAD:
                if (! bus_context_reload_config (context, &error))
                    {

```

```

        _DBUS_ASSERT_ERROR_IS_SET (&error);
        _dbus_assert (dbus_error_has_name (&error,
DBUS_ERROR_FAILED) ||
                    dbus_error_has_name (&error,
DBUS_ERROR_NO_MEMORY));
        _dbus_warn ("Unable to reload configuration: %s\n",
                    error.message);
        dbus_error_free (&error);
    }
    break;

case ACTION_QUIT:
    {
        DBusLoop *loop;
        /*
         * On OSs without abstract sockets, we want to quit
         * gracefully rather than being killed by SIGTERM,
         * so that DbusServer gets a chance to clean up the
         * sockets from the filesystem. fd.o #38656
         */
        loop = bus_context_get_loop (context);
        if (loop != NULL)
            {
                _dbus_loop_quit (loop);
            }
        break;

    default:
        break;
    }

    return TRUE;
}

static void
setup_reload_pipe (DBusLoop *loop)
{
    DBusError error;
    DBusWatch *watch;

    dbus_error_init (&error);

    if (!_dbus_full_duplex_pipe (&reload_pipe[0], &reload_pipe[1],
                                TRUE, &error))
        {
            _dbus_warn ("Unable to create reload pipe: %s\n",
                        error.message);
            dbus_error_free (&error);
            exit (1);
        }
}

```

```

watch = _dbus_watch_new (reload_pipe[RELOAD_READ_END],
                        DBUS_WATCH_READABLE, TRUE,
                        handle_reload_watch, NULL, NULL);

if (watch == NULL)
{
    _dbus_warn ("Unable to create reload watch: %s\n",
                error.message);
    dbus_error_free (&error);
    exit (1);
}

if (!_dbus_loop_add_watch (loop, watch))
{
    _dbus_warn ("Unable to add reload watch to main loop: %s\n",
                error.message);
    dbus_error_free (&error);
    exit (1);
}

}

static void
close_reload_pipe (DBusWatch **watch)
{
    _dbus_loop_remove_watch (bus_context_get_loop (context), *watch);
    _dbus_watch_invalidate (*watch);
    _dbus_watch_unref (*watch);
    *watch = NULL;

    _dbus_close_socket (reload_pipe[RELOAD_READ_END], NULL);
    reload_pipe[RELOAD_READ_END] = -1;

    _dbus_close_socket (reload_pipe[RELOAD_WRITE_END], NULL);
    reload_pipe[RELOAD_WRITE_END] = -1;
}
#endif /* DBUS_UNIX */

int
main (int argc, char **argv)
{
    DBusError error;
    DBusString config_file;
    DBusString address;
    DBusString addr_fd;
    DBusString pid_fd;
    const char *prev_arg;
    DBusPipe print_addr_pipe;
    DBusPipe print_pid_pipe;
    int i;
    dbus_bool_t print_address;
    dbus_bool_t print_pid;

```

```

BusContextFlags flags;

if (!_dbus_string_init (&config_file))
    return 1;

if (!_dbus_string_init (&address))
    return 1;

if (!_dbus_string_init (&addr_fd))
    return 1;

if (!_dbus_string_init (&pid_fd))
    return 1;

print_address = FALSE;
print_pid = FALSE;

flags = BUS_CONTEXT_FLAG_WRITE_PID_FILE;

prev_arg = NULL;
i = 1;
while (i < argc)
{
    const char *arg = argv[i];

    if (strcmp (arg, "--help") == 0 ||
        strcmp (arg, "-h") == 0 ||
        strcmp (arg, "-?") == 0)
    {
        usage ();
    }
    else if (strcmp (arg, "--version") == 0)
    {
        version ();
    }
    else if (strcmp (arg, "--introspect") == 0)
    {
        introspect ();
    }
    else if (strcmp (arg, "--nofork") == 0)
    {
        flags &= ~BUS_CONTEXT_FLAG_FORK_ALWAYS;
        flags |= BUS_CONTEXT_FLAG_FORK_NEVER;
    }
    else if (strcmp (arg, "--fork") == 0)
    {
        flags &= ~BUS_CONTEXT_FLAG_FORK_NEVER;
        flags |= BUS_CONTEXT_FLAG_FORK_ALWAYS;
    }
    else if (strcmp (arg, "--nopidfile") == 0)
    {
        flags &= ~BUS_CONTEXT_FLAG_WRITE_PID_FILE;
    }
}

```



```

    }
else if (strcmp (arg, "--systemd-activation") == 0)
    {
        flags |= BUS_CONTEXT_FLAG_SYSTEMD_ACTIVATION;
    }
else if (strcmp (arg, "--system") == 0)
    {
        check_two_config_files (&config_file, "system");

        if (!_dbus_append_system_config_file (&config_file))
            exit (1);
    }
else if (strcmp (arg, "--session") == 0)
    {
        check_two_config_files (&config_file, "session");

        if (!_dbus_append_session_config_file (&config_file))
            exit (1);
    }
else if (strstr (arg, "--config-file=") == arg)
    {
        const char *file;

        check_two_config_files (&config_file, "config-file");

        file = strchr (arg, '=');
        ++file;

        if (!_dbus_string_append (&config_file, file))
            exit (1);
    }
else if (prev_arg &&
         strcmp (prev_arg, "--config-file") == 0)
    {
        check_two_config_files (&config_file, "config-file");

        if (!_dbus_string_append (&config_file, arg))
            exit (1);
    }
else if (strcmp (arg, "--config-file") == 0)
    {
        /* wait for next arg */
    }
else if (strstr (arg, "--address=") == arg)
    {
        const char *file;

        check_two_addresses (&address, "address");

        file = strchr (arg, '=');
        ++file;
    }

```

```

        if (!_dbus_string_append (&address, file))
            exit (1);
    }
else if (prev_arg &&
        strcmp (prev_arg, "--address") == 0)
    {
        check_two_addresses (&address, "address");

        if (!_dbus_string_append (&address, arg))
            exit (1);
    }
else if (strcmp (arg, "--address") == 0)
    {
        /* wait for next arg */
    }
else if (strstr (arg, "--print-address=") == arg)
    {
        const char *desc;

        check_two_addr_descriptors (&addr_fd, "print-address");

        desc = strchr (arg, '=');
        ++desc;

        if (!_dbus_string_append (&addr_fd, desc))
            exit (1);

        print_address = TRUE;
    }
else if (prev_arg &&
        strcmp (prev_arg, "--print-address") == 0)
    {
        check_two_addr_descriptors (&addr_fd, "print-address");

        if (!_dbus_string_append (&addr_fd, arg))
            exit (1);

        print_address = TRUE;
    }
else if (strcmp (arg, "--print-address") == 0)
    {
        print_address = TRUE; /* and we'll get the next arg if
appropriate */
    }
else if (strstr (arg, "--print-pid=") == arg)
    {
        const char *desc;

        check_two_pid_descriptors (&pid_fd, "print-pid");

        desc = strchr (arg, '=');
        ++desc;
    }

```

```

        if (!_dbus_string_append (&pid_fd, desc))
            exit (1);

        print_pid = TRUE;
    }
    else if (prev_arg &&
             strcmp (prev_arg, "--print-pid") == 0)
    {
        check_two_pid_descriptors (&pid_fd, "print-pid");

        if (!_dbus_string_append (&pid_fd, arg))
            exit (1);

        print_pid = TRUE;
    }
    else if (strcmp (arg, "--print-pid") == 0)
    {
        print_pid = TRUE; /* and we'll get the next arg if
appropriate */
    }
    else
    {
        usage ();
    }

    prev_arg = arg;

    ++i;
}

if (_dbus_string_get_length (&config_file) == 0)
{
    fprintf (stderr, "No configuration file specified.\n");
    usage ();
}

_dbus_pipe_invalidate (&print_addr_pipe);
if (print_address)
{
    _dbus_pipe_init_stdout (&print_addr_pipe);
    if (_dbus_string_get_length (&addr_fd) > 0)
    {
        long val;
        int end;
        if (!_dbus_string_parse_int (&addr_fd, 0, &val, &end) ||
            end != _dbus_string_get_length (&addr_fd) ||
            val < 0 || val > _DBUS_INT_MAX)
        {
            fprintf (stderr, "Invalid file descriptor: \"%s\"\n",
                    _dbus_string_get_const_data (&addr_fd));
            exit (1);
        }
    }
}

```

```

        }

        _dbus_pipe_init (&print_addr_pipe, val);
    }
}
_dbus_string_free (&addr_fd);

_dbus_pipe_invalidate (&print_pid_pipe);
if (print_pid)
{
    _dbus_pipe_init_stdout (&print_pid_pipe);
    if (_dbus_string_get_length (&pid_fd) > 0)
    {
        long val;
        int end;
        if (!_dbus_string_parse_int (&pid_fd, 0, &val, &end) ||
            end != _dbus_string_get_length (&pid_fd) ||
            val < 0 || val > _DBUS_INT_MAX)
        {
            fprintf (stderr, "Invalid file descriptor: \"%s\"\n",
                    _dbus_string_get_const_data (&pid_fd));
            exit (1);
        }

        _dbus_pipe_init (&print_pid_pipe, val);
    }
}
_dbus_string_free (&pid_fd);

if (!bus_selinux_pre_init ())
{
    _dbus_warn ("SELinux pre-initialization failed\n");
    exit (1);
}

dbus_error_init (&error);
context = bus_context_new (&config_file, flags,
                          &print_addr_pipe, &print_pid_pipe,
                          _dbus_string_get_length(&address) > 0 ?
&address : NULL,
                          &error);
_dbus_string_free (&config_file);
if (context == NULL)
{
    _dbus_warn ("Failed to start message bus: %s\n",
                error.message);
    dbus_error_free (&error);
    exit (1);
}

/* bus_context_new() closes the print_addr_pipe and
 * print_pid_pipe

```

```

    */

#ifdef DBUS_UNIX
    setup_reload_pipe (bus_context_get_loop (context));

    /* POSIX signals are Unix-specific, and _dbus_set_signal_handler is
     * unimplemented (and probably unimplementable) on Windows, so
     * there's
     * no point in trying to make the handler portable to non-Unix. */

    _dbus_set_signal_handler (SIGTERM, signal_handler);
#ifdef SIGHUP
    _dbus_set_signal_handler (SIGHUP, signal_handler);
#endif
#ifdef DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX
    _dbus_set_signal_handler (SIGIO, signal_handler);
#endif /* DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX */
#endif /* DBUS_UNIX */

    _dbus_verbose ("We are on D-Bus...\n");
    _dbus_loop_run (bus_context_get_loop (context));

    bus_context_shutdown (context);
    bus_context_unref (context);
    bus_selinux_shutdown ();

    return 0;
}

```

File = Makefile.am

```

INCLUDES=-I$(top_srcdir) $(DBUS_CFLAGS) $(DBUS_GLIB_CFLAGS)
$(DBUS_X_CFLAGS) $(DBUS_GTK_THREADS_CFLAGS) -DDBUS_COMPILATION

```

```

nodist_libdbus_glib_HEADERS = dbus-glib-bindings.h
libdbus_glibdir = $(includedir)/dbus-1.0/dbus

```

```

dbus-glib-bindings.h: $(top_srcdir)/dbus-bus-introspect.xml
$(top_builddir)/dbus/dbus-binding-tool$(EXEEXT)
    $(DBUS_BINDING_TOOL) --mode=glib-client --prefix=dbus_bus --
output=dbus-glib-bindings.h $(top_srcdir)/dbus-bus-introspect.xml

```

```

BUILT_SOURCES = dbus-glib-bindings.h

```

```

EXTRA_DIST = run-with-tmp-session-bus.sh session.conf

```

```

CLEANFILES =
    \
    run-with-tmp-session-bus.conf \
    dbus-glib-bindings.h

```

File = Makefile.am.~10~

SUBDIRS = .

```
INCLUDES = \  
  -I$(top_srcdir) \\  
  -I$(top_builddir) \\  
  $(DBUS_CFLAGS) \\  
  $(DBUS_GLIB_CFLAGS) \\  
  $(DBUS_GLIB_TOOL_CFLAGS) \\  
  -DDBUS_COMPILATION=1 \\  
  -DDBUS_LOCALEDIR=\"$(prefix)/@DATADIRNAME@/locale\"
```

lib_LTLIBRARIES=libdbus-glib-1.la

CLEANFILES = \$(BUILT_SOURCES)

```
DBUS_GLIB_INTERNALS = \  
  dbus-gtype-specialized.c \\  
  dbus-gtype-specialized-priv.h \\  
  dbus-gutils.c \\  
  dbus-gutils.h \\  
  dbus-gsignature.c \\  
  dbus-gsignature.h \\  
  dbus-gvalue.h \\  
  dbus-gvalue-utils.c \\  
  dbus-gvalue-utils.h
```

```
libdbus_glib_1_la_SOURCES = \\  
  dbus-glib.c \\  
  dbus-gmain.c \\  
  dbus-gmarshal.c \\  
  dbus-gmarshal.h \\  
  dbus-gobject.c \\  
  dbus-gobject.h \\  
  dbus-gproxy.c \\  
  dbus-gtest.c \\  
  dbus-gtest.h \\  
  dbus-gvalue.c \\  
  dbus-gvalue.h \\  
  dbus-gvalue-parse-variant.c \\  
  dbus-gthread.c \\  
  $(DBUS_GLIB_INTERNALS)
```

```
libdbus_glib_HEADERS = \\  
  dbus-gtype-specialized.h \\  
  dbus-gvalue-parse-variant.h \\  
  dbus-glib.h \\  
  dbus-glib-lowlevel.h
```

```

libdbus_glibdir = $(includedir)/dbus-1.0/dbus

libdbus_glib_1_la_LIBADD= $(DBUS_LIBS) $(DBUS_GLIB_LIBS)
## don't export symbols that start with "_" (we use this
## convention for internal symbols)
libdbus_glib_1_la_LDFLAGS= -export-symbols-regex "^[^_].*" -version-
info $(LT_CURRENT):$(LT_REVISION):$(LT_AGE) -no-undefined

# convenience lib used here and by dbus-viewer
noinst_LTLIBRARIES=libdbus-gtool.la

libdbus_gtool_la_SOURCES = $(DBUS_GLIB_INTERNALS) \
    dbus-gidl.c           \
    dbus-gidl.h           \
    dbus-gloader-expat.c \
    dbus-gparser.c        \
    dbus-gparser.h

libdbus_gtool_la_LIBADD = $(DBUS_LIBS) -lexpat

bin_PROGRAMS=dbus-binding-tool

dbus_binding_tool_SOURCES = \
    dbus-binding-tool-glib.h \
    dbus-binding-tool-glib.c \
    dbus-glib-tool.h        \
    dbus-glib-tool.c

dbus_binding_tool_LDADD= $(builddir)/libdbus-gtool.la
$(builddir)/libdbus-glib-1.la $(DBUS_LIBS) $(DBUS_GLIB_LIBS) -lexpat

## we just rebuilt these manually and check them into cvs; easier than
## convincing automake/make to do this properly
regenerate-built-sources:
    @GLIB_GENMARSHAL@ --prefix=_dbus_g_marshal dbus-gmarshal.list --
header > dbus-gmarshal.h && \
    echo '#include <config.h>' > dbus-gmarshal.c &&
    \
    echo '#include "dbus-gmarshal.h"' >> dbus-gmarshal.c &&
    \
    @GLIB_GENMARSHAL@ --prefix=_dbus_g_marshal dbus-gmarshal.list
--body >> dbus-gmarshal.c

completiondir = $(sysconfdir)/bash_completion.d
if DBUS_BASH_COMPLETION
libexec_PROGRAMS=dbus-bash-completion-helper
completion_SCRIPTS=dbus-bash-completion.sh
endif

dbus-bash-completion.sh : dbus-bash-completion.sh.in
    @sed -e "s|@libexecdir|@|$(libexecdir)|" $< > $@

```

```

CLEANFILES += dbus-bash-completion.sh

dbus_bash_completion_helper_SOURCES =          \
    dbus-bash-completion-helper.c
dbus_bash_completion_helper_LDADD=$(builddir)/libdbus-gtool.la -lexpat
$(builddir)/libdbus-glib-1.la $(DBUS_LIBS) $(DBUS_GLIB_LIBS)

EXTRA_DIST=dbus-gmarshal.list dbus-bash-completion.sh.in

Android.mk: Makefile.am
    androgenizer -:PROJECT dbus-glib -:SHARED libdbus-glib-1 -:TAGS
eng debug \
    -:REL_TOP $(top_srcdir) -:ABS_TOP $(abs_top_srcdir) \
    -:SOURCES $(libdbus_glib_1_la_SOURCES) \
    -:CFLAGS $(DEFS) $(CFLAGS) $(DEFAULT_INCLUDES) $(INCLUDES)
$(AM_CFLAGS) \
    -:CPPFLAGS $(CPPFLAGS) $(AM_CPPFLAGS) \
    -:LDFLAGS $(libdbus_glib_1_la_LIBADD)
$(libdbus_glib_1_la_LDFLAGS) \
    > $@

if DBUS_BUILD_TESTS

## we use noinst_PROGRAMS not check_PROGRAMS for TESTS so that we
## build even when not doing "make check"
noinst_PROGRAMS= $(TESTS)

## note that TESTS has special meaning (stuff to use in make check)
## so if adding tests not to be run in make check, don't add them to
## TESTS
TESTS_ENVIRONMENT=DBUS_TEST_DATA=$(top_builddir)/test/data
DBUS_TEST_HOMEDIR=$(top_builddir)/dbus
TESTS=dbus-glib-test

## FIXME we aren't running dbus-glib-tool --self-test

dbus_glib_test_SOURCES=          \
    dbus-gtest-main.c

dbus_glib_test_LDADD= $(builddir)/libdbus-glib-1.la

else
### not building tests
TESTS=

endif

File = Makefile.am.~11~

```



```
SUBDIRS=reference

man_MANS = dbus-binding-tool.1

EXTRA_DIST = $(man_MANS)

File = Makefile.am.~12~

## Process this file with automake to produce Makefile.in

# We require automake 1.6 at least.
AUTOMAKE_OPTIONS = 1.6

# This is a blank Makefile.am for using gtk-doc.
# Copy this to your project's API docs directory and modify the
variables to
# suit your project. See the GTK+ Makefiles in gtk+/docs/reference for
examples
# of using the various options.

# The name of the module, e.g. 'glib'.
DOC_MODULE=dbus-glib

# Uncomment for versioned docs and specify the version of the module,
e.g. '2'.
#DOC_MODULE_VERSION=2

# The top-level SGML file. You can change this if you want to.
DOC_MAIN_SGML_FILE=$(DOC_MODULE)-docs.sgml

# Directories containing the source code.
# gtk-doc will search all .c and .h files beneath these paths
# for inline comments documenting functions and macros.
# e.g. DOC_SOURCE_DIR=$(top_srcdir)/gtk $(top_srcdir)/gdk
DOC_SOURCE_DIR=@abs_top_srcdir@/dbus

# Extra options to pass to gtkdoc-scangobj. Not normally needed.
SCANGOBJ_OPTIONS=

# Extra options to supply to gtkdoc-scan.
# e.g. SCAN_OPTIONS=--deprecated-guards="GTK_DISABLE_DEPRECATED"
SCAN_OPTIONS=

# Extra options to supply to gtkdoc-mkdb.
# e.g. MKDB_OPTIONS=--xml-mode --output-format=xml
MKDB_OPTIONS=--xml-mode --output-format=xml

# Extra options to supply to gtkdoc-mktmpl
# e.g. MKTMPL_OPTIONS=--only-section-tmpl
```

```

MKTMPL_OPTIONS=

# Extra options to supply to gtkdoc-mkhtml
MKHTML_OPTIONS=

# Extra options to supply to gtkdoc-fixref. Not normally needed.
# e.g. FIXXREF_OPTIONS=--extra-dir=./gdk-pixbuf/html --extra-
dir=./gdk/html
FIXXREF_OPTIONS=

# Used for dependencies. The docs will be rebuilt if any of these
change.
# e.g. HFILE_GLOB=$(top_srcdir)/gtk/*.h
# e.g. CFILE_GLOB=$(top_srcdir)/gtk/*.c
HFILE_GLOB=$(top_srcdir)/dbus/*.h
CFILE_GLOB=$(top_srcdir)/dbus/*.c

# Extra header to include when scanning, which are not under
DOC_SOURCE_DIR
# e.g. EXTRA_HFILES=$(top_srcdir)/contrib/extra.h
EXTRA_HFILES=

# Header files or dirs to ignore when scanning. Use base file/dir
names
# e.g. IGNORE_HFILES=gtkdebug.h gtkintl.h private_code
IGNORE_HFILES= \
    dbus-binding-tool-glib.h          \
    dbus-gidl.h                       \
    dbus-glib-tool.h                  \
    dbus-gparser.h                    \
    dbus-gutils.h                     \
    dbus-gsignature.h                 \
    dbus-gtest.h                      \
    dbus-gvalue.h                     \
    dbus-gvalue-utils.h               \
    dbus-gmarshal.h                   \
    example-service-glue.h            \
    example-signal-emitter-glue.h     \
    sm-marshal.h                       \
    statemachine-glue.h                \
    statemachine.h                     \
    statemachine-server-glue.h         \
    statemachine-server.h

# Images to copy into HTML directory.
# e.g. HTML_IMAGES=$(top_srcdir)/gtk/stock-icons/stock_about_24.png
HTML_IMAGES=

# Extra SGML files that are included by $(DOC_MAIN_SGML_FILE).
# e.g. content_files=running.sgml building.sgml changes-2.0.sgml
content_files=version.xml \
    dbus-binding-tool.xml

```

```

# SGML files where gtk-doc abbreviations (#GtkWidget) are expanded
# These files must be listed here *and* in content_files
# e.g. expand_content_files=running.sgml
expand_content_files=

# CFLAGS and LDFLAGS for compiling gtkdoc-scangobj with your library.
# Only needed if you are using gtkdoc-scangobj to dynamically query
widget
# signals and properties.
# e.g. GTKDOC_CFLAGS=-I$(top_srcdir) -I$(top_builddir)
$(GTK_DEBUG_FLAGS)
# e.g. GTKDOC_LIBS=$(top_builddir)/gtk/$(gtktargetlib)
GTKDOC_CFLAGS=-I$(top_srcdir) $(DBUS_CFLAGS) $(DBUS_GLIB_CFLAGS)
$(DBUS_GLIB_TOOL_CFLAGS)
GTKDOC_LIBS=$(top_builddir)/dbus/libdbus-glib-1.la

# This includes the standard gtk-doc make rules, copied by gtkdocize.
include $(top_srcdir)/gtk-doc.make

# Other files to distribute
# e.g. EXTRA_DIST += version.xml.in
EXTRA_DIST += version.xml.in

# Files not to distribute
# for --rebuild-types in $(SCAN_OPTIONS), e.g. $(DOC_MODULE).types
# for --rebuild-sections in $(SCAN_OPTIONS) e.g. $(DOC_MODULE)-
sections.txt
#DISTCLEANFILES +=

# Comment this out if you want 'make check' to test you doc status
# and run some sanity checks
if ENABLE_GTK_DOC
TESTS_ENVIRONMENT = cd $(srcdir) && \
    DOC_MODULE=$(DOC_MODULE) DOC_MAIN_SGML_FILE=$(DOC_MAIN_SGML_FILE) \
    SRCDIR=$(abs_srcdir) BUILDDIR=$(abs_builddir)
#TESTS = $(GTKDOC_CHECK)
endif

-include $(top_srcdir)/git.mk

File = Makefile.am.~13~

EXTRA_DIST = gtk-doc.m4

File = Makefile.am.~14~

ACLOCAL_AMFLAGS = -I m4

```

```

GLIB_PC=dbus-glib-1.pc

SUBDIRS=dbus tools test doc
DIST_SUBDIRS=dbus tools test doc m4

pkgconfigdir = $(libdir)/pkgconfig
pkgconfig_DATA = $(GLIB_PC)

DISTCLEANFILES =          \
    $(GLIB_PC)

EXTRA_DIST =              \
    HACKING                \
    NEWS                   \
    dbus-bus-introspect.xml \
    dbus-glib-1.pc.in

# Creating ChangeLog from git log:

MAINTAINERCLEANFILES = ChangeLog

DISTCHECK_CONFIGURE_FLAGS=--enable-gtk-doc --enable-checks --enable-
tests
EXTRA_DIST += ChangeLog

ChangeLog:
$(srcdir)/ChangeLog:
    @if test -d "$(srcdir)/.git"; then \
        (cd "$(srcdir)" && \
        ./missing --run git log --stat) | fmt --split-only > $@.tmp \
        && mv -f $@.tmp $@ \
        || ($(RM) $@.tmp; \
        echo Failed to generate ChangeLog, your ChangeLog may be
        outdated >&2; \
        (test -f $@ || echo git-log is required to generate this
        file >> $@)); \
    else \
        test -f $@ || \
        (echo A git checkout and git log are required to generate
        ChangeLog >&2 && \
        echo A git checkout and git-log are required to generate this
        file >> $@); \
    fi

%.tar.gz.asc: %.tar.gz
    $(AM_V_GEN)gpg --detach-sign --armor $@

maintainer-upload-release:
    test -f @PACKAGE@-@VERSION@.tar.gz
    test -f @PACKAGE@-@VERSION@.tar.gz.asc
    gpg --verify @PACKAGE@-@VERSION@.tar.gz.asc

```

```

        rsync -vzP @PACKAGE@-@VERSION@.tar.gz
dbus.freedesktop.org:/srv/dbus.freedesktop.org/www/releases/@PACKAGE@/
@PACKAGE@-@VERSION@.tar.gz
        rsync -vzP @PACKAGE@-@VERSION@.tar.gz.asc
dbus.freedesktop.org:/srv/dbus.freedesktop.org/www/releases/@PACKAGE@/
@PACKAGE@-@VERSION@.tar.gz.asc
        rsync -rvzPp --chmod=Dg+s,ug+rwX,o=rX
$(srcdir)/docs/reference/html/ \
        dbus.freedesktop.org:/srv/dbus.freedesktop.org/www/doc/@PACKAGE@/

include tools/lcov.am

```

File = Makefile.am.~15~

```

INCLUDES = \
    -I$(top_srcdir) \
    -I$(top_srcdir)/dbus \
    -I$(top_builddir) \
    -I$(top_builddir)/dbus \
    $(DBUS_CFLAGS) \
    $(DBUS_GLIB_CFLAGS) \
    -DDBUS_COMPILATION

```

```

LDADD = \
    $(DBUS_GLIB_THREADS_LIBS) \
    $(DBUS_GLIB_LIBS) \
    $(DBUS_LIBS) \
    $(top_builddir)/dbus/libdbus-glib-1.la \
    $(top_builddir)/test/lib/libtest.la \
    $(NULL)

```

```

tool_ldadd = \
    $(LDADD) \
    $(DBUS_GLIB_TOOL_LIBS) \
    $(top_builddir)/dbus/libdbus-gtool.la

```

```

## note that TESTS has special meaning (stuff to use in make check)
## so if adding tests not to be run in make check, don't add them to
## TESTS

```

```

if DBUS_BUILD_TESTS
TESTS_ENVIRONMENT=DBUS_TOP_BUILDDIR=$(ABSOLUTE_TOP_BUILDDIR)
TESTS=run-test.sh run-peer-test.sh
else
TESTS=
endif

```

```

EXTRA_DIST=run-test.sh run-peer-test.sh test-service-glib.xml my-
object-marshal.list test-service-glib-subclass.xml

```

```

if DBUS_BUILD_TESTS

```

```

if HAVE_GLIB_THREADS
THREAD_APPS=test-thread-server test-thread-client test-profile

test_thread_server_SOURCES=          \
    test-thread-server.c             \
    test-thread.h

test_thread_client_SOURCES=          \
    test-thread-client.c             \
    test-thread.h
endif

## we use noinst_PROGRAMS not check_PROGRAMS for TESTS so that we
## build even when not doing "make check"
testdir = $(datadir)/@PACKAGE@/tests/core
test_PROGRAMS = \
    test-dbus-glib \
    test-error-mapping \
    test-service-glib \
    $(THREAD_APPS) \
    peer-server \
    peer-client \
    test-types \
    test-30574 \
    test-peer-on-bus \
    test-proxy-peer \
    test-registrations \
    test-variant-recursion \
    test-gvariant

test_30574_SOURCES = \
    30574.c

test_proxy_peer_SOURCES = \
    my-object-marshal.c \
    my-object.c \
    my-object.h \
    proxy-peer.c

test_registrations_SOURCES = \
    my-object.c \
    my-object.h \
    my-object-subclass.c \
    my-object-subclass.h \
    my-object-marshal.c \
    registrations.c

test_dbus_glib_SOURCES=              \
    my-object.c \
    my-object.h \
    my-object-marshal.c \

```

```

    test-dbus-glib.c

test_dbus_glib_LDADD= $(tool_ldadd)

test_error_mapping_SOURCES = \
    my-object.c \
    my-object.h \
    my-object-marshal.c \
    error-mapping.c

test_variant_recursion_SOURCES=test-variant-recursion.c

test_variant_recursion_LDADD= $(tool_ldadd)

BUILT_SOURCES = test-service-glib-glua.h test-service-glib-subclass-
glua.h test-service-glib-bindings.h my-object-marshal.c my-object-
marshal.h

test_service_glib_SOURCES=
    my-object.c \
    my-object.h \
    my-object-subclass.c \
    my-object-subclass.h \
    my-object-marshal.c \
    test-service-glib.c

test-service-glib-glua.h: test-service-glib.xml
$(top_builddir)/dbus/dbus-binding-tool$(EXEEXT)
    $(DEBUG) $(DBUS_BINDING_TOOL) --prefix=my_object --mode=glib-
server --output=test-service-glib-glua.h $(srcdir)/test-service-
glib.xml

test-service-glib-subclass-glua.h: test-service-glib-subclass.xml
$(top_builddir)/dbus/dbus-binding-tool$(EXEEXT)
    $(DEBUG) $(DBUS_BINDING_TOOL) --prefix=my_object_subclass --
mode=glib-server --output=test-service-glib-subclass-glua.h
$(srcdir)/test-service-glib-subclass.xml

test-service-glib-bindings.h: test-service-glib.xml
$(top_builddir)/dbus/dbus-binding-tool$(EXEEXT)
    $(DEBUG) $(DBUS_BINDING_TOOL) --prefix=my_object --mode=glib-
client --output=test-service-glib-bindings.h $(srcdir)/test-service-
glib.xml

my-object-marshal.c: Makefile my-object-marshal.list
    echo "#include <config.h>" > $@.tmp
    @GLIB_GENMARSHAL@ --prefix=my_object_marshal $(srcdir)/my-object-
marshal.list --header --body >> $@.tmp
    mv $@.tmp $@

my-object-marshal.h: Makefile my-object-marshal.list

```

```
@GLIB_GENMARSHAL@ --prefix=my_object_marshall $(srcdir)/my-object-  
marshal.list --header > my-object-marshall.h
```

```
peer_server_SOURCES = \  
    my-object.c           \  
    my-object.h           \  
    my-object-subclass.c  \  
    my-object-subclass.h  \  
    my-object-marshall.c  \  
    peer-server.c         \
```

```
peer_client_SOURCES = \  
    peer-client.c
```

```
test_types_SOURCES = \  
    test-types.c
```

```
test_gvariant_SOURCES = \  
    test-gvariant.c
```

```
test_peer_on_bus_SOURCES = peer-on-bus.c
```

```
CLEANFILES = \  
    $(BUILT_SOURCES) \  
    run-with-tmp-session-bus.conf
```

```
else  
### not building tests
```

```
if HAVE_GLIB_THREADS  
noinst_PROGRAMS=test-profile  
endif
```

```
endif
```

```
if HAVE_GLIB_THREADS  
test_profile_SOURCES= \  
    test-profile.c  
endif
```

```
File = Makefile.am.~16~
```

```
INCLUDES = \  
    -I$(top_srcdir)           \  
    -I$(top_builddir)         \  
    -I$(top_builddir)/dbus    \  
    $(DBUS_CFLAGS)           \  
    $(DBUS_GLIB_CFLAGS)      \  
    -DDBUS_COMPILATION       \
```



```

LDADD = $(DBUS_GLIB_LIBS) \
        $(top_builddir)/dbus/libdbus-glib-1.la \
        $(top_builddir)/dbus/libdbus-gtool.la \
        $(top_builddir)/test/lib/libtest.la \
        $(NULL)

## note that TESTS has special meaning (stuff to use in make check)
## so if adding tests not to be run in make check, don't add them to
## TESTS
if DBUS_BUILD_TESTS
TESTS_ENVIRONMENT = \
        DBUS_TOP_BUILDDIR=$(ABSOLUTE_TOP_BUILDDIR) \
        DBUS_BINDING_TOOL=$(DBUS_BINDING_TOOL) \
        $(NULL)
TESTS=run-test.sh
else
TESTS=
endif

EXTRA_DIST = \
        invalid-annotated-node.xml \
        invalid-nested-annotation.xml \
        run-test.sh \
        test-goodbye.xml \
        test-hello.xml \
        test-song.xml \
        test-dup-prop-a.xml \
        test-dup-prop-b.xml \
        valid-annotations.xml \
        $(NULL)

if DBUS_BUILD_TESTS

## we use noinst_PROGRAMS not check_PROGRAMS for TESTS so that we
## build even when not doing "make check"
testdir = $(datadir)/@PACKAGE@/tests/interfaces
test_PROGRAMS = test-service test-client

test_service_SOURCES = \
        test-interfaces.c \
        test-interfaces.h \
        test-dup-prop.c \
        test-dup-prop.h \
        test-objects.c \
        test-objects.h \
        test-server.c

test_client_SOURCES = \
        test-client.c

BUILT_SOURCES = \

```

```
test-song-glue.h      \  
test-hello-glue.h    \  
test-goodbye-glue.h  \  
test-dup-prop-a-glue.h  \  
test-dup-prop-b-glue.h  \  
test-song-bindings.h \  
test-hello-bindings.h \  
test-goodbye-bindings.h \  
test-dup-prop-a-bindings.h \  
test-dup-prop-a-bindings.h \  
test-dup-prop-b-bindings.h \  
test-dup-prop-b-bindings.h \  
valid-annotations-glue.h \  
valid-annotations-bindings.h \  
$(NULL)
```

```
test-song-glue.h: test-song.xml $(top_builddir)/dbus/dbus-binding-  
tool$(EXEEXT)  
$(DBUS_BINDING_TOOL) --prefix=test_song --mode=glib-server --  
output=test-song-glue.h $(srcdir)/test-song.xml
```

```
test-song-bindings.h: test-song.xml $(top_builddir)/dbus/dbus-binding-  
tool$(EXEEXT)  
$(DBUS_BINDING_TOOL) --prefix=test_song --mode=glib-client --  
output=test-song-bindings.h $(srcdir)/test-song.xml
```

```
test-hello-glue.h: test-hello.xml $(top_builddir)/dbus/dbus-binding-  
tool$(EXEEXT)  
$(DBUS_BINDING_TOOL) --prefix=test_hello --mode=glib-server --  
output=test-hello-glue.h $(srcdir)/test-hello.xml
```

```
test-hello-bindings.h: test-hello.xml $(top_builddir)/dbus/dbus-  
binding-tool$(EXEEXT)  
$(DBUS_BINDING_TOOL) --prefix=test_hello --mode=glib-client --  
output=test-hello-bindings.h $(srcdir)/test-hello.xml
```

```
test-goodbye-glue.h: test-goodbye.xml $(top_builddir)/dbus/dbus-  
binding-tool$(EXEEXT)  
$(DBUS_BINDING_TOOL) --prefix=test_goodbye --mode=glib-server --  
output=test-goodbye-glue.h $(srcdir)/test-goodbye.xml
```

```
test-goodbye-bindings.h: test-goodbye.xml $(top_builddir)/dbus/dbus-  
binding-tool$(EXEEXT)  
$(DBUS_BINDING_TOOL) --prefix=test_goodbye --mode=glib-client --  
output=test-goodbye-bindings.h $(srcdir)/test-goodbye.xml
```

```
test-dup-prop-a-glue.h: test-dup-prop-a.xml $(top_builddir)/dbus/dbus-  
binding-tool$(EXEEXT)  
$(DBUS_BINDING_TOOL) --prefix=test_dup_prop_a --mode=glib-server  
--output=test-dup-prop-a-glue.h $(srcdir)/test-dup-prop-a.xml
```

```

test-dup-prop-a-bindings.h: test-dup-prop-a.xml
$(top_builddir)/dbus/dbus-binding-tool$(EXEEXT)
    $(DBUS_BINDING_TOOL) --prefix=test_dup_prop_a --mode=glib-client
--output=test-dup-prop-a-bindings.h $(srcdir)/test-dup-prop-a.xml

test-dup-prop-b-glue.h: test-dup-prop-b.xml $(top_builddir)/dbus/dbus-
binding-tool$(EXEEXT)
    $(DBUS_BINDING_TOOL) --prefix=test_dup_prop_b --mode=glib-server
--output=test-dup-prop-b-glue.h $(srcdir)/test-dup-prop-b.xml

test-dup-prop-b-bindings.h: test-dup-prop-b.xml
$(top_builddir)/dbus/dbus-binding-tool$(EXEEXT)
    $(DBUS_BINDING_TOOL) --prefix=test_dup_prop_b --mode=glib-client
--output=test-dup-prop-b-bindings.h $(srcdir)/test-dup-prop-b.xml

valid-annotations-glue.h: valid-annotations.xml
$(top_builddir)/dbus/dbus-binding-tool$(EXEEXT)
    $(DBUS_BINDING_TOOL) --prefix=test_annotated --mode=glib-server -
-output=$@ $<

valid-annotations-bindings.h: valid-annotations.xml
$(top_builddir)/dbus/dbus-binding-tool$(EXEEXT)
    $(DBUS_BINDING_TOOL) --prefix=test_annotated --mode=glib-client -
-output=$@ $<

CLEANFILES = \
    $(BUILT_SOURCES) \
    run-with-tmp-session-bus.conf

else
### not building tests

endif

File = Makefile.am.~17~

AM_CPPFLAGS = \
    -I$(top_srcdir) \
    -I$(top_builddir) \
    $(DBUS_CFLAGS) \
    $(DBUS_GLIB_CFLAGS) \
    $(NULL)

noinst_LTLIBRARIES = libtest.la

libtest_la_SOURCES = \
    util.c \
    util.h \

```

\$(NULL)

```
libtest_la_LIBADD = \  
    $(top_builddir)/dbus/libdbus-glib-1.la \  
    $(DBUS_LIBS) \  
    $(DBUS_GLIB_LIBS) \  
    $(NULL)
```

File = Makefile.am.~18~

```
SUBDIRS = lib . core interfaces manual  
DIST_SUBDIRS = lib core interfaces manual
```

```
INCLUDES = \  
    -I$(top_srcdir) \  
    -I$(top_builddir) \  
    -I$(top_builddir)/dbus \  
    $(DBUS_CFLAGS)
```

```
if DBUS_BUILD_TESTS  
TEST_BINARIES=test-service  
else  
TEST_BINARIES=  
endif
```

```
testdir = $(datadir)/@PACKAGE@/tests  
test_PROGRAMS= $(TEST_BINARIES)
```

```
test_service_SOURCES= \  
    test-service.c
```

```
test_service_LDADD=$(DBUS_LIBS)
```

```
EXTRA_DIST = data/nested-introspect.xml test-compile-nested.sh
```

```
TESTS_ENVIRONMENT=top_builddir=$(top_builddir) srcdir=$(srcdir)  
TESTS = test-compile-nested.sh
```

File = Makefile.am.~19~

```
AM_CPPFLAGS = \  
    -I$(top_srcdir) \  
    -I$(top_builddir) \  
    -I$(top_srcdir)/test/core \  
    -I$(top_builddir)/test/core \  
    $(DBUS_CFLAGS) \  
    $(DBUS_GLIB_CFLAGS) \  
    $(NULL)
```

```

LDADD = \
    $(top_builddir)/dbus/libdbus-glib-1.la \
    $(DBUS_LIBS) \
    $(DBUS_GLIB_LIBS) \
    $(NULL)

noinst_PROGRAMS = \
    $(NULL)

if DBUS_BUILD_TESTS
noinst_PROGRAMS += \
    test-invalid-usage \
    $(NULL)
endif

# This "test" exercises invalid usage. It is deliberately not run in
# TESTS, because it's (by design) full of bugs.
test_invalid_usage_SOURCES = \
    ../core/my-object-marshal.c \
    ../core/my-object-marshal.h \
    ../core/my-object.c \
    ../core/my-object.h \
    invalid-usage.c

File = Makefile.am.~1~

configdir=$(sysconfdir)/dbus-1
dbus_daemon_execdir = $(DBUS_DAEMONDIR)

DBUS_BUS_LIBS = \
    $(XML_LIBS) \
    $(SELINUX_LIBS) \
    $(THREAD_LIBS) \
    $(ADT_LIBS) \
    $(NETWORK_libs) \
    $(NULL)

DBUS_LAUNCHER_LIBS = \
    $(XML_LIBS) \
    $(THREAD_LIBS) \
    $(NETWORK_libs) \
    $(NULL)

AM_CPPFLAGS = \
    -I$(top_srcdir) \
    $(XML_CFLAGS) \
    -DDBUS_SYSTEM_CONFIG_FILE=\"\"$(configdir)/system.conf\"" \
    -DDBUS_COMPILATION \
    -DDBUS_STATIC_BUILD \

```

```

$(NULL)

# if assertions are enabled, improve backtraces
AM_LDFLAGS = @R_DYNAMIC_LDFLAG@

EFENCE=

CONFIG_IN_FILES=
    session.conf.in
    system.conf.in
    org.freedesktop.dbus-session.plist.in

config_DATA=
    session.conf
    system.conf

if DBUS_ENABLE_LAUNCHED
agentdir=$(LAUNCHED_AGENT_DIR)
agent_DATA=org.freedesktop.dbus-session.plist
endif

if DBUS_USE_LIBXML
XML_SOURCES=config-loader-libxml.c
endif
if DBUS_USE_EXPAT
XML_SOURCES=config-loader-expat.c
endif

if DBUS_BUS_ENABLE_KQUEUE
DIR_WATCH_SOURCE=dir-watch-kqueue.c
else
if DBUS_BUS_ENABLE_INOTIFY
DIR_WATCH_SOURCE=dir-watch-inotify.c
else
if DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX
DIR_WATCH_SOURCE=dir-watch-dnotify.c
else
DIR_WATCH_SOURCE=dir-watch-default.c
endif
endif
endif

BUS_SOURCES=
    activation.c
    activation.h
    activation-exit-codes.h
    bus.c
    bus.h
    config-parser.c
    config-parser.h
    config-parser-common.c
    config-parser-common.h

```

```

connection.c          \
connection.h          \
desktop-file.c       \
desktop-file.h       \
$(DIR_WATCH_SOURCE) \
dir-watch.h          \
dispatch.c           \
dispatch.h           \
driver.c             \
driver.h             \
expirelist.c         \
expirelist.h         \
policy.c             \
policy.h             \
selinux.h            \
selinux.c            \
services.c           \
services.h           \
signals.c            \
signals.h            \
stats.c              \
stats.h              \
test.c               \
test.h               \
utils.c              \
utils.h              \
$(XML_SOURCES)

dbus_daemon_SOURCES= \
$(BUS_SOURCES) \
main.c

dbus_daemon_LDADD= \
$(top_builddir)/dbus/libdbus-internal.la \
$(EFENCE) \
$(DBUS_BUS_LIBS)

LAUNCH_HELPER_SOURCES= \
$(XML_SOURCES) \
config-parser-common.c \
config-parser-common.h \
config-parser-trivial.c \
config-parser-trivial.h \
desktop-file.c \
desktop-file.h \
utils.c \
utils.h \
activation-exit-codes.h \
activation-helper.h \
activation-helper.c

```

This is the installed launch helper with the setuid checks

```

dbus_daemon_launch_helper_SOURCES=      \
    activation-helper-bin.c             \
    $(LAUNCH_HELPER_SOURCES)

dbus_daemon_launch_helper_LDADD=        \
    $(top_builddir)/dbus/libdbus-internal.la \
    $(DBUS_LAUNCHER_LIBS)

## we build another binary so we can do the launch testing without
## root privs.
## DO NOT INSTALL THIS FILE
dbus_daemon_launch_helper_test_SOURCES=      \
    activation-helper-bin.c             \
    $(LAUNCH_HELPER_SOURCES)

dbus_daemon_launch_helper_test_LDADD=        \
    $(top_builddir)/dbus/libdbus-internal.la \
    $(DBUS_LAUNCHER_LIBS)

dbus_daemon_launch_helper_test_CPPFLAGS = \
    $(AM_CPPFLAGS) \
    -DACTIVATION_LAUNCHER_TEST

## we build yet another binary so we can do the OOM tests
## DO NOT INSTALL THIS FILE
bus_test_launch_helper_SOURCES=            \
    test-launch-helper.c                \
    $(LAUNCH_HELPER_SOURCES)

bus_test_launch_helper_LDADD=              \
    $(top_builddir)/dbus/libdbus-internal.la \
    $(DBUS_LAUNCHER_LIBS)

bus_test_launch_helper_CPPFLAGS = \
    $(AM_CPPFLAGS) \
    -DACTIVATION_LAUNCHER_TEST \
    -DACTIVATION_LAUNCHER_DO_OOM

noinst_PROGRAMS =
dbus_daemon_exec_PROGRAMS = dbus-daemon
if DBUS_UNIX
libexec_PROGRAMS = dbus-daemon-launch-helper
endif DBUS_UNIX

## Note that TESTS has special meaning (stuff to use in make check).
## We don't actually want to run any of these tests until test/ has
## been
## compiled, so we don't put them in TESTS here; we run them in test/
## instead.

if DBUS_BUILD_TESTS
## we use noinst_PROGRAMS not check_PROGRAMS so that we build

```



```

## even when not doing "make check"

# run as a test by test/Makefile.am
noinst_PROGRAMS += bus-test bus-test-system

if DBUS_UNIX
# run as a test by test/Makefile.am
noinst_PROGRAMS += bus-test-launch-helper
# this is used by the tests but is not, itself, a test
noinst_PROGRAMS += dbus-daemon-launch-helper-test
endif DBUS_UNIX

endif DBUS_BUILD_TESTS

bus_test_system_SOURCES=
    $(XML_SOURCES)
    config-parser-common.c
    config-parser-common.h
    config-parser-trivial.c
    config-parser-trivial.h
    utils.c
    utils.h
    test-system.c

bus_test_system_LDADD=$(top_builddir)/dbus/libdbus-internal.la
$(DBUS_BUS_LIBS)

bus_test_SOURCES=
    $(BUS_SOURCES)
    test-main.c

bus_test_LDADD=$(top_builddir)/dbus/libdbus-internal.la
$(DBUS_BUS_LIBS)

## mop up the gcov files
clean-local:
    /bin/rm *.bb *.bbg *.da *.gcov || true

install-data-hook:
    $(mkinstalldirs) $(DESTDIR)$(localstatedir)/run/dbus
    $(mkinstalldirs) $(DESTDIR)$(configdir)/system.d
    $(mkinstalldirs) $(DESTDIR)$(configdir)/session.d
    $(mkinstalldirs) $(DESTDIR)$(datadir)/dbus-1/services
    $(mkinstalldirs) $(DESTDIR)$(datadir)/dbus-1/system-services
if HAVE_SYSTEMD
# Install dbus.socket as default implementation of a D-Bus stack.
# Deliberately not using $(LN_S) here: ln -fs is not universally
portable,
# but neither is systemd, so it's OK to assume here that ln complies
with SUS.
    $(mkinstalldirs)
$(DESTDIR)$(systemdsystemunitdir)/dbus.target.wants

```

```

    ln -fs ../dbus.socket
$(DESTDIR)$ (systemdsystemunitdir)/dbus.target.wants/dbus.socket
# Unconditionally enable D-Bus on systemd installations
    $(mkinstalldirs)
$(DESTDIR)$ (systemdsystemunitdir)/sockets.target.wants
    ln -fs ../dbus.socket
$(DESTDIR)$ (systemdsystemunitdir)/sockets.target.wants/dbus.socket
    $(mkinstalldirs) $(DESTDIR)$ (systemdsystemunitdir)/multi-
user.target.wants
    ln -fs ../dbus.service $(DESTDIR)$ (systemdsystemunitdir)/multi-
user.target.wants/dbus.service
endif

if DBUS_UNIX
install-exec-hook:
    if test `id -u` -eq 0; then \
        chown root:$(DBUS_USER) $(DESTDIR)$ (libexecdir)/dbus-
daemon-launch-helper$(EXEEXT); \
        chmod 4750 $(DESTDIR)$ (libexecdir)/dbus-daemon-launch-
helper$(EXEEXT); \
    else \
        echo "Not installing $(DESTDIR)$ (libexecdir)/dbus-daemon-
launch-helper binary setuid!"; \
        echo "You'll need to manually set permissions to
root:$(DBUS_USER) and permissions 4750"; \
    fi
endif

#### Init scripts fun
SCRIPT_IN_FILES=messagebus.in \
    messagebus-config.in \
    rc.messagebus.in

## Red Hat start
if DBUS_INIT_SCRIPTS_RED_HAT

initddir=$(sysconfdir)/rc.d/init.d

initd_SCRIPTS= \
    messagebus

endif
## Red Hat end

## Slackware start
if DBUS_INIT_SCRIPTS_SLACKWARE

initddir=$(sysconfdir)/rc.d/

initd_SCRIPTS= \
    rc.messagebus

```

```

endif
## Slackware end

## Cygwin start
if DBUS_INIT_SCRIPTS_CYGWIN

bin_SCRIPTS= \
    messagebus-config

endif
## Cygwin end

if HAVE_SYSTEMD
SCRIPT_IN_FILES += \
    dbus.service.in \
    dbus.socket.in

systemdsystemunit_DATA = \
    dbus.service \
    dbus.socket
endif

#### Extra dist

EXTRA_DIST=$(CONFIG_IN_FILES) $(SCRIPT_IN_FILES)

File = Makefile.am.~2~

configdir=$(sysconfdir)/dbus-1

AM_CPPFLAGS = \
    -I$(top_builddir) \
    -I$(top_srcdir) \
    $(SYSTEMD_CFLAGS) \
    $(VALGRIND_CFLAGS) \
    -DDBUS_COMPILATION \
    -DDBUS_MACHINE_UUID_FILE=\"\"$(localstatedir)/lib/dbus/machine-
id\" \
    -DDBUS_SYSTEM_CONFIG_FILE=\"\"$(configdir)/system.conf\" \
    -DDBUS_SESSION_CONFIG_FILE=\"\"$(configdir)/session.conf\" \
    $(NULL)

# if assertions are enabled, improve backtraces
AM_LDFLAGS = @R_DYNAMIC_LDFLAG@

dbusincludedir=$(includedir)/dbus-1.0/dbus
dbusarchincludedir=$(libdir)/dbus-1.0/include/dbus

lib_LTLIBRARIES=libdbus-1.la

```

```

#
# Deal with W32 .def and version-info.rc stuff
#
if DBUS_WIN

SUFFIXES = rc

.rc.o:
    $(WINDRES) $< -o $@

dbus_res = versioninfo.o
dbus_res_ldflag = -Wl,$(dbus_res)
no_undefined = -no-undefined
export_symbols =

libdbus_1_la_DEPENDENCIES = $(dbus_res)
intllibs =

else
dbus_res =
dbus_res_ldflag =
no_undefined =
## don't export symbols that start with "_" (we use this
## convention for internal symbols)
export_symbols = -export-symbols-regex "^[^_].*"

intllibs = @LTLIBINTL@

endif

#
# Platform-dependent sources:
#
if DBUS_WIN
DBUS_LIB_arch_sources =          \
    dbus-server-win.c           \
    dbus-server-win.h

if DBUS_WINCE
wince_source = dbus-sysdeps-wince-glue.h dbus-sysdeps-wince-glue.c
else
wince_source =
endif

DBUS_SHARED_arch_sources =      \
    $(wince_source)             \
    dbus-file-win.c             \
    dbus-pipe-win.c             \
    dbus-sockets-win.h          \
    dbus-sysdeps-win.c          \

```

```

        dbus-sysdeps-win.h           \
        dbus-sysdeps-thread-win.c    \
        dbus-transport-win.c         \
        dbus-transport-win.h
DBUS_UTIL_arch_sources =           \
        dbus-sysdeps-util-win.c      \
        dbus-spawn-win.c
else
if DBUS_ENABLE_LAUNCHD
launchd_source = dbus-server-launchd.h dbus-server-launchd.c
else
launchd_source =
endif

DBUS_LIB_arch_sources =           \
        dbus-uuidgen.c              \
        dbus-uuidgen.h              \
        dbus-server-unix.c          \
        dbus-server-unix.h
DBUS_SHARED_arch_sources =        \
        $(launchd_source)           \
        dbus-file-unix.c            \
        dbus-pipe-unix.c            \
        dbus-sysdeps-unix.c         \
        dbus-sysdeps-unix.h         \
        dbus-sysdeps-pthread.c      \
        dbus-transport-unix.c       \
        dbus-transport-unix.h       \
        dbus-userdb.c               \
        dbus-userdb.h               \
        sd-daemon.c                 \
        sd-daemon.h
DBUS_UTIL_arch_sources =           \
        dbus-sysdeps-util-unix.c     \
        dbus-userdb-util.c          \
        dbus-spawn.c
endif

if HAVE_LINUX_EPOLL
DBUS_UTIL_arch_sources += dbus-socket-set-epoll.c
endif

dbusinclude_HEADERS=              \
        dbus.h                      \
        dbus-address.h              \
        dbus-bus.h                   \
        dbus-connection.h           \
        dbus-errors.h

```

```
dbus-macros.h          \  
dbus-memory.h         \  
dbus-message.h        \  
dbus-misc.h           \  
dbus-pending-call.h   \  
dbus-protocol.h       \  
dbus-server.h         \  
dbus-shared.h         \  
dbus-signature.h      \  
dbus-syntax.h         \  
dbus-threads.h        \  
dbus-types.h          \  
          \
```

```
nodist_dbusarchinclude_HEADERS=          \  
    dbus-arch-deps.h
```

```
### source code that goes in the installed client library  
### and is specific to library functionality
```

```
DBUS_LIB_SOURCES=          \  
    dbus-address.c         \  
    dbus-auth.c           \  
    dbus-auth.h           \  
    dbus-bus.c            \  
    dbus-connection.c     \  
    dbus-connection-internal.h \  
    dbus-credentials.c    \  
    dbus-credentials.h    \  
    dbus-errors.c         \  
    dbus-keyring.c        \  
    dbus-keyring.h        \  
    dbus-marshal-header.c \  
    dbus-marshal-header.h \  
    dbus-marshal-byteswap.c          \  
    dbus-marshal-byteswap.h          \  
    dbus-marshal-recursive.c         \  
    dbus-marshal-recursive.h         \  
    dbus-marshal-validate.c          \  
    dbus-marshal-validate.h          \  
    dbus-message.c                   \  
    dbus-message-internal.h          \  
    dbus-message-private.h          \  
    dbus-misc.c                      \  
    dbus-nonce.h                     \  
    dbus-nonce.c                     \  
    dbus-object-tree.c               \  
    dbus-object-tree.h               \  
    dbus-pending-call.c              \  
    dbus-pending-call-internal.h     \  
    dbus-resources.c                 \  
    dbus-resources.h                 \  
    dbus-server.c                    \  
          \
```

```

dbus-server-debug-pipe.c      \
dbus-server-debug-pipe.h      \
dbus-server-protected.h      \
dbus-server-socket.c         \
dbus-server-socket.h         \
$(DBUS_LIB_arch_sources)     \
dbus-sha.c                   \
dbus-sha.h                    \
dbus-signature.c             \
dbus-syntax.c                \
dbus-timeout.c               \
dbus-timeout.h               \
dbus-threads-internal.h      \
dbus-threads.c               \
dbus-transport.c             \
dbus-transport.h             \
dbus-transport-protected.h   \
dbus-transport-socket.c      \
dbus-transport-socket.h      \
dbus-watch.c                 \
dbus-watch.h

```

```

### source code that goes in the installed client library
### AND is generic utility functionality used by the
### daemon or test programs (all symbols in here should
### be underscore-prefixed)

```

```

DBUS_SHARED_SOURCES=
dbus-dataslot.c              \
dbus-dataslot.h              \
dbus-file.c                  \
dbus-file.h                  \
dbus-hash.c                  \
dbus-hash.h                  \
dbus-internals.c             \
dbus-internals.h             \
dbus-list.c                  \
dbus-list.h                  \
dbus-marshal-basic.c         \
dbus-marshal-basic.h         \
dbus-memory.c                \
dbus-mempool.c               \
dbus-mempool.h               \
dbus-pipe.c                  \
dbus-pipe.h                  \
dbus-string.c                \
dbus-string.h                \
dbus-string-private.h        \
$(DBUS_SHARED_arch_sources) \
dbus-sysdeps.c               \
dbus-sysdeps.h               \
dbus-valgrind-internal.h

```

```

### source code that is generic utility functionality used
### by the bus daemon or test apps, but is NOT included
### in the D-Bus client library (all symbols in here
### should be underscore-prefixed but don't really need
### to be unless they move to DBUS_SHARED_SOURCES later)
DBUS_UTIL_SOURCES=
    dbus-auth-script.c
    dbus-auth-script.h
    dbus-auth-util.c
    dbus-credentials-util.c
    dbus-mainloop.c
    dbus-mainloop.h
    dbus-marshal-byteswap-util.c
    dbus-marshal-recursive-util.c
    dbus-marshal-validate-util.c
    dbus-message-factory.c
    dbus-message-factory.h
    dbus-message-util.c
    dbus-shell.c
    dbus-shell.h
    $(DBUS_UTIL_arch_sources)
    dbus-socket-set.h
    dbus-socket-set.c
    dbus-socket-set-poll.c
    dbus-spawn.h
    dbus-string-util.c
    dbus-sysdeps-util.c
    dbus-test.c
    dbus-test.h

libdbus_1_la_SOURCES=
    $(DBUS_LIB_SOURCES)
    $(DBUS_SHARED_SOURCES)

libdbus_internal_la_SOURCES=
    $(DBUS_LIB_SOURCES)
    $(DBUS_SHARED_SOURCES)
    $(DBUS_UTIL_SOURCES)

BUILT_SOURCES=$(nodist_dbusarchinclude_HEADERS)
EXTRA_DIST=dbus-arch-deps.h.in

## this library is the same as libdbus, but exports all the symbols
## and is only used for static linking within the dbus package.
noinst_LTLIBRARIES=libdbus-internal.la

libdbus_1_la_CPPFLAGS = \
    $(AM_CPPFLAGS) \
    -Ddbus_1_EXPORTS \
    $(NULL)

libdbus_1_la_LIBADD= $(LIBDBUS_LIBS)
libdbus_1_la_LDFLAGS = \

```



```

$(AM_LDFLAGS) \
$(export_symbols) \
-version-info $(LT_CURRENT):$(LT_REVISION):$(LT_AGE) \
-no-undefined \
$(NULL)

libdbus_internal_la_CPPFLAGS = \
$(AM_CPPFLAGS) \
-DDBUS_STATIC_BUILD \
$(NULL)
libdbus_internal_la_LIBADD=$(LIBDBUS_LIBS) $(SYSTEMD_LIBS)

noinst_PROGRAMS =

if DBUS_BUILD_TESTS
# We can't actually run this til we've reached test/
noinst_PROGRAMS += dbus-test
endif

dbus_test_SOURCES= \
    dbus-test-main.c

dbus_test_LDADD = libdbus-internal.la

## mop up the gcov files
clean-local:
    /bin/rm *.bb *.bbg *.da *.gcov .libs/*.da .libs/*.bbg || true

update-systemd:
    curl http://cgit.freedesktop.org/systemd/plain/src/sd-daemon.c >
sd-daemon.c
    curl http://cgit.freedesktop.org/systemd/plain/src/sd-daemon.h >
sd-daemon.h

File = Makefile.am.~3~

apidir = @htmldir@/api

# automake normally assumes that man pages are generated files;
# these ones aren't, so we need the dist_prefix to say that they're
# their own source code
dist_man1_MANS = \
    dbus-cleanup-sockets.1 \
    dbus-launch.1 \
    dbus-monitor.1 \
    dbus-send.1 \
    dbus-uuidgen.1

# on the other hand, this one is generated
man1_MANS = \

```

```
dbus-daemon.1

MAN_IN_FILES = dbus-daemon.1.in

MAN_HTML_FILES = \
    dbus-cleanup-sockets.1.html \
    dbus-daemon.1.html \
    dbus-launch.1.html \
    dbus-monitor.1.html \
    dbus-send.1.html \
    dbus-uuidgen.1.html

DTDS = \
    busconfig.dtd \
    introspect.dtd

dist_doc_DATA = system-activation.txt

# uploaded and distributed, but not installed
STATIC_DOCS = \
    dbus-faq.xml \
    dbus-specification.xml \
    dbus-test-plan.xml \
    dbus-tutorial.xml \
    dcop-howto.txt \
    introspect.xsl \
    $(DTDS)

EXTRA_DIST = \
    file-boilerplate.c \
    doxygen_to_devhelp.xsl \
    $(STATIC_DOCS) \
    $(MAN_IN_FILES)

html_DATA =

dist_html_DATA =

# diagram.png/diagram.svg aren't really HTML, but must go in the same
# directory as the HTML to avoid broken links
STATIC_HTML = \
    diagram.png \
    diagram.svg \
    $(NULL)

dist_html_DATA += $(STATIC_HTML)

# we distribute these in the tarball so users don't necessarily need
xmlto
dist_html_DATA += $(XMLTO_OUTPUT)

XMLTO_OUTPUT= \
```

```

    dbus-faq.html           \
    dbus-specification.html \
    dbus-test-plan.html    \
    dbus-tutorial.html

if DBUS_XML_DOCS_ENABLED
dbus-specification.html: dbus-specification.xml
    $(XMLTO) html-nochunks $<

dbus-test-plan.html: dbus-test-plan.xml
    $(XMLTO) html-nochunks $<

dbus-tutorial.html: dbus-tutorial.xml
    $(XMLTO) html-nochunks $<

dbus-faq.html: dbus-faq.xml
    $(XMLTO) html-nochunks $<
endif

if DBUS_DOXYGEN_DOCS_ENABLED
all-local:: doxygen.stamp

doxygen.stamp: $(wildcard $(top_srcdir)/dbus/*.ch)
    $(AM_V_GEN)cd $(top_builddir) && doxygen Doxyfile
    @touch $@

if DBUS_HAVE_XSLTPROC
html_DATA += dbus.devhelp

dbus.devhelp: $(srcdir)/doxygen_to_devhelp.xsl doxygen.stamp
    $(XSLTPROC) -o $@ $< api/xml/index.xml
endif

# this assumes CREATE_SUBDIRS isn't set to YES in Doxyfile
# (which it isn't currently)
install-data-local:: doxygen.stamp
    $(MKDIR_P) $(DESTDIR)$apidir
    $(INSTALL_DATA) api/html/* $(DESTDIR)$apidir

uninstall-local::
    rm -f $(DESTDIR)$apidir/*.html
    rm -f $(DESTDIR)$apidir/*.png
    rm -f $(DESTDIR)$apidir/*.css
    rm -f $(DESTDIR)$apidir/*.js
    rm -f $(DESTDIR)$htmldir/*.html
    rm -f $(DESTDIR)$docdir/*.txt
    rm -f $(DESTDIR)$htmldir/*.png
    rm -f $(DESTDIR)$htmldir/*.svg
    rmdir --ignore-fail-on-non-empty $(DESTDIR)$apidir || \
        rmdir $(DESTDIR)$apidir
endif

```

```

if DBUS_HAVE_MAN2HTML
html_DATA += $(MAN_HTML_FILES)

%.1.html: %.1
    $(AM_V_GEN) ( $(MAN2HTML) < $< > $@.tmp && mv $@.tmp $@ )
endif

if DBUS_CAN_UPLOAD_DOCS
BONUS_FILES = \
    $(top_srcdir)/README \
    $(top_srcdir)/HACKING \
    $(top_srcdir)/AUTHORS \
    $(top_srcdir)/NEWS \
    $(top_srcdir)/COPYING \
    $(top_srcdir)/ChangeLog

dbus-docs: $(STATIC_DOCS) $(dist_doc_DATA) $(dist_html_DATA)
$(MAN_HTML_FILES) $(BONUS_FILES) doxygen.stamp
    $(AM_V_at)rm -rf $@ $@.tmp
    $(AM_V_GEN)$(MKDIR_P) $@.tmp/api
    $(AM_V_at)cd $(srcdir) && cp $(STATIC_DOCS) @abs_builddir@/$@.tmp
    $(AM_V_at)cd $(srcdir) && cp $(dist_doc_DATA)
@abs_builddir@/$@.tmp
    $(AM_V_at)cd $(srcdir) && cp $(STATIC_HTML) @abs_builddir@/$@.tmp
    $(AM_V_at)cp $(XMLTO_OUTPUT) @abs_builddir@/$@.tmp
    $(AM_V_at)cp $(MAN_HTML_FILES) @abs_builddir@/$@.tmp
    $(AM_V_at)cp $(BONUS_FILES) @abs_builddir@/$@.tmp
    $(AM_V_at)cp -r api/html @abs_builddir@/$@.tmp/api
    $(AM_V_at)mv $@.tmp $@

dbus-docs.tar.gz: dbus-docs
    $(AM_V_GEN)tar czf $@ $<

DOC_SERVER = dbus.freedesktop.org
DOC_WWW_DIR = /srv/dbus.freedesktop.org/www

SPECIFICATION_SERVER = specifications.freedesktop.org
SPECIFICATION_PATH = /srv/specifications.freedesktop.org/www/dbus/1.0

maintainer-upload-docs: dbus-docs.tar.gz dbus-docs
    scp dbus-docs.tar.gz $(DOC_SERVER):$(DOC_WWW_DIR)/
    rsync -rpvzP --chmod=Dg+s,ug+rwX,o=rX \
        dbus-docs/ $(DOC_SERVER):$(DOC_WWW_DIR)/doc/
    cd $(srcdir) && scp -p $(DTDS)
$(SPECIFICATION_SERVER):$(SPECIFICATION_PATH)/
else
maintainer-upload-docs:
    @echo "Can't upload documentation! Re-run configure with"
    @echo "  --enable-doxygen-docs --enable-xml-docs"
    @echo "and ensure that man2html is installed."
    @false
endif

```

```
clean-local:
    rm -f $(html_DATA)
    rm -rf api
    rm -rf dbus-docs dbus-docs.tmp
    rm -f *.1.html
    rm -f doxygen.stamp
```

```
maintainer-clean-local:
    rm -f $(XMLTO_OUTPUT)
```

File = Makefile.am.~4~

SUBDIRS=dbus bus tools test doc

pkgconfigdir = \$(libdir)/pkgconfig
pkgconfig_DATA = dbus-1.pc

DISTCLEANFILES = \
 dbus-1.pc

EXTRA_DIST = \
 HACKING \
 dbus-1.pc.in \
 cleanup-man-pages.sh \
 ChangeLog.pre-1-0 \
 NEWS.pre-1-0 \
 ChangeLog.pre-1-2 \
 NEWS.pre-1-2 \
 README.win \
 README.wince \
 README.cygwin \
 README.launchd \
 cmake

all-local: Doxyfile

update-authors:
 git shortlog -s -e | cut -c 8- | sort > AUTHORS

DISTCHECK_CONFIGURE_FLAGS = \
 --with-
systemdsystemunitdir=\${\$dc_install_base}/\${systemdsystemunitdir}

ACLOCAL_AMFLAGS = -I m4 \${ACLOCAL_FLAGS}

include tools/lcov.am

```

File = Makefile.am.~5~

## the "name-test" subdir in fact contains a bunch of tests now that
## need a temporary bus
## to be running to do stuff with. The directory should be renamed.
## We want to build the current directory first to pick up the
testutils lib
SUBDIRS= . name-test
DIST_SUBDIRS=name-test

# CPPFLAGS for binaries that are normally dynamic
AM_CPPFLAGS = \
    -I$(top_srcdir) \
    $(DBUS_STATIC_BUILD_CPPFLAGS) \
    $(GLIB_CFLAGS) \
    $(DBUS_GLIB_CFLAGS) \
    $(NULL)

# improve backtraces from test stuff
AM_LDFLAGS = @R_DYNAMIC_LDFLAG@

# CPPFLAGS for binaries that are always static
static_cppflags = \
    $(AM_CPPFLAGS) \
    -DDBUS_STATIC_BUILD \
    $(NULL)

libdbus_testutils_la_CPPFLAGS = \
    $(static_cppflags)
libdbus_testutils_la_SOURCES = \
    test-utils.c \
    test-utils.h \
    $(NULL)
libdbus_testutils_la_LIBADD = \
    $(top_builddir)/dbus/libdbus-internal.la \
    $(NULL)

noinst_LTLIBRARIES = libdbus-testutils.la

if DBUS_BUILD_TESTS
## break-loader removed for now
## these binaries are used in tests but are not themselves tests
TEST_BINARIES = \
    spawn-test \
    test-exit \
    test-names \
    test-segfault \
    test-service \
    test-shell-service \
    test-sleep-forever \
    $(NULL)

```

```

## These are conceptually part of directories that come earlier in
SUBDIRS
## order, but we don't want to run them til we arrive in this
directory,
## since they depend on stuff from this directory
TESTS = \
    ../bus/bus-test$(EXEEXT) \
    ../bus/bus-test-system$(EXEEXT) \
    ../dbus/dbus-test$(EXEEXT) \
    $(NULL)

if DBUS_UNIX
TESTS += ../bus/bus-test-launch-helper$(EXEEXT)
endif

else !DBUS_BUILD_TESTS

TEST_BINARIES=
TESTS=

endif !DBUS_BUILD_TESTS

noinst_PROGRAMS= $(TEST_BINARIES)

test_service_CPPFLAGS = $(static_cppflags)
test_service_LDADD = libdbus-testutils.la
test_names_CPPFLAGS = $(static_cppflags)
test_names_LDADD = libdbus-testutils.la
## break_loader_CPPFLAGS = $(static_cppflags)
## break_loader_LDADD = $(top_builddir)/dbus/libdbus-internal.la
test_shell_service_CPPFLAGS = $(static_cppflags)
test_shell_service_LDADD = libdbus-testutils.la
shell_test_CPPFLAGS = $(static_cppflags)
shell_test_LDADD = libdbus-testutils.la
spawn_test_CPPFLAGS = $(static_cppflags)
spawn_test_LDADD = $(top_builddir)/dbus/libdbus-internal.la

test_refs_SOURCES = internals/refs.c
test_refs_CPPFLAGS = $(static_cppflags)
test_refs_LDADD = libdbus-testutils.la $(GLIB_LIBS)

test_syslog_SOURCES = internals/syslog.c
test_syslog_CPPFLAGS = $(static_cppflags)
test_syslog_LDADD = libdbus-testutils.la $(GLIB_LIBS)

EXTRA_DIST = dbus-test-runner

testexecdir = $(libdir)/dbus-1.0/test

testexec_PROGRAMS =

installable_tests = \

```

```

    shell-test \
    $(NULL)

if DBUS_WITH_GLIB
installable_tests += \
    test-corrupt \
    test-dbus-daemon \
    test-dbus-daemon-eavesdrop \
    test-loopback \
    test-marshall \
    test-refs \
    test-relay \
    test-syntax \
    test-syslog \
    $(NULL)
endif DBUS_WITH_GLIB

installcheck_tests =
installcheck_environment = \
    DBUS_TEST_DAEMON=$(DESTDIR)$(DBUS_DAEMONDIR)/dbus-daemon$(EXEEXT)
\
    DBUS_TEST_HOMEDIR=@abs_top_builddir@/dbus \
    DBUS_TEST_SYSCONFDIR=$(DESTDIR)$(sysconfdir)

TESTS_ENVIRONMENT = \
    DBUS_BLOCK_ON_ABORT=1 \
    DBUS_FATAL_WARNINGS=1 \
    DBUS_TEST_DAEMON=@abs_top_builddir@/bus/dbus-daemon$(EXEEXT) \
    DBUS_TEST_DATA=@abs_top_builddir@/test/data \
    DBUS_TEST_HOMEDIR=@abs_top_builddir@/dbus \
    $(NULL)

test_corrupt_SOURCES = corrupt.c
test_corrupt_LDADD = $(top_builddir)/dbus/libdbus-1.la \
    $(GLIB_LIBS) \
    $(DBUS_GLIB_LIBS)

test_loopback_SOURCES = loopback.c
test_loopback_LDADD = $(top_builddir)/dbus/libdbus-1.la \
    $(GLIB_LIBS) \
    $(DBUS_GLIB_LIBS)

test_relay_SOURCES = relay.c
test_relay_LDADD = $(top_builddir)/dbus/libdbus-1.la \
    $(GLIB_LIBS) \
    $(DBUS_GLIB_LIBS)

test_dbus_daemon_SOURCES = dbus-daemon.c
test_dbus_daemon_LDADD = $(top_builddir)/dbus/libdbus-1.la \
    $(GLIB_LIBS) \
    $(DBUS_GLIB_LIBS)

```



```

test_dbus_daemon_eavesdrop_SOURCES = dbus-daemon-eavesdrop.c
test_dbus_daemon_eavesdrop_CPPFLAGS = $(GLIB_CFLAGS)
$(DBUS_GLIB_CFLAGS)
test_dbus_daemon_eavesdrop_LDFLAGS = @R_DYNAMIC_LDFLAG@
test_dbus_daemon_eavesdrop_LDADD = $(top_builddir)/dbus/libdbus-1.la \
    $(GLIB_LIBS) \
    $(DBUS_GLIB_LIBS)

test_marshal_SOURCES = marshal.c
test_marshal_LDADD = $(top_builddir)/dbus/libdbus-1.la \
    $(GLIB_LIBS) \
    $(DBUS_GLIB_LIBS)

test_syntax_SOURCES = syntax.c
test_syntax_LDADD = $(top_builddir)/dbus/libdbus-1.la \
    $(GLIB_LIBS)

if DBUS_ENABLE_MODULAR_TESTS
TESTS += $(installable_tests)
installcheck_tests += $(installable_tests)

if DBUS_ENABLE_INSTALLED_TESTS
    testexec_PROGRAMS += $(installable_tests)
else !DBUS_ENABLE_INSTALLED_TESTS
    noinst_PROGRAMS += $(installable_tests)
endif !DBUS_ENABLE_INSTALLED_TESTS

endif DBUS_ENABLE_MODULAR_TESTS

# If we're installing the tests into a DESTDIR we can't run them
# again using the installed copy, because we don't know how to
# do a portable equivalent of setting LD_LIBRARY_PATH.
installcheck-local:
    $(MAKE) check-TESTS TESTS='$$$(installcheck_tests)' \
        TESTS_ENVIRONMENT='$$$(installcheck_environment)'
if DBUS_ENABLE_INSTALLED_TESTS
    test -n "$(DESTDIR)" || \
        $(installcheck_environment) \
            $(srcdir)/dbus-test-runner \
            $(testexecdir) \
            $(testexec_PROGRAMS)
endif DBUS_ENABLE_INSTALLED_TESTS

in_data = \
    data/valid-config-files-system/debug-allow-all-fail.conf.in \
    data/valid-config-files-system/debug-allow-all-pass.conf.in \
    data/valid-config-files/debug-allow-all-sha1.conf.in \
    data/valid-config-files/debug-allow-all.conf.in \
    data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service.in \
    data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service.in \

```

```
data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service.in \
data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service.in \
data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service.in \
data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service.in \
data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service.i
n \
data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service.in \
data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service.in \
data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service.in \
data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service.in \
data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service.in \
data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service.in
\
$(NULL)
```

```
EXTRA_DIST += $(in_data)
```

```
static_data = \
name-test/tmp-session-like-system.conf \
data/auth/anonymous-client-successful.auth-script \
data/auth/anonymous-server-successful.auth-script \
data/auth/cancel.auth-script \
data/auth/client-out-of-mechanisms.auth-script \
data/auth/external-failed.auth-script \
data/auth/external-root.auth-script \
data/auth/external-silly.auth-script \
data/auth/external-successful.auth-script \
data/auth/extra-bytes.auth-script \
data/auth/fail-after-n-attempts.auth-script \
data/auth/fallback.auth-script \
data/auth/invalid-command-client.auth-script \
data/auth/invalid-command.auth-script \
data/auth/invalid-hex-encoding.auth-script \
data/auth/mechanisms.auth-script \
data/equiv-config-files/basic/basic-1.conf \
data/equiv-config-files/basic/basic-2.conf \
data/equiv-config-files/basic/basic.d/basic.conf \
data/equiv-config-files/entities/basic.d/basic.conf \
data/equiv-config-files/entities/entities-1.conf \
data/equiv-config-files/entities/entities-2.conf \
data/incomplete-messages/missing-body.message \
```

```
data/invalid-config-files/badselinux-1.conf \  
data/invalid-config-files/badselinux-2.conf \  
data/invalid-config-files/circular-1.conf \  
data/invalid-config-files/circular-2.conf \  
data/invalid-config-files/circular-3.conf \  
data/invalid-config-files/not-well-formed.conf \  
data/invalid-config-files/truncated-file.conf \  
data/invalid-messages/array-of-nil.message \  
data/invalid-messages/array-with-mixed-types.message \  
data/invalid-messages/bad-boolean-array.message \  
data/invalid-messages/bad-boolean.message \  
data/invalid-messages/bad-endian.message \  
data/invalid-messages/bad-header-field-alignment.message \  
data/invalid-messages/boolean-has-no-value.message-raw \  
data/invalid-messages/local-namespace.message \  
data/invalid-messages/no-dot-in-name.message \  
data/invalid-messages/not-nul-header-padding.message \  
data/invalid-messages/overlong-name.message \  
data/invalid-messages/too-little-header-padding.message \  
data/invalid-messages/too-much-header-padding-by-far.message \  
data/invalid-messages/too-much-header-padding.message \  
data/invalid-messages/too-short-dict.message \  
data/sha-1/Readme.txt \  
data/sha-1/bit-hashes.shal \  
data/sha-1/bit-messages.shal \  
data/sha-1/byte-hashes.shal \  
data/sha-1/byte-messages.shal \  
data/valid-config-files/basic.conf \  
data/valid-config-files/basic.d/basic.conf \  
data/valid-config-files/entities.conf \  
data/valid-config-files/incoming-limit.conf \  
data/valid-config-files/many-rules.conf \  
data/valid-config-files/system.d/test.conf \  
data/valid-messages/array-of-array-of-uint32.message \  
data/valid-messages/dict-simple.message \  
data/valid-messages/dict.message \  
data/valid-messages/emptiness.message \  
data/valid-messages/lots-of-arguments.message \  
data/valid-messages/no-padding.message \  
data/valid-messages/opposite-endian.message \  
data/valid-messages/recursive-types.message \  
data/valid-messages/simplest-manual.message \  
data/valid-messages/simplest.message \  
data/valid-messages/standard-acquire-service.message \  
data/valid-messages/standard-hello.message \  
data/valid-messages/standard-list-services.message \  
data/valid-messages/standard-service-exists.message \  
data/valid-messages/unknown-header-field.message \  
$(NULL)
```

```
EXTRA_DIST += $(static_data)
```

```

## copy tests to builddir so that generated tests and static tests
## are all in one place.
all-local:
    $(AM_V_at)$(MKDIR_P) data/valid-config-files/session.d
    $(AM_V_at)set -e && \
    if test $(srcdir) = . || test $(srcdir) -ef .; then \
        echo '-- No need to copy test data as srcdir = builddir'; \
    else \
        for F in $(static_data); do \
            $(MKDIR_P) $$F; \
            rm -f $$F; \
            cp $(srcdir)/$$F $$F; \
        done; \
    fi

## this doesn't clean most copied test data files when srcdir=builddir
clean-local:
    $(AM_V_at)if test $(srcdir) = . || test $(srcdir) -ef .; then \
        echo '-- No need to clean test data as srcdir = builddir'; \
    \
    else \
        rm -f $(static_data); \
    fi

imported_data = \
    data/valid-config-files/session.conf \
    data/valid-config-files/system.conf \
    $(NULL)

noinst_DATA = $(imported_data)
CLEANFILES = $(noinst_DATA)

data/valid-config-files/session.conf: $(top_builddir)/bus/session.conf
    $(AM_V_at)$(MKDIR_P) data/valid-config-files
    $(AM_V_GEN)cp $< $@

data/valid-config-files/system.conf: $(top_builddir)/bus/system.conf
    $(AM_V_at)$(MKDIR_P) data/valid-config-files
    $(AM_V_GEN)cp $< $@

File = Makefile.am.~6~

# Everything in this directory is statically-linked to libdbus-
internal
AM_CPPFLAGS = \
    -I$(top_srcdir) \
    -DDBUS_COMPILATION \
    -DDBUS_STATIC_BUILD \
    $(NULL)

```

```

# if assertions are enabled, improve backtraces
AM_LDFLAGS = @R_DYNAMIC_LDFLAG@

## note that TESTS has special meaning (stuff to use in make check)
## so if adding tests not to be run in make check, don't add them to
## TESTS
if DBUS_BUILD_TESTS
TESTS_ENVIRONMENT=DBUS_TOP_BUILDDIR=@abs_top_builddir@
DBUS_TOP_SRCDIR=@abs_top_srcdir@ PYTHON=@PYTHON@
TESTS=run-test.sh run-test-systemserver.sh
else
TESTS=
endif

EXTRA_DIST=run-test.sh run-test-systemserver.sh test-wait-for-echo.py
test-activation-forking.py

if DBUS_BUILD_TESTS

## we use noinst_PROGRAMS not check_PROGRAMS for TESTS so that we
## build even when not doing "make check"
noinst_PROGRAMS=test-pending-call-dispatch test-pending-call-timeout
test-threads-init test-ids test-shutdown test-privserver test-
privserver-client test-autolaunch

test_pending_call_dispatch_LDADD=$(top_builddir)/dbus/libdbus-
internal.la
test_pending_call_timeout_LDADD=$(top_builddir)/dbus/libdbus-
internal.la
test_threads_init_LDADD=$(top_builddir)/dbus/libdbus-internal.la
test_ids_LDADD=$(top_builddir)/dbus/libdbus-internal.la

test_shutdown_LDADD=../libdbus-testutils.la
test_privserver_LDADD=../libdbus-testutils.la
test_privserver_client_LDADD=../libdbus-testutils.la
test_autolaunch_LDADD=../libdbus-testutils.la

endif

File = Makefile.am.~7~

configdir=$(sysconfdir)/dbus-1

AM_CPPFLAGS = \
  -I$(top_srcdir) \
  $(DBUS_STATIC_BUILD_CPPFLAGS) \
  $(DBUS_X_CFLAGS) \
  -DDBUS_COMPILATION \
  -DDBUS_MACHINE_UUID_FILE=\"\"$(localstatedir)/lib/dbus/machine-
id\"" \

```

```

$(NULL)

# if assertions are enabled, improve backtraces
AM_LDFLAGS = @R_DYNAMIC_LDFLAG@

bin_PROGRAMS = \
    dbus-launch \
    dbus-monitor \
    dbus-send \
    $(NULL)

if DBUS_UNIX
bin_PROGRAMS += \
    dbus-cleanup-sockets \
    dbus-uuidgen \
    $(NULL)
endif

dbus_send_SOURCES= \
    dbus-print-message.c \
    dbus-print-message.h \
    dbus-send.c

dbus_monitor_SOURCES= \
    dbus-monitor.c \
    dbus-print-message.c \
    dbus-print-message.h

if DBUS_WIN
dbus_launch_SOURCES= \
    dbus-launch-win.c \
    dbus-launch.h
else
dbus_launch_SOURCES= \
    dbus-launch.c \
    dbus-launch-x11.c \
    dbus-launch.h
endif

dbus_cleanup_sockets_SOURCES= \
    dbus-cleanup-sockets.c

dbus_uuidgen_SOURCES= \
    dbus-uuidgen.c

dbus_send_LDADD = \
    $(top_builddir)/dbus/libdbus-1.la \
    $(NULL)

dbus_monitor_LDADD = \
    $(top_builddir)/dbus/libdbus-1.la \
    $(NETWORK_libs) \

```

```

$(NULL)

dbus_uidgen_LDADD = \
    $(top_builddir)/dbus/libdbus-1.1a \
    $(NULL)

dbus_launch_LDADD = \
    $(DBUS_X_LIBS) \
    $(NULL)

EXTRA_DIST = run-with-tmp-session-bus.sh strtoll.c strtoull.c
CLEANFILES = \
    run-with-tmp-session-bus.conf

# create the /var/lib/dbus directory for dbus-uuidgen
install-data-local:
    $(MKDIR_P) $(DESTDIR)$localstatedir/lib/dbus

installcheck-local:
    test -d $(DESTDIR)$localstatedir/lib/dbus

File = Makefile.am.~8~

SUBDIRS = . statemachine

INCLUDES = \
    -I$(top_srcdir) \
    -I$(top_builddir) \
    -I$(top_builddir)/dbus \
    $(DBUS_CFLAGS) \
    $(DBUS_GLIB_CFLAGS) \
    -DDBUS_COMPILATION

LDADD = \
    $(DBUS_GLIB_LIBS) \
    $(top_builddir)/dbus/libdbus-glib-1.1a

## Makefile.am bits for sample client/server pair

noinst_PROGRAMS= example-client example-service

example_client_SOURCES= example-client.c

example_service_SOURCES= example-service.c

BUILT_SOURCES = example-service-glue.h

example-service-glue.h: example-service.xml

```

```

        $(LIBTOOL) --mode=execute $(DBUS_BINDING_TOOL) --
prefix=some_object --mode=glib-server --output=example-service-glue.h
$(srcdir)/example-service.xml

## Makefile.am bits for another client/server pair

noinst_PROGRAMS += example-signal-recipient example-signal-emitter
example_signal_recipient_SOURCES= example-signal-recipient.c
example_signal_emitter_SOURCES= example-signal-emitter.c

BUILT_SOURCES += example-signal-emitter-glue.h

example-signal-emitter-glue.h: example-signal-emitter.xml
    $(LIBTOOL) --mode=execute $(DBUS_BINDING_TOOL) --
prefix=test_object --mode=glib-server --output=example-signal-emitter-
glue.h $(srcdir)/example-signal-emitter.xml

CLEANFILES = $(BUILT_SOURCES)

EXTRA_DIST = example-service.xml example-signal-emitter.xml

File = Makefile.am.~9~

INCLUDES = \
    -I$(top_srcdir) \
    -I$(top_builddir) \
    -I$(top_builddir)/dbus \
    $(DBUS_CFLAGS) \
    $(DBUS_GLIB_CFLAGS) \
    $(DBUS_GTK_THREADS_CFLAGS) \
    -DDBUS_COMPILATION

LDADD = $(top_builddir)/dbus/libdbus-glib-1.1a \
    $(DBUS_GLIB_LIBS)

## Makefile.am bits for sample client/server pair

noinst_PROGRAMS= statemachine-server

#if HAVE_GTK
#noinst_PROGRAMS += statemachine-client
#endif

EXTRA_DIST = statemachine.h statemachine-server.h sm-marshal.list
statemachine-server.xml statemachine.xml

```



```

statemachine_server_SOURCES= statemachine-server.c sm-marshal.c
statemachine.c

#statemachine_client_SOURCES= statemachine-client.c sm-marshal.c
statemachine.h
#statemachine_client_LDADD= $(LDADD) $(DBUS_GTK_THREADS_LIBS)

BUILT_SOURCES = statemachine-server-glue.h statemachine-glue.h

statemachine-server-glue.h: statemachine-server.xml
    $(LIBTOOL) --mode=execute $(DBUS_BINDING_TOOL) --prefix=sm_server
--mode=glib-server --output=$@ $<

statemachine-glue.h: statemachine.xml
    $(LIBTOOL) --mode=execute $(DBUS_BINDING_TOOL) --prefix=sm_object
--mode=glib-server --output=$@ $<

sm-marshal.c: Makefile sm-marshal.list
    echo "#include <config.h>" > $@.tmp
    @GLIB_GENMARSHAL@ --prefix=sm_marshal $(srcdir)/sm-marshal.list -
-header --body >> $@.tmp
    mv $@.tmp $@

sm-marshal.h: Makefile sm-marshal.list
    @GLIB_GENMARSHAL@ --prefix=sm_marshal $(srcdir)/sm-marshal.list -
-header > $@.tmp && mv $@.tmp $@

BUILT_SOURCES += sm-marshal.c sm-marshal.h

CLEANFILES = $(BUILT_SOURCES)

```

File = many-rules.conf

```

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <user>mybususer</user>
  <listen>unix:path=/foo/bar</listen>
  <listen>tcp:port=1234</listen>
  <includedir>basic.d</includedir>
  <standard_session_servicedirs />
  <servicedir>/usr/share/foo</servicedir>
  <include ignore_missing="yes">nonexistent.conf</include>
  <policy context="default">
    <allow user="*" />
    <deny send_interface="org.freedesktop.System"
send_member="Reboot" />
    <deny receive_interface="org.freedesktop.System"
receive_member="Reboot" />
  </policy>
</busconfig>

```

```
    <deny send_path="/foo/bar/SystemObjectThing"
send_member="Reboot"/>
    <deny own="org.freedesktop.System"/>
    <deny own_prefix="org.freedesktop.ManySystems"/>
    <deny send_destination="org.freedesktop.System"/>
    <deny receive_sender="org.freedesktop.System"/>
    <deny user="root"/>
    <deny group="bin"/>
    <allow send_type="error"/>
    <allow send_type="method_call"/>
    <allow send_type="method_return"/>
    <allow send_type="signal"/>
    <deny send_destination="org.freedesktop.Bar"
send_interface="org.freedesktop.Foo"/>
    <deny send_destination="org.freedesktop.Bar"
send_interface="org.freedesktop.Foo" send_type="method_call"/>
</policy>
```

```
<policy context="mandatory">
    <allow user="*" />
    <deny send_interface="org.freedesktop.System"
send_member="Reboot"/>
    <deny receive_interface="org.freedesktop.System"
receive_member="Reboot"/>
    <deny send_path="/foo/bar/SystemObjectThing"
send_member="Reboot"/>
    <deny own="org.freedesktop.System"/>
    <deny own_prefix="org.freedesktop.ManySystems"/>
    <deny send_destination="org.freedesktop.System"/>
    <deny receive_sender="org.freedesktop.System"/>
    <deny user="root"/>
    <deny group="bin"/>
    <allow send_type="error"/>
    <allow send_type="method_call"/>
    <allow send_type="method_return"/>
    <allow send_type="signal"/>
    <deny send_destination="org.freedesktop.Bar"
send_interface="org.freedesktop.Foo"/>
    <deny send_destination="org.freedesktop.Bar"
send_interface="org.freedesktop.Foo" send_type="method_call"/>
</policy>
```

```
<limit name="max_incoming_bytes">5000</limit>
<limit name="max_outgoing_bytes">5000</limit>
<limit name="max_message_size">300</limit>
<limit name="service_start_timeout">5000</limit>
<limit name="auth_timeout">6000</limit>
<limit name="max_completed_connections">50</limit>
<limit name="max_incomplete_connections">80</limit>
<limit name="max_connections_per_user">64</limit>
<limit name="max_pending_service_starts">64</limit>
<limit name="max_names_per_connection">256</limit>
```

```
<limit name="max_match_rules_per_connection">512</limit>

</busconfig>

File = mechanisms.auth-script

## this tests that the server sends a list of mechanisms
## in response to blank AUTH

SERVER
SEND AUTH
EXPECT_COMMAND REJECTED
EXPECT_STATE WAITING_FOR_INPUT

File = messagebus

#!/bin/sh
#
# messagebus: The D-BUS systemwide message bus
#
# chkconfig: 345 22 85
# description: This is a daemon which broadcasts notifications of
system events \
# and other messages. See
http://www.freedesktop.org/software/dbus/
#
# processname: dbus-daemon
# pidfile: /var/run/dbus/pid
#
### BEGIN INIT INFO
# Provides: messagebus
# Required-Start: $syslog $local_fs
# Required-Stop: $syslog $local_fs
# Default-Start: 2 3 4 5
# Default-Stop: 0 1 6
# Short-Description: The D-Bus systemwide message bus
# Description: This is a daemon which broadcasts notifications of
system
# events and other messages. See
http://www.freedesktop.org/software/dbus
### END INIT INFO

# Sanity checks.
[ -x /usr/bin/dbus-daemon ] || exit 0

# Source function library.
. /etc/rc.d/init.d/functions
```

```

# so we can rearrange this easily
processname=dbus-daemon
servicename=messagebus

RETVAL=0

start() {
    echo -n $"Starting system message bus: "
    if [ -x /usr/bin/dbus-uuidgen ] ; then
        /usr/bin/dbus-uuidgen --ensure
    fi

    daemon --check $servicename $processname --system
    RETVAL=$?
    echo
    [ $RETVAL -eq 0 ] && touch /var/lock/subsys/$servicename
}

stop() {
    echo -n $"Stopping system message bus: "

    ## we don't want to kill all the per-user $processname, we want
    ## to use the pid file *only*; because we use the fake nonexistent
    ## program name "$servicename" that should be safe-ish
    killproc $servicename -TERM
    RETVAL=$?
    echo
    if [ $RETVAL -eq 0 ]; then
        rm -f /var/lock/subsys/$servicename
        rm -f /var/run/dbus/pid
    fi
}

# See how we were called.
case "$1" in
    start)
        start
        ;;
    stop)
        stop
        ;;
    status)
        status $servicename
        RETVAL=$?
        ;;
    restart)
        stop
        start
        ;;
    condrestart)
        if [ -f /var/lock/subsys/$servicename ]; then

```

```

        stop
        start
    fi
    ;;
reload)
    echo "Message bus can't reload its configuration, you have to
restart it"
    RETVAL=$?
    ;;
*)
    echo $"Usage: $0
{start|stop|status|restart|condrestart|reload}"
    ;;
esac
exit $RETVAL

```

File = messagebus-config

```

#!/bin/sh
#
# messagebus-config, Copyright 2009 Yaakov Selkowitz
#
# This file is part of the Cygwin port of dbus.
#
=====
# Initialization
#
=====
PROGRAMNAME=$(basename $0)
_tdir=$(dirname $0)
PROGDIR=$(cd $_tdir && pwd)

CSIH_SCRIPT=/usr/share/csih/cygwin-service-installation-helper.sh

# Subdirectory where the new package is being installed
PREFIX=/usr

# Directory where the config files are stored
SYSCONFDIR=/etc/dbus-1
DEVDIR=/dev
LOGDIR=/var/log
RUNDIR=$(dirname /var/run/dbus/pid)
SOCKDIR=$(dirname /var/run/dbus/system_bus_socket)

source ${CSIH_SCRIPT}

#
=====
# Routine: install_service

```

```

# Install messagebus as a service
#
=====
install_service() {

    if csih_is_nt
    then

        # Check if messagebus is installed and remove on user request.
        if cygrunsrv -Q messagebus > /dev/null 2>&1
        then
            csih_warning "The messagebus service is already installed."
            echo
            if csih_request "Do you want to reinstall it with different
args?"
            then
                cygrunsrv -E messagebus
                cygrunsrv -R messagebus
            fi
        fi

        # Install messagebus service if it is not already installed
        if ! cygrunsrv -Q messagebus > /dev/null 2>&1
        then
            echo
            csih_warning "The following function requires administrator
privileges!"
            if csih_request "Do you want to install messagebus as service?"
            then
                if cygrunsrv -I messagebus -d "CYGWIN D-Bus system service" -p
/usr/bin/dbus-daemon -a "--nofork --system"
                then
                    echo
                    csih_inform "The messagebus service has been installed under
the LocalSystem"
                    csih_inform "account (also known as SYSTEM). To start the
service now, call"
                    csih_inform "\`net start messagebus' or \`cygrunsrv -S
messagebus'. Otherwise, it"
                    csih_inform "will start automatically after the next
reboot."
                    echo
                    csih_inform "Check ${SYSCONFDIR}/system.conf first, if it suits
your needs."
                fi
            fi # user allowed us to install messagebus
        fi # messagebus already installed
    fi # csih_is_nt
} # --- End of install_service --- #

```

```

#
=====
# Main Entry Point
#
=====

# Check how the script has been started.  If
# (1) it has been started by giving the full path and
# that path is /etc/postinstall, OR
# (2) Otherwise, if the environment variable
# CONFIG_AUTO_ANSWER_NO is set
# then set auto_answer to "no".  This allows automatic
# creation of the config files in /etc w/o overwriting
# them if they already exist.  In both cases, color
# escape sequences are suppressed, so as to prevent
# cluttering setup's logfiles.
if [ "$PROGDIR" = "/etc/postinstall" ]
then
    csih_auto_answer="no"
    csih_disable_color
fi
if [ -n "${CONFIG_AUTO_ANSWER_NO}" ]
then
    csih_auto_answer="no"
    csih_disable_color
fi

#
=====
# Parse options
#
=====
while :
do
    case $# in
    0)
        break
        ;;
    esac

    option=$1
    shift

    case "$option" in
    -d | --debug )
        set -x
        csih_trace_on
        ;;

    -y | --yes )

```

```

    csih_auto_answer=yes
    ;;

-n | --no )
    csih_auto_answer=no
    ;;

*)
    echo "usage: ${PROGNAME} [OPTION]..."
    echo
    echo "This script creates a basic messagebus configuration."
    echo
    echo "Options:"
    echo "    --debug  -d    Enable shell's debug output."
    echo "    --yes    -y    Answer all questions with \"yes\"
automatically."
    echo "    --no     -n    Answer all questions with \"no\"
automatically."
    echo
    exit 1
    ;;

esac
done

#
=====
# Action!
#
=====

# Check for ${SYSCONFDIR} directory
csih_make_dir "${SYSCONFDIR}" "Cannot create global configuration
files."
chmod 775 "${SYSCONFDIR}"
setfacl -m u:system:rwx "${SYSCONFDIR}"

# Check for ${DEVDIR} directory
csih_make_dir "${DEVDIR}" "Syslogging using messagebus will not work."
chmod 775 "${DEVDIR}"
setfacl -m u:system:rwx "${DEVDIR}"

# Check for ${LOGDIR} directory
csih_make_dir "${LOGDIR}" "Syslogging using messagebus will not work."
chmod 775 "${LOGDIR}"
setfacl -m u:system:rwx "${LOGDIR}"

# Check for ${RUNDIR} directory
csih_make_dir "${RUNDIR}" "PID files of running processes will not be
created."
chmod 775 "${RUNDIR}"
setfacl -m u:system:rwx "${RUNDIR}"

```



```
# Check for ${SOCKDIR} directory
csih_make_dir "${SOCKDIR}" "SOCKET files of running processes will not
be created."
chmod 775 "${SOCKDIR}"
setfacl -m u:system:rwX "${SOCKDIR}"
```

```
# maybe: csih_auto_answer=no will skip,
# interactive user will get a chance to override
install_service
```

```
echo
echo "Configuration finished. Have fun!"
```

```
File = messagebus-config.in
```

```
#!/bin/sh
#
# messagebus-config, Copyright 2009 Yaakov Selkowitz
#
# This file is part of the Cygwin port of dbus.
```

```
#
=====
# Initialization
#
=====
PROGRAMNAME=$(basename $0)
_tdir=$(dirname $0)
PROGDIR=$(cd $_tdir && pwd)
```

```
CSIH_SCRIPT=/usr/share/csih/cygwin-service-installation-helper.sh
```

```
# Subdirectory where the new package is being installed
PREFIX=@prefix@
```

```
# Directory where the config files are stored
SYSCONFDIR=@sysconfdir@/dbus-1
DEVDIR=/dev
LOGDIR=/var/log
RUNDIR=$(dirname @DBUS_SYSTEM_PID_FILE@)
SOCKDIR=$(dirname @DBUS_SYSTEM_SOCKET@)
```

```
source ${CSIH_SCRIPT}
```

```
#
=====
# Routine: install_service
#   Install messagebus as a service
```

```

#
=====
install_service() {

    if csih_is_nt
    then

        # Check if messagebus is installed and remove on user request.
        if cygrunsrv -Q messagebus > /dev/null 2>&1
        then
            csih_warning "The messagebus service is already installed."
            echo
            if csih_request "Do you want to reinstall it with different
args?"
            then
                cygrunsrv -E messagebus
                cygrunsrv -R messagebus
            fi
        fi

        # Install messagebus service if it is not already installed
        if ! cygrunsrv -Q messagebus > /dev/null 2>&1
        then
            echo
            csih_warning "The following function requires administrator
privileges!"
            if csih_request "Do you want to install messagebus as service?"
            then
                if cygrunsrv -I messagebus -d "CYGWIN D-Bus system service" -p
@EXPANDED_BINDIR@/dbus-daemon -a "--nofork --system"
                then
                    echo
                    csih_inform "The messagebus service has been installed under
the LocalSystem"
                    csih_inform "account (also known as SYSTEM). To start the
service now, call"
                    csih_inform "\`net start messagebus' or \`cygrunsrv -S
messagebus'. Otherwise, it"
                    csih_inform "will start automatically after the next
reboot."
                    echo
                    csih_inform "Check ${SYSCONFDIR}/system.conf first, if it suits
your needs."
                fi
            fi # user allowed us to install messagebus
        fi # messagebus already installed
    fi # csih_is_nt
} # --- End of install_service --- #

```

```

#
=====

```

```

# Main Entry Point
#
=====

# Check how the script has been started.  If
# (1) it has been started by giving the full path and
# that path is /etc/postinstall, OR
# (2) Otherwise, if the environment variable
# CONFIG_AUTO_ANSWER_NO is set
# then set auto_answer to "no".  This allows automatic
# creation of the config files in /etc w/o overwriting
# them if they already exist.  In both cases, color
# escape sequences are suppressed, so as to prevent
# cluttering setup's logfiles.
if [ "$PROGDIR" = "/etc/postinstall" ]
then
    csih_auto_answer="no"
    csih_disable_color
fi
if [ -n "${CONFIG_AUTO_ANSWER_NO}" ]
then
    csih_auto_answer="no"
    csih_disable_color
fi

#
=====

# Parse options
#
=====

while :
do
    case $# in
    0)
        break
        ;;
    esac

    option=$1
    shift

    case "$option" in
    -d | --debug )
        set -x
        csih_trace_on
        ;;

    -y | --yes )
        csih_auto_answer=yes
        ;;
    )
    esac
done

```

```

-n | --no )
    csih_auto_answer=no
    ;;

*)
    echo "usage: ${PROGNAME} [OPTION]..."
    echo
    echo "This script creates a basic messagebus configuration."
    echo
    echo "Options:"
    echo "    --debug  -d      Enable shell's debug output."
    echo "    --yes    -y      Answer all questions with \"yes\"
automatically."
    echo "    --no     -n      Answer all questions with \"no\"
automatically."
    echo
    exit 1
    ;;

    esac
done

#
=====
# Action!
#
=====

# Check for ${SYSCONFDIR} directory
csih_make_dir "${SYSCONFDIR}" "Cannot create global configuration
files."
chmod 775 "${SYSCONFDIR}"
setfacl -m u:system:rwx "${SYSCONFDIR}"

# Check for ${DEVDIR} directory
csih_make_dir "${DEVDIR}" "Syslogging using messagebus will not work."
chmod 775 "${DEVDIR}"
setfacl -m u:system:rwx "${DEVDIR}"

# Check for ${LOGDIR} directory
csih_make_dir "${LOGDIR}" "Syslogging using messagebus will not work."
chmod 775 "${LOGDIR}"
setfacl -m u:system:rwx "${LOGDIR}"

# Check for ${RUNDIR} directory
csih_make_dir "${RUNDIR}" "PID files of running processes will not be
created."
chmod 775 "${RUNDIR}"
setfacl -m u:system:rwx "${RUNDIR}"

# Check for ${SOCKDIR} directory

```

```
csih_make_dir "${SOCKDIR}" "SOCKET files of running processes will not
be created."
chmod 775 "${SOCKDIR}"
setfacl -m u:system:rwx "${SOCKDIR}"

# maybe: csih_auto_answer=no will skip,
# interactive user will get a chance to override
install_service

echo
echo "Configuration finished. Have fun!"
```

```
File = messagebus.in
```

```
#!/bin/sh
#
# messagebus: The D-BUS systemwide message bus
#
# chkconfig: 345 22 85
# description: This is a daemon which broadcasts notifications of
system events \
# and other messages. See
http://www.freedesktop.org/software/dbus/
#
# processname: dbus-daemon
# pidfile: @DBUS_SYSTEM_PID_FILE@
#
### BEGIN INIT INFO
# Provides: messagebus
# Required-Start: $syslog $local_fs
# Required-Stop: $syslog $local_fs
# Default-Start: 2 3 4 5
# Default-Stop: 0 1 6
# Short-Description: The D-Bus systemwide message bus
# Description: This is a daemon which broadcasts notifications of
system
# events and other messages. See
http://www.freedesktop.org/software/dbus
### END INIT INFO

# Sanity checks.
[ -x @EXPANDED_BINDIR@/dbus-daemon ] || exit 0

# Source function library.
. @EXPANDED_SYSCONFDIR@/rc.d/init.d/functions

# so we can rearrange this easily
processname=dbus-daemon
servicename=messagebus
```

```

RETVAL=0

start() {
    echo -n "Starting system message bus: "
    if [ -x @EXPANDED_BINDIR@/dbus-uuidgen ] ; then
        @EXPANDED_BINDIR@/dbus-uuidgen --ensure
    fi

    daemon --check $servicename $processname --system
    RETVAL=$?
    echo
    [ $RETVAL -eq 0 ] && touch
@EXPANDED_LOCALSTATEDIR@/lock/subsys/$servicename
}

stop() {
    echo -n "Stopping system message bus: "

    ## we don't want to kill all the per-user $processname, we want
    ## to use the pid file *only*; because we use the fake nonexistent
    ## program name "$servicename" that should be safe-ish
    killproc $servicename -TERM
    RETVAL=$?
    echo
    if [ $RETVAL -eq 0 ]; then
        rm -f @EXPANDED_LOCALSTATEDIR@/lock/subsys/$servicename
        rm -f @DBUS_SYSTEM_PID_FILE@
    fi
}

# See how we were called.
case "$1" in
    start)
        start
        ;;
    stop)
        stop
        ;;
    status)
        status $servicename
        RETVAL=$?
        ;;
    restart)
        stop
        start
        ;;
    condrestart)
        if [ -f @EXPANDED_LOCALSTATEDIR@/lock/subsys/$servicename ];
then
            stop
            start

```

```
        fi
        ;;
    reload)
        echo "Message bus can't reload its configuration, you have to
restart it"
        RETVAL=$?
        ;;
    *)
        echo $"Usage: $0
{start|stop|status|restart|condrestart|reload}"
        ;;
esac
exit $RETVAL
```

File = missing

```
#!/bin/sh
# Common stub for a few missing GNU programs while installing.

scriptversion=2012-01-06.18; # UTC

# Copyright (C) 1996-2012 Free Software Foundation, Inc.
# Originally by Fran,cois Pinard <pinard@iro.umontreal.ca>, 1996.

# This program is free software; you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation; either version 2, or (at your option)
# any later version.

# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
# GNU General Public License for more details.

# You should have received a copy of the GNU General Public License
# along with this program. If not, see
<http://www.gnu.org/licenses/>.

# As a special exception to the GNU General Public License, if you
# distribute this file as part of a program that contains a
# configuration script generated by Autoconf, you may include it under
# the same distribution terms that you use for the rest of that
program.

if test $# -eq 0; then
    echo 1>&2 "Try '$0 --help' for more information"
    exit 1
fi

run=:
```

```

sed_output='s/. * --output[ =]\([^ ]*\).*/\1/p'
sed_minuso='s/. * -o \([^ ]*\).*/\1/p'

# In the cases where this matters, 'missing' is being run in the
# srcdir already.
if test -f configure.ac; then
    configure_ac=configure.ac
else
    configure_ac=configure.in
fi

msg="missing on your system"

case $1 in
--run)
    # Try to run requested program, and just exit if it succeeds.
    run=
    shift
    "$@" && exit 0
    # Exit code 63 means version mismatch. This often happens
    # when the user try to use an ancient version of a tool on
    # a file that requires a minimum version. In this case we
    # we should proceed has if the program had been absent, or
    # if --run hadn't been passed.
    if test $? = 63; then
        run=:
        msg="probably too old"
    fi
    ;;

-h|--h|--he|--hel|--help)
    echo "\
$0 [OPTION]... PROGRAM [ARGUMENT]...

Handle 'PROGRAM [ARGUMENT]...' for when PROGRAM is missing, or return
an
error status if there is no known handling for PROGRAM.

Options:
  -h, --help          display this help and exit
  -v, --version       output version information and exit
  --run               try to run the given command, and emulate it if it
fails

Supported PROGRAM values:
  aclocal             touch file 'aclocal.m4'
  autoconf            touch file 'configure'
  autoheader          touch file 'config.h.in'
  autom4te            touch the output file, or create a stub one
  automake            touch all 'Makefile.in' files
  bison               create 'y.tab.[ch]', if possible, from existing .[ch]
  flex                create 'lex.yy.c', if possible, from existing .c

```



```
help2man    touch the output file
lex         create 'lex.yy.c', if possible, from existing .c
makeinfo   touch the output file
yacc       create 'y.tab.[ch]', if possible, from existing .[ch]
```

Version suffixes to PROGRAM as well as the prefixes 'gnu-', 'gnu', and 'g' are ignored when checking the name.

Send bug reports to <bug-automake@gnu.org>."

```
exit $?
;;
```

```
-v|--v|--ve|--ver|--vers|--versi|--versio|--version)
  echo "missing $scriptversion (GNU Automake)"
  exit $?
;;
```

```
*)
  echo 1>&2 "$0: Unknown '$1' option"
  echo 1>&2 "Try '$0 --help' for more information"
  exit 1
;;
```

esac

```
# normalize program name to check for.
program=`echo "$1" | sed '
s/^gnu-//; t
s/^gnu//; t
s/^g//; t'`
```

```
# Now exit if we have it, but it failed. Also exit now if we
# don't have it and --version was passed (most likely to detect
# the program). This is about non-GNU programs, so use $1 not
# $program.
```

```
case $1 in
```

```
lex*|yacc*)
  # Not GNU programs, they don't have --version.
  ;;
```

```
*)
  if test -z "$run" && ($1 --version) > /dev/null 2>&1; then
    # We have it, but it failed.
    exit 1
  elif test "x$2" = "x--version" || test "x$2" = "x--help"; then
    # Could not run --version or --help. This is probably someone
    # running '$TOOL --version' or '$TOOL --help' to check whether
    # $TOOL exists and not knowing $TOOL uses missing.
    exit 1
  fi
  ;;
```

esac

```

# If it does not exist, or fails to run (possibly an outdated
version),
# try to emulate it.
case $program in
  aclocal*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified 'acinclude.m4' or '${configure_ac}'. You might
want
to install the Automake and Perl packages. Grab them from
any GNU archive site."
    touch aclocal.m4
    ;;

  autoconf*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified '${configure_ac}'. You might want to install
the
Autoconf and GNU m4 packages. Grab them from any GNU
archive site."
    touch configure
    ;;

  autoheader*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified 'acconfig.h' or '${configure_ac}'. You might
want
to install the Autoconf and GNU m4 packages. Grab them
from any GNU archive site."
    files=`sed -n 's/^[ ]*A[CM]_CONFIG_HEADER(\([^)]*\)).*/\1/p'
${configure_ac}`
    test -z "$files" && files="config.h"
    touch_files=
    for f in $files; do
      case $f in
        *:*) touch_files="$touch_files "`echo "$f" |
          sed -e 's/^[^:]*:/' -e 's/:.*//'`;
        *) touch_files="$touch_files $f.in";
      esac
    done
    touch $touch_files
    ;;

  automake*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified 'Makefile.am', 'acinclude.m4' or
'${configure_ac}'.
You might want to install the Automake and Perl packages.

```

```

        Grab them from any GNU archive site."
find . -type f -name Makefile.am -print |
    sed 's/\.am$/\.in/' |
    while read f; do touch "$f"; done
;;

autom4te*)
    echo 1>&2 "\
WARNING: '$1' is needed, but is $msg.
    You might have modified some files without having the
    proper tools for further handling them.
    You can get '$1' as part of Autoconf from any GNU
    archive site."

file=`echo "$*" | sed -n "$sed_output"`
test -z "$file" && file=`echo "$*" | sed -n "$sed_minuso"`
if test -f "$file"; then
    touch $file
else
    test -z "$file" || exec >$file
    echo "#! /bin/sh"
    echo "# Created by GNU Automake missing as a replacement of"
    echo "# $ $@"
    echo "exit 0"
    chmod +x $file
    exit 1
fi
;;

bison*|yacc*)
    echo 1>&2 "\
WARNING: '$1' $msg. You should only need it if
    you modified a '.y' file. You may need the Bison package
    in order for those modifications to take effect. You can get
    Bison from any GNU archive site."
rm -f y.tab.c y.tab.h
if test $# -ne 1; then
    eval LASTARG=\${$#}
    case $LASTARG in
        *.y)
            SRCFILE=`echo "$LASTARG" | sed 's/y$/c/'`
            if test -f "$SRCFILE"; then
                cp "$SRCFILE" y.tab.c
            fi
            SRCFILE=`echo "$LASTARG" | sed 's/y$/h/'`
            if test -f "$SRCFILE"; then
                cp "$SRCFILE" y.tab.h
            fi
        ;;
    esac
fi
if test ! -f y.tab.h; then

```

```

    echo >y.tab.h
fi
if test ! -f y.tab.c; then
    echo 'main() { return 0; }' >y.tab.c
fi
;;

lex*|flex*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
    you modified a '.l' file. You may need the Flex package
    in order for those modifications to take effect. You can get
    Flex from any GNU archive site."
    rm -f lex.yy.c
    if test $# -ne 1; then
        eval LASTARG=\${$#}
        case $LASTARG in
            *.l)
                SRCFILE=`echo "$LASTARG" | sed 's/l$/c/'`
                if test -f "$SRCFILE"; then
                    cp "$SRCFILE" lex.yy.c
                fi
            ;;
        esac
    fi
    if test ! -f lex.yy.c; then
        echo 'main() { return 0; }' >lex.yy.c
    fi
    ;;

help2man*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
    you modified a dependency of a manual page. You may need the
    Help2man package in order for those modifications to take
    effect. You can get Help2man from any GNU archive site."

    file=`echo "$*" | sed -n "$sed_output"`
    test -z "$file" && file=`echo "$*" | sed -n "$sed_minuso"`
    if test -f "$file"; then
        touch $file
    else
        test -z "$file" || exec >$file
        echo ".ab help2man is required to generate this page"
        exit $?
    fi
    ;;

makeinfo*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
    you modified a '.texi' or '.texinfo' file, or any other file

```

```

indirectly affecting the aspect of the manual. The spurious
call might also be the consequence of using a buggy 'make'
(AIX,
DU, IRIX). You might want to install the Texinfo package or
the GNU make package. Grab either from any GNU archive
site."
# The file to touch is that specified with -o ...
file=`echo "$*" | sed -n "$sed_output"`
test -z "$file" && file=`echo "$*" | sed -n "$sed_minuso"`
if test -z "$file"; then
# ... or it is the one specified with @setfilename ...
infile=`echo "$*" | sed 's/. * \([^ ]*\) *$/\1/'`
file=`sed -n '
/^@setfilename/{
s/. * \([^ ]*\) *$/\1/
p
q
}' $infile`
# ... or it is derived from the source name (dir/f.texi becomes
f.info)
test -z "$file" && file=`echo "$infile" | sed
's,.*/,,,;s,.[^,]*$,,,'`.info
fi
# If the file does not exist, the user really needs makeinfo;
# let's fail without touching anything.
test -f $file || exit 1
touch $file
;;

*)
echo 1>&2 "\
WARNING: '$1' is needed, and is $msg.
You might have modified some files without having the
proper tools for further handling them. Check the 'README'
file,
it often tells you about the needed prerequisites for
installing
this package. You may also peek at any GNU archive site, in
case
some other package would contain this missing '$1' program."
exit 1
;;
esac

exit 0

# Local variables:
# eval: (add-hook 'write-file-hooks 'time-stamp)
# time-stamp-start: "scriptversion="
# time-stamp-format: "%:y-%02m-%02d.%02H"
# time-stamp-time-zone: "UTC"
# time-stamp-end: "; # UTC"

```

```
# End:
```

```
File = missing-body.message
```

```
## message that's missing an expected body
```

```
VALID_HEADER method_call  
HEADER_FIELD INTERFACE  
TYPE STRING  
STRING 'org.freedesktop.Foo'  
HEADER_FIELD MEMBER  
TYPE STRING  
STRING 'Bar'  
ALIGN 8  
END_LENGTH Header
```

```
## create the body, then chop it off
```

```
START_LENGTH Body  
TYPE INT32  
INT32 37  
END_LENGTH Body
```

```
CHOP 8
```

```
File = missing.~1~
```

```
#!/bin/sh
```

```
# Common stub for a few missing GNU programs while installing.
```

```
scriptversion=2012-01-06.18; # UTC
```

```
# Copyright (C) 1996-2012 Free Software Foundation, Inc.
```

```
# Originally by Fran,cois Pinard <pinard@iro.umontreal.ca>, 1996.
```

```
# This program is free software; you can redistribute it and/or modify  
# it under the terms of the GNU General Public License as published by  
# the Free Software Foundation; either version 2, or (at your option)  
# any later version.
```

```
# This program is distributed in the hope that it will be useful,  
# but WITHOUT ANY WARRANTY; without even the implied warranty of  
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the  
# GNU General Public License for more details.
```

```
# You should have received a copy of the GNU General Public License  
# along with this program. If not, see  
<http://www.gnu.org/licenses/>.
```

```
# As a special exception to the GNU General Public License, if you
# distribute this file as part of a program that contains a
# configuration script generated by Autoconf, you may include it under
# the same distribution terms that you use for the rest of that
program.
```

```
if test $# -eq 0; then
  echo 1>&2 "Try '$0 --help' for more information"
  exit 1
fi
```

```
run=:
sed_output='s/. * --output[ =]\([^ ]*\).*/\1/p'
sed_minuso='s/. * -o \([^ ]*\).*/\1/p'
```

```
# In the cases where this matters, 'missing' is being run in the
# srcdir already.
if test -f configure.ac; then
  configure_ac=configure.ac
else
  configure_ac=configure.in
fi
```

```
msg="missing on your system"
```

```
case $1 in
--run)
  # Try to run requested program, and just exit if it succeeds.
  run=
  shift
  "$@" && exit 0
  # Exit code 63 means version mismatch. This often happens
  # when the user try to use an ancient version of a tool on
  # a file that requires a minimum version. In this case we
  # we should proceed has if the program had been absent, or
  # if --run hadn't been passed.
  if test $? = 63; then
    run=:
    msg="probably too old"
  fi
  ;;
```

```
-h|--h|--he|--hel|--help)
  echo "\
$0 [OPTION]... PROGRAM [ARGUMENT]...
```

Handle 'PROGRAM [ARGUMENT]...' for when PROGRAM is missing, or return an error status if there is no known handling for PROGRAM.

```
Options:
  -h, --help      display this help and exit
```

```
-v, --version    output version information and exit
--run           try to run the given command, and emulate it if it
fails
```

Supported PROGRAM values:

```
aclocal        touch file 'aclocal.m4'
autoconf       touch file 'configure'
autoheader     touch file 'config.h.in'
autom4te       touch the output file, or create a stub one
automake       touch all 'Makefile.in' files
bison          create 'y.tab.[ch]', if possible, from existing .[ch]
flex           create 'lex.yy.c', if possible, from existing .c
help2man       touch the output file
lex            create 'lex.yy.c', if possible, from existing .c
makeinfo       touch the output file
yacc           create 'y.tab.[ch]', if possible, from existing .[ch]
```

Version suffixes to PROGRAM as well as the prefixes 'gnu-', 'gnu', and 'g' are ignored when checking the name.

Send bug reports to <bug-automake@gnu.org>."

```
exit $?
;;
```

```
-v|--v|--ve|--ver|--vers|--versi|--versio|--version)
```

```
echo "missing $scriptversion (GNU Automake)"
exit $?
;;
```

```
*)
```

```
echo 1>&2 "$0: Unknown '$1' option"
echo 1>&2 "Try '$0 --help' for more information"
exit 1
;;
```

```
esac
```

```
# normalize program name to check for.
```

```
program=`echo "$1" | sed '
s/^gnu-//; t
s/^gnu//; t
s/^g//; t`
```

```
# Now exit if we have it, but it failed. Also exit now if we
# don't have it and --version was passed (most likely to detect
# the program). This is about non-GNU programs, so use $1 not
# $program.
```

```
case $1 in
```

```
lex*|yacc*)
```

```
# Not GNU programs, they don't have --version.
```

```
;;
```



```

*)
if test -z "$run" && ($1 --version) > /dev/null 2>&1; then
  # We have it, but it failed.
  exit 1
elif test "x$2" = "x--version" || test "x$2" = "x--help"; then
  # Could not run --version or --help. This is probably someone
  # running '$TOOL --version' or '$TOOL --help' to check whether
  # $TOOL exists and not knowing $TOOL uses missing.
  exit 1
fi
;;
esac

# If it does not exist, or fails to run (possibly an outdated
version),
# try to emulate it.
case $program in
  aclocal*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified 'acinclude.m4' or '${configure_ac}'. You might
want
to install the Automake and Perl packages. Grab them from
any GNU archive site."
    touch aclocal.m4
    ;;

  autoconf*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified '${configure_ac}'. You might want to install
the
Autoconf and GNU m4 packages. Grab them from any GNU
archive site."
    touch configure
    ;;

  autoheader*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified 'acconfig.h' or '${configure_ac}'. You might
want
to install the Autoconf and GNU m4 packages. Grab them
from any GNU archive site."
    files=`sed -n 's/^[ ]*A[CM]_CONFIG_HEADER(\([^)]*\)).*/\1/p'
${configure_ac}`
    test -z "$files" && files="config.h"
    touch_files=
    for f in $files; do
      case $f in
        *.* ) touch_files="$touch_files "`echo "$f" |
          sed -e 's/^[^:]*://' -e 's/:.*//'`;

```

```

    *) touch_files="$touch_files $f.in";;
    esac
done
touch $touch_files
;;

automake*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
    you modified 'Makefile.am', 'acinclude.m4' or
'$configure_ac}'.
    You might want to install the Automake and Perl packages.
    Grab them from any GNU archive site."
    find . -type f -name Makefile.am -print |
    sed 's/\.am$/\.in/' |
    while read f; do touch "$f"; done
;;

autom4te*)
    echo 1>&2 "\
WARNING: '$1' is needed, but is $msg.
    You might have modified some files without having the
    proper tools for further handling them.
    You can get '$1' as part of Autoconf from any GNU
    archive site."

file=`echo "$*" | sed -n "$sed_output"`
test -z "$file" && file=`echo "$*" | sed -n "$sed_minuso"`
if test -f "$file"; then
    touch $file
else
    test -z "$file" || exec >$file
    echo "#! /bin/sh"
    echo "# Created by GNU Automake missing as a replacement of"
    echo "# $ $@"
    echo "exit 0"
    chmod +x $file
    exit 1
fi
;;

bison*|yacc*)
    echo 1>&2 "\
WARNING: '$1' $msg. You should only need it if
    you modified a '.y' file. You may need the Bison package
    in order for those modifications to take effect. You can get
    Bison from any GNU archive site."
    rm -f y.tab.c y.tab.h
    if test $# -ne 1; then
        eval LASTARG=\${$#}
        case $LASTARG in
            *.y)

```

```

SRCFILE=`echo "$LASTARG" | sed 's/y$/c/'`
if test -f "$SRCFILE"; then
    cp "$SRCFILE" y.tab.c
fi
SRCFILE=`echo "$LASTARG" | sed 's/y$/h/'`
if test -f "$SRCFILE"; then
    cp "$SRCFILE" y.tab.h
fi
;;
esac
fi
if test ! -f y.tab.h; then
    echo >y.tab.h
fi
if test ! -f y.tab.c; then
    echo 'main() { return 0; }' >y.tab.c
fi
;;

lex*|flex*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified a '.l' file. You may need the Flex package
in order for those modifications to take effect. You can get
Flex from any GNU archive site."
    rm -f lex.yy.c
    if test $# -ne 1; then
        eval LASTARG=\${$#}
        case $LASTARG in
            *.l)
                SRCFILE=`echo "$LASTARG" | sed 's/l$/c/'`
                if test -f "$SRCFILE"; then
                    cp "$SRCFILE" lex.yy.c
                fi
            ;;
        esac
    fi
    if test ! -f lex.yy.c; then
        echo 'main() { return 0; }' >lex.yy.c
    fi
    ;;

help2man*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified a dependency of a manual page. You may need the
Help2man package in order for those modifications to take
effect. You can get Help2man from any GNU archive site."

    file=`echo "$*" | sed -n "$sed_output"`
    test -z "$file" && file=`echo "$*" | sed -n "$sed_minuso"`
    if test -f "$file"; then

```

```

    touch $file
else
    test -z "$file" || exec >$file
    echo ".ab help2man is required to generate this page"
    exit $?
fi
;;

makeinfo*)
    echo 1>&2 "\
WARNING: '$1' is $msg. You should only need it if
you modified a '.texi' or '.texinfo' file, or any other file
indirectly affecting the aspect of the manual. The spurious
call might also be the consequence of using a buggy 'make'
(AIX,
    DU, IRIX). You might want to install the Texinfo package or
the GNU make package. Grab either from any GNU archive
site."
# The file to touch is that specified with -o ...
file=`echo "$*" | sed -n "$sed_output"`
test -z "$file" && file=`echo "$*" | sed -n "$sed_minuso"`
if test -z "$file"; then
    # ... or it is the one specified with @setfilename ...
    infile=`echo "$*" | sed 's/.* \([^ ]*\) *$/\1/'`
    file=`sed -n '
/^@setfilename/{
    s/.* \([^ ]*\) *$/\1/
    p
    q
}' $infile`
    # ... or it is derived from the source name (dir/f.texi becomes
f.info)
    test -z "$file" && file=`echo "$infile" | sed
's,.*/,,,;s,..[^\.]*$,,,'`.info
fi
# If the file does not exist, the user really needs makeinfo;
# let's fail without touching anything.
test -f $file || exit 1
touch $file
;;

*)
    echo 1>&2 "\
WARNING: '$1' is needed, and is $msg.
You might have modified some files without having the
proper tools for further handling them. Check the 'README'
file,
    it often tells you about the needed prerequisites for
installing
    this package. You may also peek at any GNU archive site, in
case
    some other package would contain this missing '$1' program."

```

```

        exit 1
    ;;
esac

exit 0

# Local variables:
# eval: (add-hook 'write-file-hooks 'time-stamp)
# time-stamp-start: "scriptversion="
# time-stamp-format: "%:y-%02m-%02d.%02H"
# time-stamp-time-zone: "UTC"
# time-stamp-end: "; # UTC"
# End:

File = my-object-marshal.c

#include <config.h>

#ifndef __my_object_marshal_MARSHAL_H__
#define __my_object_marshal_MARSHAL_H__

#include <glib-object.h>

G_BEGIN_DECLS

#ifdef G_ENABLE_DEBUG
#define g_marshal_value_peek_boolean(v) g_value_get_boolean (v)
#define g_marshal_value_peek_char(v) g_value_get_schar (v)
#define g_marshal_value_peek_uchar(v) g_value_get_uchar (v)
#define g_marshal_value_peek_int(v) g_value_get_int (v)
#define g_marshal_value_peek_uint(v) g_value_get_uint (v)
#define g_marshal_value_peek_long(v) g_value_get_long (v)
#define g_marshal_value_peek_ulong(v) g_value_get_ulong (v)
#define g_marshal_value_peek_int64(v) g_value_get_int64 (v)
#define g_marshal_value_peek_uint64(v) g_value_get_uint64 (v)
#define g_marshal_value_peek_enum(v) g_value_get_enum (v)
#define g_marshal_value_peek_flags(v) g_value_get_flags (v)
#define g_marshal_value_peek_float(v) g_value_get_float (v)
#define g_marshal_value_peek_double(v) g_value_get_double (v)
#define g_marshal_value_peek_string(v) (char*) g_value_get_string
(v)
#define g_marshal_value_peek_param(v) g_value_get_param (v)
#define g_marshal_value_peek_boxed(v) g_value_get_boxed (v)
#define g_marshal_value_peek_pointer(v) g_value_get_pointer (v)
#define g_marshal_value_peek_object(v) g_value_get_object (v)
#define g_marshal_value_peek_variant(v) g_value_get_variant (v)
#else /* !G_ENABLE_DEBUG */
/* WARNING: This code accesses GValues directly, which is UNSUPPORTED
API.

```

```

*           Do not access GValues directly in your code. Instead, use
the
*           g_value_get_*() functions
*/
#define g_marshal_value_peek_boolean(v) (v)->data[0].v_int
#define g_marshal_value_peek_char(v) (v)->data[0].v_int
#define g_marshal_value_peek_uchar(v) (v)->data[0].v_uint
#define g_marshal_value_peek_int(v) (v)->data[0].v_int
#define g_marshal_value_peek_uint(v) (v)->data[0].v_uint
#define g_marshal_value_peek_long(v) (v)->data[0].v_long
#define g_marshal_value_peek_ulong(v) (v)->data[0].v_ulong
#define g_marshal_value_peek_int64(v) (v)->data[0].v_int64
#define g_marshal_value_peek_uint64(v) (v)->data[0].v_uint64
#define g_marshal_value_peek_enum(v) (v)->data[0].v_long
#define g_marshal_value_peek_flags(v) (v)->data[0].v_ulong
#define g_marshal_value_peek_float(v) (v)->data[0].v_float
#define g_marshal_value_peek_double(v) (v)->data[0].v_double
#define g_marshal_value_peek_string(v) (v)->data[0].v_pointer
#define g_marshal_value_peek_param(v) (v)->data[0].v_pointer
#define g_marshal_value_peek_boxed(v) (v)->data[0].v_pointer
#define g_marshal_value_peek_pointer(v) (v)->data[0].v_pointer
#define g_marshal_value_peek_object(v) (v)->data[0].v_pointer
#define g_marshal_value_peek_variant(v) (v)->data[0].v_pointer
#endif /* !G_ENABLE_DEBUG */

/* NONE:STRING,INT,STRING (/home/smcv/src/fdo/dbus-glib/test/core/my-
object-marshal.list:1) */
extern void my_object_marshal_VOID__STRING_INT_STRING (GClosure
*closure,
                                                    GValue
*return_value,
                                                    guint
n_param_values,
                                                    const GValue
*param_values,
                                                    gpointer
invocation_hint,
                                                    gpointer
marshal_data);
void
my_object_marshal_VOID__STRING_INT_STRING (GClosure *closure,
GValue *return_value,
G_GNUC_UNUSED,
guint
n_param_values,
const GValue *param_values,
gpointer
invocation_hint G_GNUC_UNUSED,
gpointer marshal_data)
{

```



```

void
my_object_marshal_VOID__STRING_BOXED (GClosure      *closure,
                                       GValue        *return_value
G_GNUC_UNUSED,
                                       guint         n_param_values,
                                       const GValue *param_values,
                                       gpointer      invocation_hint
G_GNUC_UNUSED,
                                       gpointer      marshal_data)
{
    typedef void (*GMarshalFunc_VOID__STRING_BOXED) (gpointer      data1,
                                                      gpointer      arg_1,
                                                      gpointer      arg_2,
                                                      gpointer      data2);
    register GMarshalFunc_VOID__STRING_BOXED callback;
    register GCClosure *cc = (GCClosure*) closure;
    register gpointer data1, data2;

    g_return_if_fail (n_param_values == 3);

    if (G_CCLOSURE_SWAP_DATA (closure))
    {
        data1 = closure->data;
        data2 = g_value_peek_pointer (param_values + 0);
    }
    else
    {
        data1 = g_value_peek_pointer (param_values + 0);
        data2 = closure->data;
    }
    callback = (GMarshalFunc_VOID__STRING_BOXED) (marshal_data ?
marshal_data : cc->callback);

    callback (data1,
              g_marshal_value_peek_string (param_values + 1),
              g_marshal_value_peek_boxed (param_values + 2),
              data2);
}
#define my_object_marshal_NONE__STRING_BOXED
my_object_marshal_VOID__STRING_BOXED

G_END_DECLS

#endif /* __my_object_marshal_MARSHAL_H__ */

```

File = my-object-marshal.h


```

#ifndef __my_object_marshall_MARSHAL_H__
#define __my_object_marshall_MARSHAL_H__

#include <glib-object.h>

G_BEGIN_DECLS

/* NONE:STRING,INT,STRING (/home/smcv/src/fdo/dbus-glib/test/core/my-
object-marshal.list:1) */
extern void my_object_marshall_VOID__STRING_INT_STRING (GClosure
*closure,
                                                    GValue
*return_value,
                                                    guint
n_param_values,
                                                    const GValue
*param_values,
                                                    gpointer
invocation_hint,
                                                    gpointer
marshal_data);
#define my_object_marshall_NONE__STRING_INT_STRING
my_object_marshall_VOID__STRING_INT_STRING

/* NONE:STRING,BOXED (/home/smcv/src/fdo/dbus-glib/test/core/my-
object-marshal.list:2) */
extern void my_object_marshall_VOID__STRING_BOXED (GClosure
*closure,
                                                    GValue
*return_value,
                                                    guint
n_param_values,
                                                    const GValue
*param_values,
                                                    gpointer
invocation_hint,
                                                    gpointer
marshal_data);
#define my_object_marshall_NONE__STRING_BOXED
my_object_marshall_VOID__STRING_BOXED

G_END_DECLS

#endif /* __my_object_marshall_MARSHAL_H__ */

```

File = my-object-marshal.list

NONE:STRING,INT,STRING
NONE:STRING,BOXED

File = my-object-subclass.c

```
#include <config.h>
#include <string.h>
#include <glib/gi18n.h>
#include <glib-object.h>
#include "my-object-subclass.h"

#include "test-service-glib-subclass-glue.h"

/* Properties */
enum
{
    PROP_0,
    PROP_THIS_IS_A_SUBCLASS_STRING,
    PROP_THIS_IS_A_SUBCLASS_UINT
};

G_DEFINE_TYPE(MyObjectSubclass, my_object_subclass, MY_TYPE_OBJECT)

static void
my_object_subclass_finalize (GObject *object)
{
    MyObjectSubclass *mobject = MY_OBJECT_SUBCLASS (object);

    g_free (mobject->this_is_a_subclass_string);

    (G_OBJECT_CLASS (my_object_subclass_parent_class)->finalize)
    (object);
}

static void
my_object_subclass_set_property (GObject      *object,
                                guint          prop_id,
                                const GValue  *value,
                                GParamSpec    *pspec)
{
    MyObjectSubclass *mobject;

    mobject = MY_OBJECT_SUBCLASS (object);

    switch (prop_id)
    {
        case PROP_THIS_IS_A_SUBCLASS_STRING:
            g_free (mobject->this_is_a_subclass_string);
            mobject->this_is_a_subclass_string = g_value_dup_string (value);
            break;

        case PROP_THIS_IS_A_SUBCLASS_UINT:
```

```

        mobject->this_is_a_subclass_uint = g_value_get_uint (value);
        break;

    default:
        G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
        break;
    }
}

static void
my_object_subclass_get_property (GObject      *object,
                                guint         prop_id,
                                GValue       *value,
                                GParamSpec  *pspec)
{
    MyObjectSubclass *mobject;

    mobject = MY_OBJECT_SUBCLASS (object);

    switch (prop_id)
    {
        case PROP_THIS_IS_A_SUBCLASS_STRING:
            g_value_set_string (value, mobject->this_is_a_subclass_string);
            break;

        case PROP_THIS_IS_A_SUBCLASS_UINT:
            g_value_set_uint (value, mobject->this_is_a_subclass_uint);
            break;

        default:
            G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
            break;
    }
}

static void
my_object_subclass_init (MyObjectSubclass *obj)
{
}

static void
my_object_subclass_class_init (MyObjectSubclassClass *mobject_class)
{
    GObjectClass *gobject_class = G_OBJECT_CLASS (mobject_class);

    dbus_g_object_type_install_info (MY_TYPE_OBJECT_SUBCLASS,
                                     &dbus_glib_my_object_subclass_object_info);

    gobject_class->finalize = my_object_subclass_finalize;
    gobject_class->set_property = my_object_subclass_set_property;
    gobject_class->get_property = my_object_subclass_get_property;
}

```

```

    g_object_class_install_property (gobject_class,
                                    PROP_THIS_IS_A_SUBCLASS_STRING,
                                    g_param_spec_string
("this_is_a_subclass_string",
                                    _("Sample
string"),
                                    _("Example of
a string property"),
                                    "default
subclass value",
G_PARAM_READWRITE | G_PARAM_CONSTRUCT));

    g_object_class_install_property (gobject_class,
                                    PROP_THIS_IS_A_SUBCLASS_UINT,
                                    g_param_spec_uint ("this_is_a_subclass_uint",
                                                        _("Sample
uint"),
                                                        _("Example of
a uint property"),
                                                        0,
G_MAXUINT32, 1234567,
G_PARAM_READWRITE | G_PARAM_CONSTRUCT));
}

```

File = my-object-subclass.h

```

#ifndef __MY_OBJECT_SUBCLASS_H__
#define __MY_OBJECT_SUBCLASS_H__

#include <glib-object.h>
#include <dbus/dbus-glib.h>

#include "my-object.h"

typedef struct MyObjectSubclass MyObjectSubclass;
typedef struct MyObjectSubclassClass MyObjectSubclassClass;

GType my_object_subclass_get_type (void);

struct MyObjectSubclass
{
    GObject parent;
    char *this_is_a_subclass_string;
    guint this_is_a_subclass_uint;
};

struct MyObjectSubclassClass

```

```

{
    MyObjectClass parent;
};

#define MY_TYPE_OBJECT_SUBCLASS
(my_object_subclass_get_type ())
#define MY_OBJECT_SUBCLASS(object)
(G_TYPE_CHECK_INSTANCE_CAST ((object), MY_TYPE_OBJECT_SUBCLASS,
MyObjectSubclass))
#define MY_OBJECT_SUBCLASS_CLASS(klass)      (G_TYPE_CHECK_CLASS_CAST
((klass), MY_TYPE_OBJECT_SUBCLASS, MyObjectSubclassClass))
#define MY_IS_OBJECT_SUBCLASS(object)
(G_TYPE_CHECK_INSTANCE_TYPE ((object), MY_TYPE_OBJECT_SUBCLASS))
#define MY_IS_OBJECT_SUBCLASS_CLASS(klass)  (G_TYPE_CHECK_CLASS_TYPE
((klass), MY_TYPE_OBJECT_SUBCLASS))
#define MY_OBJECT_SUBCLASS_GET_CLASS(obj)
(G_TYPE_INSTANCE_GET_CLASS ((obj), MY_TYPE_OBJECT_SUBCLASS,
MyObjectSubclassClass))

#endif

```

File = my-object.c

```

#include <config.h>
#include <string.h>
#include <glib/gi18n.h>
#include <glib-object.h>
#include "my-object.h"
#include "my-object-marshal.h"

#include "test-service-glib-glue.h"

void
my_object_register_marshallers (void)
{
    dbus_g_object_register_marshaller
(my_object_marshal_VOID__STRING_INT_STRING,
    G_TYPE_NONE, G_TYPE_STRING, G_TYPE_INT, G_TYPE_STRING,
G_TYPE_INVALID);

    dbus_g_object_register_marshaller
(my_object_marshal_VOID__STRING_BOXED,
    G_TYPE_NONE, G_TYPE_STRING, G_TYPE_VALUE, G_TYPE_INVALID);
}

/* Properties */
enum
{
    PROP_0,
    PROP_THIS_IS_A_STRING,

```

```

    PROP_NO_TOUCHING,
    PROP_SUPER_STUDLY,
    PROP_SHOULD_BE_HIDDEN
};

enum
{
    FROBNICATE,
    OBJECTIFIED,
    SIG0,
    SIG1,
    SIG2,
    LAST_SIGNAL
};

static guint signals[LAST_SIGNAL] = { 0 };

G_DEFINE_TYPE(MyObject, my_object, G_TYPE_OBJECT)

static void
my_object_finalize (GObject *object)
{
    MyObject *mobject = MY_OBJECT (object);

    g_free (mobject->this_is_a_string);
    g_clear_error (&mobject->saved_error);

    (G_OBJECT_CLASS (my_object_parent_class)->finalize) (object);
}

static void
my_object_set_property (GObject      *object,
                       guint         prop_id,
                       const GValue *value,
                       GParamSpec   *pspec)
{
    MyObject *mobject;

    mobject = MY_OBJECT (object);

    switch (prop_id)
    {
        case PROP_THIS_IS_A_STRING:
            g_free (mobject->this_is_a_string);
            mobject->this_is_a_string = g_value_dup_string (value);
            break;

        case PROP_NO_TOUCHING:
            mobject->notouching = g_value_get_uint (value);
            break;

        case PROP_SUPER_STUDLY:

```

```

    mobject->super_studly = g_value_get_double (value);
    break;

case PROP_SHOULD_BE_HIDDEN:
    mobject->should_be_hidden = g_value_get_boolean (value);
    break;

default:
    G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
    break;
}
}

static void
my_object_get_property (GObject      *object,
                       guint         prop_id,
                       GValue       *value,
                       GParamSpec   *pspec)
{
    MyObject *mobject;

    mobject = MY_OBJECT (object);

    switch (prop_id)
    {
        case PROP_THIS_IS_A_STRING:
            g_value_set_string (value, mobject->this_is_a_string);
            break;

        case PROP_NO_TOUCHING:
            g_value_set_uint (value, mobject->notouching);
            break;

        case PROP_SUPER_STUDLY:
            g_value_set_double (value, mobject->super_studly);
            break;

        case PROP_SHOULD_BE_HIDDEN:
            g_value_set_boolean (value, mobject->should_be_hidden);
            break;

        default:
            G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
            break;
    }
}

static void
my_object_init (MyObject *obj)
{
    obj->val = 0;
    obj->notouching = 42;
}

```

```

obj->saved_error = g_error_new_literal (MY_OBJECT_ERROR,
    MY_OBJECT_ERROR_FOO, "this method always loses");
}

static void
my_object_class_init (MyObjectClass *mobject_class)
{
    GObjectClass *gobject_class = G_OBJECT_CLASS (mobject_class);

    my_object_register_marshallers ();

    dbus_g_object_type_install_info (MY_TYPE_OBJECT,
        &dbus_glib_my_object_object_info);

    gobject_class->finalize = my_object_finalize;
    gobject_class->set_property = my_object_set_property;
    gobject_class->get_property = my_object_get_property;

    g_object_class_install_property (gobject_class,
        PROP_THIS_IS_A_STRING,
        g_param_spec_string ("this_is_a_string",
            _("Sample
string"),
            _("Example of
a string property"),
            "default
value",
G_PARAM_READWRITE));
    g_object_class_install_property (gobject_class,
        PROP_NO_TOUCHING,
        g_param_spec_uint ("no_touching",
            _("Don't
touch"),
            _("Example of a
readonly property (for export)"),
            0, 100, 42,
G_PARAM_READWRITE));
    g_object_class_install_property (gobject_class,
        PROP_SUPER_STUDLY,
        g_param_spec_double ("super-
studly",
            _("In Studly
Caps"),
            _("Example of
a StudlyCaps property"),
            0, 256, 128,
G_PARAM_READWRITE));

```



```

        G_SIGNAL_RUN_LAST | G_SIGNAL_DETAILED,
        0,
        NULL, NULL,
        g_cclosure_marshal_VOID__BOXED,
        G_TYPE_NONE, 1,
        DBUS_TYPE_G_STRING_STRING_HASHTABLE);
}

GQuark
my_object_error_quark (void)
{
    static GQuark quark = 0;
    if (!quark)
        quark = g_quark_from_static_string ("my_object_error");

    return quark;
}

/* This should really be standard. */
#define ENUM_ENTRY(NAME, DESC) { NAME, "" #NAME "", DESC }

GType
my_object_error_get_type (void)
{
    static GType etype = 0;

    if (etype == 0)
    {
        static const GEnumValue values[] =
        {
            ENUM_ENTRY (MY_OBJECT_ERROR_FOO, "Foo"),
            ENUM_ENTRY (MY_OBJECT_ERROR_BAR, "Bar"),
            ENUM_ENTRY (MY_OBJECT_ERROR_MULTI_WORD, "Multi-word"),
            ENUM_ENTRY (MY_OBJECT_ERROR_UNDER_SCORE,
"Under_score"),
            { 0, 0, 0 }
        };

        etype = g_enum_register_static ("MyObjectError", values);
    }

    return etype;
}

gboolean
my_object_do_nothing (MyObject *obj, GError **error)
{
    return TRUE;
}

gboolean
```

```

my_object_increment (MyObject *obj, gint32 x, gint32 *ret, GError
**error)
{
    *ret = x + 1;
    return TRUE;
}

```

```

gint32
my_object_increment_retval (MyObject *obj, gint32 x)
{
    return x + 1;
}

```

```

gint32
my_object_increment_retval_error (MyObject *obj, gint32 x, GError
**error)
{
    if (x + 1 > 10)
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "%s",
                    "x is bigger than 9");
        return FALSE;
    }
    return x + 1;
}

```

```

void
my_object_save_error (MyObject *obj,
                    GQuark domain,
                    gint code,
                    const gchar *message)
{
    g_clear_error (&obj->saved_error);
    g_set_error_literal (&obj->saved_error, domain, code, message);
}

```

```

gboolean
my_object_throw_error (MyObject *obj, GError **error)
{
    g_set_error_literal (error, obj->saved_error->domain,
                        obj->saved_error->code, obj->saved_error->message);
    return FALSE;
}

```

```

gboolean
my_object_throw_unregistered_error (MyObject *obj, GError **error)
{
    /* Unregistered errors shouldn't cause a dbus abort. See
    * https://bugzilla.redhat.com/show\_bug.cgi?id=581794

```

```

*
* This is arguably invalid usage - a domain of 0 (which stringifies
* to NULL) is meaningless. (See GNOME#660731.)
*
* We can't just use my_object_save_error() and ThrowError() for
* this, because g_error_new() is stricter about the domain than
* g_error_new_valist(). Perhaps this method should be removed
entirely,
* though.
*/
g_set_error (error, 0, 0,
            "%s",
            "this method always loses more");
return FALSE;
}

```

```

gboolean
my_object_uppercase (MyObject *obj, const char *str, char **ret,
GError **error)
{
    *ret = g_ascii_strup (str, -1);
    return TRUE;
}

```

```

gboolean
my_object_many_args (MyObject *obj, guint32 x, const char *str, double
trouble, double *d_ret, char **str_ret, GError **error)
{
    *d_ret = trouble + (x * 2);
    *str_ret = g_ascii_strup (str, -1);
    return TRUE;
}

```

```

gboolean
my_object_many_return (MyObject *obj, guint32 *arg0, char **arg1,
gint32 *arg2, guint32 *arg3, guint32 *arg4, const char **arg5, GError
**error)
{
    *arg0 = 42;
    *arg1 = g_strdup ("42");
    *arg2 = -67;
    *arg3 = 2;
    *arg4 = 26;
    *arg5 = "hello world"; /* Annotation specifies as const */
    return TRUE;
}

```

```

gboolean
my_object_stringify (MyObject *obj, GValue *value, char **ret, GError
**error)
{

```

```

GValue valstr = {0, };

g_value_init (&valstr, G_TYPE_STRING);
if (!g_value_transform (value, &valstr))
{
    g_set_error (error,
                MY_OBJECT_ERROR,
                MY_OBJECT_ERROR_FOO,
                "couldn't transform value");
    return FALSE;
}
*ret = g_value_dup_string (&valstr);
g_value_unset (&valstr);
return TRUE;
}

gboolean
my_object_unstringify (MyObject *obj, const char *str, GValue *value,
GError **error)
{
    if (str[0] == '\0' || !g_ascii_isdigit (str[0])) {
        g_value_init (value, G_TYPE_STRING);
        g_value_set_string (value, str);
    } else {
        g_value_init (value, G_TYPE_INT);
        g_value_set_int (value, (int) g_ascii_strtoll (str, NULL, 10));
    }
    return TRUE;
}

gboolean
my_object_recursive1 (MyObject *obj, GArray *array, guint32 *len_ret,
GError **error)
{
    *len_ret = array->len;
    return TRUE;
}

gboolean
my_object_recursive2 (MyObject *obj, guint32 reqlen, GArray **ret,
GError **error)
{
    guint32 val;
    GArray *array;

    array = g_array_new (FALSE, TRUE, sizeof (guint32));

    while (reqlen > 0) {
        val = 42;
        g_array_append_val (array, val);
        val = 26;
        g_array_append_val (array, val);
    }
}

```

```

    reqlen--;
}
val = 2;
g_array_append_val (array, val);
*ret = array;
return TRUE;
}

gboolean
my_object_many_uppercase (MyObject *obj, const char * const *in, char
***out, GError **error)
{
    int len;
    int i;

    len = g_strv_length ((char**) in);

    *out = g_new0 (char *, len + 1);
    for (i = 0; i < len; i++)
    {
        (*out)[i] = g_ascii_strup (in[i], -1);
    }
    (*out)[i] = NULL;

    return TRUE;
}

static void
hash_foreach_stringify (gpointer key, gpointer val, gpointer
user_data)
{
    const char *keystr = key;
    const GValue *value = val;
    GValue *sval;
    GHashTable *ret = user_data;

    sval = g_new0 (GValue, 1);
    g_value_init (sval, G_TYPE_STRING);
    if (!g_value_transform (value, sval))
        g_assert_not_reached ();

    g_hash_table_insert (ret, g_strdup (keystr), sval);
}

static void
unset_and_free_gvalue (gpointer val)
{
    g_value_unset (val);
    g_free (val);
}

gboolean

```

```

my_object_many_stringify (MyObject *obj, GHashTable /* char * ->
GValue * */ *vals, GHashTable /* char * -> GValue * */ **ret, GError
**error)
{
    *ret = g_hash_table_new_full (g_str_hash, g_str_equal,
                                g_free, unset_and_free_gvalue);
    g_hash_table_foreach (vals, hash_foreach_stringify, *ret);
    return TRUE;
}

gboolean
my_object_rec_arrays (MyObject *obj, GPtrArray *in, GPtrArray **ret,
GError **error)
{
    char **strs;
    GArray *ints;
    guint v_UINT;

    if (in->len != 2)
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid array len");
        return FALSE;
    }

    strs = g_ptr_array_index (in, 0);
    if (!*strs || strcmp (*strs, "foo"))
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid string 0");
        return FALSE;
    }
    strs++;
    if (!*strs || strcmp (*strs, "bar"))
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid string 1");
        return FALSE;
    }
    strs++;
    if (*strs)
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid string array len in pos 0");
    }
}

```

```

        return FALSE;
    }
    strs = g_ptr_array_index (in, 1);
    if (!*strs || strcmp (*strs, "baz"))
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid string 0");
        return FALSE;
    }
    strs++;
    if (!*strs || strcmp (*strs, "wheel"))
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid string 1");
        return FALSE;
    }
    strs++;
    if (!*strs || strcmp (*strs, "moo"))
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid string 2");
        return FALSE;
    }
    strs++;
    if (*strs)
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid string array len in pos 1");
        return FALSE;
    }
}

*ret = g_ptr_array_new ();

ints = g_array_new (TRUE, TRUE, sizeof (guint));
v_UINT = 10;
g_array_append_val (ints, v_UINT);
v_UINT = 42;
g_array_append_val (ints, v_UINT);
v_UINT = 27;
g_array_append_val (ints, v_UINT);
g_ptr_array_add (*ret, ints);

ints = g_array_new (TRUE, TRUE, sizeof (guint));
v_UINT = 30;

```



```

    g_array_append_val (ints, v_UINT);
    g_ptr_array_add (*ret, ints);
    return TRUE;
}

gboolean
my_object_objpath (MyObject *obj, const char *incoming, const char
**outgoing, GError **error)
{
    if (strcmp (incoming,
"/org/freedesktop/DBus/GLib/Tests/MyTestObject"))
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid incoming object");
        return FALSE;
    }
    *outgoing = "/org/freedesktop/DBus/GLib/Tests/MyTestObject2";
    return TRUE;
}

gboolean
my_object_get_objs (MyObject *obj, GPtrArray **objs, GError **error)
{
    *objs = g_ptr_array_new ();

    g_ptr_array_add (*objs, g_strdup
("/org/freedesktop/DBus/GLib/Tests/MyTestObject"));
    g_ptr_array_add (*objs, g_strdup
("/org/freedesktop/DBus/GLib/Tests/MyTestObject2"));

    return TRUE;
}

static void
hash_foreach (gpointer key, gpointer val, gpointer user_data)
{
    const char *keyst = key;
    const char *valstr = val;
    guint *count = user_data;

    *count += (strlen (keyst) + strlen (valstr));
    g_print ("%s -> %s\n", keyst, valstr);
}

gboolean
my_object_str_hash_len (MyObject *obj, GHashTable *table, guint *len,
GError **error)
{
    *len = 0;
    g_hash_table_foreach (table, hash_foreach, len);
}

```

```

    return TRUE;
}

gboolean
my_object_send_car (MyObject *obj, GValueArray *invals, GValueArray
**outvals, GError **error)
{
    if (invals->n_values != 3
        || G_VALUE_TYPE (g_value_array_get_nth (invals, 0)) !=
G_TYPE_STRING
        || G_VALUE_TYPE (g_value_array_get_nth (invals, 1)) !=
G_TYPE_UINT
        || G_VALUE_TYPE (g_value_array_get_nth (invals, 2)) !=
G_TYPE_VALUE)
    {
        g_set_error (error,
                    MY_OBJECT_ERROR,
                    MY_OBJECT_ERROR_FOO,
                    "invalid incoming values");
        return FALSE;
    }
    *outvals = g_value_array_new (2);
    g_value_array_append (*outvals, NULL);
    g_value_init (g_value_array_get_nth (*outvals, (*outvals)->n_values
- 1), G_TYPE_UINT);
    g_value_set_uint (g_value_array_get_nth (*outvals, (*outvals)-
>n_values - 1),
                    g_value_get_uint (g_value_array_get_nth (invals, 1)) +
1);
    g_value_array_append (*outvals, NULL);
    g_value_init (g_value_array_get_nth (*outvals, (*outvals)->n_values
- 1), DBUS_TYPE_G_OBJECT_PATH);
    g_value_set_boxed (g_value_array_get_nth (*outvals, (*outvals)-
>n_values - 1),
                    g_strdup
("/org/freedesktop/DBus/GLib/Tests/MyTestObject2"));
    return TRUE;
}

gboolean
my_object_get_hash (MyObject *obj, GHashTable **ret, GError **error)
{
    GHashTable *table;

    table = g_hash_table_new (g_str_hash, g_str_equal);
    g_hash_table_insert (table, "foo", "bar");
    g_hash_table_insert (table, "baz", "whee");
    g_hash_table_insert (table, "cow", "crack");
    *ret = table;
    return TRUE;
}

```

```

gboolean
my_object_increment_val (MyObject *obj, GError **error)
{
    obj->val++;
    return TRUE;
}

gboolean
my_object_get_val (MyObject *obj, guint *ret, GError **error)
{
    *ret = obj->val;
    return TRUE;
}

gboolean
my_object_get_value (MyObject *obj, guint *ret, GError **error)
{
    *ret = obj->val;
    return TRUE;
}

gboolean
my_object_echo_variant (MyObject *obj, GValue *variant, GValue *ret,
GError **error)
{
    GType t;
    t = G_VALUE_TYPE(variant);
    g_value_init (ret, t);
    g_value_copy (variant, ret);

    return TRUE;
}

gboolean
my_object_echo_signature (MyObject *obj, const gchar *in, gchar **out,
GError **error)
{
    *out = g_strdup (in);
    return TRUE;
}

gboolean
my_object_process_variant_of_array_of_ints123 (MyObject *obj, GValue
*variant, GError **error)
{
    GArray *array;
    int i;
    int j;

    j = 0;

    array = (GArray *)g_value_get_boxed (variant);

```

```

for (i = 0; i <= 2; i++)
{
    j = g_array_index (array, int, i);
    if (j != i + 1)
        goto error;
}

return TRUE;

error:
    *error = g_error_new (MY_OBJECT_ERROR,
                        MY_OBJECT_ERROR_FOO,
                        "Error decoding a variant of type ai (i + 1 = %i, j
= %i)",
                        i, j + 1);
    return FALSE;
}

typedef struct _HashAndString HashAndString;

struct _HashAndString
{
    GHashTable *hash;
    gchar* string;
};

static void
hash_foreach_prepend_string (gpointer key, gpointer val, gpointer
user_data)
{
    HashAndString *data = (HashAndString*) user_data;
    gchar *in = (gchar*) val;
    g_hash_table_insert (data->hash, g_strdup ((gchar*) key),
                        g_strjoin (" ", data->string, in, NULL));
}

static void
hash_foreach_mangle_dict_of_strings (gpointer key, gpointer val,
gpointer user_data)
{
    GHashTable *out = (GHashTable*) user_data;
    GHashTable *in_dict = (GHashTable *) val;
    HashAndString *data = g_new0 (HashAndString, 1);

    data->string = (gchar*) key;
    data->hash = g_hash_table_new_full (g_str_hash, g_str_equal,
                                        g_free, g_free);
    g_hash_table_foreach (in_dict, hash_foreach_prepend_string, data);
}

```

```

    g_hash_table_insert(out, g_strdup ((gchar*) key), data->hash);
}

gboolean
my_object_dict_of_dicts (MyObject *obj, GHashTable *in,
                        GHashTable **out, GError **error)
{
    *out = g_hash_table_new_full (g_str_hash, g_str_equal,
                                (GDestroyNotify) g_free,
                                (GDestroyNotify)
g_hash_table_destroy);
    g_hash_table_foreach (in, hash_foreach_mangle_dict_of_strings,
*out);
    return TRUE;
}

void
my_object_dict_of_sigs (MyObject *obj,
                        GHashTable *dict,
                        DBusGMethodInvocation *context)
{
    dbus_g_method_return (context, dict);
}

void
my_object_dict_of_objs (MyObject *obj,
                        GHashTable *dict,
                        DBusGMethodInvocation *context)
{
    dbus_g_method_return (context, dict);
}

gboolean
my_object_emit_frobnicate (MyObject *obj, GError **error)
{
    g_signal_emit (obj, signals[FROBNICATE], 0, 42);
    return TRUE;
}

gboolean
my_object_emit_signals (MyObject *obj, GError **error)
{
    GValue val = {0, };

    g_signal_emit (obj, signals[SIG0], 0, "foo", 22, "moo");

    g_value_init (&val, G_TYPE_STRING);
    g_value_set_string (&val, "bar");
    g_signal_emit (obj, signals[SIG1], 0, "baz", &val);
    g_value_unset (&val);

    return TRUE;
}

```

```

}

gboolean
my_object_emit_signal2 (MyObject *obj, GError **error)
{
    GHashTable *table;

    table = g_hash_table_new (g_str_hash, g_str_equal);
    g_hash_table_insert (table, "baz", "cow");
    g_hash_table_insert (table, "bar", "foo");
    g_signal_emit (obj, signals[SIG2], 0, table);
    g_hash_table_destroy (table);
    return TRUE;
}

typedef struct {
    gint32 x;
    DBusGMethodInvocation *context;
} IncrementData;

static gboolean
do_async_increment (IncrementData *data)
{
    gint32 newx = data->x + 1;
    dbus_g_method_return (data->context, newx);
    g_free (data);
    return FALSE;
}

void
my_object_async_increment (MyObject *obj, gint32 x,
DBusGMethodInvocation *context)
{
    IncrementData *data = g_new0 (IncrementData, 1);
    data->x = x;
    data->context = context;
    g_idle_add ((GSourceFunc)do_async_increment, data);
}

typedef struct {
    GError *error;
    DBusGMethodInvocation *context;
} ErrorData;

static gboolean
do_async_error (ErrorData *data)
{
    dbus_g_method_return_error (data->context, data->error);
    g_error_free (data->error);
    g_free (data);
    return FALSE;
}

```

```

void
my_object_async_throw_error (MyObject *obj, DBusGMethodInvocation
*context)
{
    ErrorData *data = g_new0 (ErrorData, 1);

    data->error = g_error_copy (obj->saved_error);
    data->context = context;
    g_idle_add ((GSourceFunc) do_async_error, data);
}

void
my_object_unsafe_disable_legacy_property_access (MyObject *obj)
{
    dbus_glib_global_set_disable_legacy_property_access ();
}

extern GMainLoop *loop;

gboolean
my_object_terminate (MyObject *obj, GError **error)
{
    g_main_loop_quit (loop);
    return TRUE;
}

void
my_object_emit_objectified (MyObject *obj,
    GObject *other)
{
    g_signal_emit (obj, signals[OBJECTIFIED], 0, other);
}

```

File = my-object.h

```

#ifndef __MY_OBJECT_H__
#define __MY_OBJECT_H__

#include <glib-object.h>
#include <dbus/dbus-glib.h>

typedef struct MyObject MyObject;
typedef struct MyObjectClass MyObjectClass;

void my_object_register_marshallers (void);
GType my_object_get_type (void);

struct MyObject
{

```

```

GObject parent;
GError *saved_error;
char *this_is_a_string;
guint notouching;
guint val;
gdouble super_studly;
gboolean should_be_hidden;
};

struct MyObjectClass
{
    GObjectClass parent;
};

#define MY_TYPE_OBJECT (my_object_get_type ())
#define MY_OBJECT(object) (G_TYPE_CHECK_INSTANCE_CAST ((object), MY_TYPE_OBJECT, MyObject))
#define MY_OBJECT_CLASS(klass) (G_TYPE_CHECK_CLASS_CAST ((klass), MY_TYPE_OBJECT, MyObjectClass))
#define MY_IS_OBJECT(object) (G_TYPE_CHECK_INSTANCE_TYPE ((object), MY_TYPE_OBJECT))
#define MY_IS_OBJECT_CLASS(klass) (G_TYPE_CHECK_CLASS_TYPE ((klass), MY_TYPE_OBJECT))
#define MY_OBJECT_GET_CLASS(obj) (G_TYPE_INSTANCE_GET_CLASS ((obj), MY_TYPE_OBJECT, MyObjectClass))

typedef enum
{
    MY_OBJECT_ERROR_FOO,
    MY_OBJECT_ERROR_BAR,
    MY_OBJECT_ERROR_MULTI_WORD,
    MY_OBJECT_ERROR_UNDER_SCORE
} MyObjectError;

#define MY_OBJECT_ERROR (my_object_error_quark ())
#define MY_TYPE_ERROR (my_object_error_get_type ())

GQuark my_object_error_quark (void);
GType my_object_error_get_type (void);

gboolean my_object_do_nothing (MyObject *obj, GError **error);

gboolean my_object_increment (MyObject *obj, gint32 x, gint32 *ret, GError **error);

gint32 my_object_increment_retval (MyObject *obj, gint32 x);

gint32 my_object_increment_retval_error (MyObject *obj, gint32 x, GError **error);

gboolean my_object_throw_error (MyObject *obj, GError **error);

```



```
gboolean my_object_throw_not_supported (MyObject *obj, GError
**error);
gboolean my_object_throw_error_multi_word (MyObject *obj, GError
**error);
gboolean my_object_throw_unregistered_error (MyObject *obj, GError
**error);

gboolean my_object_uppercase (MyObject *obj, const char *str, char
**ret, GError **error);

gboolean my_object_many_args (MyObject *obj, guint32 x, const char
*str, double trouble, double *d_ret, char **str_ret, GError **error);

gboolean my_object_many_return (MyObject *obj, guint32 *arg0, char
**arg1, gint32 *arg2, guint32 *arg3, guint32 *arg4, const char **arg5,
GError **error);

gboolean my_object_recurse1 (MyObject *obj, GArray *array, guint32
*len_ret, GError **error);
gboolean my_object_recursive2 (MyObject *obj, guint32 reqlen, GArray
**array, GError **error);

gboolean my_object_many_stringify (MyObject *obj, GHashTable *vals,
GHashTable **ret, GError **error);

gboolean my_object_rec_arrays (MyObject *obj, GPtrArray *in, GPtrArray
**ret, GError **error);

gboolean my_object_objpath (MyObject *obj, const char *in, const char
**arg1, GError **error);

gboolean my_object_get_objs (MyObject *obj, GPtrArray **objs, GError
**error);

gboolean my_object_stringify (MyObject *obj, GValue *value, char
**ret, GError **error);
gboolean my_object_unstringify (MyObject *obj, const char *str, GValue
*value, GError **error);

gboolean my_object_many_uppercase (MyObject *obj, const char * const
*in, char ***out, GError **error);

gboolean my_object_str_hash_len (MyObject *obj, GHashTable *table,
guint *len, GError **error);

gboolean my_object_send_car (MyObject *obj, GValueArray *invals,
GValueArray **outvals, GError **error);

gboolean my_object_get_hash (MyObject *obj, GHashTable **table, GError
**error);

gboolean my_object_increment_val (MyObject *obj, GError **error);
```

```

gboolean my_object_get_val (MyObject *obj, guint *ret, GError
**error);

gboolean my_object_get_value (MyObject *obj, guint *ret, GError
**error);

gboolean my_object_emit_signals (MyObject *obj, GError **error);
gboolean my_object_emit_signal2 (MyObject *obj, GError **error);

gboolean my_object_emit_frobnicate (MyObject *obj, GError **error);

gboolean my_object_echo_variant (MyObject *obj, GValue *variant,
GValue *ret, GError **error);
gboolean my_object_echo_signature (MyObject *obj, const gchar *in,
gchar **out, GError **error);

gboolean my_object_process_variant_of_array_of_ints123 (MyObject *obj,
GValue *variant, GError **error);

gboolean my_object_dict_of_dicts (MyObject *obj, GHashTable *dict,
GHashTable **ret, GError **error);

void my_object_dict_of_sigs (MyObject *obj, GHashTable *dict,
DBusGMethodInvocation *ctx);

void my_object_dict_of_objs (MyObject *obj, GHashTable *dict,
DBusGMethodInvocation *ctx);

gboolean my_object_terminate (MyObject *obj, GError **error);

void my_object_async_increment (MyObject *obj, gint32 x,
DBusGMethodInvocation *context);

void my_object_async_throw_error (MyObject *obj, DBusGMethodInvocation
*context);

void my_object_unsafe_disable_legacy_property_access (MyObject *obj);

void my_object_emit_objectified (MyObject *obj, GObject *other);

/* Not a D-Bus method. */
void my_object_save_error (MyObject *obj, GQuark domain, gint code,
const gchar *message);

#endif

File = nested-introspect.xml

<?xml version="1.0" encoding="UTF-8" ?>

```

```
<!-- http://bugs.freedesktop.org/show_bug.cgi?id=19065 -->
<node name="/">
  <node name="org">
    <interface name="org.dummy">
      <method name="mycall">
        </method>
      </interface>
    </node>
  </node>
</node>
```

File = NEWS

== IMPORTANT NOTE: This file isn't maintained anymore ==

Release summaries are done on the mailing list and linked through the wiki.

== END IMPORTANT NOTE ==

D-Bus GLib Bindings 0.78 (04 Dec 2008)

Thanks to Robert McQueen, Philip Van Hoof, David Zeuthen, Colin Walters, Dan Williams, Nick Welch, Tomas Pelka and others for their contributions.

Reliability fixes:

- #16114 [patch] wincaps-to-uscore property names for GetAll()
- #16419: recursive variants demarshaling limits
- #18573: service tracker race

Other notable fixes and enhancements:

- #17329: allow hash tables to contain complex types
- #17798: add support for 'o', 'g' and 'as' in dictionaries
- #16925: bash completion for dbus-send

D-Bus GLib Bindings 0.75 (05 Jun 2008)

==

Thanks to Dan Williams, David Zeuthen, Kimmo Härmäläinen, Ross Burton, William Jon McCann, Colin Walters, Brian Cameron, Peter O'Gorman, Peter Kjellerstedt, Christian Persch, Rob Taylor and others for their contributions in this release.

Critical fixes:

- #15430: ABI now guaranteed frozen
- #8607: Fix broken introspection XML
- #16079: Return an error on unknown property Get

- #10834: Fix error handling in `dbus_g_proxy_end_call_internal`

Other notable fixes:

- #11672: Fixes for `/bin/sh` as `dash`
- #11675: Fixes for non-gcc compilers
- #10668: Correctly detect path to `dbus-daemon`
- #12849, #12857: Memory leak fixes
- New function to specify default timeout for calls on proxy
- Implement `org.freedesktop.DBus.Properties.GetAll`
- Require `DBus 1.1`

D-Bus GLib Bindings 0.74 (27 Jun 2007)

==

- Init threading first to stop a warning from new GLib.
- Remove the XML documentation support in `configure`
- Fix typo in `_dbus_gvalue_signals_error` (#10837) (Thanks to Peter Kjellerstedt)
- Update GLib requirement (Closes #10889).
- Document `dbus-gtype-specialized`
- Add simple test suite for peer objects.
- Support peer-to-peer proxies. (Closes #10233).
- Add `dbus_connection_get_g_connection`.
- Stop compiler warnings (Closes #10374).
- Handle `dbus` errors which are not name has no owner
- Update abstract socket test from `DBus`, which now cross-compile
- Rename the error quark to be unique
- Update `AUTHORS`

D-Bus GLib Bindings 0.73 (13 Feb 2007)

==

- Allow passing of `NULL` to `strv` out arguments.
(Patch due to Luiz Augusto von Dentz <luiz.dentz@gmail.com>. Fixes bug #8795.)
- Make `uscore_to_wincaps` return `NULL` when passed `NULL`. (Fixes bug #8318.)
- Only respond to `NameOwnerChanged` if its one of our names.
(Patch by Kimmo Hämmäläinen <kimmo.hamalainen@nokia.com>. Fixes bug #8235.)
- Fix `dbus-binding-tool` to generate headers usable from C++.
(Thanks to Christian Persch <chpe@gnome.org>. Fixes bug #6358.)
- Only require `--prefix` for server side binding generation.
(Fixes reopened bug #4185.)
- Clarify documentation for `dbus_g_method_get_sender`.
(Fixes #8832.)
- Add new API for specifying the timeout in `DBusGProxy` calls.
(Patch due to S. Nalliammai <snallammai@novell.com>. Fixes bug #9832.)
- Don't check for `libxml2` when `expat` not found. (Fixes bugs #9894 and #9000.)

- Add configure flags --with-introspect-xml. (Fixes bug #9105)
- Use dbus_threads_init_default() rather than using own threading primitives.
(Fixes bug #9259.)
- Reduce dependency to dbus version 0.93, error out if correct version not found. (Patch due to Luiz Augusto von Dentz <luiz.dentz@gmail.com>.
Fixes bug #8793.)
- Allow dbus and dbus-glib to live in different prefixes. (Fixes bug #9384.)
- Add pkg-config support for uninstalled use.
(Fix due to Damien Carbery <damien.carbery@sun.com>. Fixes bug #9769.)

D-Bus GLib Bindings 0.72 (26 Oct 2006)

==

- Only use -Wfloat-equal if compiler supports it (Closes #7658.
Thanks
to Jens Granseuer <jensgr@gmx.net> for the patch).
- Return NULL from g_return_val_if_fail in dbus_g_proxy_begin_call (Closes #4159.)
- Add dbus-gidl.h to IGNORE_HFILES for doxygen docs
- Update tools/Makefile.am for new dbus-binding-tool behaviour
- Remove bashism in make-dbus-glib-error-enum.sh (Closes #6700).
- Fix introspection when object has exported properties.
(dbus-gobject:write_interface was completely broken)
- Fix thanks to mccann@jhu.edu. (Closes #8607).
- Require --prefix in dbus-binding-tool (Closes #4185).
- Don't shadow index. Rename usage of index to index_. Thanks
stdlib...
(Closes #8353).
- Fix small leak when marshal_table is destroyed (Closes #6870 with
patch from Richard Hult <richard@imendio.com>).
- Fixes crash if disposing one DBusGProxy causes another for the same
service to be unrefed in a destroyed callback.
- Use modern AC_INIT, AM_INIT_AUTOMAKE
- Clean generated run-with-tmp-session-bus.conf on make clean
- Actually run unit tests and checks when doing make distcheck
- Use TEST_CORE_SERVICE_BINARY path for core test service file
- Use dbus-daemon --introspect to generate DBus service introspect
xml
- Add tests for new interfaces functionality
- Bump GLib dependency to 2.6 (Closes #4390).
- Add gobject-2.0 to dbus-glib-1.pc.in
- Puts all exposed services in the org.freedesktop.DBus.GLib
namespace
- Update COPYING and HACKING to be correct for dbus-glib
- Move tests/glib to test/core
- Rename configure.in to configure.ac for modernity
- Fix memleak in lookup_or_register_specialized (Applies fix from
Daniel d'Andrada Tenório de Carvalho, closing bug #7352).

- Add an m4 directory and add gtk-doc.m4, which is installed in the tree by gtkdocize.

- tools/Makefile.am: Add tools/session.conf to EXTRA_DIST so make check

works from tarballs

- Fix compilation with -Werror
- Make test scripts run during out-of-tree compilation
- Fix out-of-tree compilation
- Replace doxygen with gtk-doc in INSTALL
- Commit patch to switch to gtk-doc with gtype-specialized doc and
- Updates from Marc-Andre Lureau <marcandre.lureau@gmail.com>, with minor cleanup. (Closes #7726.)

D-Bus GLib Bindings 0.71 (24 July 2006)

==

- Correctly installs a few missing headers
- Build was cleaned up a bit

D-Bus GLib Bindings 0.70 (17 July 2006)

==

- First release after bindings split
 - dbus-binding-tool heeds org.freedesktop.DBus.GLib.ClientCSymbol C symbol name annotations when generating glib client bindings
 - DBusGProxy can now be inherited from
 - Support added for generating bindings to arrays that are represented as GPtrArrays rather than GArrays (ie size-variable things, such as strings, objects, structs, etc).
 - Modification of the existing specialised types to have N type parameters (rather than the current 1 or 2 for arrays and dictionaries respectively). You can then use this to get a glib type to represent any arbitrary D-Bus struct type using dbus_g_type_get_struct. The only implementation of these types is with GValueArrays as before, but it's now possible to store these in arrays, emit them in signals, etc.
 - New methodbus_g_connection_open provides a way to open connections to an arbitrary address
 - Various bugs and memory leaks fixed
- Sleep after starting the peer server, before starting the peer client. This fixes random failures due to the race.

File = NEWS.pre-1-0

D-Bus 1.0.0 (08 November 2006)

==

- Documents updated with API/ABI guarantees
 - Added missing patch FreeBSD need to run out of the box
 - dbus-monitor now has a profile mode
 - AUTHORS file updated with names from the ChangeLog
- Thanks to everyone who helped get us here

D-Bus 1.0 RC 3 (0.95) (02 November 2006)

==

- DBUS_API_SUBJECT_TO_CHANGE no longer needs to be defined when building apps
- ./configure checks now work when cross compiling
- dbus-uuidgen --ensure is now run in the init script so there is no need to
run it in a post script
- dbus-uuidgen now writes out to /var/lib/dbus to work with systems that do not
have a writable /etc. Packages should install and own the /var/lib/dbus
directory
- recursive locks are now used when dbus_threads_init_default is called
- standard_session_servicedirs tag added to the session.conf
under a normal build this specifies these service directories:
/usr/local/share/dbus-1/services
/usr/share/dbus-1/services
\$HOME/.local/share/dbus-1/services
- fixed crash when a service directory is specified more than once
- fixed a crash in *BSD when watching config directories for changes
- fixed Irix build by using dirp->_dd_fd to get the file descriptor
- cleaned up the LOCAL_CREDS vs CMGCRED credential code so *BSD's
don't
crash here anymore
- dbus_message_iter_get_array_len deprecated
- cleanup-man-pages.sh added so packagers can clean up Doxygen man
page output
from 7 to 2 megs
- large documentation improvements
- numerous bug fixes

D-Bus 1.0 RC 2 (0.94) (14 October 2006)

==

- dbus-uuidgen binary added for future remote machine identification
packagers should call dbus-uuidgen --ensure in their post
- GetMachineId peer method added to the bus API
- dbus_connection_set_route_peer_messages API added to let the bus
send
peer messages directly to an app
- Autolaunch abilities added to dbus-launch with the --autolaunch flag
This feature allows libdbus to start a session bus if none can be
found

This is an internal feature and should not be used by scripts
DBUS_SESSION_BUS_ADDRESS is still the correct way to specify a session bus

- dbus-launch now prints out a simple key value pairs instead of shell scripts
 - if one of the shell flags aren't used
- support DBUS_BLOCK_ON_ABORT env variable to cause blocking waiting for gdb
- weak ref are now held for shared connections so the right things happen
 - this fixes some pretty major bugs with the way connections were handled
- Some refactoring for Windows (doesn't effect Unix)
- Solaris build fixes
- MacOSX build fixes
- Cross compile build fixes. We now assume getpwnam_r is posix and va_lists can be copied by value since we can't check this in a cross compile. If this is not true for a particular target is up to the developer to patch.
- Bug fixing all around

D-Bus 1.0 RC 1 (0.93) (14 September 2006)

==

- dbus_threads_init_default added for initalizing threads without the need for bindings
- Filters are now properly removed
- dbus_connection_open now holds a hard ref to shared connections
- We now print out a warning and do nothing when someone tries to close a shared connection
- The --introspect switch has been added to the bus for printing out introspection data without actually running the bus
- LOCAL_CREDS socket credentials are now supported for systems which support it such as NetBSD
- Generalize kqueue support so it works with NetBSD as well as FreeBSD
- Numerous bug fixes and memory leaks patched

D-Bus 0.92 (18 August 2006)

==

- Proper thread locking added to pending calls
- Threading semantics changed from init early to init before the second thread is started
- Correctly error out when an application tries to acquire or release the org.freedesktop.DBus name instead of sending false result codes
- kqueue directory watching code can now be used to monitor config file changes on FreeBSD

- --with-dbus-daemondir configure switch added so the daemon can be installed
 - separate from the user binaries
- Makefiles fixed for cygwin
- Various fixes for the ongoing Windows port
- Fixed docs and comments to use the D-Bus spelling instead of D-BUS
- Many memleaks and bugs fixed

D-Bus 0.91 (24 July 2006)

==

- Remove some lingering bits left over from the bindings split
- Fix assertion causing D-Bus applications to crash when checks are enabled
- Fix a timeout bug which would block applications from being auto started

D-Bus 0.90 (17 July 2006)

==

- API/ABI freeze for 1.0
- Bindings are now split out into seperate packages
- ListActivatableNames added as a method on the bus
- Removed deprecated dbus_connection_disconnect (use dbus_connection_close)
- Shared connections are now unreffed on disconnect
- Fixed pending calls for threaded enviornments
- Pending calls get timed out on connection disconnect
- dbus_connection_send_with_reply returns TRUE and a NULL pending call if you call it on a connection object which has been disconnected already
 - (it returns FALSE on Out of Memory errors only)
- dbus-monitor now correctly catches methods, not just signals
- dbus-monitor now prints object paths

D-BUS 0.62 (12 June 2006)

==

- Doc fixes
- Added support for all data-types for the dbus tools
- Fixed eavesdropping on method calls (dbus-monitor)
- Fixed silent dropping of method calls with interface=NULL
- Fixed console ownership problems in Solaris
- Fixed installation of dbus-signature.h and #include it in dbus/dbus.h
- Flush the user database cache on config reload
- GLib bindings:
 - Fix memory leaks
 - Fix properties in DBusGProxy so that they can be given in any order
 - Added lots of assertions to ensure correct use
 - Remove duplicated code
 - Fix static string pointer uses in GPtrArray-based collections
- Python bindings:
 - Remove reference to sys/cdefs.h

- Qt4 bindings:
 - Code reorganized
 - Added the dbusidl2cpp, dbuscpp2xml and dbus tools
 - Added example programs (ping-pong, complex ping-pong, listnames, chat)
 - Updated selftests
 - Fixed compilation and .moc- and .ui-file processing and cleaning
 - Made central classes derive from QObject
 - Enhance error reporting
 - Many bugfixes
- Mono bindings:
 - Minor bugfixes

D-BUS 0.61 (24 February 2006)

==

- Documentation all around
- dbus-launch now produces correct sh and csh syntax
- Nested arrays now work correctly
- GLib bindings:
 - Inheriting from DBusGProxy is now possible
 - GPtrArrays can now be marshalled
 - org.freedesktop.DBus.GLib.ClientCSymbol annotation added
 - Opening connections to arbitrary addresses now supported
- Python bindings:
 - sender_keyword and path_keyword keywords added to signal listener API
- Byte types now demarshal to unsigned char
- calling methods now do the correct thing
- Qt bindings:
 - both Qt3 and Qt4 bindings can be built at the same time
 - Use the standard org.freedesktop.DBus.Method.NoReply annotation for the "async" calls instead of creating one for us.
- Mono bindings:
 - 64bit arch fixes
- Massive bug fixing all around

D-BUS 0.60 (30 November 2005)

==

- major ABI/API changes - sonames changed
- RequestName queuing behavior has changed (refer to dbus-specification)
 - DBUS_NAME_FLAG_PROHIBIT_REPLACEMENT has been removed and DBUS_NAME_FLAG_ALLOW_REPLACEMENT has been added to the flags
- signals emitted by the bus now show up in the introspect data
- auth EXTERNAL now supported on BSD variants
- ReleaseName method added to the bus to allow a service to remove itself as owner of a bus name
- dbus_connection_read_write added for getting messages off the bus in the absence of a mainloop
- Qt4 bindings added and the Qt3 bindings have been deprecated
- python bindings:

- marshal using introspect data if available
- better exception handling and propagation
- private connections are now supported
- UTF-8 cleanups
- out_signature added to method decorators for specifying how the return values should be marshaled
- sender_keyword added to method decorators for specifying and argument to provide the unique name of the method caller
- async_callbacks added to method decorators
- multiple inheritance of classes now supported
- GLib bindings:
 - respect NoReply annotations
 - dbus_g_method_return_get_reply and dbus_g_method_return_send_reply added to the lowlevel code for use when the dbus-glib marshalling code is not adequate
- numerous bug fixes all around

D-BUS 0.50 (06 September 2005)

===

This is a minor release from 0.36.2. The series number has changed not because of any technical reasons but as an indication that we are moving closer to 1.0. It is hoped that this will be the last series to see major changes, most of which will be isolated to the GLib and Python bindings, as we transition to concentrate more on bug busting and code auditing.

- D-Bus builds on the Cygwin platform
- Makefile cleanups
- Various bug fixes
- Optimization of the dbus object tree
- Memleaks and GIL crasher bugs have been fixed in the Python bindings

D-BUS 0.36.2 (29 August 2005)

===

- Security: Restrict other users from connecting to another users session bus

D-BUS 0.36.1 (24 August 2005)

===

- Python Bindings:
 - fixed to work with hal-device-manager
 - For 64bit builds everything is installed to lib64/python2.4/ since Python can't handle multilib

D-BUS 0.36 (23 August 2005)

===

- Maximum sized of cached messages have been reduced to 10K
- Match rules now allow matching on arguments inside the message
- introspect.xsl XSLT style sheet added for formatting introspection data into XHTML for analysis
- Python bindings:
 - now have working type objects for explicit

- typecasting
- Variant type has been added
- Dictionaries, Variants and Arrays can all be passed the signature or type(s) of their children
- the optional timeout= keyword has been added when making method calls
- match on args has been implemented
- a .pth file has been added for dealing with libraries and python files being in different directories such as in 64bit installs
- various bug fixes
- GLib bindings:
 - deeply recursive types now supported
 - many symbols are no longer exported as part of the public API
 - various memleak and other bug fixes

D-BUS 0.35.2 (17 July 2005)

===

- Rename Unix Security Context to SELinux Security Context in API
- Fixed more dist errors that distcheck didn't pick up on
- Fixed various bugs in the python bindings that prevented them from working

D-BUS 0.35.1 (16 July 2005)

===

- Fixed dist error where python/dbus_bindings.pxd was being shipped instead of dbus_bindings.pxd.in
- Use this instead of the 0.35 tarball

D-BUS 0.35 (15 July 2005)

===

- --with-dbus-user added to the configure scripts for configuring the user the system bus runs on
- --with-console-auth-dir added to configure scripts for configuring the directory to look in for console user locks
- service files for auto-starting D-Bus services now has the ability to pass in command line arguments to the executable
- Huge auto-start bug squashed which caused some services not to start when requested in rapid succession
- SE-Linux security contexts can now be appended to messages for inspection by services that enforce their own security policies
- Colin says the GLib binding are ready for general consumption
- New GLib tutorial
- New GLib example code
- Python bindings are now version (0,42,0)
- Python bindings API has changed on the service side
- dbus.service has been split out as a separate module

- dbus.service.Service is renamed to dbus.service.BusName
- dbus.service.Object has swapped the bus_name and object_path constructor parameters to make it easier to do inheritance over the bus
- dbus.glib has been separated out in order to lessen the dependency on glib and to allow other mainloops to be integrated with the bindings including a planned generic mainloop for non-gui apps.
- Python bindings now acquire the GIL when calling back into the python interpreter. Fixes crashes when using threading and other random segfaults.
- New Python tutorial
- Numerous D-Bus bug fixes all around

D-BUS 0.34 (15 June 2005)

===

- dbus_connection_disconnect is deprecated in favor of dbus_connection_close
- The bus can now use D_NOTIFY (if available) to check when configuration files have changed and reload them
- New dbus_message_has_path/member/interface API added
- The Ping message from the org.freedesktop.DBus.Peer interface is now handled
- Complete glib bindings overhaul (and are still under construction)
- Tutorial now has an updated GLib section
- GLib bindings can now send/receive hash tables, arrays and other complex types
- Python bindings overhaul (most public facing API's done)
- Python bindings have been split up into separate files
- Python added new type classes for hinting to the marshaler what type to send over the wire
- Python bindings now have decorators for specifying exported methods and signals
- Numerous bug fixes

D-BUS 0.33 (25 Apr 2005)

===

- downgrade requirement from GTK+-2.6 to 2.4 for building gtk components
- python binding API's have been overhauled to be more "pythonic" and cleaner
- python bindings now export dbus.version which is set to (0,40,0)
- python bindings now implement the org.freedesktop.DBus.Introspectable interface
- python binding match rules are now more flexible
- make check has been fixed
- many, many major bug fixes

D-BUS 0.32 (29 Mar 2005)

===

- mono bindings now compiles correctly
- mono binding cleanups
- glib bindings generates wrappers for bus methods in dbus-glib-bindings.h
- glib binding cleanups
- users and groups can now be specified by UID and GID in config files
- numerous memory leak fixes
- various other fixes

D-BUS 0.31 (07 Mar 2005)

===

- land the new message args API and recursive type system
- add docs and fixed Doxygen warnings throughout source
- split out some functions not needed in libdbus to *-util.c source files
- take out type convenience functions
- libdbus now back below 150K
- booleans are now 32-bit instead of 8-bit
- specification updated
- grand renaming to strip out the use of "service" just say "name" instead (or "bus name" when ambiguous)
- rename dbus-daemon-1 to dbus-daemon throughout
- rename activation to auto-start
- auto-start on by default now
- note that libdbus is the low-level API
- python bindings updated to the new API
- mono bindings updated to the new API
- add 16 bit types
- dictionaries are now ARRAYS of DICT_ENTRY
- dbus-glib-tool renamed to dbus-binding-tool
- massive rewrite of the glib bindings
- saner names for the dbus interface, object path and service defines
- new functions for handling type signatures
- bump sonames for libdbus and libdbus-glib
- various small fixes

D-BUS 0.23 (11 Jan 2005)

===

- add setgroups() to drop supplementary groups
- updated SELinux support
- add an "at console" security policy
- fix a bug where org.freedesktop.DBus wasn't recognized as an existing service.
- error out if --enable-mono is explicitly set and mono libs can't be found
- set the max_match_rules_per_connection limit from the config file.
- removed dbus_bug_get_with_g_main since it's been replaced by

- dbus_g_bus_get
- fix fd leaks in socket code
- lots and lots of mono binding updates, including fixes to make it compatible with Mono 1.1.3
- added --nofork option to override config file setting at runtime
- added support for int64 and uint64 to the python bindings
- lots of python binding updates
- config file DTD updates
- use ServiceOwnerChanges signal instead of ServiceCreated and ServiceDeleted
- fixes to the authentication code
- new init script for Slackware
- print out the pid even when --fork is passed
- increase preallocation sizes in DBusMessage to heavily reduce reallocs
- lots of performance enhancements
- lots more small bug fixes

D-BUS 0.22

===

- add --reply-timeout to dbus-send
- fix a memleak
- fix Solaris/Forte build
- switch to AFL 2.1 rather than 2.0 to address patent termination clause concerns
- add SELinux support
- mostly repair libxml backend for config parser, still doesn't pass out of memory tests
- fix distcheck to include language bindings
- add GetConnectionUnixUser method on bus driver
- also for UnixProcessID
- lots of Python, Mono, other binding fixes
- change GLib bindings to not include dbus/dbus.h (fully encapsulate libdbus)
- pass paths as strings, not arrays of string
- add message signature header field
- cleanups to marshaling code
- clean up authentication code
- reload conf files on SIGHUP
- rename SERVICE/SENDER_SERVICE to DESTINATION/SENDER
- fix circular conf file inclusion
- allow empty arrays
- tons of other small bugfixes

D-BUS 0.21

===

- implement "auto activation" flag on messages, so the destination service can be launched automatically
- fix a bug in custom type marshaling

- optimize case where multiple apps activate the same service (avoid "thundering herd")
- add dynamic service file discovery/reloading
- fix a busy loop when blocking for a reply
- fix a 64-bit crash involving varargs
- fix a bus crash when processing an AcquireService
- allow appending TYPE_BYTE via append_args_valist
- fix dicts-inside-dicts
- enhancements to Python and Qt bindings

D-BUS 0.20

===

This release lands some very large API changes and numerous bugfixes. The list of changes is too large to fully document here; please refer to the documentation, and message-bus-list archives.

D-BUS 0.13

===

This is probably the last release before landing the large API changes on the "dbus-object-names" branch.

- fix system bus to always use filesystem socket; anyone can create any abstract socket, which isn't secure since if you can crash the system bus you'd be able to replace it.
- add DTD for configuration file
- improve specification a bit

D-BUS 0.12

===

- fix "service messagebus status" on Red Hat
- fix demarshaling of DBUS_TYPE_NAMED
- fix "eval `dbus-launch --exit-with-session`" to exit properly
- fix build without --prefix
- useless fooling with Mono bindings
- useless fooling with gcj bindings
- fix srcdir != builddir
- fix various compiler warnings and other issues
- add get/set data to DBusMessage
- fix headers for C++
- OS X build fixes
- abstract domain sockets support (Linux only)
- add dbus-cleanup-sockets utility for people not using linux
- be consistent about defaulting to --session/--system with command line tools
- merge in policies from included config files
- fix build on non-x86
- docs updates

- lots of other bugfixes

D-BUS 0.11

===

- add --enable-docs to turn off/on the docbook stuff (doesn't cover doxygen stuff yet)
- make people define DBUS_API_SUBJECT_TO_CHANGE and read warning in README so they don't expect the API to be frozen already
- rename .pc files to "dbus-1.pc" instead of "dbus-1.0.pc" etc. - this will require changing pkg-config invocations
- some docs cleanups
- add man pages for all executables
- allow send to/from bus driver in the default system.conf
- fix user lookup bug
- implement dbus-launch to launch the session message bus
- fix some thread deadlocks
- some performance profiling/optimization
- add dbus_bus_activate_service() function
- fix some minor bugs here and there
- install Red Hat initscript in the right place

D-BUS 0.10

===

- reversed order of args to dbus_message_new()
- renamed dbus_message_name_is() and some other functions
- change DbusWatch to have dbus_watch_handle() similar to dbus_timeout_handle(), drop connection/server-specific handle routines
- change message serials to be unsigned
- implemented <allow>/<deny>/<limit> features for config file; system bus now has a deny-all policy by default.
- system.conf has <includedir>system.d</includedir> so packages can install additions to the default policy to <allow> the messages they need. e.g. CUPS might install a cups.conf - see test/data/valid-config-files/system.d/test.conf for an example.
- add timeouts for authentication, activation
- add glib-style "checks" on public API, enable those by default, disable assertions by default
- add GMainContext argument to GLib setup functions, can be NULL for default context. Needed for threads.
- add 64-bit integer type
- validate type of standard message header fields
- consider messages in the org.freedesktop.Local namespace to be invalid (to avoid fake disconnect

messages for example)

- fix assorted memory leaks and other bugs in the SHA-1 auth mechanism
- cache user database information (groups user is in, etc.) helps a lot with NIS
- always store uid_t, pid_t, gid_t in "ulong" rather than "int"
- implement config file settings for which users can connect
- SHA-1 unit test
- dbus-send, dbus-monitor command line utilities
- fixed lots of misc crashes and other bugs

D-BUS 0.9

===

- implemented a test case for service activation, and fixed many bugs exposed by that
- implemented recursive argument marshaling/demarshaling for messages, allowing multidimensional arrays
- fixed up integration of message dispatch with main loop by adding a callback on change of dispatch status
- add a pidfile feature to daemon
- some build fixes
- clean up unix domain sockets on exit
- add --print-address and the ability to create a random server address in a temporary directory

D-BUS 0.8

===

- fix dumb bug in 0.7

D-BUS 0.7

===

- implement configuration file used to control bus characteristics
- implement daemon mode, changing user ID, and other system bus features
- add init scripts for systemwide bus
- add "make check-coverage" target to check test coverage
- more test suite additions
- many, many bugfixes
- many API changes/fixes

D-BUS 0.6

===

- Vastly improved bus daemon test suite
- Lots of misc. bugfixes and memory leak fixes
- Support for marshalling key/value data

- Activation improvements.

D-BUS 0.5

===

- Specification updates
- port to OS X and other BSD variants
- port to Solaris
- Partial work on cookie-based authentication
- Thread safety fixes
- Lots of misc. bugfixes
- Support for more array types
- Add data slots to DBusServer
- DBusString security audit fixes
- Fix for systems (or valgrind) with unaligned malloc blocks

D-BUS 0.4

===

- Preliminary activation support.
- Better authentication test suite
- Bus test program
- Specification updates
- Thread safety
- Bug fixes

D-BUS 0.3

===

- Preliminary limitations
- Message sending works
- Bus client
- Array marshalling/demarshalling
- Services
- Better OOM handling in the bus
- In-proc debug transport
- Transport/server address support

D-BUS 0.2

===

- Include test code in the tarball.

D-BUS 0.1

===

- Initial release.

File = NEWS.pre-1-2

D-Bus 1.2.1 (04 April)

==

- Due to issues putting the re-licensing effort on hold indefinitely, it has been decided to move to 1.2.x versioning scheme. Being that 1.1.20 is considered to also be 1.2.0 and this being the second release in the 1.2.x stable series we have versioned this release 1.2.1. This release contains a number of bug fixes identified after 1.1.20.
- compiles under some older versions of glibc
- compiles without X support once again
- fix stuck server grab if dbus-launch is run in an existing D-Bus X session
- various Mac OSX build fixes added
- don't use the broken poll call on Mac OSX
- better checks for linker flag support should allow D-Bus to link under various linkers
- exit_on_disconnect is set after the connection registers with a bus so we don't exit if we get a disconnect during the handshake
- dicts now work correctly with dbus-send
- inotify backend is now less aggressive
- pending calls expire correctly
- memleak of uuid when the bus is autolaunched fixed

D-Bus 1.1.20 - "Conisten Water" (27 Febuary)

==

- This is the next generation supported STABLE release of D-Bus. For all intents and purposes this is the 1.2.0 release WITHOUT the planned X11/MIT license change due to a couple of license holders who have yet to respond. For the most part this license change is being persued to simplify licensing issues and fix a couple of licensing courner cases. When this happens D-Bus will be released under the 1.2.0 version.
- D-Bus 1.0.x effectively goes into security fix mode and will only be updated for major issues.
- Fixed CVE-2008-0595 - security policy of the type <allow send_interface="some.interface.WithMethods"/> work as an implicit allow for messages sent without an interface bypassing the default deny rules and

potentially allowing restricted methods exported on the bus to be executed by unauthorized users.

- Fixes dbus-launch so the session bus goes away so does D-Bus
- Builds against latest gcc/glibc changes
- Correctly unref connections without guids during shutdown
- About the name: Submitted by Greg K Nicholson, Conisten Water is a lake in Cumbria, England where several water speed records have been broken. Between 1956 and 1959 Sir Malcolm's son Donald Campbell set four successive records on the lake in Bluebird K7, a hydroplane. (Wikipedia http://en.wikipedia.org/wiki/Coniston_Water#Waterspeed_record)

D-Bus 1.1.4 - 1.2.0RC2 (17 January 2007)

==

- Fixes inotify support

D-Bus 1.1.3 - 1.2.0RC1 (15 January 2007)

==

- This release is intended to be Release Candidate 1 of major release D-Bus 1.2.0. If nothing is found to be wrong with this release it will become 1.2.0 within a week. If we need to make major changes we will release an RC2 and start the process over again.
- This is a development release, so API's may still change if problems are found (though this is extremely unlikely).
- DTD for the introspection format is fixed and uploaded to the servers
- Sources now reside in a git repository at <http://gitweb.freedesktop.org/?p=dbus/dbus.git;a=summary>
- Argument path matching of the type `arg0path='/aa/bb/'` is now supported (see the specification for more information)
- New error `org.freedesktop.DBus.Error.ObjectPathInUse` added
- Autolaunched busses now save their parameters in X11 if possible making them behave closer to busses launched through the normal mechanisms
- inotify is now the default backend for watching configuration file changes

- More support for the AIX platform has been added
- Numerous bug fixes and performance enhancements

D-Bus 1.1.2 (27 July 2007)

==

- This release is intended to be a feature complete beta for stable release 1.2.0, please test it. 1.2.0 will follow pretty soon if no major problems are found. We'll do more betas if significant changes are made.
- This is a development release, so API's may still change if problems are found (though we will try hard not to).
- The system bus now supports starting services on demand. This uses a setuid helper program because system bus daemon runs as a nobody user, while services it launches may need to run as a different user.

Extra eyes auditing the setuid helper are encouraged and would be timely right now, before 1.2.0

A design doc is available in doc/system-activation.txt

- The TCP address format has been enhanced, such that TCP may be actually usable. The dbus-daemon man page describes the new elements in the address format. 1.1.1 had added an `all_interfaces` flag to the format, which has been removed in favor of a cleaner approach.
- Some thread-related bugs have been fixed, these are important fixes if you are using multiple threads with libdbus, and not important otherwise.

D-Bus 1.1.1 (18 June 2007)

==

- This is a development release, unless you need specific functionality please use the stable releases as API's may change (though we will try hard not to)
- The bus daemon now generates a globally-unique ID for itself, which is available using the convenience function `dbus_bus_get_id()`. Use this as a unique ID for a user's session, for example.
- `dbus_server_get_id()`, `dbus_connection_get_server_id()` now available to access the unique ID of a particular address
- `dbus_watch_get_fd()` deprecated since it had unclear cross-platform semantics.

- dbus_watch_get_unix_fd() and dbus_watch_get_socket() replace it.
- support ANONYMOUS mechanism for authentication, which allows a client to authenticate as nobody in particular
- add API dbus_connection_set_allow_anonymous() which will allow the message stream to begin if the client auths as anonymous (otherwise, the client will be dropped unless they auth as a user).
- the ANONYMOUS support means you can now use D-Bus (without a bus daemon) as a protocol for a network service provided to anonymous Internet or LAN clients
- many internal changes to better support the Windows port, though the port is still not complete in this release
- some improved documentation and return_if_fail checks
- some small bug fixes

D-Bus 1.1.0 (25 May 2007)

==

- first release in the development series, unless you need specific functionality please use the stable releases as API's may change (though we will try hard not to)
- better eavesdropping support now picks up reply messages for debugging
- .pc file now lists the directory the daemon is installed into (daemondir)
- GetAll call added to the properties interface
- support for message serialization added for use with external transports like TUBES!!!
- many bugs fixed

File = NEWS.~1~

D-Bus 1.6.8 (2012-09-28)

==

The "Fix one thing, break another" release.

â€¢ Follow up to CVE-2012-3524: The additional hardening work to use __secure_getenv() as a followup to bug #52202 broke certain configurations of gnome-keyring. Given the difficulty of making this work without extensive changes to gnome-keyring, use of __secure_getenv() is deferred.

D-Bus 1.6.6 (2012-09-28)

==

The "Clear the environment in your setuid binaries, please" release.

â€¢ CVE-2012-3524: Don't access environment variables (fd.o #52202)
Thanks to work and input from Colin Walters, Simon McVittie,
Geoffrey Thomas, and others.

â€¢ Unix-specific:

Â· Fix compilation on Solaris (fd.o #53286, Jonathan Perkin)
Â· Work around interdependent headers on OpenBSD by including
sys/types.h
before each use of sys/socket.h (fd.o #54418, Brad Smith)

D-Bus 1.6.4 (2012-07-18)

==

â€¢ Detect that users are "at the console" correctly when configured
with

a non-default path such as --enable-console-auth-dir=/run/console
(fd.o #51521, Dave Reisner)

â€¢ Remove an incorrect assertion from DBusTransport (fd.o #51657,
Simon McVittie)

â€¢ Make --enable-developer default to "no" (regression in 1.6.2;
fd.o #51657, Simon McVittie)

â€¢ Windows-specific:

Â· Launch dbus-daemon correctly if its path contains a space
(fd.o #49450, Wolfgang Baron)

D-Bus 1.6.2 (2012-06-27)

==

The "Ice Cabbage" release.

â€¢ Change how we create /var/lib/dbus so it works under Automake >=
1.11.4
(fd.o #51406, Simon McVittie)

â€¢ Don't return from dbus_pending_call_set_notify with a lock held on
OOM
(fd.o #51032, Simon McVittie)

â€¢ Disconnect "developer mode" (assertions, verbose mode etc.) from
Automake maintainer mode. D-Bus developers should now configure with
--enable-developer. Automake maintainer mode is now on by default;
distributions can disable it with --disable-maintainer-mode.
(fd.o #34671, Simon McVittie)

â€¢ Automatically define DBUS_STATIC_BUILD in static-only Autotools
builds,

fixing linking when targeting Windows (fd.o #33973; william, Simon McVittie)

â€¢ Unix-specific:

Â· Check for libpthread under CMake on Unix (fd.o #47237, Simon McVittie)

D-Bus 1.6.0 (2012-06-05)

==

The "soul of this machine has improved" release.

This version starts a new stable branch of D-Bus: only bug fixes will be accepted into 1.6.x. Other changes will now go to the 1.7.x branch.

Summary of changes since 1.4.x:

â€¢ New requirements

Â· PTHREAD_MUTEX_RECURSIVE on Unix

Â· compiler support for 64-bit integers (int64_t or equivalent)

â€¢ D-Bus Specification v0.19

â€¢ New dbus-daemon features

Â· <allow_own_prefix="com.example.Service"/> rules allow the service to

own names like com.example.Service.Instance3

Â· optional systemd integration when checking at_console policies

Â· --nopidfile option, mainly for use by systemd

Â· path_namespace and arg0namespace may appear in match rules

Â· eavesdropping is disabled unless the match rule contains

eavesdrop=true

â€¢ New public API

Â· functions to validate various string types (dbus_validate_path() etc.)

Â· dbus_type_is_valid()

Â· DBusBasicValue, a union of every basic type

â€¢ Bug fixes

Â· removed an unsafe reimplementaion of recursive mutexes

Â· dbus-daemon no longer busy-loops if it has far too many file descriptors

Â· dbus-daemon.exe --print-address works on Windows

Â· all the other bug fixes from 1.4.20

â€¢ Other major implementation changes

Â· on Linux, dbus-daemon uses epoll if supported, for better scalability

Â· dbus_threads_init() ignores its argument and behaves like dbus_threads_init_default() instead

• removed the per-connection link cache, improving dbus-daemon performance

• Developer features

• optional Valgrind instrumentation (`--with-valgrind`)

• optional Stats interface on the dbus-daemon (`--enable-stats`)

• optionally abort whenever `malloc()` fails (`--enable-embedded-tests` and export `DBUS_MALLOCCANNOTFAIL=1`)

Changes since 1.5.12:

• Be more careful about monotonic time vs. real time, fixing `DBUS_COOKIE_SHA1` spec-compliance (fd.o #48580, David Zeuthen)

• Don't use `install(1)` within the source/build trees, fixing the build as non-root when using OpenBSD `install(1)` (fd.o #48217, Antoine Jacoutot)

• Add missing commas in some tcp and nonce-tcp addresses, and remove an unused duplicate copy of the nonce-tcp transport in Windows builds (fd.o #45896, Simon McVittie)

D-Bus 1.5.12 (2012-03-27)
==

The "Big Book of Science" release.

• Add public API to validate various string types:

`dbus_validate_path()`, `dbus_validate_interface()`,
`dbus_validate_member()`,
`dbus_validate_error_name()`, `dbus_validate_bus_name()`,
`dbus_validate_utf8()`
(fd.o #39549, Simon McVittie)

• Turn `DBusBasicValue` into public API so bindings don't need to invent their own "union of everything" type (fd.o #11191, Simon McVittie)

• Enumerate data files included in the build rather than using `find(1)` (fd.o #33840, Simon McVittie)

• Add support for policy rules like `<allow own_prefix="com.example.Service"/>` in dbus-daemon (fd.o #46273, Alban Crequy)

• Windows-specific:

• make `dbus-daemon.exe --print-address` (and `--print-pid`) work again on Win32, but not on WinCE (fd.o #46049, Simon McVittie)

Â· fix duplicate case value when compiling against mingw-w64
(fd.o #47321, Andoni Morales Alastruey)

D-Bus 1.5.10 (2012-02-21)
==

The "fire in Delerium" release.

On Unix platforms, PTHREAD_MUTEX_RECURSIVE (as specified in POSIX 2008 Base and SUSv2) is now required.

â€¢ D-Bus Specification 0.19:

Â· Formally define unique connection names and well-known bus names, and document best practices for interface, bus, member and error names,

and object paths (fd.o #37095, Simon McVittie)

Â· Document the search path for session and system services on Unix, and

where they should be installed by build systems (fd.o #21620, fd.o #35306;

Simon McVittie)

Â· Document the systemd transport (fd.o #35232, Lennart Poettering)

â€¢ Make dbus_threads_init() use the same built-in threading implementation

as dbus_threads_init_default(); the user-specified primitives that it

takes as a parameter are now ignored (fd.o #43744, Simon McVittie)

â€¢ Allow all configured auth mechanisms, not just one (fd.o #45106, Pavel Strashkin)

â€¢ Improve cmake build system (Ralf Habacker):

Â· simplify XML parser dependencies (fd.o #41027)

Â· generate build timestamp (fd.o #41029)

Â· only create batch files on Windows

Â· fix option and cache syntax

Â· add help-options target

Â· share dbus-arch-deps.h.in with autotools rather than having our own version (fd.o #41033)

â€¢ Build tests successfully with older GLib, as found in e.g. Debian 6

(fd.o #41219, Simon McVittie)

â€¢ Avoid use of deprecated GThread API (fd.o #44413, Martin Pitt)

â€¢ Build documentation correctly if man2html doesn't support filenames on

its command-line (fd.o #43875, Jack Nagel)

â€¢ Improve test coverage. To get even more coverage, run the tests with

DBUS_TEST_SLOW=1 (fd.o #38285, #42811; Simon McVittie)

â€¢ Reduce the size of the shared library by moving functionality only used

by dbus-daemon, tests etc. into their internal library and deleting unused code (fd.o #34976, #39759; Simon McVittie)

â€¢ Add dbus-daemon --nopidfile option, overriding the configuration, for

setups where the default configuration must include <pidfile/> to avoid breaking traditional init, but the pid file is in fact unnecessary; use

it under systemd to improve startup time a bit (fd.o #45520, Lennart Poettering)

â€¢ Optionally (if configured --with-valgrind) add instrumentation to debug

libdbus and associated tools more meaningfully under Valgrind (fd.o #37286, Simon McVittie)

â€¢ Improve the dbus-send(1) man page (fd.o #14005, Simon McVittie)

â€¢ Make dbus-protocol.h compatible with C++11 (fd.o #46147, Marc Mutz)

â€¢ If tests are enabled and DBUS_MALLOC_CANNOT_FAIL is set in the environment,

abort on failure to malloc() (like GLib does), to turn runaway memory leaks

into a debuggable core-dump if a resource limit is applied (fd.o #41048, Simon McVittie)

â€¢ Don't crash if realloc() returns NULL in a debug build (fd.o #41048,

Simon McVittie)

â€¢ Unix-specific:

Â· Replace our broken reimplementations of recursive mutexes, which has

been broken since 2006, with an ordinary pthreads recursive mutex (fd.o #43744; Sigmund Augdal, Simon McVittie)

Â· Use epoll(7) for a more efficient main loop in Linux; equivalent patches

welcomed for other OSs' equivalents like kqueue, /dev/poll, or Solaris

event ports (fd.o #33337; Simon McVittie, Ralf Habacker)

Â· When running under systemd, use it instead of ConsoleKit to check

whether to apply at_console policies (fd.o #39609, Lennart Poettering)
Â· Avoid a highly unlikely fd leak (fd.o #29881, Simon McVittie)
Â· Don't close invalid fd -1 if getaddrinfo fails (fd.o #37258, eXeC001er)
Â Â· Don't touch ~/.dbus and ~/.dbus-keyrings when running 'make installcheck'
(fd.o #41218, Simon McVittie)
Â· Stop pretending we respect XDG_DATA_DIRS for system services: the launch helper doesn't obey environment variables to avoid privilege escalation attacks, so make the system bus follow the same rules
(fd.o #21620, Simon McVittie)

â€¢ Windows-specific:

Â· Find the dbus-daemon executable next to the shared library (fd.o #41558;
Jesper Dam, Ralf Habacker)
Â· Remove the faulty implementation of _dbus_condvar_wake_all (fd.o #44609,
Simon McVittie)

D-Bus 1.5.8 (2011-09-21)

==

The "cross-metering" release.

In addition to dead code removal and refactoring, this release contains all of the bugfixes from 1.4.16.

â€¢ Clean up dead code, and make more warnings fatal in development builds

(fd.o #39231, fd.o #41012; Simon McVittie)

â€¢ If full test coverage is requested via --enable-tests, strictly require

Python, pygobject and dbus-python, which are required by some tests; if not,

and Python is missing, skip those tests rather than failing

(fd.o #37847, Simon McVittie)

â€¢ When using cmake, provide the same version-info API in the installed headers

as for autotools (DBUS_VERSION, etc.) (fd.o #40905, Ralf Habacker)

â€¢ Add a regression test for fd.o #38005 (fd.o #39836, Simon McVittie)

â€¢ Make "NOCONFIGURE=1 ./autogen.sh" not run configure (Colin Walters)

â€¢ Add `_DBUS_STATIC_ASSERT` and use it to check invariants (fd.o #39636, Simon McVittie)

â€¢ Fix duplicates in authors list (Ralf Habacker)

â€¢ Fix broken links from `dbus-tutorial.html` if `$(htmldir) != $(docdir)` (fd.o #39879, Chris Mayo)

â€¢ Fix a small memory leak, and a failure to report errors, when updating a service file entry for activation (fd.o #39230, Simon McVittie)

â€¢ Unix-specific:

Â· Clean up (non-abstract) Unix sockets on bus daemon exit (fd.o #38656;

Brian Cameron, Simon McVittie)

Â· On systems that use `libcap-ng` but not `systemd`, drop supplemental groups

when switching to the daemon user (Red Hat #726953, Steve Grubb)

Â· Make the `cmake` build work again on GNU platforms (fd.o #29228, Simon McVittie)

Â· Fix compilation on non-C99 systems that have `inttypes.h` but not `stdint.h`, like Solaris (fd.o #40313, Dagobert Michelsen)

Â· Define `MSG_ALIGN`, `MSG_LEN`, `MSG_SPACE` on Solaris < 10 (fd.o #40235, Simon McVittie)

Â· Cope with Unixes that don't have `LOG_PERROR`, like Solaris 10 (fd.o #39987, Simon McVittie)

Â· Cope with platforms whose `vsnprintf` violates both POSIX and C99, like Tru64, IRIX and HP-UX (fd.o #11668, Simon McVittie)

â€¢ Windows-specific:

Â· Fix compilation on MSVC, which doesn't understand "inline" with its

C99 meaning (fd.o #40000; Ralf Habacker, Simon McVittie)

Â· Fix misuse of `GPid` in `test/dbus-daemon.c` (fd.o #40003, Simon McVittie)

Â· Fix cross-compilation to Windows with Automake (fd.o #40003, Simon McVittie)

D-Bus 1.5.6 (2011-07-29)

==

The "weird, gravy-like aftertaste" release.

In addition to new features and refactoring, this release contains all of the bugfixes from 1.4.14.

Potentially incompatible (Bustle and similar debugging tools will need changes to work as intended):

â€¢ Do not allow match rules to "eavesdrop" (receive messages intended for a different recipient) by mistake: eavesdroppers must now opt-in to this behaviour by putting "eavesdrop='true'" in the match rule, which will not have any practical effect on buses where eavesdropping is not allowed (fd.o #37890, Cosimo Alfarano)

Other changes:

â€¢ D-Bus Specification version 0.18 (fd.o #37890, fd.o #39450, fd.o #38252; Cosimo Alfarano, Simon McVittie)
 Â· add the "eavesdrop" keyword to match rules
 Â· define eavesdropping, unicast messages and broadcast messages
 Â· stop claiming that match rules are needed to match unicast messages to you
 Â· promote the type system to be a top-level section

â€¢ Use `DBUS_ERROR_OBJECT_PATH_IN_USE` if `dbus_connection_try_register_object_path` or `dbus_connection_try_register_fallback` fails, not `...ADDRESS_IN_USE`, and simplify object-path registration (fd.o #38874, JiÅ™Å™ KlimeÅ™)

â€¢ Consistently use atomic operations on everything that is ever manipulated via atomic ops, as was done for changes to `DBusConnection`'s `refcount` in 1.4.12 (fd.o #38005, Simon McVittie)

â€¢ Fix a file descriptor leak when connecting to a TCP socket (fd.o #37258, Simon McVittie)

â€¢ Make "make check" in a clean tree work, by not running tests until test data has been set up (fd.o #34405, Simon McVittie)

â€¢ The `dbus-daemon` no longer busy-loops if it has a very large number of file descriptors (fd.o #23194, Simon McVittie)

â€¢ Refactor message flow through dispatching to avoid locking violations if the bus daemon's message limit is hit; remove the per-connection link cache,

which was meant to improve performance, but now reduces it (fd.o #34393, Simon McVittie)

â€¢ Some cmake fixes (Ralf Habacker)

â€¢ Remove dead code, mainly from DBusString (fd.o #38570, fd.o #39610; Simon McVittie, Lennart Poettering)

â€¢ Stop storing two extra byte order indicators in each D-Bus message (fd.o #38287, Simon McVittie)

â€¢ Add an optional Stats interface which can be used to get statistics from a running dbus-daemon if enabled at configure time with --enable-stats (fd.o #34040, Simon McVittie)

â€¢ Fix various typos (fd.o #27227, fd.o #38284; Sascha Silbe, Simon McVittie)

â€¢ Documentation (fd.o #36156, Simon McVittie):
 Â· let xsltproc be overridden as usual: ./configure XSLTPROC=myxsltproc
 Â· install more documentation automatically, including man2html output
 Â· put dbus.devhelp in the right place (it must go in \${htmldir})

â€¢ Unix-specific:
 Â· look for system services in /lib/dbus-1/system-services in addition to all the other well-known locations; note that this should always be /lib, even on platforms where shared libraries on the root FS would go in /lib64, /lib/x86_64-linux-gnu or similar (fd.o #35229, Lennart Poettering)
 Â· opt-in to fd passing on Solaris (fd.o #33465, Simon McVittie)

â€¢ Windows-specific (Ralf Habacker):
 Â· fix use of a mutex for autolaunch server detection
 Â· don't crash on malloc failure in _dbus_printf_string_upper_bound

D-Bus 1.5.4 (2011-06-10)
==

Security (local denial of service):

â€¢ Byte-swap foreign-endian messages correctly, preventing a long-standing local DoS if foreign-endian messages are relayed through the dbus-daemon

(backporters: this is git commit
c3223ba6c401ba81df1305851312a47c485e6cd7)
(CVE-2011-2200, fd.o #38120, Debian #629938; Simon McVittie)

New things:

â€¢ The constant to use for an infinite timeout now has a name,
DBUS_TIMEOUT_INFINITE. It is numerically equivalent to 0x7fffffff
(INT32_MAX)
which can be used for source compatibility with older versions of
libdbus.

â€¢ If GLib and DBus-GLib are already installed, more tests will be
built,
providing better coverage. The new tests can also be installed via
./configure --enable-installed-tests
for system integration testing, if required. (fd.o #34570, Simon
McVittie)

Changes:

â€¢ Consistently use atomic operations for the DBusConnection's
refcount,
fixing potential threading problems (fd.o #38005, Simon McVittie)

â€¢ Don't use -Wl,--gc-sections by default: in practice the size
decrease is
small (300KiB on x86-64) and it frequently doesn't work in unusual
toolchains. To optimize for minimum installed size, you should
benchmark
various possibilities for CFLAGS and LDFLAGS, and set the best flags
for
your particular toolchain at configure time. (fd.o #33466, Simon
McVittie)

â€¢ Use #!/bin/sh for run-with-tmp-session-bus.sh, making it work on
*BSD
(fd.o #35880, Timothy Redaelli)

â€¢ Use ln -fs to set up dbus for systemd, which should fix
reinstallation
when not using a DESTDIR (fd.o #37870, Simon McVittie)

â€¢ Windows-specific changes:
Â· don't try to build dbus-daemon-launch-helper (fd.o #37838, Mark
Brand)

D-Bus 1.5.2 (2011-06-01)
==

The "Boar Hunter" release.

Notes for distributors:

This version of D-Bus no longer uses `-fPIE` by default. Distributions wishing to harden the `dbus-daemon` and `dbus-launch-helper` can re-enable this if their toolchain supports it reliably, via something like:

```
./configure CFLAGS=-fPIE LDFLAGS="-pie -Wl,-z,relro"
```

or by using distribution-specific wrappers such as Debian's `hardening-wrapper`.

Changes:

- â€¢ D-Bus Specification v0.17
 - Â· Reserve the extra characters used in signatures by GVariant (fd.o #34529, Simon McVittie)
 - Â· Define the ObjectManager interface (fd.o #34869, David Zeuthen)
- â€¢ Don't force `-fPIE`: distributions and libtool know better than we do whether it's desirable (fd.o #16621, fd.o #27215; Simon McVittie)
- â€¢ Allow `--disable-gc-sections`, in case your toolchain offers the `-ffunction-sections`, `-fdata-sections` and `-Wl,--gc-sections` options but they're broken, as seen on Solaris (fd.o #33466, Simon McVittie)
- â€¢ Install `dbus-daemon` and `dbus-daemon-launch-helper` in a more normal way (fd.o #14512; Simon McVittie, loosely based on a patch from Luca Barbato)
- â€¢ Ensure that maintainers upload documentation with the right permissions (fd.o #36130, Simon McVittie)
- â€¢ Don't force users of `libdbus` to be linked against `-lpthread`, `-lrt` (fd.o #32827, Simon McVittie)
- â€¢ Log system-bus activation information to `syslog` (fd.o #35705, Colin Walters)
- â€¢ Log messages dropped due to quotas to `syslog` (fd.o #35358, Simon McVittie)
- â€¢ Make the `nonce-tcp` transport work on Unix (fd.o #34569, Simon McVittie)
- â€¢ On Unix, if `/var/lib/dbus/machine-id` cannot be read, try `/etc/machine-id` (fd.o #35228, Lennart Poettering)
- â€¢ In the regression tests, don't report fds as "leaked" if they were open on startup (fd.o #35173, Simon McVittie)
- â€¢ Make `dbus-monitor` bail out if asked to monitor more than one bus, rather than silently using the last one (fd.o #26548, Will Thompson)

â€¢ Clarify documentation (fd.o #35182, Simon McVittie)
â€¢ Clean up minor dead code and some incorrect error handling
(fd.o #33128, fd.o #29881; Simon McVittie)
â€¢ Check that compiler options are supported before using them
(fd.o #19681,
Simon McVittie)
â€¢ Windows:
â€¢ Remove obsolete workaround for winioctl.h (fd.o #35083, Ralf
Habacker)

D-Bus 1.5.0 (2011-04-11)
==

The "you never know when you need to tow something from your giant
flying shark" release.

â€¢ D-Bus Specification v0.16
Â· Add support for path_namespace and arg0namespace in match rules
(fd.o #24317, #34870; Will Thompson, David Zeuthen, Simon
McVittie)
Â· Make argNpath support object paths, not just object-path-like
strings,
and document it better (fd.o #31818, Will Thompson)
â€¢ Let the bus daemon implement more than one interface (fd.o
#33757,
Simon McVittie)
â€¢ Optimize _dbus_string_replace_len to reduce waste (fd.o #21261,
Roberto Guido)
â€¢ Require user intervention to compile with missing 64-bit support
(fd.o #35114, Simon McVittie)
â€¢ Add dbus_type_is_valid as public API (fd.o #20496, Simon
McVittie)
â€¢ Raise UnknownObject instead of UnknownMethod for calls to
methods on
paths that are not part of the object tree, and UnknownInterface
for calls
to unknown interfaces in the bus daemon (fd.o #34527, Lennart
Poettering)

D-Bus 1.4.8 (2011-04-08)
==

The "It's like the beginning of a lobster" release.

â€¢ Rename configure.in to configure.ac, and update it to modern
conventions
(fd.o #32245; Javier JardÃ³n, Simon McVittie)
â€¢ Correctly give XDG_DATA_HOME priority over XDG_DATA_DIRS (fd.o
#34496,
Anders Kaseorg)
â€¢ Prevent X11 autolaunching if \$DISPLAY is unset or empty, and add
--disable-x11-autolaunch configure option to prevent it altogether

in embedded environments (fd.o #19997, NB#219964; Simon McVittie)
â€¢ Install the documentation, and an index for Devhelp (fd.o #13495,
Debian #454142; Simon McVittie, Matthias Clasen)
â€¢ If checks are not disabled, check validity of string-like types and
booleans when sending them (fd.o #16338, NB#223152; Simon McVittie)
â€¢ Add UnknownObject, UnknownInterface, UnknownProperty and PropertyReadOnly
errors to dbus-shared.h (fd.o #34527, Lennart Poettering)
â€¢ Break up a huge conditional in config-parser so gcov can produce coverage
data (fd.o #10887, Simon McVittie)
â€¢ List which parts of the Desktop Entry specification are applicable to
.service files (fd.o #19159, Sven Herzberg)
â€¢ Don't suppress service activation if two services have the same Exec=
(fd.o #35750, Colin Walters)
â€¢ Windows:
Â· Avoid the name ELEMENT_TYPE due to namespace-pollution from winioctl.h
(Andre Heinecke)
Â· Include _dbus_path_is_absolute in libdbus on Windows, fixing compilation
(fd.o #32805, Mark Brand)

D-Bus 1.4.6 (2010-02-17)

==

The "1, 2, miss a few, 99, 100" release.

â€¢ Remove unfinished changes intended to support GTest-based tests, which were mistakenly included in 1.4.4

D-Bus 1.4.4 (2010-02-17)

==

â€¢ Switch back to using even micro versions for stable releases; 1.4.1

should have been called 1.4.2, so skip that version number

â€¢ Don't leave bad file descriptors being watched when spawning processes,

which could result in a busy-loop (fd.o #32992, NB#200248; possibly

also LP#656134, LP#680444, LP#713157)

â€¢ Check for MSG_NOSIGNAL correctly

â€¢ Fix failure to detect abstract socket support (fd.o #29895)

â€¢ Make _dbus_system_logv actually exit with DBUS_SYSTEM_LOG_FATAL (fd.o #32262, NB#180486)

â€¢ Improve some error code paths (fd.o #29981, fd.o #32264, fd.o #32262,
fd.o #33128, fd.o #33277, fd.o #33126, NB#180486)
â€¢ Avoid possible symlink attacks in /tmp during compilation (fd.o #32854)
â€¢ Tidy up dead code (fd.o #25306, fd.o #33128, fd.o #34292, NB#180486)
â€¢ Improve gcc malloc annotations (fd.o #32710)
â€¢ If the system bus is launched via systemd, protect it from the OOM killer
â€¢ Documentation improvements (fd.o #11190)
â€¢ Avoid readdir_r, which is difficult to use correctly (fd.o #8284,
fd.o #15922, LP#241619)
â€¢ Cope with invalid files in session.d, system.d (fd.o #19186, Debian #230231)
â€¢ Don't distribute generated files that embed our builddir (fd.o #30285,
fd.o #34292)
â€¢ Raise the system bus's fd limit to be sufficient for its configuration
(fd.o #33474, LP#381063)
â€¢ Fix syslog string processing
â€¢ Ignore -Waddress
â€¢ Remove broken gcov parsing code and --enable-gcov, and replace them
with lcov HTML reports and --enable-compiler-coverage (fd.o #10887)
â€¢ Windows:
 Â· avoid live-lock in Windows CE due to unfair condition variables
â€¢ OpenBSD:
 Â· support credentials-passing (fd.o #32542)
â€¢ Solaris:
 Â· opt-in to thread safety (fd.o #33464)

D-Bus 1.4.1 (20 December 2010)

==

â€¢ Fix for CVE-2010-4352: sending messages with excessively-nested variants can
crash the bus. The existing restriction to 64-levels of nesting previously
only applied to the static type signature; now it also applies to dynamic
nesting using variants. Thanks to RÃ©mi Denis-Courmont for discovering this
issue.
â€¢ OS X portability fixes, including launchd support.
â€¢ Windows autolaunch improvements.
â€¢ Various bug fixes.

D-Bus 1.4.0 (6 Sep 2010)

==

- systemd hookup

D-Bus 1.3.1 (23 June 2010)

==

- New standardized PropertiesChanged signal in the properties interface
- Various portability fixes, in particular to Windows platforms
- Support forking bus services, for compatibility

D-Bus 1.3.0 (29 July 2009)

==

- ability for dbus-send to send to any bus (--address)
- file descriptor passing on Unix socket transports
- use of GCC atomic intrinsics for better processor support (requires -march=i486 or above for x86 compilation)
- thread-safe FD_CLOEXEC setting on recent Linux kernels (2.6.24-27 and up) and glibc (2.9 for pipe2 and 2.10 for accept4)
- feature negotiation in the bus daemon

File = no-dot-in-name.message

a message with dotless interface

VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call

HEADER_FIELD INTERFACE

TYPE STRING

STRING 'NoDotInHere'

HEADER_FIELD MEMBER

TYPE STRING

STRING 'Bar'

HEADER_FIELD PATH

TYPE OBJECT_PATH

OBJECT_PATH '/foo'

ALIGN 8

END_LENGTH Header

START_LENGTH Body

END_LENGTH Body

File = no-padding.message

Message with no header padding

VALID_HEADER includes a LENGTH Header and LENGTH Body

```

VALID_HEADER method_call

REQUIRED_FIELDS

## this byte array is filled with zeros to the natural length
## of the header
HEADER_FIELD UNKNOWN
TYPE ARRAY
TYPE BYTE
ALIGN 4
LENGTH ThisByteArray
START_LENGTH ThisByteArray
BYTE 1
ALIGN 8 1
END_LENGTH ThisByteArray

END_LENGTH Header
START_LENGTH Body
END_LENGTH Body

File = not-nul-header-padding.message

## has one non-nul byte in header padding

## VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call

HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.Foo'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'Bar'
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/foo'

HEADER_FIELD UNKNOWN
TYPE STRING
STRING 'a'
ALIGN 8
## kill a padding byte and replace it
CHOP 1
BYTE 'q'
END_LENGTH Header
START_LENGTH Body
END_LENGTH Body

```

File = not-well-formed.conf

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <user>mybususer</foo>
</busconfig>
```

File = ogg.m4

```
# Configure paths for libogg
# Jack Moffitt <jack@icecast.org> 10-21-2000
# Shamelessly stolen from Owen Taylor and Manish Singh

dnl XIPH_PATH_OGG([ACTION-IF-FOUND [, ACTION-IF-NOT-FOUND]])
dnl Test for libogg, and define OGG_CFLAGS and OGG_LIBS
dnl
AC_DEFUN([XIPH_PATH_OGG],
[
dnl
dnl Get the cflags and libraries
dnl
AC_ARG_WITH(ogg,AC_HELP_STRING([--with-ogg=PREFIX],[Prefix where libogg
is installed (optional)]), ogg_prefix="$withval", ogg_prefix="")
AC_ARG_WITH(ogg-libraries,AC_HELP_STRING([--with-ogg-
libraries=DIR],[Directory where libogg library is installed
(optional)]), ogg_libraries="$withval", ogg_libraries="")
AC_ARG_WITH(ogg-includes,AC_HELP_STRING([--with-ogg-
includes=DIR],[Directory where libogg header files are installed
(optional)]), ogg_includes="$withval", ogg_includes="")
AC_ARG_ENABLE(oggtest,AC_HELP_STRING([--disable-oggtest],[Do not try
to compile and run a test Ogg program]),, enable_oggtest=yes)

  if test "x$ogg_libraries" != "x" ; then
    OGG_LIBS="-L$ogg_libraries"
  elif test "x$ogg_prefix" = "xno" || test "x$ogg_prefix" = "xyes" ;
then
    OGG_LIBS=""
  elif test "x$ogg_prefix" != "x" ; then
    OGG_LIBS="-L$ogg_prefix/lib"
  elif test "x$prefix" != "xNONE" ; then
    OGG_LIBS="-L$prefix/lib"
  fi

  if test "x$ogg_prefix" != "xno" ; then
    OGG_CFLAGS="$OGG_CFLAGS -logg"
  fi

  if test "x$ogg_includes" != "x" ; then
    OGG_CFLAGS="-I$ogg_includes"
```



```

    elif test "x$ogg_prefix" = "xno" || test "x$ogg_prefix" = "xyes" ;
then
    OGG_CFLAGS=""
    elif test "x$ogg_prefix" != "x" ; then
        OGG_CFLAGS="-I$ogg_prefix/include"
    elif test "x$prefix" != "xNONE"; then
        OGG_CFLAGS="-I$prefix/include"
    fi

AC_MSG_CHECKING(for Ogg)
if test "x$ogg_prefix" = "xno" ; then
    no_ogg="disabled"
    enable_oggtest="no"
else
    no_ogg=""
fi

if test "x$enable_oggtest" = "xyes" ; then
    ac_save_CFLAGS="$CFLAGS"
    ac_save_LIBS="$LIBS"
    CFLAGS="$CFLAGS $OGG_CFLAGS"
    LIBS="$LIBS $OGG_LIBS"
dnl
dnl Now check if the installed Ogg is sufficiently new.
dnl
    rm -f conf.oggtest
    AC_TRY_RUN([
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <ogg/ogg.h>

int main ()
{
    system("touch conf.oggtest");
    return 0;
}

],, no_ogg=yes,[echo $ac_n "cross compiling; assumed OK... $ac_c"])
    CFLAGS="$ac_save_CFLAGS"
    LIBS="$ac_save_LIBS"
fi

if test "x$no_ogg" = "xdisabled" ; then
    AC_MSG_RESULT(no)
    ifelse([$2], , :, [$2])
elif test "x$no_ogg" = "x" ; then
    AC_MSG_RESULT(yes)
    ifelse([$1], , :, [$1])
else
    AC_MSG_RESULT(no)

```

```

    if test -f conf.oggtest ; then
        :
    else
        echo "*** Could not run Ogg test program, checking why..."
        CFLAGS="$CFLAGS $OGG_CFLAGS"
        LIBS="$LIBS $OGG_LIBS"
        AC_TRY_LINK([
#include <stdio.h>
#include <ogg/ogg.h>
], [ return 0; ],
    [ echo "*** The test program compiled, but did not run. This
usually means"
    echo "*** that the run-time linker is not finding Ogg or
finding the wrong"
    echo "*** version of Ogg. If it is not finding Ogg, you'll need
to set your"
    echo "*** LD_LIBRARY_PATH environment variable, or edit
/etc/ld.so.conf to point"
    echo "*** to the installed location Also, make sure you have
run ldconfig if that"
    echo "*** is required on your system"
    echo "***"
    echo "*** If you have an old version installed, it is best to
remove it, although"
    echo "*** you may also be able to get things to work by
modifying LD_LIBRARY_PATH"],
    [ echo "*** The test program failed to compile or link. See the
file config.log for the"
    echo "*** exact error that occurred. This usually means Ogg was
incorrectly installed"
    echo "*** or that you have moved Ogg since it was installed."
])
        CFLAGS="$ac_save_CFLAGS"
        LIBS="$ac_save_LIBS"
    fi
    OGG_CFLAGS=""
    OGG_LIBS=""
    ifelse([$2], , :, [$2])
fi
AC_SUBST(OGG_CFLAGS)
AC_SUBST(OGG_LIBS)
rm -f conf.oggtest
])

```

File = opposite-endian.message

Message of opposite endianness, with lots of random fields in it

OPPOSITE_ENDIAN

```
## VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call
```

```
REQUIRED_FIELDS
```

```
HEADER_FIELD UNKNOWN
```

```
TYPE INT32
```

```
INT32 0xfeeb
```

```
ALIGN 8
```

```
END_LENGTH Header
```

```
START_LENGTH Body
```

```
TYPE INT32
```

```
INT32 89765432
```

```
TYPE UINT32
```

```
UINT32 0xffffffff
```

```
TYPE STRING
```

```
STRING 'Hello this is a string'
```

```
TYPE DOUBLE
```

```
DOUBLE 3.14159
```

```
TYPE NIL
```

```
END_LENGTH Body
```

```
File = org.freedesktop.dbus-session.plist
```

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN"
```

```
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
```

```
<plist version="1.0">
```

```
<dict>
```

```
  <key>Label</key>
```

```
  <string>org.freedesktop.dbus-session</string>
```

```
  <key>ServiceIPC</key>
```

```
  <true/>
```

```
  <!-- Please uncomment on 10.4; OnDemand doesn't work properly
there. -->
```

```
  <!--
```

```
  <key>OnDemand</key>
```

```
  <false />
```

```
  -->
```

```
  <key>ProgramArguments</key>
```

```
  <array>
```

```
    <string>/usr/bin/dbus-daemon</string>
```

```

        <string>--nofork</string>
        <string>--session</string>
    </array>

    <key>Sockets</key>
    <dict>
        <key>unix_domain_listener</key>
        <dict>
            <key>SecureSocketWithKey</key>
            <string>DBUS_LAUNCHD_SESSION_BUS_SOCKET</string>
        </dict>
    </dict>
</dict>
</plist>

```

File = org.freedesktop.dbus-session.plist.in

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN"
"http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
    <key>Label</key>
    <string>org.freedesktop.dbus-session</string>

    <key>ServiceIPC</key>
    <true/>

    <!-- Please uncomment on 10.4; OnDemand doesn't work properly
there. -->
    <!--
    <key>OnDemand</key>
    <false />
    -->

    <key>ProgramArguments</key>
    <array>
        <string>@DBUS_DAEMONDIR@/dbus-daemon</string>
        <string>--nofork</string>
        <string>--session</string>
    </array>

    <key>Sockets</key>
    <dict>
        <key>unix_domain_listener</key>
        <dict>
            <key>SecureSocketWithKey</key>
            <string>DBUS_LAUNCHD_SESSION_BUS_SOCKET</string>
        </dict>
    </dict>

```

</dict>
</plist>

File = org.freedesktop.DBus.TestSuite.PrivServer.service

[D-BUS Service]
Name=org.freedesktop.DBus.TestSuite.PrivServer
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/name-test/test-
privserver

File = org.freedesktop.DBus.TestSuite.PrivServer.service.in

[D-BUS Service]
Name=org.freedesktop.DBus.TestSuite.PrivServer
Exec=@DBUS_TEST_EXEC@/name-test/test-privserver@EXEEXT@

File = org.freedesktop.DBus.TestSuiteEchoService.service

[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteEchoService
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-service
User=anyrandomuser

File = org.freedesktop.DBus.TestSuiteEchoService.service.in

[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteEchoService
Exec=@DBUS_TEST_EXEC@/test-service@EXEEXT@
User=anyrandomuser

File = org.freedesktop.DBus.TestSuiteEchoService.service.in.~1~

[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteEchoService

Exec=@DBUS_TEST_EXEC@/test-service@EXEEXT@

File = org.freedesktop.DBus.TestSuiteEchoService.service.~1~

[D-BUS Service]

Name=org.freedesktop.DBus.TestSuiteEchoService
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-service

File = org.freedesktop.DBus.TestSuiteForkingEchoService.service

[D-BUS Service]

Name=org.freedesktop.DBus.TestSuiteForkingEchoService
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-service
org.freedesktop.DBus.TestSuiteForkingEchoService fork

File = org.freedesktop.DBus.TestSuiteForkingEchoService.service.in

[D-BUS Service]

Name=org.freedesktop.DBus.TestSuiteForkingEchoService
Exec=@DBUS_TEST_EXEC@/test-service@EXEEXT@
org.freedesktop.DBus.TestSuiteForkingEchoService fork

File = org.freedesktop.DBus.TestSuiteNoExec.service

[D-BUS Service]

Name=org.freedesktop.DBus.TestSuiteNoExec
User=anyrandomuser

File = org.freedesktop.DBus.TestSuiteNoExec.service.in

[D-BUS Service]

Name=org.freedesktop.DBus.TestSuiteNoExec
User=anyrandomuser

File = org.freedesktop.DBus.TestSuiteNoService.service

```
[D-BUS Service]
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-service
User=anyrandomuser
```

File = org.freedesktop.DBus.TestSuiteNoService.service.in

```
[D-BUS Service]
Exec=@DBUS_TEST_EXEC@/test-service@EXEEXT@
User=anyrandomuser
```

File = org.freedesktop.DBus.TestSuiteNoUser.service

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteNoUser
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-service
```

File = org.freedesktop.DBus.TestSuiteNoUser.service.in

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteNoUser
Exec=@DBUS_TEST_EXEC@/test-service@EXEEXT@
```

File = org.freedesktop.DBus.TestSuiteSegfaultService.service

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteSegfaultService
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-segfault
User=anyrandomuser
```

File = org.freedesktop.DBus.TestSuiteSegfaultService.service.in

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteSegfaultService
Exec=@DBUS_TEST_EXEC@/test-segfault@EXEEXT@
User=anyrandomuser
```

```
File = org.freedesktop.DBus.TestSuiteSegfaultService.service.in.~1~
```

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteSegfaultService
Exec=@DBUS_TEST_EXEC@/test-segfault@EXEEXT@
```

```
File = org.freedesktop.DBus.TestSuiteSegfaultService.service.~1~
```

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteSegfaultService
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-segfault
```

```
File = org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
```

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteShellEchoServiceFail
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-shell-service
"this should 'fail' because of an unterminated quote
User=anyrandomuser
```

```
File = org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service.in
```

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteShellEchoServiceFail
Exec=@DBUS_TEST_EXEC@/test-shell-service@EXEEXT@ "this should 'fail'
because of an unterminated quote
User=anyrandomuser
```


File =
org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service.in.~1~

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteShellEchoServiceFail
Exec=@DBUS_TEST_EXEC@/test-shell-service@EXEEXT@ "this should 'fail'
because of an unterminated quote
```

File = org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service.~1~

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteShellEchoServiceFail
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-shell-service
"this should 'fail' because of an unterminated quote
```

File = org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-shell-service -
test "that" 'we get' back --what "we put in"
User=anyrandomuser
```

File =
org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service.in

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess
Exec=@DBUS_TEST_EXEC@/test-shell-service@EXEEXT@ -test "that" 'we get'
back --what "we put in"
```

File =
org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service.~1~

```
[D-BUS Service]
Name=org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess
Exec=/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
```

```
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/test/test-shell-service -
test "that" 'we get' back --what "we put in"
```

File = output.0

```
@%:@! /bin/sh
@%:@ Guess values for system-dependent variables and create Makefiles.
@%:@ Generated by GNU Autoconf 2.69 for dbus-glib 0.100.2.
@%:@
@%:@ Report bugs to
<https://bugs.freedesktop.org/enter\_bug.cgi?product=dbus&component=GLib>.
@%:@
@%:@
@%:@ Copyright (C) 1992-1996, 1998-2012 Free Software Foundation, Inc.
@%:@
@%:@
@%:@ This configure script is free software; the Free Software
Foundation
@%:@ gives unlimited permission to copy, distribute and modify it.
## ----- ##
## M4sh Initialization. ##
## ----- ##

# Be more Bourne compatible
DUALCASE=1; export DUALCASE # for MKS sh
if test -n "${ZSH_VERSION+set}" && (emulate sh) >/dev/null 2>&1; then
:
  emulate sh
  NULLCMD=:
  # Pre-4.2 versions of Zsh do word splitting on ${1+"$@"}, which
  # is contrary to our usage.  Disable this feature.
  alias -g '${1+"$@"}'='"$@"'
  setopt NO_GLOB_SUBST
else
  case `(set -o) 2>/dev/null` in @%:@(
  *posix*) :
    set -o posix ;; @%:@(
  *) :
    ;;
  esac
fi

as_nl='
'
export as_nl
# Printing a long string crashes Solaris 7 /usr/bin/printf.
```



```

# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " "$as_nl"

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
  *[\ \/]* ) as_myself=$0 ;;
  *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
  as_myself=$0
fi
if test ! -f "$as_myself"; then
  $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
  exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh). But do not cause bugs in bash 2.01; the "|| exit
1"
# suppresses any "Segmentation fault" message there. '((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
  && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.

```

```

(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

# Use a proper internal environment variable to ensure we don't fall
# into an infinite loop, continuously re-executing ourselves.
if test x"${_as_can_reexec}" != xno && test "x$CONFIG_SHELL" != x;
then
    _as_can_reexec=no; export _as_can_reexec;
    # We cannot yet assume a decent shell, so we have to provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec'.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
as_fn_exit 255
fi
# We don't want this to propagate to other subprocesses.
{ _as_can_reexec=; unset _as_can_reexec;}
if test "x$CONFIG_SHELL" = x; then
    as_bourne_compatible="if test -n \"\${ZSH_VERSION+set}\" && (emulate
sh) >/dev/null 2>&1; then :
    emulate sh
    NULLCMD=:
    # Pre-4.2 versions of Zsh do word splitting on \"\${1+\"$@\"}\", which
    # is contrary to our usage. Disable this feature.
    alias -g \"\${1+\"$@\"}\"='\"$@\"'
    setopt NO_GLOB_SUBST
else
    case \"(set -o) 2>/dev/null\" in @%:@(
    *posix*) :
        set -o posix ;; @%:@(
    *) :
        ;;
esac
fi
"
    as_required="as_fn_return () { (exit \$1); }
as_fn_success () { as_fn_return 0; }
as_fn_failure () { as_fn_return 1; }
as_fn_ret_success () { return 0; }
as_fn_ret_failure () { return 1; }

```

```
exitcode=0
as_fn_success || { exitcode=1; echo as_fn_success failed.; }
as_fn_failure && { exitcode=1; echo as_fn_failure succeeded.; }
as_fn_ret_success || { exitcode=1; echo as_fn_ret_success failed.; }
as_fn_ret_failure && { exitcode=1; echo as_fn_ret_failure succeeded.;
}
if ( set x; as_fn_ret_success y && test x = "\"\$1\" " ); then :

else
  exitcode=1; echo positional parameters were not saved.
fi
test x\$exitcode = x0 || exit 1
test -x / || exit 1"
  as_suggested="
as_lineno_1=";as_suggested=\$as_suggested$LINENO;as_suggested=\$as_suggested" as_lineno_1a=\$LINENO

as_lineno_2=";as_suggested=\$as_suggested$LINENO;as_suggested=\$as_suggested" as_lineno_2a=\$LINENO
  eval 'test \"x\$as_lineno_1'\$as_run'\\" !=
\"x\$as_lineno_2'\$as_run'\\" &&
  test \"x\`expr \$as_lineno_1'\$as_run' + 1\`\" =
\"x\$as_lineno_2'\$as_run'\\"' || exit 1
test \"\$( ( 1 + 1 ) ) = 2\" || exit 1

test -n \"\${ZSH_VERSION+set}\${BASH_VERSION+set}\" || (

ECHO='////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////
\\'
ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO
ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO
PATH=/empty FPATH=/empty; export PATH FPATH
test \"X\`printf %s \$ECHO\`\" = \"X\$ECHO\" \\\
  || test \"X\`print -r -- \$ECHO\`\" = \"X\$ECHO\" ) || exit 1"
if (eval "\$as_required") 2>/dev/null; then :
as_have_required=yes
else
as_have_required=no
fi
if test x\$as_have_required = xyes && (eval "\$as_suggested")
2>/dev/null; then :

else
as_save_IFS=\$IFS; IFS=\$PATH_SEPARATOR
as_found=false
for as_dir in /bin\$PATH_SEPARATOR/usr/bin\$PATH_SEPARATOR\$PATH
do
IFS=\$as_save_IFS
test -z "\$as_dir" && as_dir=.
as_found=:
```

```

case $as_dir in @%:@(
    /*)
        for as_base in sh bash ksh sh5; do
            # Try only shells that exist, to save several forks.
            as_shell=$as_dir/$as_base
            if { test -f "$as_shell" || test -f "$as_shell.exe"; } &&
                { $as_echo "$as_bourne_compatible"$as_required" |
as_run=a "$as_shell"; } 2>/dev/null; then :
                CONFIG_SHELL=$as_shell as_have_required=yes
                    if { $as_echo "$as_bourne_compatible"$as_suggested" |
as_run=a "$as_shell"; } 2>/dev/null; then :
                        break 2
                    fi
                fi
            done;;
        esac
    as_found=false
done
$as_found || { if { test -f "$SHELL" || test -f "$SHELL.exe"; } &&
    { $as_echo "$as_bourne_compatible"$as_required" | as_run=a
"$SHELL"; } 2>/dev/null; then :
    CONFIG_SHELL=$SHELL as_have_required=yes
fi; }
IFS=$as_save_IFS

    if test "x$CONFIG_SHELL" != x; then :
        export CONFIG_SHELL
            # We cannot yet assume a decent shell, so we have to
provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec`.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
exit 255
fi

    if test x$as_have_required = xno; then :
        $as_echo "$0: This script requires a shell more modern than all"
        $as_echo "$0: the shells that I found on your system."
    fi

```

```

if test x${ZSH_VERSION+set} = xset ; then
    $as_echo "$0: In particular, zsh $ZSH_VERSION has bugs and should"
    $as_echo "$0: be upgraded to zsh 4.3.4 or later."
else
    $as_echo "$0: Please tell bug-autoconf@gnu.org and
$0:
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=Glib
$0: about your system, including any error possibly output
$0: before this message. Then install a modern shell, or
$0: manually run the script under such a shell if you do
$0: have one."
    fi
    exit 1
fi
fi
fi
SHELL=${CONFIG_SHELL-/bin/sh}
export SHELL
# Unset more variables known to interfere with behavior of common
tools.
CLICOLOR_FORCE= GREP_OPTIONS=
unset CLICOLOR_FORCE GREP_OPTIONS

## ----- ##
## M4sh Shell Functions. ##
## ----- ##
@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @$|@? to STATUS, without forking.
as_fn_set_status ()
{
    return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS
@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
}

```



```

} @%:@ as_fn_exit

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "@S|@as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{

    case $as_dir in #(
    -*) as_dir=./$as_dir;;
    esac
    test -d "$as_dir" || eval $as_mkdir_p || {
        as_dirs=
        while ;; do
            case $as_dir in #(
            *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\'/g"`;;
            #'(
            *) as_qdir=$as_dir;;
            esac
            as_dirs="'$as_qdir' $as_dirs"
            as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\([^\/]\)\/*\([^\/]\)\/*\*$' \|| \
X"$as_dir" : 'X\(\(\)\)\/*\([^\/]\)\/*\*$' \|| \
X"$as_dir" : 'X\(\(\)\)\$' \|| \
X"$as_dir" : 'X\(\(\)\)' \|| . 2>/dev/null ||
$as_echo X"$as_dir" |
sed '/^X\([^\/]\)\(\(\)\)\/*\([^\/]\)\/*\*$/{
s//\1/
q
}
/^X\(\(\)\)\/*\([^\/]\)\/*\*$/{
s//\1/
q
}
/^X\(\(\)\)\$/{
s//\1/
q
}
/^X\(\(\)\)\.*/{
s//\1/
q
}
s/././; q'`
            test -d "$as_dir" && break
        done
        test -z "$as_dirs" || eval "mkdir $as_dirs"
    } || test -d "$as_dir" || as_fn_error $? "cannot create directory
$as_dir"

} @%:@ as_fn_mkdir_p

```

```

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$as_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
        {
            eval $1+=\$2
        }'
else
    as_fn_append ()
    {
        eval $1=\$$1\$2
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \$(( 1 + 1 )) = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
        {
            as_val=$(( $* ))
        }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----

```

```

@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
    as_status=$1; test $as_status -eq 0 && as_status=1
    if test "$4"; then
        as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
        $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
    fi
    $as_echo "$as_me: error: $2" >&2
    as_fn_exit $as_status
} @%:@ as_fn_error

if expr a : '\(a\)' >/dev/null 2>&1 &&
    test "X`expr 00001 : '.*\(...\)`" = X001; then
    as_expr=expr
else
    as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
    as_basename=basename
else
    as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
    as_dirname=dirname
else
    as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]\*\)\/*$' \| \| \
X"$0" : 'X\(\(\)\)$' \| \| \
X"$0" : 'X\(\(\)\)' \| \| . 2>/dev/null ||
$as_echo X/"$0" |
sed '/^\.*\/\([^\/]\*\)\/*$/{
    s//\1/
    q
}
/^X\(\(\)\)$/{
    s//\1/
    q
}
/^X\(\(\)\)\.*/{'

```

```

        s//\1/
        q
    }
    s/.*/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxy'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_letters$as_cr_digits

as_lineno_1=$LINENO as_lineno_1a=$LINENO
as_lineno_2=$LINENO as_lineno_2a=$LINENO
eval 'test "x$as_lineno_1'$as_run'" != "x$as_lineno_2'$as_run'" &&
test "x`expr $as_lineno_1'$as_run' + 1`" = "x$as_lineno_2'$as_run'"
|| {
# Blame Lee E. McMahon (1931-1989) for sed's syntax.  :-)
sed -n '
    p
    /[$]LINENO/=
    ' <$as_myself |
    sed '
        s/[$]LINENO.*/&-/
        t lineno
        b
        :lineno
        N
        :loop
        s/[$]LINENO\([^'$as_cr_alnum'_]*\n\)\(.*\)/\2\1\2/
        t loop
        s/-\n.*//
    ' >$as_me.lineno &&
    chmod +x "$as_me.lineno" ||
    { $as_echo "$as_me: error: cannot create $as_me.lineno; rerun with
a POSIX shell" >&2; as_fn_exit 1; }

# If we had to re-execute with $CONFIG_SHELL, we're ensured to have
# already done that, so ensure we don't try to do so again and fall
# in an infinite loop.  This has already happened in practice.
_as_can_reexec=no; export _as_can_reexec
# Don't try to exec as it changes ${0}, causing all sort of problems
# (the dirname of ${0} is not the place where we might find the
# original and so on.  Autoconf is especially sensitive to this).
. "$as_me.lineno"
# Exit status is that of the last command.
exit
}

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((

```

```

-n*)
  case `echo 'xy\c'` in
  *c*) ECHO_T=' ';; # ECHO_T is single tab character.
  xy)  ECHO_C='\c';;
  *)   echo `echo ksh88 bug on AIX 6.1` > /dev/null
      ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$ conf$$exe conf$$file
if test -d conf$$dir; then
  rm -f conf$$dir/conf$$file
else
  rm -f conf$$dir
  mkdir conf$$dir 2>/dev/null
fi
if (echo >conf$$file) 2>/dev/null; then
  if ln -s conf$$file conf$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$file conf$$dir 2>/dev/null && test ! -f conf$$exe
  ||
    as_ln_s='cp -pR'
  elif ln conf$$file conf$$ 2>/dev/null; then
    as_ln_s=ln
  else
    as_ln_s='cp -pR'
  fi
else
  as_ln_s='cp -pR'
fi
rm -f conf$$ conf$$exe conf$$dir/conf$$file conf$$file
rmdir conf$$dir 2>/dev/null

if mkdir -p . 2>/dev/null; then
  as_mkdir_p='mkdir -p "$as_dir"'
else
  test -d ./-p && rmdir ./-p
  as_mkdir_p=false
fi

as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.

```

```

as_tr_cpp="eval sed
'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+%pp%;s%[^_$as_cr_alnum]%%_g'"

SHELL=${CONFIG_SHELL-/bin/sh}

test -n "$DJDIR" || exec 7<&0 </dev/null
exec 6>&1

# Name of the host.
# hostname on some systems (SVR3.2, old GNU/Linux) returns a bogus
exit status,
# so uname gets run too.
ac_hostname=`(hostname || uname -n) 2>/dev/null | sed 1q`

#
# Initializations.
#
ac_default_prefix=/usr/local
ac_clean_files=
ac_config_libobj_dir=.
LIB@&t@OBS=
cross_compiling=no
subdirs=
MFLAGS=
MAKEFLAGS=

# Identity of this package.
PACKAGE_NAME='dbus-glib'
PACKAGE_TARNAME='dbus-glib'
PACKAGE_VERSION='0.100.2'
PACKAGE_STRING='dbus-glib 0.100.2'
PACKAGE_BUGREPORT='https://bugs.freedesktop.org/enter_bug.cgi?product=
dbus&component=GLib'
PACKAGE_URL=''

# Factoring default headers for most tests.
ac_includes_default="\
#include <stdio.h>
#ifdef HAVE_SYS_TYPES_H
# include <sys/types.h>
#endif
#ifdef HAVE_SYS_STAT_H
# include <sys/stat.h>
#endif
#ifdef STDC_HEADERS
# include <stdlib.h>
# include <stddef.h>
#else

```

```
# ifdef HAVE_STDLIB_H
# include <stdlib.h>
# endif
#endif
#ifdef HAVE_STRING_H
# if !defined STDC_HEADERS && defined HAVE_MEMORY_H
# include <memory.h>
# endif
# include <string.h>
#endif
#ifdef HAVE_STRINGS_H
# include <strings.h>
#endif
#ifdef HAVE_INTTYPES_H
# include <inttypes.h>
#endif
#ifdef HAVE_STDINT_H
# include <stdint.h>
#endif
#ifdef HAVE_UNISTD_H
# include <unistd.h>
#endif"
```

```
ac_subst_vars='am__EXEEXT_FALSE
am__EXEEXT_TRUE
LTLIBOBJS
LIB@&t@OBS
TEST_SOCKET_DIR
ABSOLUTE_TOP_BUILDDIR
TEST_SLEEP_FOREVER_BINARY
TEST_SEGFAULT_BINARY
TEST_EXIT_BINARY
TEST_INTERFACES_SERVICE_BINARY
TEST_CORE_SERVICE_BINARY
TEST_SHELL_SERVICE_BINARY
TEST_SERVICE_BINARY
TEST_SERVICE_DIR
EXPANDED_DATADIR
EXPANDED_LIBDIR
EXPANDED_BINDIR
EXPANDED_SYSCONFDIR
EXPANDED_LOCALSTATEDIR
GTK_DOC_USE_REBASE_FALSE
GTK_DOC_USE_REBASE_TRUE
GTK_DOC_USE_LIBTOOL_FALSE
GTK_DOC_USE_LIBTOOL_TRUE
GTK_DOC_BUILD_PDF_FALSE
GTK_DOC_BUILD_PDF_TRUE
GTK_DOC_BUILD_HTML_FALSE
GTK_DOC_BUILD_HTML_TRUE
ENABLE_GTK_DOC_FALSE
ENABLE_GTK_DOC_TRUE'
```

GTKDOC_DEPS_LIBS
GTKDOC_DEPS_CFLAGS
HTML_DIR
GTKDOC_MKPDF
GTKDOC_REBASE
GTKDOC_CHECK
DBUS_GLIB_TOOL_LIBS
DBUS_GLIB_TOOL_CFLAGS
GLIB_GENMARSHAL
HAVE_GLIB_THREADS_FALSE
HAVE_GLIB_THREADS_TRUE
DBUS_GLIB_THREADS_LIBS
DBUS_GLIB_THREADS_CFLAGS
DBUS_GLIB_LIBS
DBUS_GLIB_CFLAGS
DBUS_LIBS
DBUS_CFLAGS
PKG_CONFIG_LIBDIR
PKG_CONFIG_PATH
PKG_CONFIG
DBUS_PATH_OR_ABSTRACT
OTOOL64
OTOOL
LIPO
NMEDIT
DSYMUTIL
MANIFEST_TOOL
RANLIB
ac_ct_AR
AR
DLLTOOL
OBJDUMP
LN_S
NM
ac_ct_DUMPBIN
DUMPBIN
LD
FGREP
SED
LIBTOOL
DBUS_BUILD_TESTS_FALSE
DBUS_BUILD_TESTS_TRUE
DBUS_BINDING_TOOL
DBUS_BASH_COMPLETION_FALSE
DBUS_BASH_COMPLETION_TRUE
EGREP
GREP
CPP
am__fastdepCC_FALSE
am__fastdepCC_TRUE
CCDEPMODE
am__nodep

AMDEPBACKSLASH
AMDEP_FALSE
AMDEP_TRUE
am__quote
am__include
DEPDIR
OBJEXT
EXEEXT
ac_ct_CC
CPPFLAGS
LDFLAGS
CFLAGS
CC
LT_AGE
LT_REVISION
LT_CURRENT
AM_BACKSLASH
AM_DEFAULT_VERBOSITY
AM_DEFAULT_V
AM_V
MAINT
MAINTAINER_MODE_FALSE
MAINTAINER_MODE_TRUE
am__untar
am__tar
AMTAR
am__leading_dot
SET_MAKE
AWK
mkdir_p
MKDIR_P
INSTALL_STRIP_PROGRAM
STRIP
install_sh
MAKEINFO
AUTOHEADER
AUTOMAKE
AUTOCONF
ACLOCAL
VERSION
PACKAGE
CYGPATH_W
am__isrc
INSTALL_DATA
INSTALL_SCRIPT
INSTALL_PROGRAM
host_os
host_vendor
host_cpu
host
build_os
build_vendor

build_cpu
build
target_alias
host_alias
build_alias
LIBS
ECHO_T
ECHO_N
ECHO_C
DEFS
mandir
localedir
libdir
psdir
pdfdir
dvidir
htmldir
infodir
docdir
oldincludedir
includedir
localstatedir
sharedstatedir
sysconfdir
datadir
datarootdir
libexecdir
sbindir
bindir
program_transform_name
prefix
exec_prefix
PACKAGE_URL
PACKAGE_BUGREPORT
PACKAGE_STRING
PACKAGE_VERSION
PACKAGE_TARNAME
PACKAGE_NAME
PATH_SEPARATOR
SHELL'
ac_subst_files=''
ac_user_opts='
enable_option_checking
enable_maintainer_mode
enable_silent_rules
enable_dependency_tracking
enable_tests
enable_ansi
enable_verbose_mode
enable_asserts
enable_checks
enable_gcov

```

enable_bash_completion
with_test_socket_dir
with_introspect_xml
with_dbus_binding_tool
enable_shared
enable_static
with_pic
enable_fast_install
with_gnu_ld
with_libtool_sysroot
enable_libtool_lock
with_html_dir
enable_gtk_doc
enable_gtk_doc_html
enable_gtk_doc_pdf
'
        ac_precious_vars='build_alias
host_alias
target_alias
CC
CFLAGS
LDFLAGS
LIBS
CPPFLAGS
CPP
PKG_CONFIG
PKG_CONFIG_PATH
PKG_CONFIG_LIBDIR
DBUS_CFLAGS
DBUS_LIBS
DBUS_GLIB_CFLAGS
DBUS_GLIB_LIBS
DBUS_GLIB_THREADS_CFLAGS
DBUS_GLIB_THREADS_LIBS
GTKDOC_DEPS_CFLAGS
GTKDOC_DEPS_LIBS'

# Initialize some variables set by options.
ac_init_help=
ac_init_version=false
ac_unrecognized_opts=
ac_unrecognized_sep=
# The variables have the same names as the options, with
# dashes changed to underlines.
cache_file=/dev/null
exec_prefix=NONE
no_create=
no_recursion=
prefix=NONE
program_prefix=NONE
program_suffix=NONE

```

```

program_transform_name=s,x,x,
silent=
site=
srcdir=
verbose=
x_includes=NONE
x_libraries=NONE

# Installation directory options.
# These are left unexpanded so users can "make install
exec_prefix=/foo"
# and all the variables that are supposed to be based on exec_prefix
# by default will actually change.
# Use braces instead of parens because sh, perl, etc. also accept
them.
# (The list follows the same order as the GNU Coding Standards.)
bindir='${exec_prefix}/bin'
sbindir='${exec_prefix}/sbin'
libexecdir='${exec_prefix}/libexec'
datarootdir='${prefix}/share'
datadir='${datarootdir}'
sysconfdir='${prefix}/etc'
sharedstatedir='${prefix}/com'
localstatedir='${prefix}/var'
includedir='${prefix}/include'
oldincludedir='/usr/include'
docdir='${datarootdir}/doc/${PACKAGE_TARNAME}'
infodir='${datarootdir}/info'
htmldir='${docdir}'
dvidir='${docdir}'
pdfdir='${docdir}'
psdir='${docdir}'
libdir='${exec_prefix}/lib'
localedir='${datarootdir}/locale'
mandir='${datarootdir}/man'

ac_prev=
ac_dashdash=
for ac_option
do
  # If the previous option needs an argument, assign it.
  if test -n "$ac_prev"; then
    eval $ac_prev=\$ac_option
    ac_prev=
    continue
  fi

  case $ac_option in
    *=?*) ac_optarg=`expr "$ac_option" : '[^=]*=\(.*\)'` ;;
    *=)   ac_optarg= ;;
    *)    ac_optarg=yes ;;
  esac

```

Accept the important Cygnus configure options, so we can diagnose typos.

```
case $ac_dashdash$ac_option in
--)
  ac_dashdash=yes ;;

-bindir | --bindir | --bindi | --bind | --bin | --bi)
  ac_prev=bindir ;;
-bindir=* | --bindir=* | --bindi=* | --bind=* | --bin=* | --bi=*)
  bindir=$ac_optarg ;;

-build | --build | --buil | --bui | --bu)
  ac_prev=build_alias ;;
-build=* | --build=* | --buil=* | --bui=* | --bu=*)
  build_alias=$ac_optarg ;;

-cache-file | --cache-file | --cache-fil | --cache-fi \
| --cache-f | --cache- | --cache | --cach | --cac | --ca | --c)
  ac_prev=cache_file ;;
-cache-file=* | --cache-file=* | --cache-fil=* | --cache-fi=* \
| --cache-f=* | --cache-=* | --cache=* | --cach=* | --cac=* | --ca=*
| --c=*)
  cache_file=$ac_optarg ;;

--config-cache | -C)
  cache_file=config.cache ;;

-datadir | --datadir | --datadi | --datad)
  ac_prev=datadir ;;
-datadir=* | --datadir=* | --datadi=* | --datad=*)
  datadir=$ac_optarg ;;

-datarootdir | --datarootdir | --datarootdi | --datarootd | --
dataroot \
| --dataroo | --dataro | --datar)
  ac_prev=datarootdir ;;
-datarootdir=* | --datarootdir=* | --datarootdi=* | --datarootd=* \
| --dataroot=* | --dataroo=* | --dataro=* | --datar=*)
  datarootdir=$ac_optarg ;;

-disable-* | --disable-*)
  ac_useropt=`expr "x$ac_option" : 'x-*disable-\(.*\)'`
  # Reject names that are not valid shell variable names.
  expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
  as_fn_error $? "invalid feature name: $ac_useropt"
  ac_useropt_orig=$ac_useropt
  ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]//_/'`
  case $ac_user_opts in
  *)
"enable_$ac_useropt"
```

```

"*) ;;
    *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
disable-$ac_useropt_orig"
    ac_unrecognized_sep=', ';;
    esac
    eval enable_$ac_useropt=no ;;

-docdir | --docdir | --docdi | --doc | --do)
    ac_prev=docdir ;;
-docdir=* | --docdir=* | --docdi=* | --doc=* | --do=*)
    docdir=$ac_optarg ;;

-dvidir | --dvidir | --dvidi | --dvid | --dvi | --dv)
    ac_prev=dvidir ;;
-dvidir=* | --dvidir=* | --dvidi=* | --dvid=* | --dvi=* | --dv=*)
    dvidir=$ac_optarg ;;

-enable-* | --enable-*)
    ac_useropt=`expr "x$ac_option" : 'x-*enable-\([^=]*\) '`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
    as_fn_error $? "invalid feature name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *)
"enable_$ac_useropt"
"*) ;;
    *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
enable-$ac_useropt_orig"
    ac_unrecognized_sep=', ';;
    esac
    eval enable_$ac_useropt=\$ac_optarg ;;

-exec-prefix | --exec_prefix | --exec-prefix | --exec-prefi \
| --exec-pref | --exec-pre | --exec-pr | --exec-p | --exec- \
| --exec | --exe | --ex)
    ac_prev=exec_prefix ;;
-exec-prefix=* | --exec_prefix=* | --exec-prefix=* | --exec-prefi=*
\
| --exec-pref=* | --exec-pre=* | --exec-pr=* | --exec-p=* | --exec-
=* \
| --exec=* | --exe=* | --ex=*)
    exec_prefix=$ac_optarg ;;

-gas | --gas | --ga | --g)
    # Obsolete; use --with-gas.
    with_gas=yes ;;

-help | --help | --hel | --he | -h)

```

```

    ac_init_help=long ;;
-help=r* | --help=r* | --hel=r* | --he=r* | -hr*)
    ac_init_help=recursive ;;
-help=s* | --help=s* | --hel=s* | --he=s* | -hs*)
    ac_init_help=short ;;

-host | --host | --hos | --ho)
    ac_prev=host_alias ;;
-host=* | --host=* | --hos=* | --ho=*)
    host_alias=$ac_optarg ;;

-htmldir | --htmldir | --htmlidi | --htmlid | --html | --htm | --ht)
    ac_prev=htmldir ;;
-htmldir=* | --htmldir=* | --htmlidi=* | --htmlid=* | --html=* | --
htm=* \
| --ht=*)
    htmldir=$ac_optarg ;;

-includedir | --includedir | --includedi | --included | --include \
| --includ | --inclu | --incl | --inc)
    ac_prev=includedir ;;
-includedir=* | --includedir=* | --includedi=* | --included=* | --
include=* \
| --includ=* | --inclu=* | --incl=* | --inc=*)
    includedir=$ac_optarg ;;

-infodir | --infodir | --infodi | --infod | --info | --inf)
    ac_prev=infodir ;;
-infodir=* | --infodir=* | --infodi=* | --infod=* | --info=* | --
inf=*)
    infodir=$ac_optarg ;;

-libdir | --libdir | --libdi | --libd)
    ac_prev=libdir ;;
-libdir=* | --libdir=* | --libdi=* | --libd=*)
    libdir=$ac_optarg ;;

-libexecdir | --libexecdir | --libexecdi | --libexecd | --libexec \
| --libexe | --libex | --libe)
    ac_prev=libexecdir ;;
-libexecdir=* | --libexecdir=* | --libexecdi=* | --libexecd=* | --
libexec=* \
| --libexe=* | --libex=* | --libe=*)
    libexecdir=$ac_optarg ;;

-localedir | --localedir | --localedi | --localed | --locale)
    ac_prev=localedir ;;
-localedir=* | --localedir=* | --localedi=* | --localed=* | --
locale=*)
    localedir=$ac_optarg ;;

-localstatedir | --localstatedir | --localstatedi | --localstated \

```

```

| --localstate | --localstat | --localsta | --localst | --locals)
  ac_prev=localstatedir ;;
-localstatedir=* | --localstatedir=* | --localstatedi=* | --
localstated=* \
| --localstate=* | --localstat=* | --localsta=* | --localst=* | --
locals=*)
  localstatedir=$ac_optarg ;;

-mandir | --mandir | --mandi | --mand | --man | --ma | --m)
  ac_prev=mandir ;;
-mandir=* | --mandir=* | --mandi=* | --mand=* | --man=* | --ma=* | -
-m=*)
  mandir=$ac_optarg ;;

-nfp | --nfp | --nf)
  # Obsolete; use --without-fp.
  with_fp=no ;;

-no-create | --no-create | --no-creat | --no-crea | --no-cre \
| --no-cr | --no-c | -n)
  no_create=yes ;;

-no-recursion | --no-recursion | --no-recursio | --no-recursi \
| --no-recurs | --no-recur | --no-recu | --no-rec | --no-re | --no-
r)
  no_recursion=yes ;;

-oldincludedir | --oldincludedir | --oldincludedi | --oldincluded \
| --oldinclude | --oldinclud | --oldinclu | --oldincl | --oldinc \
| --oldin | --oldi | --old | --ol | --o)
  ac_prev=oldincludedir ;;
-oldincludedir=* | --oldincludedir=* | --oldincludedi=* | --
oldincluded=* \
| --oldinclude=* | --oldinclud=* | --oldinclu=* | --oldincl=* | --
oldinc=* \
| --oldin=* | --oldi=* | --old=* | --ol=* | --o=*)
  oldincludedir=$ac_optarg ;;

-prefix | --prefix | --prefi | --pref | --pre | --pr | --p)
  ac_prev=prefix ;;
-prefix=* | --prefix=* | --prefi=* | --pref=* | --pre=* | --pr=* | -
-p=*)
  prefix=$ac_optarg ;;

-program-prefix | --program-prefix | --program-prefi | --program-
pref \
| --program-pre | --program-pr | --program-p)
  ac_prev=program_prefix ;;
-program-prefix=* | --program-prefix=* | --program-prefi=* \
| --program-pref=* | --program-pre=* | --program-pr=* | --program-
p=*)
  program_prefix=$ac_optarg ;;

```



```

-program-suffix | --program-suffix | --program-suffi | --program-
suff \
| --program-suf | --program-su | --program-s)
ac_prev=program_suffix ;;
-program-suffix=* | --program-suffix=* | --program-suffi=* \
| --program-suff=* | --program-suf=* | --program-su=* | --program-
s=*)
program_suffix=$ac_optarg ;;

-program-transform-name | --program-transform-name \
| --program-transform-nam | --program-transform-na \
| --program-transform-n | --program-transform- \
| --program-transform | --program-transfor \
| --program-transfo | --program-transf \
| --program-trans | --program-tran \
| --progr-tra | --program-tr | --program-t)
ac_prev=program_transform_name ;;
-program-transform-name=* | --program-transform-name=* \
| --program-transform-nam=* | --program-transform-na=* \
| --program-transform-n=* | --program-transform-==* \
| --program-transform=* | --program-transfor=* \
| --program-transfo=* | --program-transf=* \
| --program-trans=* | --program-tran=* \
| --progr-tra=* | --program-tr=* | --program-t=*)
program_transform_name=$ac_optarg ;;

-pdfdir | --pdfdir | --pdfdi | --pdfd | --pdf | --pd)
ac_prev=pdfdir ;;
-pdfdir=* | --pdfdir=* | --pdfdi=* | --pdfd=* | --pdf=* | --pd=*)
pdfdir=$ac_optarg ;;

-psdir | --psdir | --psdi | --psd | --ps)
ac_prev=psdir ;;
-psdir=* | --psdir=* | --psdi=* | --psd=* | --ps=*)
psdir=$ac_optarg ;;

-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil)
silent=yes ;;

-sbindir | --sbindir | --sbindi | --sbind | --sbin | --sbi | --sb)
ac_prev=sbindir ;;
-sbindir=* | --sbindir=* | --sbindi=* | --sbind=* | --sbin=* \
| --sbi=* | --sb=*)
sbindir=$ac_optarg ;;

-sharedstatedir | --sharedstatedir | --sharedstatedi \
| --sharedstated | --sharedstate | --sharedstat | --sharedsta \
| --sharedst | --shareds | --shared | --share | --shar \
| --sha | --sh)
ac_prev=sharedstatedir ;;

```

```

-sharedstatedir=* | --sharedstatedir=* | --sharedstatedi=* \
| --sharedstated=* | --sharedstate=* | --sharedstat=* | --
sharedsta=* \
| --sharedst=* | --shareds=* | --shared=* | --share=* | --shar=* \
| --sha=* | --sh=*)
    sharedstatedir=$ac_optarg ;;

-site | --site | --sit)
    ac_prev=site ;;
-site=* | --site=* | --sit=*)
    site=$ac_optarg ;;

-srcdir | --srcdir | --srcdi | --srcd | --src | --sr)
    ac_prev=srcdir ;;
-srcdir=* | --srcdir=* | --srcdi=* | --srcd=* | --src=* | --sr=*)
    srcdir=$ac_optarg ;;

-sysconfdir | --sysconfdir | --sysconfdi | --sysconfd | --sysconf \
| --syscon | --sysco | --sysc | --sys | --sy)
    ac_prev=sysconfdir ;;
-sysconfdir=* | --sysconfdir=* | --sysconfdi=* | --sysconfd=* | --
sysconf=* \
| --syscon=* | --sysco=* | --sysc=* | --sys=* | --sy=*)
    sysconfdir=$ac_optarg ;;

-target | --target | --targe | --targ | --tar | --ta | --t)
    ac_prev=target_alias ;;
-target=* | --target=* | --targe=* | --targ=* | --tar=* | --ta=* | -
-t=*)
    target_alias=$ac_optarg ;;

-v | -verbose | --verbose | --verbos | --verbo | --verb)
    verbose=yes ;;

-version | --version | --versio | --versi | --vers | -V)
    ac_init_version=: ;;

-with-* | --with-*)
    ac_useropt=`expr "x$ac_option" : 'x-*with-\([^=]*\)'`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid package name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *)
"with_$ac_useropt"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--with-
$ac_useropt_orig"
        ac_unrecognized_sep=', ';;

```

```

esac
eval with_${ac_useropt}=\${ac_optarg} ;;

-without-* | --without-*)
    ac_useropt=`expr "x${ac_option}" : 'x-*without-\(.*\)'`
    # Reject names that are not valid shell variable names.
    expr "x${ac_useropt}" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid package name: ${ac_useropt}"
    ac_useropt_orig=${ac_useropt}
    ac_useropt=`$as_echo "${ac_useropt}" | sed 's/[-+.]/_/g'`
    case ${ac_user_opts} in
        *)
            "with_${ac_useropt}"
            *) ;;
        *)
    ac_unrecognized_opts="$ac_unrecognized_opts${ac_unrecognized_sep}--
without-${ac_useropt}_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval with_${ac_useropt}=no ;;

--x)
    # Obsolete; use --with-x.
    with_x=yes ;;

-x-includes | --x-includes | --x-include | --x-includ | --x-inclu \
| --x-incl | --x-inc | --x-in | --x-i)
    ac_prev=x_includes ;;
-x-includes=* | --x-includes=* | --x-include=* | --x-includ=* | --x-
inclu=* \
| --x-incl=* | --x-inc=* | --x-in=* | --x-i=*)
    x_includes=${ac_optarg} ;;

-x-libraries | --x-libraries | --x-librarie | --x-librari \
| --x-librar | --x-libra | --x-libr | --x-lib | --x-li | --x-l)
    ac_prev=x_libraries ;;
-x-libraries=* | --x-libraries=* | --x-librarie=* | --x-librari=* \
| --x-librar=* | --x-libra=* | --x-libr=* | --x-lib=* | --x-li=* | -
-x-l=*)
    x_libraries=${ac_optarg} ;;

-*) as_fn_error $? "unrecognized option: \`${ac_option}`
Try \`${0} --help' for more information"
    ;;

*=*)
    ac_envvar=`expr "x${ac_option}" : 'x\([^=]*\)='`
    # Reject names that are not valid shell variable names.
    case ${ac_envvar} in #(
        '' | [0-9]* | *[^!_${as_cr_alnum}]* )
        as_fn_error $? "invalid variable name: \`${ac_envvar}`" ;;
    esac

```

```

eval $ac_envvar=\$ac_optarg
export $ac_envvar ;;

*)
# FIXME: should be removed in autoconf 3.0.
$as_echo "$as_me: WARNING: you should use --build, --host, --
target" >&2
expr "x$ac_option" : ".*[^\-._$as_cr_alnum]" >/dev/null &&
$as_echo "$as_me: WARNING: invalid host type: $ac_option" >&2
: "${build_alias=$ac_option} ${host_alias=$ac_option}
${target_alias=$ac_option}"
;;

esac
done

if test -n "$ac_prev"; then
ac_option=--`echo $ac_prev | sed 's/_/-/g'`
as_fn_error $? "missing argument to $ac_option"
fi

if test -n "$ac_unrecognized_opts"; then
case $enable_option_checking in
no) ;;
fatal) as_fn_error $? "unrecognized options:
$ac_unrecognized_opts" ;;
*) $as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2 ;;
esac
fi

# Check all directory arguments for consistency.
for ac_var in exec_prefix prefix bindir sbindir libexecdir
datarootdir \
datadir sysconfdir sharedstatedir localstatedir includedir
\
oldincludedir docdir infodir htmdir dvidir pdfdir psdir \
libdir localedir mandir
do
eval ac_val=\$$ac_var
# Remove trailing slashes.
case $ac_val in
*/ )
ac_val=`expr "X$ac_val" : 'X\([^/]\)' \| "X$ac_val" :
'X\(.*\)'`
eval $ac_var=\$ac_val;;
esac
# Be sure to have absolute directory names.
case $ac_val in
[\\/$]* | ?:[\\/$]* ) continue;;
NONE | '' ) case $ac_var in *prefix ) continue;; esac;;
esac

```

```

    as_fn_error $? "expected an absolute directory name for --$ac_var:
$ac_val"
done

# There might be people who depend on the old broken behavior: ` $host '
# used to hold the argument of --host etc.
# FIXME: To remove some day.
build=$build_alias
host=$host_alias
target=$target_alias

# FIXME: To remove some day.
if test "x$host_alias" != x; then
  if test "x$build_alias" = x; then
    cross_compiling=maybe
  elif test "x$build_alias" != "x$host_alias"; then
    cross_compiling=yes
  fi
fi

ac_tool_prefix=
test -n "$host_alias" && ac_tool_prefix=$host_alias-

test "$silent" = yes && exec 6>/dev/null

ac_pwd=`pwd` && test -n "$ac_pwd" &&
ac_ls_di=`ls -di .` &&
ac_pwd_ls_di=`cd "$ac_pwd" && ls -di .` ||
  as_fn_error $? "working directory cannot be determined"
test "X$ac_ls_di" = "X$ac_pwd_ls_di" ||
  as_fn_error $? "pwd does not report name of working directory"

# Find the source files, if location was not specified.
if test -z "$srcdir"; then
  ac_srcdir_defaulted=yes
  # Try the directory containing this script, then the parent
  directory.
  ac_confdir=`$as_dirname -- "$as_myself" ||
$as_expr X"$as_myself" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$as_myself" : 'X\(//\)[^/]' \| \
  X"$as_myself" : 'X\(//\)$' \| \
  X"$as_myself" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$as_myself" |
  sed '/^X\(.*[^/]\)\//\/*[^/][^/]*\/*$/{
    s//\1/
    q
  }
/^X\(\\/\)\)[^/].*${
  s//\1/
  q

```

```

    }
    /^X\(\\\/\\\/)\$/ {
        s//\1/
        q
    }
    /^X\(\\\/)\.*/ {
        s//\1/
        q
    }
    s/.*\/./; q`
srcdir=${ac_confdir}
if test ! -r "$srcdir/$ac_unique_file"; then
    srcdir=..
fi
else
    ac_srcdir_defaulted=no
fi
if test ! -r "$srcdir/$ac_unique_file"; then
    test "$ac_srcdir_defaulted" = yes && srcdir="$ac_confdir or .."
    as_fn_error $? "cannot find sources ($ac_unique_file) in $srcdir"
fi
ac_msg="sources are in $srcdir, but `cd $srcdir' does not work"
ac_abs_confdir=`
    cd "$srcdir" && test -r "./$ac_unique_file" || as_fn_error $?
"$ac_msg"
    pwd) `
# When building in place, set srcdir=.
if test "$ac_abs_confdir" = "$ac_pwd"; then
    srcdir=.
fi
# Remove unnecessary trailing slashes from srcdir.
# Double slashes in file names in object file debugging info
# mess up M-x gdb in Emacs.
case $srcdir in
*/) srcdir=`expr "X$srcdir" : 'X\([^\/]\)' \| "X$srcdir" :
'X\([^\/]\)'`;
esac
for ac_var in $ac_precious_vars; do
    eval ac_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_env_${ac_var}_value=\${${ac_var}_value}
    eval ac_cv_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_cv_env_${ac_var}_value=\${${ac_var}_value}
done

#
# Report the --help message.
#
if test "$ac_init_help" = "long"; then
    # Omit some internal or obsolete options to make the list less
    imposing.
    # This message is too long to be a string in the A/UX 3.1 sh.
    cat <<_ACEOF

```

\`configure' configures dbus-glib 0.100.2 to adapt to many kinds of systems.

Usage: \$0 [OPTION]... [VAR=VALUE]...

To assign environment variables (e.g., CC, CFLAGS...), specify them as VAR=VALUE. See below for descriptions of some of the useful variables.

Defaults for the options are specified in brackets.

Configuration:

-h, --help	display this help and exit
--help=short	display options specific to this package
--help=recursive	display the short help of all the included packages
-V, --version	display version information and exit
-q, --quiet, --silent	do not print '`checking ...' messages
--cache-file=FILE	cache test results in FILE [disabled]
-C, --config-cache	alias for '`--cache-file=config.cache'
-n, --no-create	do not create output files
--srcdir=DIR	find the sources in DIR [configure dir or `..']

Installation directories:

--prefix=PREFIX	install architecture-independent files in PREFIX	@<:@@S @ac_default_prefix@:>@
--exec-prefix=EPREFIX	install architecture-dependent files in EPREFIX	@<:@PREFIX@:>@

By default, '`make install' will install all the files in '`\$ac_default_prefix/bin', '`\$ac_default_prefix/lib' etc. You can specify an installation prefix other than '`\$ac_default_prefix' using '`--prefix', for instance '`--prefix=\$HOME'.

For better control, use the options below.

Fine tuning of the installation directories:

--bindir=DIR	user executables [EPREFIX/bin]
--sbindir=DIR	system admin executables [EPREFIX/sbin]
--libexecdir=DIR	program executables [EPREFIX/libexec]
--sysconfdir=DIR	read-only single-machine data [PREFIX/etc]
--sharedstatedir=DIR	modifiable architecture-independent data [PREFIX/com]
--localstatedir=DIR	modifiable single-machine data [PREFIX/var]
--libdir=DIR	object code libraries [EPREFIX/lib]
--includedir=DIR	C header files [PREFIX/include]
--oldincludedir=DIR	C header files for non-gcc [/usr/include]

```

--datarootdir=DIR          read-only arch.-independent data root
[PREFIX/share]
--datadir=DIR             read-only architecture-independent data
[DATAROOTDIR]
--infodir=DIR            info documentation [DATAROOTDIR/info]
--localedir=DIR         locale-dependent data [DATAROOTDIR/locale]
--mandir=DIR            man documentation [DATAROOTDIR/man]
--docdir=DIR            documentation root @<:@DATAROOTDIR/doc/dbus-
glib@:>@
--htmldir=DIR           html documentation [DOCDIR]
--dvidir=DIR            dvi documentation [DOCDIR]
--pdfdir=DIR            pdf documentation [DOCDIR]
--psdir=DIR             ps documentation [DOCDIR]
_ACEOF

```

```
cat <<\_ACEOF
```

Program names:

```

--program-prefix=PREFIX      prepend PREFIX to installed
program names
--program-suffix=SUFFIX     append SUFFIX to installed
program names
--program-transform-name=PROGRAM  run sed PROGRAM on installed
program names

```

System types:

```

--build=BUILD          configure for building on BUILD [guessed]
--host=HOST            cross-compile to build programs to run on HOST
[BUILD]
_ACEOF
fi

```

```

if test -n "$ac_init_help"; then
  case $ac_init_help in
    short | recursive ) echo "Configuration of dbus-glib 0.100.2:";;
    esac
  cat <<\_ACEOF

```

Optional Features:

```

--disable-option-checking  ignore unrecognized --enable/--with
options
--disable-FEATURE         do not include FEATURE (same as --enable-
FEATURE=no)
--enable-FEATURE[=ARG]   include FEATURE [ARG=yes]
--enable-maintainer-mode
                           enable make rules and dependencies not
useful (and
                           sometimes confusing) to the casual installer
--enable-silent-rules     less verbose build output (undo: "make V=1")
--disable-silent-rules    verbose build output (undo: "make V=0")
--enable-dependency-tracking
                           do not reject slow dependency extractors

```



```

--disable-dependency-tracking
                                speeds up one-time build
--enable-tests                    enable unit test code
--enable-ansi                    enable -ansi -pedantic gcc flags
--enable-verbose-mode            support verbose debug mode
--enable-asserts                 include assertion checks
--enable-checks                  include sanity checks on public API
--enable-gcov                    compile with coverage profiling
instrumentation (gcc
                                only)
--enable-bash-completion         install bash completion scripts
--enable-shared@<:@=PKGS@:>@    build shared libraries
@<:@default=yes@:>@
--enable-static@<:@=PKGS@:>@    build static libraries
@<:@default=yes@:>@
--enable-fast-install@<:@=PKGS@:>@
                                optimize for fast installation
@<:@default=yes@:>@
--disable-libtool-lock          avoid locking (might break parallel builds)
--enable-gtk-doc                 use gtk-doc to build documentation
@<:@@<:@default=no@:>@@@:>@
--enable-gtk-doc-html           build documentation in html format
@<:@@<:@default=yes@:>@@@:>@
--enable-gtk-doc-pdf            build documentation in pdf format
@<:@@<:@default=no@:>@@@:>@

Optional Packages:
--with-PACKAGE[=ARG]            use PACKAGE [ARG=yes]
--without-PACKAGE                do not use PACKAGE (same as --with-
PACKAGE=no)
--with-test-socket-dir=dirname
                                Where to put sockets for make check
--with-introspect-xml=filename
                                Pass in a pregenerated dbus daemon
introspection xml
                                file (as generated by 'dbus-daemon --
introspect') to
                                use instead of querying the installed dbus
daemon
--with-dbus-binding-tool=filename
                                Use external dbus-binding-tool program
--with-pic@<:@=PKGS@:>@         try to use only PIC/non-PIC objects
@<:@default=use
                                both@:>@
--with-gnu-ld                    assume the C compiler uses GNU ld
@<:@default=no@:>@
--with-libtool-sysroot=DIR      Search for dependent libraries within DIR
                                (or the compiler's sysroot if not specified).
--with-html-dir=PATH            path to installed docs

```

Some influential environment variables:

```

CC          C compiler command
CFLAGS      C compiler flags
LDFLAGS     linker flags, e.g. -L<lib dir> if you have libraries in
a
            nonstandard directory <lib dir>
LIBS        libraries to pass to the linker, e.g. -l<library>
CPPFLAGS    (Objective) C/C++ preprocessor flags, e.g. -I<include
dir> if
            you have headers in a nonstandard directory <include
dir>
CPP         C preprocessor
PKG_CONFIG  path to pkg-config utility
PKG_CONFIG_PATH
            directories to add to pkg-config's search path
PKG_CONFIG_LIBDIR
            path overriding pkg-config's built-in search path
DBUS_CFLAGS C compiler flags for DBUS, overriding pkg-config
DBUS_LIBS   linker flags for DBUS, overriding pkg-config
DBUS_GLIB_CFLAGS
            C compiler flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_LIBS
            linker flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_THREADS_CFLAGS
            C compiler flags for DBUS_GLIB_THREADS, overriding pkg-
config
DBUS_GLIB_THREADS_LIBS
            linker flags for DBUS_GLIB_THREADS, overriding pkg-
config
GTKDOC_DEPS_CFLAGS
            C compiler flags for GTKDOC_DEPS, overriding pkg-config
GTKDOC_DEPS_LIBS
            linker flags for GTKDOC_DEPS, overriding pkg-config

```

Use these variables to override the choices made by `configure' or to help it to find libraries and programs with nonstandard names/locations.

Report bugs to

https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLib.

```
_ACEOF
```

```
ac_status=$?
```

```
fi
```

```
if test "$ac_init_help" = "recursive"; then
```

```
  # If there are subdirs, report their specific --help.
```

```
  for ac_dir in : $ac_subdirs_all; do test "x$ac_dir" = x: && continue
    test -d "$ac_dir" ||
```

```
      { cd "$srcdir" && ac_pwd=`pwd` && srcdir=. && test -d "$ac_dir";
```

```
  } ||
```

```
    continue
```

```
  ac_builddir=.
```

```

case "$ac_dir" in
.) ac_dir_suffix= ac_top_buildddir_sub=. ac_top_build_prefix= ;;
*)
  ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.[\\\/]||'`
  # A ".." for each directory in $ac_dir_suffix.
  ac_top_buildddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\\\\/]*|/..|g;s|/||'`
  case $ac_top_buildddir_sub in
  "") ac_top_buildddir_sub=. ac_top_build_prefix= ;;
  *) ac_top_build_prefix=$ac_top_buildddir_sub/ ;;
  esac ;;
esac
ac_abs_top_buildddir=$ac_pwd
ac_abs_buildddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_buildddir=$ac_top_build_prefix

case $srcdir in
.) # We are building in place.
  ac_srcdir=.
  ac_top_srcdir=$ac_top_buildddir_sub
  ac_abs_top_srcdir=$ac_pwd ;;
[\\\/]* | ?:[\\\/]* ) # Absolute name.
  ac_srcdir=$srcdir$ac_dir_suffix;
  ac_top_srcdir=$srcdir
  ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
  ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
  ac_top_srcdir=$ac_top_build_prefix$srcdir
  ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

cd "$ac_dir" || { ac_status=$?; continue; }
# Check for gusted configure.
if test -f "$ac_srcdir/configure.gnu"; then
  echo &&
  $SHELL "$ac_srcdir/configure.gnu" --help=recursive
elif test -f "$ac_srcdir/configure"; then
  echo &&
  $SHELL "$ac_srcdir/configure" --help=recursive
else
  $as_echo "$as_me: WARNING: no configuration information is in
$ac_dir" >&2
  fi || ac_status=$?
  cd "$ac_pwd" || { ac_status=$?; break; }
done
fi

test -n "$ac_init_help" && exit $ac_status
if $ac_init_version; then

```

```
cat <<\_ACEOF
dbus-glib configure 0.100.2
generated by GNU Autoconf 2.69
```

Copyright (C) 2012 Free Software Foundation, Inc.
This configure script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it.

```
_ACEOF
```

```
  exit
```

```
fi
```

```
## ----- ##
## Autoconf initialization. ##
## ----- ##
```

```
@%:@ ac_fn_c_try_compile LINENO
```

```
@%:@ -----
```

```
@%:@ Try to compile conftest.@S|@ac_ext, and return whether this  
succeeded.
```

```
ac_fn_c_try_compile ()
```

```
{
```

```
  as_lineno=${as_lineno-"$1"}
```

```
as_lineno_stack=as_lineno_stack=$as_lineno_stack
```

```
  rm -f conftest.$ac_objext
```

```
  if { { ac_try="$ac_compile"
```

```
case "($ac_try" in
```

```
  *\"* | *\\`* | *\\*) ac_try_echo=\\$ac_try;;
```

```
  *) ac_try_echo=$ac_try;;
```

```
esac
```

```
eval ac_try_echo=\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
```

```
$as_echo "$ac_try_echo"; } >&5
```

```
  (eval "$ac_compile") 2>conftest.err
```

```
  ac_status=$?
```

```
  if test -s conftest.err; then
```

```
    grep -v '^ *+' conftest.err >conftest.er1
```

```
    cat conftest.er1 >&5
```

```
    mv -f conftest.er1 conftest.err
```

```
  fi
```

```
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
```

```
  test $ac_status = 0; } && {
```

```
    test -z "$ac_c_werror_flag" ||
```

```
    test ! -s conftest.err
```

```
  } && test -s conftest.$ac_objext; then :
```

```
  ac_retval=0
```

```
else
```

```
  $as_echo "$as_me: failed program was:" >&5
```

```
sed 's/^/| /' conftest.$ac_ext >&5
```

```
  ac_retval=1
```

```
fi
```

```
eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
```

```
as_fn_set_status $ac_retval
```

```

} @%:@ ac_fn_c_try_compile

@%:@ ac_fn_c_try_link LINENO
@%:@ -----
@%:@ Try to link confptest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_link ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  rm -f confptest.$ac_objext confptest$ac_exeext
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>confptest.err
  ac_status=$?
  if test -s confptest.err; then
    grep -v '^ *+' confptest.err >confptest.er1
    cat confptest.er1 >&5
    mv -f confptest.er1 confptest.err
  fi
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } && {
    test -z "$ac_c_werror_flag" ||
    test ! -s confptest.err
  } && test -s confptest$ac_exeext && {
    test "$cross_compiling" = yes ||
    test -x confptest$ac_exeext
  }; then :
    ac_retval=0
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' confptest.$ac_ext >&5

    ac_retval=1
fi
  # Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
  # created by the PGI compiler (confptest_ipa8_confptest.o), as it
would
  # interfere with the next link command; also delete a directory that
is
  # left behind by Apple's compiler. We do this before executing the
actions.
  rm -rf confptest.dSYM confptest_ipa8_confptest.o
  eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
  as_fn_set_status $ac_retval

```

```

} @%:@ ac_fn_c_try_link

@%:@ ac_fn_c_try_cpp LINENO
@%:@ -----
@%:@ Try to preprocess conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_cpp ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if { { ac_try="$ac_cpp conftest.$ac_ext"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_cpp conftest.$ac_ext") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    grep -v '^ *+' conftest.err >conftest.er1
    cat conftest.er1 >&5
    mv -f conftest.er1 conftest.err
  fi
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } > conftest.i && {
    test -z "$ac_c_preproc_warn_flag$ac_c_werror_flag" ||
    test ! -s conftest.err
  }; then :
    ac_retval=0
  else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' conftest.$ac_ext >&5

    ac_retval=1
  fi
  eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_cpp

@%:@ ac_fn_c_try_run LINENO
@%:@ -----
@%:@ Try to link conftest.@S|@ac_ext, and return whether this
succeeded. Assumes
@%:@ that executables *can* be run.
ac_fn_c_try_run ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if { { ac_try="$ac_link"

```

```

case "((($ac_try" in
  *\"* | *\\`* | *\\`*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\`\"\$as_me:${as_lineno-$LINENO}: $ac_try_echo\`\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
  test $ac_status = 0; } && { ac_try='./conftest$ac_exeext'
  { { case "((($ac_try" in
    *\"* | *\\`* | *\\`*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
  esac
  eval ac_try_echo="\`\"\$as_me:${as_lineno-$LINENO}: $ac_try_echo\`\"
  $as_echo "$ac_try_echo"; } >&5
    (eval "$ac_try") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
    test $ac_status = 0; }; }; then :
    ac_retval=0
  else
    $as_echo "$as_me: program exited with status $ac_status" >&5
    $as_echo "$as_me: failed program was:" >&5
  sed 's/^/|/' conftest.$ac_ext >&5

    ac_retval=$ac_status
  fi
  rm -rf conftest.dSYM conftest_ipa8_conftest.oo
  eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
  as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_run

@%:@ ac_fn_c_check_header_compile LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists and can be compiled using the include
files in
@%:@ INCLUDES, setting the cache variable VAR accordingly.
ac_fn_c_check_header_compile ()
{
  as_lineno=${as_lineno-"$1"}
  as_lineno_stack=as_lineno_stack=$as_lineno_stack
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
  $as_echo_n "checking for $2... " >&6; }
  if eval \"\${$3+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
@%:@include <$2>

```

```

_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    eval "$3=yes"
else
    eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
eval ac_res=\${$3
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_header_compile

@%:@ ac_fn_c_check_func LINENO FUNC VAR
@%:@ -----
@%:@ Tests whether FUNC exists, setting the cache variable VAR
accordingly
ac_fn_c_check_func ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval "\${$3+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
/* Define $2 to an innocuous variant, in case <limits.h> declares $2.
   For example, HP-UX 11i <limits.h> declares gettimeofday. */
#define $2 innocuous_$2

/* System header to define __stub macros and hopefully few prototypes,
   which can conflict with char $2 (); below.
   Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
   <limits.h> exists even on freestanding compilers. */

#ifdef __STDC__
# include <limits.h>
#else
# include <assert.h>
#endif

#undef $2

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus

```



```

extern "C"
#endif
char $2 ();
/* The GNU C library defines this for functions which it implements
   to always fail with ENOSYS.  Some functions are actually named
   something starting with __ and the normal name is an alias.  */
#if defined __stub_$2 || defined __stub___$2
choke me
#endif

int
main ()
{
return $2 ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
eval "$3=yes"
else
eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
fi
eval ac_res=\$3
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_func

@%:@ ac_fn_c_check_header_mongrel LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists, giving a warning if it cannot be
compiled using
@%:@ the include files in INCLUDES and setting the cache variable VAR
@%:@ accordingly.
ac_fn_c_check_header_mongrel ()
{
as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
if eval \${$3+:} false; then :
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
$as_echo_n "(cached) " >&6
fi
eval ac_res=\$3

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
else
  # Is the header compilable?
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 usability" >&5
$as_echo_n "checking $2 usability... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
@%:@include <$2>
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_header_compiler=yes
else
  ac_header_compiler=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_compiler"
>&5
$as_echo "$ac_header_compiler" >&6; }

# Is the header present?
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 presence" >&5
$as_echo_n "checking $2 presence... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <$2>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
  ac_header_preproc=yes
else
  ac_header_preproc=no
fi
rm -f conftest.err conftest.i conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_preproc"
>&5
$as_echo "$ac_header_preproc" >&6; }

# So? What about this header?
case $ac_header_compiler:$ac_header_preproc:$ac_c_preproc_warn_flag in
#((
  yes:no: )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: accepted by
the compiler, rejected by the preprocessor!" >&5
$as_echo "$as_me: WARNING: $2: accepted by the compiler, rejected by
the preprocessor!" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
    ;;

```

```

no:yes:* )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: present but
cannot be compiled" >&5
$as_echo "$as_me: WARNING: $2: present but cannot be compiled" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      check
for missing prerequisite headers?" >&5
$as_echo "$as_me: WARNING: $2:      check for missing prerequisite
headers?" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: see the
Autoconf documentation" >&5
$as_echo "$as_me: WARNING: $2: see the Autoconf documentation" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      section
\"Present But Cannot Be Compiled\"" >&5
$as_echo "$as_me: WARNING: $2:      section \"Present But Cannot Be
Compiled\"" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
( $as_echo "## -----
----- ##
## Report this to
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=Glib
##
## -----
----- ##"
) | sed "s/^/$as_me: WARNING:      /" >&2
;;
esac
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
    $as_echo_n "(cached) " >&6
else
    eval "$3=\$ac_header_compiler"
fi
eval ac_res=\${$3}
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
fi
    eval $as_lineno_stack; ${as_lineno_stack+:} unset as_lineno

} @%:@ ac_fn_c_check_header_mongrel
cat >config.log <<_ACEOF
This file contains any messages produced by compilers while
running configure, to aid debugging if configure makes a mistake.

It was created by dbus-glib $as_me 0.100.2, which was
generated by GNU Autoconf 2.69.  Invocation command line was

$ $0 $@

```

```

_ACEOF
exec 5>>config.log
{
cat <<_ASUNAME
## ----- ##
## Platform. ##
## ----- ##

hostname = `(hostname || uname -n) 2>/dev/null | sed 1q`
uname -m = `(uname -m) 2>/dev/null || echo unknown`
uname -r = `(uname -r) 2>/dev/null || echo unknown`
uname -s = `(uname -s) 2>/dev/null || echo unknown`
uname -v = `(uname -v) 2>/dev/null || echo unknown`

/usr/bin/uname -p = `(/usr/bin/uname -p) 2>/dev/null || echo unknown`
/bin/uname -X      = `(/bin/uname -X) 2>/dev/null      || echo unknown`

/bin/arch          = `(/bin/arch) 2>/dev/null          || echo
unknown`
/usr/bin/arch -k   = `(/usr/bin/arch -k) 2>/dev/null   || echo
unknown`
/usr/convex/getsysinfo = `(/usr/convex/getsysinfo) 2>/dev/null || echo
unknown`
/usr/bin/hostinfo  = `(/usr/bin/hostinfo) 2>/dev/null  || echo
unknown`
/bin/machine       = `(/bin/machine) 2>/dev/null       || echo
unknown`
/usr/bin/oslevel   = `(/usr/bin/oslevel) 2>/dev/null   || echo
unknown`
/bin/universe      = `(/bin/universe) 2>/dev/null      || echo
unknown`

_ASUNAME

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
$as_echo "PATH: $as_dir"
done
IFS=$as_save_IFS

} >&5

cat >&5 <<_ACEOF

## ----- ##
## Core tests. ##
## ----- ##

```

_ACEOF

```
# Keep a trace of the command line.
# Strip out --no-create and --no-recursion so they do not pile up.
# Strip out --silent because we don't want to record it for future
runs.
# Also quote any args containing shell meta-characters.
# Make two passes to allow for proper duplicate-argument suppression.
ac_configure_args=
ac_configure_args0=
ac_configure_args1=
ac_must_keep_next=false
for ac_pass in 1 2
do
  for ac_arg
  do
    case $ac_arg in
      -no-create | --no-c* | -n | -no-recursion | --no-r*) continue ;;
      -q | -quiet | --quiet | --quie | --qui | --qu | --q \
      | -silent | --silent | --silen | --sile | --sil)
        continue ;;
      *\`)
        ac_arg=`$as_echo "$ac_arg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"` ;;
    esac
    case $ac_pass in
      1) as_fn_append ac_configure_args0 " '$ac_arg'" ;;
      2)
        as_fn_append ac_configure_args1 " '$ac_arg'"
        if test $ac_must_keep_next = true; then
          ac_must_keep_next=false # Got value, back to normal.
        else
          case $ac_arg in
            *=* | --config-cache | -C | -disable-* | --disable-* \
            | -enable-* | --enable-* | -gas | --g* | -nfp | --nf* \
            | -q | -quiet | --q* | -silent | --sil* | -v | -verb* \
            | -with-* | --with-* | -without-* | --without-* | --x)
              case "$ac_configure_args0 " in
                "$ac_configure_args1"* " '$ac_arg' "*" ) continue ;;
              esac
            ;;
            -* ) ac_must_keep_next=true ;;
          esac
        fi
        as_fn_append ac_configure_args " '$ac_arg'"
      ;;
    esac
  done
done
{ ac_configure_args0=; unset ac_configure_args0;}
{ ac_configure_args1=; unset ac_configure_args1;}
```

```

# When interrupted or exit'd, cleanup temporary files, and complete
# config.log. We remove comments because anyway the quotes in there
# would cause problems or look ugly.
# WARNING: Use '\' to represent an apostrophe within the trap.
# WARNING: Do not start the trap code with a newline, due to a FreeBSD
4.0 bug.
trap 'exit_status=$?'
    # Save into config.log some information that might help in
debugging.
    {
        echo

        $as_echo "## ----- ##
## Cache variables. ##
## ----- ##"
        echo
        # The following way of writing the cache mishandles newlines in
values,
(
    for ac_var in `(set) 2>&1 | sed -n '\''s/^\([a-zA-Z_][a-zA-Z0-
9_]*\)ate variables. ##
## ----- ##"
        echo
        # The following way of writing the cache mishandles newlines in
values,
(
    for ac_var in `(set) 2>&1 | sed -n '\''s/^\([a-zA-Z_][a-zA-Z0-
9_]*\)
        eval ac_val=\${ac_var}
        case $ac_val in #(
            *${as_nl}*)
                case $ac_var in #(
                    *_cv *) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5
$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
                esac
            case $ac_var in #(
                _ | IFS | as_nl) ;; #(
                BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
                *) { eval $ac_var=; unset $ac_var; } ;;
            esac ;;
        esac
    done
    (set) 2>&1 |
        case $as_nl`(ac_space='\' '\''; set) 2>&1` in #(
            *${as_nl}ac_space=\ *)
                sed -n \
                "s/'\''/'\''\\ \\ \\ '\'''\'''\''/g;

s/^\([_${as_cr_alnum}]*_cv_[_${as_cr_alnum}]*\)=\((.*)\)/\1='''\2''''
/p"
                ;; #(
            *)
                sed -n "/^[_${as_cr_alnum}]*_cv_[_${as_cr_alnum}]*/p"
                ;;
        esac |
        sort

```



```

    trap 'ac_signal='$ac_signal'; as_fn_exit 1' $ac_signal
done
ac_signal=0

# confdefs.h avoids OS command line length limits that DEFS can
exceed.
rm -f -r conftest* confdefs.h

$as_echo "/* confdefs.h */" > confdefs.h

# Predefined preprocessor variables.

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_NAME "$PACKAGE_NAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_TARNAME "$PACKAGE_TARNAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_VERSION "$PACKAGE_VERSION"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_STRING "$PACKAGE_STRING"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_BUGREPORT "$PACKAGE_BUGREPORT"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_URL "$PACKAGE_URL"
_ACEOF

# Let the site file select an alternate cache file if it wants to.
# Prefer an explicitly selected file to automatically selected ones.
ac_site_file1=NONE
if test -n "$CONFIG_SITE"; then
  # We do not want a PATH search for config.site.
  case $CONFIG_SITE in @%:@(
    -*) ac_site_file1=./$CONFIG_SITE;;
    */*) ac_site_file1=$CONFIG_SITE;;
    *) ac_site_file1=./$CONFIG_SITE;;
  esac
fi
for ac_site_file in $ac_site_file1
do
  test "x$ac_site_file" = xNONE && continue

```



```

    if test /dev/null != "$ac_site_file" && test -r "$ac_site_file";
then
    { $as_echo "$as_me:${as_lineno-$LINENO}: loading site script
$ac_site_file" >&5
$as_echo "$as_me: loading site script $ac_site_file" >&6;}
    sed 's/^\| /' "$ac_site_file" >&5
    . "$ac_site_file" \
    || { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "failed to load site script $ac_site_file
See \`config.log' for more details" "$LINENO" 5; }
    fi
done

if test -r "$cache_file"; then
    # Some versions of bash will fail to source /dev/null (special files
    # actually), so we avoid doing that.  DJGPP emulates it as a regular
    file.
    if test /dev/null != "$cache_file" && test -f "$cache_file"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: loading cache
$cache_file" >&5
$as_echo "$as_me: loading cache $cache_file" >&6;}
        case $cache_file in
            [\\\/]* | ?:[\\\/]* ) . "$cache_file";;
            *) . "$cache_file";;
        esac
    fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: creating cache $cache_file"
>&5
$as_echo "$as_me: creating cache $cache_file" >&6;}
    >$cache_file
fi

# Check that the precious variables saved in the cache have kept the
# same
# value.
ac_cache_corrupted=false
for ac_var in $ac_precious_vars; do
    eval ac_old_set=\$ac_cv_env_${ac_var}_set
    eval ac_new_set=\$ac_env_${ac_var}_set
    eval ac_old_val=\$ac_cv_env_${ac_var}_value
    eval ac_new_val=\$ac_env_${ac_var}_value
    case $ac_old_set,$ac_new_set in
        set, )
            { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
set to \`$ac_old_val' in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was set to \`$ac_old_val' in the
previous run" >&2;}
            ac_cache_corrupted=: ;;
        ,set)

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: \`${ac_var}' was
not set in the previous run" >&5
$zas_echo "$sas_me: error: \`${ac_var}' was not set in the previous run"
>&2;}
    ac_cache_corrupted=: ;;
,);;
*)
    if test "x$ac_old_val" != "x$ac_new_val"; then
# differences in whitespace do not lead to failure.
ac_old_val_w=`echo x $ac_old_val`
ac_new_val_w=`echo x $ac_new_val`
if test "$ac_old_val_w" != "$ac_new_val_w"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: \`${ac_var}' has
changed since the previous run:" >&5
$zas_echo "$sas_me: error: \`${ac_var}' has changed since the previous
run:" >&2;}
        ac_cache_corrupted=:
        else
            { $sas_echo "$sas_me:${as_lineno-$LINENO}: warning: ignoring
whitespace changes in \`${ac_var}' since the previous run:" >&5
$zas_echo "$sas_me: warning: ignoring whitespace changes in \`${ac_var}'
since the previous run:" >&2;}
            eval $ac_var=\$ac_old_val
        fi
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: former value:
\`${ac_old_val}'" >&5
$zas_echo "$sas_me: former value: \`${ac_old_val}'" >&2;}
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: current value:
\`${ac_new_val}'" >&5
$zas_echo "$sas_me: current value: \`${ac_new_val}'" >&2;}
        fi;;
    esac
# Pass precious variables to config.status.
if test "$ac_new_set" = set; then
    case $ac_new_val in
        *`*) ac_arg=$ac_var=`$zas_echo "$ac_new_val" | sed
"s/'/'\\\\\\\\\\\\\\\\\\\\'/'/g"` ;;
        *) ac_arg=$ac_var=$ac_new_val ;;
    esac
    case " $ac_configure_args " in
        * " '$ac_arg' "*) ;; # Avoid dups. Use of quotes ensures
accuracy.
        *) as_fn_append ac_configure_args " '$ac_arg'" ;;
    esac
fi
done
if $ac_cache_corrupted; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: in \`${ac_pwd}':" >&5
$zas_echo "$sas_me: error: in \`${ac_pwd}':" >&2;}
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: changes in the
environment can compromise the build" >&5

```

```

$as_echo "$as_me: error: changes in the environment can compromise the
build" >&2;}
  as_fn_error $? "run `make distclean' and/or `rm $cache_file' and
start over" "$LINENO" 5
fi
## ----- ##
## Main body of script. ##
## ----- ##

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

ac_aux_dir=
for ac_dir in "$srcdir" "$srcdir/.." "$srcdir/../../.."; do
  if test -f "$ac_dir/install-sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install-sh -c"
    break
  elif test -f "$ac_dir/install.sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install.sh -c"
    break
  elif test -f "$ac_dir/shtool"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/shtool install -c"
    break
  fi
done
if test -z "$ac_aux_dir"; then
  as_fn_error $? "cannot find install-sh, install.sh, or shtool in
`$srcdir` `"$srcdir/.."` `"$srcdir/../../.."`" "$LINENO" 5
fi

# These three variables are undocumented and unsupported,
# and are intended to be withdrawn in a future Autoconf release.
# They can cause serious problems if a builder's source tree is in a
directory
# whose full name contains unusual characters.
ac_config_guess="$SHELL $ac_aux_dir/config.guess" # Please don't use
this var.
ac_config_sub="$SHELL $ac_aux_dir/config.sub" # Please don't use this
var.
ac_configure="$SHELL $ac_aux_dir/configure" # Please don't use this
var.

```

```

# Make sure we can run config.sub.
$SHELL "$ac_aux_dir/config.sub" sun4 >/dev/null 2>&1 ||
  as_fn_error $? "cannot run $SHELL $ac_aux_dir/config.sub" "$LINENO"
5

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking build system type"
>&5
$as_echo_n "checking build system type... " >&6; }
if ${ac_cv_build+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_build_alias=$build_alias
  test "x$ac_build_alias" = x &&
  ac_build_alias=`$SHELL "$ac_aux_dir/config.guess"`
  test "x$ac_build_alias" = x &&
  as_fn_error $? "cannot guess build type; you must specify one"
"$LINENO" 5
ac_cv_build=`$SHELL "$ac_aux_dir/config.sub" $ac_build_alias` ||
  as_fn_error $? "$SHELL $ac_aux_dir/config.sub $ac_build_alias
failed" "$LINENO" 5

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_build" >&5
$as_echo "$ac_cv_build" >&6; }
case $ac_cv_build in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical build" "$LINENO" 5;;
esac
build=$ac_cv_build
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_build
shift
build_cpu=$1
build_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
build_os=$*
IFS=$ac_save_IFS
case $build_os in *\ *) build_os=`echo "$build_os" | sed 's/ /-/g'`;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking host system type"
>&5
$as_echo_n "checking host system type... " >&6; }
if ${ac_cv_host+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$host_alias" = x; then
    ac_cv_host=$ac_cv_build
  else

```

```

    ac_cv_host=`$SHELL "$ac_aux_dir/config.sub" $host_alias` ||
    as_fn_error $? "$SHELL $ac_aux_dir/config.sub $host_alias failed"
"$LINENO" 5
fi

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_host" >&5
$as_echo "$ac_cv_host" >&6; }
case $ac_cv_host in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical host" "$LINENO" 5;;
esac
host=$ac_cv_host
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_host
shift
host_cpu=$1
host_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
host_os=$*
IFS=$ac_save_IFS
case $host_os in *\ *) host_os=`echo "$host_os" | sed 's/ /-/g`;;
esac

```

```

am__api_version='1.12'

```

```

# Find a good install program.  We prefer a C program (faster),
# so one script is as good as another.  But avoid the broken or
# incompatible versions:
# SysV /etc/install, /usr/sbin/install
# SunOS /usr/etc/install
# IRIX /sbin/install
# AIX /bin/install
# AmigaOS /C/install, which installs bootblocks on floppy discs
# AIX 4 /usr/bin/installbsd, which doesn't work without a -g flag
# AFS /usr/afsws/bin/install, which mishandles nonexistent args
# SVR4 /usr/ucb/install, which tries to use the nonexistent group
"staff"
# OS/2's system install, which has a completely different semantic
# ./install, which can be erroneously created by make from
./install.sh.
# Reject install programs that cannot install multiple files.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a BSD-compatible
install" >&5
$as_echo_n "checking for a BSD-compatible install... " >&6; }
if test -z "$INSTALL"; then
if ${ac_cv_path_install+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
  for as_dir in $PATH
  do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    # Account for people who put trailing slashes in PATH elements.
  case $as_dir/ in @%:@(
    ./ | ../ | /[cC]/* | \
    /etc/* | /usr/sbin/* | /usr/etc/* | /sbin/* | /usr/afsws/bin/* | \
    ?:[\\/]os2[\\/]install[\\/] * | ?:[\\/]OS2[\\/]INSTALL[\\/] * | \
    /usr/ucb/* ) ;;
    *)
      # OSF1 and SCO ODT 3.0 have their own names for install.
      # Don't use installbsd from OSF since it installs stuff as root
      # by default.
      for ac_prog in ginstall scoinst install; do
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext"; then
            if test $ac_prog = install &&
              grep dspmsg "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
          then
            # AIX install. It has an incompatible calling convention.
            :
          elif test $ac_prog = install &&
              grep pwplus "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
          then
            # program-specific install script used by HP pwplus--don't
            use.
            :
          else
            rm -rf conftest.one conftest.two conftest.dir
            echo one > conftest.one
            echo two > conftest.two
            mkdir conftest.dir
            if "$as_dir/$ac_prog$ac_exec_ext" -c conftest.one
            conftest.two "`pwd`/conftest.dir" &&
              test -s conftest.one && test -s conftest.two &&
              test -s conftest.dir/conftest.one &&
              test -s conftest.dir/conftest.two
            then
              ac_cv_path_install="$as_dir/$ac_prog$ac_exec_ext -c"
              break 3
            fi
          fi
        done
      done
    done
  ;;
esac

done

```

```

IFS=$as_save_IFS

rm -rf conftest.one conftest.two conftest.dir

fi
  if test "${ac_cv_path_install+set}" = set; then
    INSTALL=$ac_cv_path_install
  else
    # As a last resort, use the slow shell script. Don't cache a
    # value for INSTALL within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    INSTALL=$ac_install_sh
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $INSTALL" >&5
$as_echo "$INSTALL" >&6; }

# Use test -z because SunOS4 sh mishandles braces in ${var-val}.
# It thinks the first close brace ends the variable substitution.
test -z "$INSTALL_PROGRAM" && INSTALL_PROGRAM='${INSTALL}'

test -z "$INSTALL_SCRIPT" && INSTALL_SCRIPT='${INSTALL}'

test -z "$INSTALL_DATA" && INSTALL_DATA='${INSTALL} -m 644'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether build
environment is sane" >&5
$as_echo_n "checking whether build environment is sane... " >&6; }
# Reject unsafe characters in $srcdir or the absolute working
directory
# name. Accept space and tab only in the latter.
am_lf='
'
case `pwd` in
  *[\ \ \#\ $\&\ '\ \`$am_lf]*)
    as_fn_error $? "unsafe absolute working directory name" "$LINENO"
5;;
esac
case $srcdir in
  *[\ \ \#\ $\&\ '\ \`$am_lf\ \]*)
    as_fn_error $? "unsafe srcdir value: '$srcdir'" "$LINENO" 5;;
esac

# Do 'set' in a subshell so we don't clobber the current shell's
# arguments. Must try -L first in case configure is actually a
# symlink; some systems play weird games with the mod time of symlinks
# (eg FreeBSD returns the mod time of the symlink's containing
# directory).
if (
  am_has_slept=no
  for am_try in 1 2; do

```

```

echo "timestamp, slept: $am_has_slept" > confptest.file
set X `ls -Lt "$srcdir/configure" confptest.file 2> /dev/null`
if test "$*" = "X"; then
  # -L didn't work.
  set X `ls -t "$srcdir/configure" confptest.file`
fi
if test "$*" != "X $srcdir/configure confptest.file" \
  && test "$*" != "X confptest.file $srcdir/configure"; then

  # If neither matched, then we have a broken ls. This can happen
  # if, for instance, CONFIG_SHELL is bash and it inherits a
  # broken ls alias from the environment. This has actually
  # happened. Such a system could not be considered "sane".
  as_fn_error $? "ls -t appears to fail. Make sure there is not a
broken
alias in your environment" "$LINENO" 5
  fi
  if test "$2" = confptest.file || test $am_try -eq 2; then
    break
  fi
  # Just in case.
  sleep 1
  am_has_slept=yes
done
test "$2" = confptest.file
)
then
  # Ok.
  :
else
  as_fn_error $? "newly created file is older than distributed files!
Check your system clock" "$LINENO" 5
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
# If we didn't sleep, we still need to ensure time stamps of
config.status and
# generated files are strictly newer.
am_sleep_pid=
if grep 'slept: no' confptest.file >/dev/null 2>&1; then
  ( sleep 1 ) &
  am_sleep_pid=$!
fi

rm -f confptest.file

test "$program_prefix" != NONE &&

program_transform_name="s^&$program_prefix&;$program_transform_name"
# Use a double $ so make ignores it.
test "$program_suffix" != NONE &&

```



```

program_transform_name="s&\&\$&\$program_suffix&;$program_transform_name"
# Double any \ or $.
# By default was `s,x,x', remove it if useless.
ac_script='s/[\\\$]/&&/g;s;/s,x,x,$//'
program_transform_name=`$as_echo "$program_transform_name" | sed
"$ac_script"`

# expand $ac_aux_dir to an absolute path
am_aux_dir=`cd $ac_aux_dir && pwd`

if test x"${MISSING+set}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      MISSING="\${SHELL} \"$am_aux_dir/missing\"" ;;
    *)
      MISSING="\${SHELL} $am_aux_dir/missing" ;;
  esac
fi
# Use eval to expand $SHELL
if eval "$MISSING --run true"; then
  am_missing_run="$MISSING --run "
else
  am_missing_run=
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: 'missing' script
is too old or missing" >&5
$as_echo "$as_me: WARNING: 'missing' script is too old or missing"
>&2;}
fi

if test x"${install_sh}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      install_sh="\${SHELL} '$am_aux_dir/install-sh'" ;;
    *)
      install_sh="\${SHELL} $am_aux_dir/install-sh"
  esac
fi

# Installed binaries are usually stripped using 'strip' when the user
# run "make install-strip". However 'strip' might not be the right
# tool to use in cross-compilation environments, therefore Automake
# will honor the 'STRIP' environment variable to overrule this
program.
if test "$cross_compiling" != no; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$STRIP"; then
        ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_STRIP="{ac_tool_prefix}strip"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
STRIP=$ac_cv_prog_STRIP
if test -n "$STRIP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
$as_echo "$STRIP" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_STRIP"; then
    ac_ct_STRIP=$STRIP
    # Extract the first word of "strip", so it can be a program name
    with args.
    set dummy strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$ac_ct_STRIP"; then
            ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
            test.
        else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS

```

```

test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_ac_ct_STRIP="strip"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
if test -n "$ac_ct_STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_STRIP" = x; then
    STRIP=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    STRIP=$ac_ct_STRIP
  fi
else
  STRIP="$ac_cv_prog_STRIP"
fi

fi
INSTALL_STRIP_PROGRAM="\$(install_sh) -c -s"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a thread-safe
mkdir -p" >&5
$as_echo_n "checking for a thread-safe mkdir -p... " >&6; }
if test -z "$MKDIR_P"; then
  if ${ac_cv_path_mkdir+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH$PATH_SEPARATOR/opt/sfw/bin

```

```

do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_prog in mkdir gmkdir; do
    for ac_exec_ext in '' $ac_executable_extensions; do
      as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext" || continue
      case `"$as_dir/$ac_prog$ac_exec_ext" --version 2>&1` in #(
        'mkdir (GNU coreutils) '* | \
        'mkdir (coreutils) '* | \
        'mkdir (fileutils) '4.1*)
        ac_cv_path_mkdir=$as_dir/$ac_prog$ac_exec_ext
        break 3;;
      esac
    done
  done
done
IFS=$as_save_IFS

fi

test -d ./--version && rmdir ./--version
if test "${ac_cv_path_mkdir+set}" = set; then
  MKDIR_P="$ac_cv_path_mkdir -p"
else
  # As a last resort, use the slow shell script. Don't cache a
  # value for MKDIR_P within a source directory, because that will
  # break other packages using the cache if that directory is
  # removed, or if the value is a relative name.
  MKDIR_P="$ac_install_sh -d"
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $MKDIR_P" >&5
$as_echo "$MKDIR_P" >&6; }

for ac_prog in gawk mawk nawk awk
do
  # Extract the first word of "$ac_prog", so it can be a program name
  with args.
  set dummy $ac_prog; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_AWK+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$AWK"; then
      ac_cv_prog_AWK="$AWK" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_AWK="$ac_prog"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$sas_save_IFS

fi
fi
AWK=$ac_cv_prog_AWK
if test -n "$AWK"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $AWK" >&5
$as_echo "$AWK" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$AWK" && break
done

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether ${MAKE-make}
sets \${MAKE}" >&5
$as_echo_n "checking whether ${MAKE-make} sets \${MAKE}... " >&6; }
set x ${MAKE-make}
ac_make=`$as_echo "$2" | sed 's/+/p/g; s/[^a-zA-Z0-9_]/_/g`
if eval \${ac_cv_prog_make_${ac_make}_set+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat >conftest.make <<\_ACEOF
SHELL = /bin/sh
all:
    @echo '@@@%=% (MAKE)=@@@%'
\_ACEOF
# GNU make sometimes prints "make[1]: Entering ...", which would
confuse us.
case ` ${MAKE-make} -f conftest.make 2>/dev/null ` in
    *@@@%=?*=@@@%*)
        eval ac_cv_prog_make_${ac_make}_set=yes;;
    *)
        eval ac_cv_prog_make_${ac_make}_set=no;;
esac
rm -f conftest.make
fi
if eval test \${ac_cv_prog_make_${ac_make}_set} = yes; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```

```

    SET_MAKE=
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    SET_MAKE="MAKE=${MAKE-make}"
fi

rm -rf .tst 2>/dev/null
mkdir .tst 2>/dev/null
if test -d .tst; then
    am__leading_dot=.
else
    am__leading_dot=_
fi
rmdir .tst 2>/dev/null

if test "`cd $srcdir && pwd`" != "`pwd`; then
    # Use -I$(srcdir) only when $(srcdir) != ., so that make's output
    # is not polluted with repeated "-I."
    am__isrc=' -I$(srcdir)'
    # test to see if srcdir already configured
    if test -f $srcdir/config.status; then
        as_fn_error $? "source directory already configured; run \"make
distclean\" there first" "$LINENO" 5
    fi
fi

# test whether we have cygpath
if test -z "$CYGPATH_W"; then
    if (cygpath --version) >/dev/null 2>/dev/null; then
        CYGPATH_W='cygpath -w'
    else
        CYGPATH_W='echo'
    fi
fi

# Define the identity of the package.
PACKAGE='dbus-glib'
VERSION='0.100.2'

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE "$PACKAGE"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define VERSION "$VERSION"
_ACEOF

# Some tools Automake needs.

```

```

ACLOCAL=${ACLOCAL-"${am_missing_run}aclocal-${am__api_version}"}

AUTOCONF=${AUTOCONF-"${am_missing_run}autoconf"}

AUTOMAKE=${AUTOMAKE-"${am_missing_run}automake-${am__api_version}"}

AUTOHEADER=${AUTOHEADER-"${am_missing_run}autoheader"}

MAKEINFO=${MAKEINFO-"${am_missing_run}makeinfo"}

# For better backward compatibility.  To be removed once Automake
# 1.9.x
# dies out for good.  For more background, see:
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00001.html>
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00014.html>
mkdir_p='$(MKDIR_P) '

# We need awk for the "check" target.  The system "awk" is bad on
# some platforms.
# Always define AMTAR for backward compatibility.  Yes, it's still
# used
# in the wild :-( We should find a proper way to deprecate it ...
AMTAR='${TAR-tar}'

am__tar='${TAR-tar} chof - "$$stardir"' am__untar='${TAR-tar} xf -'

ac_config_headers="$ac_config_headers config.h"

# Honor aclocal flags
ACLOCAL="$ACLOCAL $ACLOCAL_FLAGS"

## must come before we use the $USE_MAINTAINER_MODE variable later

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to enable
maintainer-specific portions of Makefiles" >&5
$as_echo_n "checking whether to enable maintainer-specific portions of
Makefiles... " >&6; }
    @%:@ Check whether --enable-maintainer-mode was given.
if test "${enable_maintainer_mode+set}" = set; then :
    enableval=$enable_maintainer_mode; USE_MAINTAINER_MODE=$enableval

```

```

else
  USE_MAINTAINER_MODE=no
fi

  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$USE_MAINTAINER_MODE" >&5
$as_echo "$USE_MAINTAINER_MODE" >&6; }
  if test $USE_MAINTAINER_MODE = yes; then
    MAINTAINER_MODE_TRUE=
    MAINTAINER_MODE_FALSE='#'
else
  MAINTAINER_MODE_TRUE='#'
  MAINTAINER_MODE_FALSE=
fi

  MAINT=$MAINTAINER_MODE_TRUE

@%:@ Check whether --enable-silent-rules was given.
if test "${enable_silent_rules+set}" = set; then :
  enableval=$enable_silent_rules;
fi

case $enable_silent_rules in @%:@ (((
  yes) AM_DEFAULT_VERBOSITY=0;;
  no) AM_DEFAULT_VERBOSITY=1;;
  *) AM_DEFAULT_VERBOSITY=0;;
esac
am_make=${MAKE-make}
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $am_make
supports nested variables" >&5
$as_echo_n "checking whether $am_make supports nested variables... "
>&6; }
if ${am_cv_make_support_nested_variables+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if $as_echo 'TRUE=$(BAR$(V))
BAR0=false
BAR1=true
V=1
am__doit:
  @$(TRUE)
.PHONY: am__doit' | $am_make -f - >/dev/null 2>&1; then
  am_cv_make_support_nested_variables=yes
else
  am_cv_make_support_nested_variables=no
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_make_support_nested_variables" >&5
$as_echo "$am_cv_make_support_nested_variables" >&6; }

```



```

if test $am_cv_make_support_nested_variables = yes; then
  AM_V='$(V)'
  AM_DEFAULT_V='$(AM_DEFAULT_VERBOSITY)'
else
  AM_V=$AM_DEFAULT_VERBOSITY
  AM_DEFAULT_V=$AM_DEFAULT_VERBOSITY
fi
AM_BACKSLASH='\ '

# libtool versioning - this applies to libdbus
#
# See
http://sources.redhat.com/autobook/autobook/autobook\_91.html#SEC91 for
details
#

## increment if the interface has additions, changes, removals.
LT_CURRENT=4

## increment any time the source changes; set to
## 0 if you increment CURRENT
LT_REVISION=2

## increment if any interfaces have been added; set to 0
## if any interfaces have been changed or removed. removal has
## precedence over adding, so set to 0 if both happened.
LT_AGE=2

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}gcc", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$CC"; then
      ac_cv_prog_CC="$CC" # Let the user override the test.
    else

```

```

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_CC="${ac_tool_prefix}gcc"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_CC"; then
  ac_ct_CC=$CC
  # Extract the first word of "gcc", so it can be a program name with
  args.
  set dummy gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_CC"; then
      ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_CC="gcc"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5

```

```

        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test "x$ac_ct_CC" = x; then
    CC=""
else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    CC=$ac_ct_CC
fi
else
    CC="$ac_cv_prog_CC"
fi

if test -z "$CC"; then
    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}cc", so it can be a
        program name with args.
        set dummy ${ac_tool_prefix}cc; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_CC+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            if test -n "$CC"; then
                ac_cv_prog_CC="$CC" # Let the user override the test.
            else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="${ac_tool_prefix}cc"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$sas_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $CC" >&5
    $sas_echo "$CC" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $sas_echo "no" >&6; }
fi

fi
fi
if test -z "$CC"; then
    # Extract the first word of "cc", so it can be a program name with
    args.
    set dummy cc; ac_word=$2
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $sas_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_CC+:} false; then :
        $sas_echo_n "(cached) " >&6
    else
        if test -n "$CC"; then
            ac_cv_prog_CC="$CC" # Let the user override the test.
        else
            ac_prog_rejected=no
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$sas_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' ' $ac_executable_extensions; do
                    if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
                        if test "$sas_dir/$ac_word$ac_exec_ext" = "/usr/ucb/cc"; then
                            ac_prog_rejected=yes
                            continue
                        fi
                    fi
                done
                ac_cv_prog_CC="cc"
                $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
            done
        fi
    fi
fi

```

```

        break 2
    fi
done
done
IFS=$as_save_IFS

if test $ac_prog_rejected = yes; then
    # We found a bogon in the path, so make sure we never use it.
    set dummy $ac_cv_prog_CC
    shift
    if test $@%:@ != 0; then
        # We chose a different compiler from the bogus one.
        # However, it has the same basename, so the bogon will be chosen
        # first if we set CC to just the basename; use the full file name.
        shift
        ac_cv_prog_CC="$as_dir/$ac_word${1+' '}$@"
    fi
fi
fi
fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$CC"; then
    if test -n "$ac_tool_prefix"; then
        for ac_prog in cl.exe
        do
            # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
            be a program name with args.
            set dummy $ac_tool_prefix$ac_prog; ac_word=$2
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
            if ${ac_cv_prog_CC+:} false; then :
                $as_echo_n "(cached) " >&6
            else
                if test -n "$CC"; then
                    ac_cv_prog_CC="$CC" # Let the user override the test.
                else
                    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                    for as_dir in $PATH
                    do
                        IFS=$as_save_IFS
                        test -z "$as_dir" && as_dir=.
                        for ac_exec_ext in '' $ac_executable_extensions; do

```

```

    if as_fn_executable_p "$sas_dir/$sas_word$sas_exec_ext"; then
        ac_cv_prog_CC="$sas_tool_prefix$sas_prog"
        $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$sas_word$sas_exec_ext" >&5
        break 2
    fi
done
done
IFS=$sas_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $CC" >&5
    $sas_echo "$CC" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $sas_echo "no" >&6; }
fi

    test -n "$CC" && break
done
fi
if test -z "$CC"; then
    ac_ct_CC=$CC
    for ac_prog in cl.exe
do
    # Extract the first word of "$sas_prog", so it can be a program name
with args.
set dummy $sas_prog; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $sas_word" >&5
    $sas_echo_n "checking for $sas_word... " >&6; }
if ${ac_cv_prog_ac_ct_CC+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_CC"; then
        ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$sas_save_IFS
    test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $sas_executable_extensions; do
    if as_fn_executable_p "$sas_dir/$sas_word$sas_exec_ext"; then
        ac_cv_prog_ac_ct_CC="$sas_prog"
        $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$sas_word$sas_exec_ext" >&5
        break 2
    fi

```

```

done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_CC" && break
done

  if test "x$ac_ct_CC" = x; then
    CC=""
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    CC=$ac_ct_CC
  fi
fi

fi

test -z "$CC" && { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "no acceptable C compiler found in $PATH
See `config.log' for more details" "$LINENO" 5; }

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\`* | *\`* | *\`*) ac_try_echo=\`$ac_try;;

```

```

*) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\`"\$as_me:${as_lineno-$LINENO}: $ac_try_echo\`"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    sed '10a\
... rest of stderr output deleted ...
    10q' conftest.err >conftest.er1
    cat conftest.er1 >&5
  fi
  rm -f conftest.er1 conftest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }
done

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

;
  return 0;
}
_ACEOF
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files a.out a.out.dSYM a.exe b.out"
# Try to create an executable without -o first, disregard a.out.
# It will help us diagnose broken compilers, and finding out an
intuition
# of exeext.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
compiler works" >&5
$as_echo_n "checking whether the C compiler works... " >&6; }
ac_link_default=`$as_echo "$ac_link" | sed 's/ -o *conftest[^\` ]*//'\`

# The possible output files:
ac_files="a.out conftest.exe conftest a.exe a_out.exe b.out
conftest.*"

ac_rmfiles=
for ac_file in $ac_files
do
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    * ) ac_rmfiles="$ac_rmfiles $ac_file";;
  esac
done
done

```



```

rm -f $ac_rmfiles

if { { ac_try="$ac_link_default"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\`\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\`"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link_default") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
  test $ac_status = 0; }; then :
  # Autoconf-2.13 could set the ac_cv_exeext variable to `no'.
  # So ignore a value of `no', otherwise this would lead to `EXEEXT =
no'
  # in a Makefile. We should not override ac_cv_exeext if it was
  cached,
  # so that the user can short-circuit this test for compilers unknown
  to
  # Autoconf.
for ac_file in $ac_files ''
do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj )
      ;;
    [ab].out )
      # We found the default executable, but exeext='' is most
      # certainly right.
      break;;
    *.* )
      if test "${ac_cv_exeext+set}" = set && test "$ac_cv_exeext" !=
no;
      then ;; else
        ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)`
      fi
      # We set ac_cv_exeext here because the later test for it is not
      # safe: cross compilers may not add the suffix if given an `-o'
      # argument, so we may need to know it at that point already.
      # Even if this section looks crufty: it has the advantage of
      # actually working.
      break;;
    * )
      break;;
  esac
done
test "$ac_cv_exeext" = no && ac_cv_exeext=

else
  ac_file=''

```

```

fi
if test -z "$ac_file"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "C compiler cannot create executables
See `config.log' for more details" "$LINENO" 5; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
default output file name" >&5
$as_echo_n "checking for C compiler default output file name... " >&6;
}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_file" >&5
$as_echo "$ac_file" >&6; }
ac_exeext=$ac_cv_exeext

rm -f -r a.out a.out.dSYM a.exe conftest$ac_cv_exeext b.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of
executables" >&5
$as_echo_n "checking for suffix of executables... " >&6; }
if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: \$ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; then :
  # If both `conftest.exe' and `conftest' are `present' (well,
observable)
# catch `conftest.exe'. For instance with Cygwin, `ls conftest' will
# work properly (i.e., refer to `conftest.exe'), while it won't with
# `rm'.
for ac_file in conftest.exe conftest conftest.*; do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    *.* ) ac_cv_exeext=`expr "$ac_file" : '[^.]*(\\..*)'`
      break;;
    * ) break;;
  esac
done

```

```

    esac
done
else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
>&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "cannot compute suffix of executables: cannot compile
and link
See \`config.log' for more details" "$LINENO" 5; }
fi
rm -f confptest confptest$ac_cv_exeext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_exeext" >&5
$as_echo "$ac_cv_exeext" >&6; }

rm -f confptest.$ac_ext
EXEEXT=$ac_cv_exeext
ac_exeext=$EXEEXT
cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
@%:@include <stdio.h>
int
main ()
{
FILE *f = fopen ("confptest.out", "w");
return ferror (f) || fclose (f) != 0;

;
return 0;
}
_ACEOF
ac_clean_files="$ac_clean_files confptest.out"
# Check that the compiler produces executables we can run.  If not,
either
# the compiler is broken, or we cross compile.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are cross
compiling" >&5
$as_echo_n "checking whether we are cross compiling... " >&6; }
if test "$cross_compiling" != yes; then
  { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
  test $ac_status = 0; }
if { ac_try='./confptest$ac_cv_exeext'
{ { case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;

```

```

*) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; }; then
    cross_compiling=no
  else
    if test "$cross_compiling" = maybe; then
      cross_compiling=yes
    else
      { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
>&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "cannot run C compiled programs.
If you meant to cross compile, use \`--host'.
See \`config.log' for more details" "$LINENO" 5; }
      fi
    fi
  fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $cross_compiling" >&5
$as_echo "$cross_compiling" >&6; }

rm -f conftest.$ac_ext conftest$ac_cv_exeext conftest.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of object
files" >&5
$as_echo_n "checking for suffix of object files... " >&6; }
if ${ac_cv_objext+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
rm -f conftest.o conftest.obj
if { { ac_try="$ac_compile"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\`$ac_try`;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5

```

```

(eval "$ac_compile") 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }; then :
for ac_file in confptest.o confptest.obj confptest.*; do
test -f "$ac_file" || continue;
case $ac_file in
*. $ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM ) ;;
*) ac_cv_objext=`expr "$ac_file" : '.*\.(.*)'`
break;;
esac
done
else
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' confptest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \ ` $ac_pwd':" >&5
$as_echo "$as_me: error: in \ ` $ac_pwd':" >&2;}
as_fn_error $? "cannot compute suffix of object files: cannot compile
See \ `config.log' for more details" "$LINENO" 5; }
fi
rm -f confptest.$ac_cv_objext confptest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_objext" >&5
$as_echo "$ac_cv_objext" >&6; }
OBJEXT=$ac_cv_objext
ac_objext=$OBJEXT
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C compiler" >&5
$as_echo_n "checking whether we are using the GNU C compiler... " >&6;
}
if ${ac_cv_c_compiler_gnu+:} false; then :
$as_echo_n "(cached) " >&6
else
cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */

int
main ()
{
#ifdef __GNUC__
choke me
#endif

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_compiler_gnu=yes
else

```

```

    ac_compiler_gnu=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_c_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_c_compiler_gnu" >&5
$as_echo "$ac_cv_c_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
    GCC=yes
else
    GCC=
fi
ac_test_CFLAGS=${CFLAGS+set}
ac_save_CFLAGS=$CFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC accepts
-g" >&5
$as_echo_n "checking whether $CC accepts -g... " >&6; }
if ${ac_cv_prog_cc_g+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_save_c_werror_flag=$ac_c_werror_flag
    ac_c_werror_flag=yes
    ac_cv_prog_cc_g=no
    CFLAGS="-g"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_g=yes
else
    CFLAGS=""
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF

```

```

if ac_fn_c_try_compile "$LINENO"; then :

else
  ac_c_werror_flag=$ac_save_c_werror_flag
  CFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_prog_cc_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  ac_c_werror_flag=$ac_save_c_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cc_g" >&5
$as_echo "$ac_cv_prog_cc_g" >&6; }
if test "$ac_test_CFLAGS" = set; then
  CFLAGS=$ac_save_CFLAGS
elif test $ac_cv_prog_cc_g = yes; then
  if test "$GCC" = yes; then
    CFLAGS="-g -O2"
  else
    CFLAGS="-g"
  fi
else
  if test "$GCC" = yes; then
    CFLAGS="-O2"
  else
    CFLAGS=
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $CC option to
accept ISO C89" >&5
$as_echo_n "checking for $CC option to accept ISO C89... " >&6; }
if ${ac_cv_prog_cc_c89+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_cv_prog_cc_c89=no
ac_save_CC=$CC
cat confdefs.h - <<_ACEOF >conftest.$ac_ext

```

```

/* end confdefs.h.  */
#include <stdarg.h>
#include <stdio.h>
struct stat;
/* Most of the following tests are stolen from RCS 5.7's src/conf.sh.
*/
struct buf { int x; };
FILE * (*rcsopen) (struct buf *, struct stat *, int);
static char *e (p, i)
    char **p;
    int i;
{
    return p[i];
}
static char *f (char * (*g) (char **, int), char **p, ...)
{
    char *s;
    va_list v;
    va_start (v,p);
    s = g (p, va_arg (v,int));
    va_end (v);
    return s;
}

/* OSF 4.0 Compaq cc is some sort of almost-ANSI by default.  It has
function prototypes and stuff, but not '\xHH' hex character
constants.
These don't provoke an error unfortunately, instead are silently
treated
as 'x'.  The following induces an error, until -std is added to get
proper ANSI mode.  Curiously '\x00'!='x' always comes out true, for an
array size at least.  It's necessary to write '\x00'==0 to get
something
that's true only with -std.  */
int osf4_cc_array ['\x00' == 0 ? 1 : -1];

/* IBM C 6 for AIX is almost-ANSI by default, but it replaces macro
parameters
inside strings and character constants.  */
#define FOO(x) 'x'
int xlc6_cc_array[FOO(a) == 'x' ? 1 : -1];

int test (int i, double x);
struct s1 {int (*f) (int a);};
struct s2 {int (*f) (double a);};
int pairnames (int, char **, FILE *(*)(struct buf *, struct stat *,
int), int, int);
int argc;
char **argv;
int
main ()

```



```

{
return f (e, argv, 0) != argv[0]  ||  f (e, argv, 1) != argv[1];
;
return 0;
}
_ACEOF
for ac_arg in ' -qlanglvl=extc89 -qlanglvl=ansi -std \
    -Ae "-Aa -D_HPUX_SOURCE" "-Xc -D__EXTENSIONS__"
do
CC="$ac_save_CC $ac_arg"
if ac_fn_c_try_compile "$LINENO"; then :
ac_cv_prog_cc_c89=$ac_arg
fi
rm -f core conftest.err conftest.$ac_objext
test "x$ac_cv_prog_cc_c89" != "xno" && break
done
rm -f conftest.$ac_ext
CC=$ac_save_CC

fi
# AC_CACHE_VAL
case "x$ac_cv_prog_cc_c89" in
x)
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: none needed" >&5
$as_echo "none needed" >&6; } ;;
xno)
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: unsupported" >&5
$as_echo "unsupported" >&6; } ;;
*)
CC="$CC $ac_cv_prog_cc_c89"
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_prog_cc_c89" >&5
$as_echo "$ac_cv_prog_cc_c89" >&6; } ;;
esac
if test "x$ac_cv_prog_cc_c89" != xno; then :

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
DEPDIR="$am__leading_dot"deps"

ac_config_commands="$ac_config_commands depfiles"

am_make=${MAKE-make}
cat > confinc << 'END'
am__doit:

```

```

        @echo this is the am__doit target
.PHONY: am__doit
END
# If we don't find an include directive, just comment out the code.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for style of include
used by $am_make" >&5
$as_echo_n "checking for style of include used by $am_make... " >&6; }
am__include="#"
am__quote=
_am_result=none
# First try GNU make style include.
echo "include confinc" > confmf
# Ignore all kinds of additional output from 'make'.
case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
    am__include=include
    am__quote=
    _am_result=GNU
    ;;
esac
# Now try BSD make style include.
if test "$am__include" = "#"; then
    echo '.include "confinc"' > confmf
    case ` $am_make -s -f confmf 2> /dev/null ` in #(
    *the\ am__doit\ target*)
        am__include=.include
        am__quote=""
        _am_result=BSD
        ;;
    esac
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $_am_result" >&5
$as_echo "$_am_result" >&6; }
rm -f confinc confmf

@%:@ Check whether --enable-dependency-tracking was given.
if test "${enable_dependency_tracking}" = set; then :
    enableval=$enable_dependency_tracking;
fi

if test "x$enable_dependency_tracking" != xno; then
    am_depcomp="$ac_aux_dir/depcomp"
    AMDEPBACKSLASH='\'
    am__nodep='_no'
fi
if test "x$enable_dependency_tracking" != xno; then
    AMDEP_TRUE=
    AMDEP_FALSE='#'
else
    AMDEP_TRUE='#'

```

```

    AMDEP_FALSE=
fi

depcc="$CC"    am_compiler_list=

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$as_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CC_dependencies_compiler_type+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$AMDEP_TRUE" && test -f "$am_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf confptest.dir
    mkdir confptest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$am_depcomp" confptest.dir
    cd confptest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.
    mkdir sub

    am_cv_CC_dependencies_compiler_type=none
    if test "$am_compiler_list" = ""; then
      am_compiler_list=`sed -n 's/^#\([a-zA-Z0-9]*\)$/\1/p' <
./depcomp`
    fi
    am_universal=false
    case " $depcc " in #(
      *\ -arch\ *\ -arch\ *) am_universal=true ;;
    esac

    for depmode in $am_compiler_list; do
      # Setup a source with many dependencies, because some compilers
      # like to wrap large dependency lists on column 80 (with \), and
      # we should not choose a depcomp mode which is confused by this.
      #
      # We need to recreate these files for each test, as the compiler
may
      # overwrite some of them when testing with obscure command lines.

```

```

# This happens at least with the AIX C compiler.
: > sub/confctest.c
for i in 1 2 3 4 5 6; do
    echo '#include "confstst'$i'.h"' >> sub/confctest.c
    # Using ": > sub/confstst$i.h" creates only sub/confstst1.h with
    # Solaris 10 /bin/sh.
    echo '/* dummy */' > sub/confstst$i.h
done
echo "${am__include} ${am__quote}sub/confctest.Po${am__quote}" >
confmf

# We check with '-c' and '-o' for the sake of the "dashmstdout"
# mode. It turns out that the SunPro C++ compiler does not
properly
# handle '-M -o', and we need to detect this. Also, some Intel
# versions had trouble with output in subdirs.
am__obj=sub/confctest.${OBJEXT-o}
am__minus_obj="-o $am__obj"
case $depmode in
gcc)
    # This depmode causes a compiler race in universal mode.
    test "$am__universal" = false || continue
    ;;
nosideeffect)
    # After this tag, mechanisms are not by side-effect, so they'll
    # only be used when explicitly requested.
    if test "x$enable_dependency_tracking" = xyes; then
        continue
    else
        break
    fi
    ;;
msvc7 | msvc7msys | msvisualcpp | msvcmsys)
    # This compiler won't grok '-c -o', but also, the minuso test
has
    # not run yet. These depmodes are late enough in the game, and
    # so weak that their functioning should not be impacted.
    am__obj=confctest.${OBJEXT-o}
    am__minus_obj=
    ;;
none) break ;;
esac
if depmode=$depmode \
    source=sub/confctest.c object=$am__obj \
    depfile=sub/confctest.Po tmpdepfile=sub/confctest.TPo \
    $SHELL ./depcomp $depcc -c $am__minus_obj sub/confctest.c \
    >/dev/null 2>confctest.err &&
    grep sub/confstst1.h sub/confctest.Po > /dev/null 2>&1 &&
    grep sub/confstst6.h sub/confctest.Po > /dev/null 2>&1 &&
    grep $am__obj sub/confctest.Po > /dev/null 2>&1 &&
    ${MAKE-make} -s -f confmf > /dev/null 2>&1; then

```

```

        # icc doesn't choke on unknown options, it will just issue
warnings
        # or remarks (even with -Werror).  So we grep stderr for any
message
        # that says an option was ignored or not supported.
        # When given -MP, icc 7.0 and 7.1 complain thusly:
        #   icc: Command line warning: ignoring option '-M'; no argument
required
        # The diagnosis changed in icc 8.0:
        #   icc: Command line remark: option '-MP' not supported
        if (grep 'ignoring option' conftest.err ||
            grep 'not supported' conftest.err) >/dev/null 2>&1; then ;;
else
        am_cv_CC_dependencies_compiler_type=$depmode
        break
    fi
fi
done

    cd ..
    rm -rf conftest.dir
else
    am_cv_CC_dependencies_compiler_type=none
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CC_dependencies_compiler_type" >&5
$as_echo "$am_cv_CC_dependencies_compiler_type" >&6; }
CCDEPMODE=depmode=$am_cv_CC_dependencies_compiler_type

if
    test "x$enable_dependency_tracking" != xno \
    && test "$am_cv_CC_dependencies_compiler_type" = gcc3; then
    am__fastdepCC_TRUE=
    am__fastdepCC_FALSE='#'
else
    am__fastdepCC_TRUE='#'
    am__fastdepCC_FALSE=
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing strerror" >&5
$as_echo_n "checking for library containing strerror... " >&6; }
if ${ac_cv_search_strerror+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_func_search_save_LIBS=$LIBS
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

```

```

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char strerror ();
int
main ()
{
return strerror ();
    ;
    return 0;
}
__ACEOF
for ac_lib in ' cposix; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_strerror=$ac_res
  fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
  if ${ac_cv_search_strerror+:} false; then :
    break
  fi
done
if ${ac_cv_search_strerror+:} false; then :

else
  ac_cv_search_strerror=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_strerror" >&5
$as_echo "$ac_cv_search_strerror" >&6; }
ac_res=$ac_cv_search_strerror
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'

```

```

ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to run the C
preprocessor" >&5
$as_echo_n "checking how to run the C preprocessor... " >&6; }
# On Suns, sometimes $CPP names a directory.
if test -n "$CPP" && test -d "$CPP"; then
  CPP=
fi
if test -z "$CPP"; then
  if ${ac_cv_prog_CPP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    # Double quotes because CPP needs to be expanded
    for CPP in "$CC -E" "$CC -E -traditional-cpp" "/lib/cpp"
    do
      ac_preproc_ok=false
      for ac_c_preproc_warn_flag in ' yes
do
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
  # <limits.h> exists even on freestanding compilers.
  # On the NeXT, cc -E runs the code through the compiler's parser,
  # not just through cpp. "Syntax error" is here to catch this case.
  cat confdefs.h - << _ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
          Syntax error
        _ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :

else
  # Broken: fails on valid input.
  continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext

  # OK, works on sane cases. Now check whether nonexistent headers
  # can be detected and how.
  cat confdefs.h - << _ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <ac_nonexistent.h>
        _ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
  # Broken: success on invalid input.
  continue

```

```

else
  # Passes both tests.
ac_preproc_ok=:
break
fi
rm -f confptest.err confptest.i confptest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :
  break
fi

  done
  ac_cv_prog_CPP=$CPP

fi
  CPP=$ac_cv_prog_CPP
else
  ac_cv_prog_CPP=$CPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CPP" >&5
$as_echo "$CPP" >&6; }
ac_preproc_ok=false
for ac_c_preproc_warn_flag in '' yes
do
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
  # <limits.h> exists even on freestanding compilers.
  # On the NeXT, cc -E runs the code through the compiler's parser,
  # not just through cpp. "Syntax error" is here to catch this case.
  cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
          Syntax error
__ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :

else
  # Broken: fails on valid input.
continue
fi
rm -f confptest.err confptest.i confptest.$ac_ext

  # OK, works on sane cases.  Now check whether nonexistent headers
  # can be detected and how.

```



```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
    # Broken: success on invalid input.
continue
else
    # Passes both tests.
ac_preproc_ok=:
break
fi
rm -f conftest.err conftest.i conftest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f conftest.i conftest.err conftest.$ac_ext
if $ac_preproc_ok; then :

else
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error $? "C preprocessor `'$CPP\' fails sanity check
See `config.log' for more details" "$LINENO" 5; }
fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for grep that
handles long lines and -e" >&5
$as_echo_n "checking for grep that handles long lines and -e... " >&6;
}
if ${ac_cv_path_GREP+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -z "$GREP"; then
        ac_path_GREP_found=false
        # Loop through the user's path and test for each of PROGRAMME-LIST
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_prog in grep ggrep; do
                for ac_exec_ext in ' $ac_executable_extensions; do

```

```

        ac_path_GREP="$sas_dir/$ac_prog$sac_exec_ext"
        as_fn_executable_p "$ac_path_GREP" || continue
# Check for GNU ac_path_GREP and select it if it is found.
# Check for GNU $ac_path_GREP
case `"$ac_path_GREP" --version 2>&1` in
*GNU*)
    ac_cv_path_GREP="$ac_path_GREP" ac_path_GREP_found=;;
*)
    ac_count=0
    $sas_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $sas_echo 'GREP' >> "confptest.nl"
        "$ac_path_GREP" -e 'GREP$' -e '-(cannot match)-' < "confptest.nl"
>"confptest.out" 2>/dev/null || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_GREP_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_GREP="$ac_path_GREP"
            ac_path_GREP_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

        $ac_path_GREP_found && break 3
    done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_GREP"; then
    as_fn_error $? "no acceptable grep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_GREP=$GREP
fi

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_path_GREP" >&5
$sas_echo "$ac_cv_path_GREP" >&6; }
GREP="$ac_cv_path_GREP"

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for egrep" >&5
$sas_echo_n "checking for egrep... " >&6; }

```

```

if ${ac_cv_path_EGREP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if echo a | $GREP -E '(a|b)' >/dev/null 2>&1
  then ac_cv_path_EGREP="$GREP -E"
  else
    if test -z "$EGREP"; then
      ac_path_EGREP_found=false
      # Loop through the user's path and test for each of PROGNAMES_LIST
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_prog in egrep; do
          for ac_exec_ext in '' $ac_executable_extensions; do
            ac_path_EGREP="$as_dir/$ac_prog$ac_exec_ext"
            as_fn_executable_p "$ac_path_EGREP" || continue
          # Check for GNU ac_path_EGREP and select it if it is found.
          # Check for GNU $ac_path_EGREP
          case `"$ac_path_EGREP" --version 2>&1` in
          *GNU*)
            ac_cv_path_EGREP="$ac_path_EGREP" ac_path_EGREP_found=:;
          *)
            ac_count=0
            $as_echo_n 0123456789 >"conftest.in"
            while :
            do
              cat "conftest.in" "conftest.in" >"conftest.tmp"
              mv "conftest.tmp" "conftest.in"
              cp "conftest.in" "conftest.nl"
              $as_echo 'EGREP' >> "conftest.nl"
              "$ac_path_EGREP" 'EGREP$' < "conftest.nl" >"conftest.out"
            2>/dev/null || break
              diff "conftest.out" "conftest.nl" >/dev/null 2>&1 || break
              as_fn_arith $ac_count + 1 && ac_count=$as_val
              if test $ac_count -gt ${ac_path_EGREP_max-0}; then
                # Best one so far, save it but keep looking for a better one
                ac_cv_path_EGREP="$ac_path_EGREP"
                ac_path_EGREP_max=$ac_count
              fi
              # 10*(2^10) chars as input seems more than enough
              test $ac_count -gt 10 && break
            done
            rm -f conftest.in conftest.tmp conftest.nl conftest.out;;
          esac

          $ac_path_EGREP_found && break 3
        done
      done
    done
  done
  IFS=$as_save_IFS

```

```

    if test -z "$ac_cv_path_EGREP"; then
        as_fn_error $? "no acceptable egrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
    fi
else
    ac_cv_path_EGREP=$EGREP
fi

    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_EGREP"
>&5
$as_echo "$ac_cv_path_EGREP" >&6; }
EGREP="$ac_cv_path_EGREP"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$as_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_header_stdcl=yes
else
    ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test $ac_cv_header_stdcl = yes; then
    # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |

```

```

$EGREP "memchr" >/dev/null 2>&1; then :

else
    ac_cv_header_stdcl=no
fi
rm -f confctest*

fi

if test $ac_cv_header_stdcl = yes; then
    # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
    cat confdefs.h - <<_ACEOF >confctest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>

_ACEOF
if (eval "$ac_cpp confctest.$ac_ext") 2>&5 |
    $EGREP "free" >/dev/null 2>&1; then :

else
    ac_cv_header_stdcl=no
fi
rm -f confctest*

fi

if test $ac_cv_header_stdcl = yes; then
    # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
    if test "$cross_compiling" = yes; then :
    else
        cat confdefs.h - <<_ACEOF >confctest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0x0FF) == 0x020)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
        (('a' <= (c) && (c) <= 'i') \
         || ('j' <= (c) && (c) <= 'r') \
         || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
    int i;

```

```

    for (i = 0; i < 256; i++)
        if (XOR (islower (i), ISLOWER (i))
            || toupper (i) != TOUPPER (i))
            return 2;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
    ac_cv_header_stdc=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdc"
>&5
$as_echo "$ac_cv_header_stdc" >&6; }
if test $ac_cv_header_stdc = yes; then

$as_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

@%:@ Check whether --enable-tests was given.
if test "${enable_tests+set}" = set; then :
    enableval=$enable_tests; enable_tests=$enableval
else
    enable_tests=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-ansi was given.
if test "${enable_ansi+set}" = set; then :
    enableval=$enable_ansi; enable_ansi=$enableval
else
    enable_ansi=no
fi

@%:@ Check whether --enable-verbose-mode was given.
if test "${enable_verbose_mode+set}" = set; then :
    enableval=$enable_verbose_mode; enable_verbose_mode=$enableval
else
    enable_verbose_mode=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-asserts was given.
if test "${enable_asserts+set}" = set; then :
    enableval=$enable_asserts; enable_asserts=$enableval

```

```

else
    enable_asserts=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-checks was given.
if test "${enable_checks+set}" = set; then :
    enableval=$enable_checks; enable_checks=$enableval
else
    enable_checks=yes
fi

@%:@ Check whether --enable-gcov was given.
if test "${enable_gcov+set}" = set; then :
    enableval=$enable_gcov; enable_gcov=$enableval
else
    enable_gcov=no
fi

@%:@ Check whether --enable-bash-completion was given.
if test "${enable_bash_completion+set}" = set; then :
    enableval=$enable_bash_completion; enable_bash_completion=$enableval
else
    enable_bash_completion=yes
fi

@%:@ Check whether --with-test-socket-dir was given.
if test "${with_test_socket_dir+set}" = set; then :
    withval=$with_test_socket_dir;
fi

@%:@ Check whether --with-introspect-xml was given.
if test "${with_introspect_xml+set}" = set; then :
    withval=$with_introspect_xml;
fi

    if test x$enable_bash_completion = xyes; then
        DBUS_BASH_COMPLETION_TRUE=
        DBUS_BASH_COMPLETION_FALSE='#'
    else
        DBUS_BASH_COMPLETION_TRUE='#'
        DBUS_BASH_COMPLETION_FALSE=
    fi

if test x$enable_bash_completion = xyes; then

$as_echo "@%:@define DBUS_BASH_COMPLETION 1" >>confdefs.h

```

```
fi

if test x$enable_verbose_mode = xyes; then

$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h

fi

@%:@ Check whether --with-dbus-binding-tool was given.
if test "${with_dbus_binding_tool+set}" = set; then :
  withval=$with_dbus_binding_tool; DBUS_BINDING_TOOL=$withval
else
  DBUS_BINDING_TOOL=\$(top_builddir)/dbus/dbus-binding-tool
fi

  if test x$enable_tests = xyes; then
    DBUS_BUILD_TESTS_TRUE=
    DBUS_BUILD_TESTS_FALSE='#'
  else
    DBUS_BUILD_TESTS_TRUE='#'
    DBUS_BUILD_TESTS_FALSE=
  fi

if test x$enable_tests = xyes; then

$as_echo "@%:@define DBUS_BUILD_TESTS 1" >>confdefs.h

fi

if test x$enable_verbose_mode = xyes; then

$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h

fi
if test x$enable_asserts = xno; then

$as_echo "@%:@define DBUS_DISABLE_ASSERT 1" >>confdefs.h

$as_echo "@%:@define G_DISABLE_ASSERT 1" >>confdefs.h

fi
if test x$enable_checks = xno; then

$as_echo "@%:@define DBUS_DISABLE_CHECKS 1" >>confdefs.h
```



```

$as_echo "@%:@define G_DISABLE_CHECKS 1" >>confdefs.h

fi

#### gcc warning flags

if test "x$GCC" = "xyes"; then

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether gcc
understands -Wfloat-equal" >&5
$as_echo_n "checking whether gcc understands -Wfloat-equal... " >&6; }

    ac_save_CFLAGS="$CFLAGS"
    CFLAGS="$CFLAGS -Wfloat-equal"

    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

    _ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cc_flag=yes
else
    ac_cc_flag=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$ac_save_CFLAGS"

if test "x$ac_cc_flag" = "xyes"; then
    ac_flag_float_equal=yes
else
    ac_flag_float_equal=no
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cc_flag" >&5
$as_echo "$ac_cc_flag" >&6; }

    case " $CFLAGS " in
*[\ \ ]-Wall[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wall" ;;
esac

    case " $CFLAGS " in
*[\ \ ]-Wchar-subscripts[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wchar-subscripts" ;;
esac

    case " $CFLAGS " in
*[\ \ ]-Wmissing-declarations[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wmissing-declarations" ;;
esac

```

```

case " $CFLAGS " in
*[\ \ ]-Wmissing-prototypes[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wmissing-prototypes" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wnested-externs[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wnested-externs" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wpointer-arith[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wpointer-arith" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wcast-align[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wcast-align" ;;
esac

if test "x$ac_flag_float_equal" = "xyes"; then
  case " $CFLAGS " in
  *[\ \ ]-Wfloat-equal[\ \ ]*) ;;
  *) CFLAGS="$CFLAGS -Wfloat-equal" ;;
  esac
fi

case " $CFLAGS " in
*[\ \ ]-Wsign-compare[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wsign-compare" ;;
esac

# This one is special - it's not a warning override.
# http://bugs.freedesktop.org/show\_bug.cgi?id=10599
# is the bug for DBus core.
case " $CFLAGS " in
*[\ \ ]-fno-strict-aliasing[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -fno-strict-aliasing" ;;
esac

if test "x$enable_ansi" = "xyes"; then
  case " $CFLAGS " in
  *[\ \ ]-ansi[\ \ ]*) ;;
  *) CFLAGS="$CFLAGS -ansi" ;;
  esac

  case " $CFLAGS " in
  *[\ \ ]-D_POSIX_C_SOURCE*) ;;
  *) CFLAGS="$CFLAGS -D_POSIX_C_SOURCE=199309L" ;;
  esac

```

```

case " $CFLAGS " in
*[\ \ ]-D_BSD_SOURCE[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -D_BSD_SOURCE" ;;
esac

case " $CFLAGS " in
*[\ \ ]-pedantic[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -pedantic" ;;
esac
fi
if test x$enable_gcov = xyes; then
case " $CFLAGS " in
*[\ \ ]-fprofile-arcs[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -fprofile-arcs" ;;
esac
case " $CFLAGS " in
*[\ \ ]-ftest-coverage[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -ftest-coverage" ;;
esac

## remove optimization
CFLAGS=`echo "$CFLAGS" | sed -e 's/-O[0-9]*//g'`
fi
else
if test x$enable_gcov = xyes; then
as_fn_error $? "--enable-gcov can only be used with gcc" "$LINENO"
5
fi
fi
fi

case `pwd` in
*\ * | *\ *)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Libtool does not
cope well with whitespace in `pwd`" >&5
$as_echo "$as_me: WARNING: Libtool does not cope well with whitespace
in `pwd`" >&2;} ;;
esac

macro_version='2.4.2'
macro_revision='1.3337'

```



```
    $ECHO ""
}

case "$ECHO" in
  printf*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: printf"
>&5
$as_echo "printf" >&6; } ;;
  print*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: print -r"
>&5
$as_echo "print -r" >&6; } ;;
  *) { $as_echo "$as_me:${as_lineno-$LINENO}: result: cat" >&5
$as_echo "cat" >&6; } ;;
esac
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a sed that does
not truncate output" >&5
$as_echo_n "checking for a sed that does not truncate output... " >&6;
}
if ${ac_cv_path_SED+:} false; then :
  $as_echo_n "(cached) " >&6
else
```

```
ac_script=s/aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa/bbbbbbbbbbbbbbbbbbbbbbbbbbbbbb
bbbbbbbbbbbb/
  for ac_i in 1 2 3 4 5 6 7; do
    ac_script="$ac_script$as_nl$ac_script"
  done
  echo "$ac_script" 2>/dev/null | sed 99q >confptest.sed
  { ac_script=; unset ac_script;}
  if test -z "$SED"; then
    ac_path_SED_found=false
    # Loop through the user's path and test for each of PROGRAMME-LIST
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in sed gsed; do
        for ac_exec_ext in ' $ac_executable_extensions; do
```

```

        ac_path_SED="$as_dir/$ac_prog$ac_exec_ext"
        as_fn_executable_p "$ac_path_SED" || continue
# Check for GNU ac_path_SED and select it if it is found.
# Check for GNU $ac_path_SED
case `"$ac_path_SED" --version 2>&1` in
*GNU*)
    ac_cv_path_SED="$ac_path_SED" ac_path_SED_found=;;;
*)
    ac_count=0
    $as_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $as_echo ' ' >> "confptest.nl"
        "$ac_path_SED" -f confptest.sed < "confptest.nl" >"confptest.out"
2>/dev/null || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_SED_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_SED="$ac_path_SED"
            ac_path_SED_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

        $ac_path_SED_found && break 3
    done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_SED"; then
    as_fn_error $? "no acceptable sed could be found in \$PATH"
"$LINENO" 5
fi
else
    ac_cv_path_SED=$SED
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_SED" >&5
$as_echo "$ac_cv_path_SED" >&6; }
SED="$ac_cv_path_SED"
rm -f confptest.sed

test -z "$SED" && SED=sed
Xsed="$SED -e 1s/^X//"

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for fgrep" >&5
$sas_echo_n "checking for fgrep... " >&6; }
if ${ac_cv_path_FGREP+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if echo 'ab*c' | $GREP -F 'ab*c' >/dev/null 2>&1
  then ac_cv_path_FGREP="$GREP -F"
  else
    if test -z "$FGREP"; then
      ac_path_FGREP_found=false
      # Loop through the user's path and test for each of PROGMAME-LIST
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_prog in fgrep; do
          for ac_exec_ext in ' $ac_executable_extensions; do
            ac_path_FGREP="$as_dir/$ac_prog$ac_exec_ext"
            as_fn_executable_p "$ac_path_FGREP" || continue
          # Check for GNU ac_path_FGREP and select it if it is found.
          # Check for GNU $ac_path_FGREP
          case `"$ac_path_FGREP" --version 2>&1` in
          *GNU*)
            ac_cv_path_FGREP="$ac_path_FGREP" ac_path_FGREP_found=:;
          *)
            ac_count=0
            $sas_echo_n 0123456789 >"confptest.in"
            while :
            do
              cat "confptest.in" "confptest.in" >"confptest.tmp"
              mv "confptest.tmp" "confptest.in"
              cp "confptest.in" "confptest.nl"
              $sas_echo 'FGREP' >> "confptest.nl"
              "$ac_path_FGREP" FGREP < "confptest.nl" >"confptest.out" 2>/dev/null
            || break
              diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
            as_fn_arith $ac_count + 1 && ac_count=$as_val
            if test $ac_count -gt ${ac_path_FGREP_max-0}; then
              # Best one so far, save it but keep looking for a better one
              ac_cv_path_FGREP="$ac_path_FGREP"
            fi
          done
        done
      done
    fi
  fi

```

```

        ac_path_FGREP_max=$ac_count
    fi
    # 10*(2^10) chars as input seems more than enough
    test $ac_count -gt 10 && break
done
rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

    $ac_path_FGREP_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_FGREP"; then
    as_fn_error $? "no acceptable fgrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_FGREP=$FGREP
fi

    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_FGREP"
>&5
$as_echo "$ac_cv_path_FGREP" >&6; }
FGREP="$ac_cv_path_FGREP"

test -z "$GREP" && GREP=grep

```

```

@%:@ Check whether --with-gnu-ld was given.
if test "${with_gnu_ld+set}" = set; then :
    withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes

```



```

else
  with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
GCC" >&5
$as_echo_n "checking for ld used by GCC... " >&6; }
  case $host in
  *-*-mingw*)
    # gcc leaves a trailing carriage return which upsets mingw
    ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
  *)
    ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
  esac
  case $ac_prog in
  # Accept absolute paths.
  [\\/*] | ?:[\\/*]*)
    re_direlt=' /^[^/][^/]*/\.\./'
    # Canonicalize the pathname of ld
    ac_prog=`$ECHO "$ac_prog"| $SED 's%\\\\\%/g'`
    while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
      ac_prog=`$ECHO $ac_prog| $SED "s%$re_direlt%/"`
    done
    test -z "$LD" && LD="$ac_prog"
    ;;
  "")
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
  *)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
  esac
elif test "$with_gnu_ld" = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
      IFS="$lt_save_ifs"

```

```

    test -z "$ac_dir" && ac_dir=.
    if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.
        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
        *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break
            ;;
        *)
            test "$with_gnu_ld" != yes && break
            ;;
        esac
    fi
done
IFS="$lt_save_ifs"
else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5
$as_echo "$LD" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \$PATH"
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
    $as_echo_n "(cached) " >&6
else
    # I'd rather use --version here, but apparently some GNU lds only
accept -v.
    case `"$LD" -v 2>&1 </dev/null` in
    *GNU* | *'with BFD'*)
        lt_cv_prog_gnu_ld=yes
        ;;
    *)
        lt_cv_prog_gnu_ld=no
        ;;
    esac
fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5
$sas_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for BSD- or MS-
compatible name lister (nm)" >&5
$sas_echo_n "checking for BSD- or MS-compatible name lister (nm)... "
>&6; }
if ${lt_cv_path_NM+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test -n "$NM"; then
    # Let the user override the test.
    lt_cv_path_NM="$NM"
  else
    lt_nm_to_check="${ac_tool_prefix}nm"
    if test -n "$ac_tool_prefix" && test "$build" = "$host"; then
      lt_nm_to_check="$lt_nm_to_check nm"
    fi
    for lt_tmp_nm in $lt_nm_to_check; do
      lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
      for ac_dir in $PATH /usr/ccs/bin/elf /usr/ccs/bin /usr/ucb /bin;
do
        IFS="$lt_save_ifs"
        test -z "$ac_dir" && ac_dir=.
        tmp_nm="$ac_dir/$lt_tmp_nm"
        if test -f "$tmp_nm" || test -f "$tmp_nm$ac_exeext" ; then
          # Check to see if the nm accepts a BSD-compat flag.
          # Adding the `sed lq' prevents false positives on HP-UX, which
says:
          # nm: unknown option "B" ignored
          # Tru64's nm complains that /dev/null is an invalid object file
          case `"$tmp_nm" -B /dev/null 2>&1 | sed 'lq'` in
          */dev/null* | *'Invalid file or object type'*)
            lt_cv_path_NM="$tmp_nm -B"
            break
          ;;
          *)
            case `"$tmp_nm" -p /dev/null 2>&1 | sed 'lq'` in
            */dev/null*)
              lt_cv_path_NM="$tmp_nm -p"
              break
            ;;

```

```

        *)
        lt_cv_path_NM=${lt_cv_path_NM="$tmp_nm"} # keep the first
match, but
        continue # so that we can try to find one that supports BSD
flags
        ;;
    esac
    ;;
    esac
    fi
done
IFS="$lt_save_ifs"
done
: ${lt_cv_path_NM=no}
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_path_NM" >&5
$as_echo "$lt_cv_path_NM" >&6; }
if test "$lt_cv_path_NM" != "no"; then
    NM="$lt_cv_path_NM"
else
    # Didn't find any BSD compatible name lister, look for dumpbin.
    if test -n "$DUMPBIN"; then :
        # Let the user override the test.
    else
        if test -n "$ac_tool_prefix"; then
            for ac_prog in dumpbin "link -dump"
            do
                # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
                be a program name with args.
                set dummy $ac_tool_prefix$ac_prog; ac_word=$2
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
                $as_echo_n "checking for $ac_word... " >&6; }
                if ${ac_cv_prog_DUMPBIN+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    if test -n "$DUMPBIN"; then
                        ac_cv_prog_DUMPBIN="$DUMPBIN" # Let the user override the test.
                    else
                        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                        for as_dir in $PATH
                        do
                            IFS=$as_save_IFS
                            test -z "$as_dir" && as_dir=.
                            for ac_exec_ext in ' $ac_executable_extensions; do
                                if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                                    ac_cv_prog_DUMPBIN="$ac_tool_prefix$ac_prog"
                                    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                                    break 2
                                fi
                            done
                        done
                    fi
                fi
            done
        fi
    fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
DUMPBIN=$ac_cv_prog_DUMPBIN
if test -n "$DUMPBIN"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DUMPBIN" >&5
$as_echo "$DUMPBIN" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

test -n "$DUMPBIN" && break
done
fi
if test -z "$DUMPBIN"; then
  ac_ct_DUMPBIN=$DUMPBIN
  for ac_prog in dumpbin "link -dump"
  do
    # Extract the first word of "$ac_prog", so it can be a program name
    with args.
    set dummy $ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_DUMPBIN+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$ac_ct_DUMPBIN"; then
        ac_cv_prog_ac_ct_DUMPBIN="$ac_ct_DUMPBIN" # Let the user override
        the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in '$ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_ac_ct_DUMPBIN="$ac_prog"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
        IFS=$as_save_IFS
      fi
    fi
  fi
fi

```

```

ac_ct_DUMPBIN=$ac_cv_prog_ac_ct_DUMPBIN
if test -n "$ac_ct_DUMPBIN"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DUMPBIN" >&5
$as_echo "$ac_ct_DUMPBIN" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_DUMPBIN" && break
done

  if test "x$ac_ct_DUMPBIN" = x; then
    DUMPBIN=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DUMPBIN=$ac_ct_DUMPBIN
  fi
fi

  case ` $DUMPBIN -symbols /dev/null 2>&1 | sed '1q' ` in
*COFF*)
    DUMPBIN="$DUMPBIN -symbols"
    ;;
*)
    DUMPBIN=:
    ;;
esac
  fi

  if test "$DUMPBIN" != ":"; then
    NM="$DUMPBIN"
  fi
fi
test -z "$NM" && NM=nm

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the name lister
($NM) interface" >&5
$as_echo_n "checking the name lister ($NM) interface... " >&6; }

```

```

if ${lt_cv_nm_interface+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_nm_interface="BSD nm"
  echo "int some_variable = 0;" > conftest.$ac_ext
  (eval echo "\"\$as_me:$LINENO: $ac_compile\"" >&5)
  (eval "$ac_compile" 2>conftest.err)
  cat conftest.err >&5
  (eval echo "\"\$as_me:$LINENO: $NM \\\"conftest.$ac_objext\\\"\""
>&5)
  (eval "$NM \"conftest.$ac_objext\" 2>conftest.err > conftest.out)
  cat conftest.err >&5
  (eval echo "\"\$as_me:$LINENO: output\"" >&5)
  cat conftest.out >&5
  if $GREP 'External.*some_variable' conftest.out > /dev/null; then
    lt_cv_nm_interface="MS dumpbin"
  fi
  rm -f conftest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_nm_interface"
>&5
$as_echo "$lt_cv_nm_interface" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether ln -s works"
>&5
$as_echo_n "checking whether ln -s works... " >&6; }
LN_S=$as_ln_s
if test "$LN_S" = "ln -s"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no, using $LN_S"
>&5
$as_echo "no, using $LN_S" >&6; }
fi

# find the maximum length of command line arguments
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the maximum length
of command line arguments" >&5
$as_echo_n "checking the maximum length of command line arguments... "
>&6; }
if ${lt_cv_sys_max_cmd_len+:} false; then :
  $as_echo_n "(cached) " >&6
else
  i=0
  teststring="ABCD"

  case $build_os in
  msdosdjgpp*)
    # On DJGPP, this test can blow up pretty badly due to problems in
libc

```

```

    # (any single argument exceeding 2000 bytes causes a buffer
    overrun
    # during glob expansion). Even if it were fixed, the result of
    this
    # check would be larger than it should be.
    lt_cv_sys_max_cmd_len=12288;    # 12K is about right
    ;;

gnu*)
    # Under GNU Hurd, this test is not required because there is
    # no limit to the length of command line arguments.
    # Libtool will interpret -1 as no limit whatsoever
    lt_cv_sys_max_cmd_len=-1;
    ;;

cygwin* | mingw* | cegcc*)
    # On Win9x/ME, this test blows up -- it succeeds, but takes
    # about 5 minutes as the teststring grows exponentially.
    # Worse, since 9x/ME are not pre-emptively multitasking,
    # you end up with a "frozen" computer, even though with patience
    # the test eventually succeeds (with a max line length of 256k).
    # Instead, let's just punt: use the minimum linelength reported by
    # all of the supported platforms: 8192 (on NT/2K/XP).
    lt_cv_sys_max_cmd_len=8192;
    ;;

mint*)
    # On MiNT this can take a long time and run out of memory.
    lt_cv_sys_max_cmd_len=8192;
    ;;

amigaos*)
    # On AmigaOS with pdksh, this test takes hours, literally.
    # So we just punt and use a minimum line length of 8192.
    lt_cv_sys_max_cmd_len=8192;
    ;;

netbsd* | freebsd* | openbsd* | darwin* | dragonfly*)
    # This has been around since 386BSD, at least. Likely further.
    if test -x /sbin/sysctl; then
        lt_cv_sys_max_cmd_len=`/sbin/sysctl -n kern.argmax`
    elif test -x /usr/sbin/sysctl; then
        lt_cv_sys_max_cmd_len=`/usr/sbin/sysctl -n kern.argmax`
    else
        lt_cv_sys_max_cmd_len=65536    # usable default for all BSDs
    fi
    # And add a safety zone
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
    ;;

interix*)

```



```

    # We know the value 262144 and hardcode it with a safety zone
    (like BSD)
    lt_cv_sys_max_cmd_len=196608
    ;;

os2*)
    # The test takes a long time on OS/2.
    lt_cv_sys_max_cmd_len=8192
    ;;

osf*)
    # Dr. Hans Ekkehard Plesser reports seeing a kernel panic running
    configure
    # due to this test when exec_disable_arg_limit is 1 on Tru64. It
    is not
    # nice to cause kernel panics so lets avoid the loop below.
    # First set a reasonable default.
    lt_cv_sys_max_cmd_len=16384
    #
    if test -x /sbin/sysconfig; then
        case ` /sbin/sysconfig -q proc exec_disable_arg_limit` in
            *1*) lt_cv_sys_max_cmd_len=-1 ;;
        esac
    fi
    ;;

sco3.2v5*)
    lt_cv_sys_max_cmd_len=102400
    ;;

sysv5* | sco5v6* | sysv4.2uw2*)
    kargmax=`grep ARG_MAX /etc/conf/cf.d/stune 2>/dev/null`
    if test -n "$kargmax"; then
        lt_cv_sys_max_cmd_len=`echo $kargmax | sed 's/.*[ ]//`
    else
        lt_cv_sys_max_cmd_len=32768
    fi
    ;;

*)
    lt_cv_sys_max_cmd_len=`(getconf ARG_MAX) 2> /dev/null`
    if test -n "$lt_cv_sys_max_cmd_len"; then
        lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
        lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
    else
        # Make teststring a little bigger before we do anything with it.
        # a 1K string should be a reasonable start.
        for i in 1 2 3 4 5 6 7 8 ; do
            teststring=$teststring$teststring
        done
        SHELL=${SHELL-${CONFIG_SHELL-/bin/sh}}
        # If test is not a shell built-in, we'll probably end up
        computing a
        # maximum length that is only half of the actual maximum length,
        but

```

```

# we can't tell.
while { test "X"`env echo "$teststring$teststring" 2>/dev/null`
\
    = "X$teststring$teststring"; } >/dev/null 2>&1 &&
    test $i != 17 # 1/2 MB should be enough
do
    i=`expr $i + 1`
    teststring=$teststring$teststring
done
# Only check the string length outside the loop.
lt_cv_sys_max_cmd_len=`expr "X$teststring" : ".*" 2>&1`
teststring=
# Add a significant safety factor because C++ compilers can tack
on
# massive amounts of additional arguments before passing them to
the
# linker. It appears as though 1/2 is a usable value.
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \ / 2`
fi
;;
esac

fi

if test -n $lt_cv_sys_max_cmd_len ; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sys_max_cmd_len" >&5
$as_echo "$lt_cv_sys_max_cmd_len" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: none" >&5
$as_echo "none" >&6; }
fi
max_cmd_len=$lt_cv_sys_max_cmd_len

: ${CP="cp -f"}
: ${MV="mv -f"}
: ${RM="rm -f"}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands some XSI constructs" >&5
$as_echo_n "checking whether the shell understands some XSI
constructs... " >&6; }
# Try some XSI features
xsi_shell=no
( _lt_dummy="a/b/c"

```

```

test
"${_lt_dummy##*/},{_lt_dummy%/*},{_lt_dummy#??}"${_lt_dummy%$_lt_du
mmy"}, \
    = c,a/b,b/c, \
    && eval 'test $(( 1 + 1 )) -eq 2 \
    && test "${#_lt_dummy}" -eq 5' ) >/dev/null 2>&1 \
    && xsi_shell=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $xsi_shell" >&5
$as_echo "$xsi_shell" >&6; }

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands \"+=\"\" >&5
$as_echo_n "checking whether the shell understands \"+=\"... \" >&6; }
lt_shell_append=no
( foo=bar; set foo baz; eval "$1+=\2" && test "$foo" = barbaz ) \
    >/dev/null 2>&1 \
    && lt_shell_append=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_shell_append" >&5
$as_echo "$lt_shell_append" >&6; }

```

```

if ( (MAIL=60; unset MAIL) || exit) >/dev/null 2>&1; then
    lt_unset=unset
else
    lt_unset=false
fi

```

```

# test EBCDIC or ASCII
case `echo X|tr X '\101'` in
A) # ASCII based system
    # \n is not interpreted correctly by Solaris 8 /usr/ucb/tr
    lt_SP2NL='tr \040 \012'
    lt_NL2SP='tr \015\012 \040\040'
    ;;
*) # EBCDIC based system
    lt_SP2NL='tr \100 \n'
    lt_NL2SP='tr \r\n \100\100'
    ;;
esac

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to convert
$build file names to $host format" >&5
$sas_echo_n "checking how to convert $build file names to $host
format... " >&6; }
if ${lt_cv_to_host_file_cmd+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  case $host in
    *-*-mingw* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_host_file_cmd=func_convert_file_msys_to_w32
          ;;
        *-*-cygwin* )
          lt_cv_to_host_file_cmd=func_convert_file_cygwin_to_w32
          ;;
        * ) # otherwise, assume *nix
          lt_cv_to_host_file_cmd=func_convert_file_nix_to_w32
          ;;
      esac
    ;;
    *-*-cygwin* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_host_file_cmd=func_convert_file_msys_to_cygwin
          ;;
        *-*-cygwin* )
          lt_cv_to_host_file_cmd=func_convert_file_noop
          ;;
        * ) # otherwise, assume *nix
          lt_cv_to_host_file_cmd=func_convert_file_nix_to_cygwin
          ;;
      esac
    ;;
    * ) # unhandled hosts (and "normal" native builds)
      lt_cv_to_host_file_cmd=func_convert_file_noop
    ;;
  esac
fi

to_host_file_cmd=${lt_cv_to_host_file_cmd}
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_to_host_file_cmd" >&5
$sas_echo "$lt_cv_to_host_file_cmd" >&6; }

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to convert
$build file names to toolchain format" >&5
$sas_echo_n "checking how to convert $build file names to toolchain
format... " >&6; }
if ${lt_cv_to_tool_file_cmd+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  #assume ordinary cross tools, or native build.
lt_cv_to_tool_file_cmd=func_convert_file_noop
case $host in
  *-*-mingw* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_tool_file_cmd=func_convert_file_msys_to_w32
        ;;
      esac
    ;;
  esac
fi

to_tool_file_cmd=$lt_cv_to_tool_file_cmd
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_to_tool_file_cmd" >&5
$sas_echo "$lt_cv_to_tool_file_cmd" >&6; }

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $LD option to
reload object files" >&5
$sas_echo_n "checking for $LD option to reload object files... " >&6; }
if ${lt_cv_ld_reload_flag+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  lt_cv_ld_reload_flag='-r'
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_reload_flag" >&5
$sas_echo "$lt_cv_ld_reload_flag" >&6; }
reload_flag=$lt_cv_ld_reload_flag
case $reload_flag in
  "" | " ") ;;
  *) reload_flag="$reload_flag" ;;
esac
reload_cmds='$LD$reload_flag -o $output$reload_objs'
case $host_os in
  cygwin* | mingw* | pw32* | cegcc*)
    if test "$GCC" != yes; then
      reload_cmds=false
    fi
  fi

```

```

;;
darwin*)
  if test "$GCC" = yes; then
    reload_cmds='$LTCC $LTCFLAGS -nostdlib ${wl}-r -o
$output$reload_objs'
  else
    reload_cmds='$LD$reload_flag -o $output$reload_objs'
  fi
;;
esac

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}objdump", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$OBJDUMP"; then
      ac_cv_prog_OBJDUMP="$OBJDUMP" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_OBJDUMP="${ac_tool_prefix}objdump"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS
    fi
  fi
  OBJDUMP=$ac_cv_prog_OBJDUMP
  if test -n "$OBJDUMP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OBJDUMP" >&5

```

```

$as_echo "$OBJDUMP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_OBJDUMP"; then
  ac_ct_OBJDUMP=$OBJDUMP
  # Extract the first word of "objdump", so it can be a program name
  with args.
  set dummy objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OBJDUMP"; then
      ac_cv_prog_ac_ct_OBJDUMP="$ac_ct_OBJDUMP" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OBJDUMP="objdump"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

    fi
  fi

  ac_ct_OBJDUMP=$ac_cv_prog_ac_ct_OBJDUMP
  if test -n "$ac_ct_OBJDUMP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OBJDUMP" >&5
$as_echo "$ac_ct_OBJDUMP" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi

  if test "x$ac_ct_OBJDUMP" = x; then
    OBJDUMP="false"
  else

```

```

        case $cross_compiling:$ac_tool_warned in
yes:)
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$sas_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        OBJDUMP=$ac_ct_OBJDUMP
        fi
else
        OBJDUMP="$ac_cv_prog_OBJDUMP"
fi

test -z "$OBJDUMP" && OBJDUMP=objdump

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to recognize
dependent libraries" >&5
$sas_echo_n "checking how to recognize dependent libraries... " >&6; }
if ${lt_cv_deplibs_check_method+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    lt_cv_file_magic_cmd='$MAGIC_CMD'
lt_cv_file_magic_test_file=
lt_cv_deplibs_check_method='unknown'
# Need to set the preceding variable on all platforms that support
# interlibrary dependencies.
# 'none' -- dependencies not supported.
# `unknown' -- same as none, but documents that we really don't know.
# 'pass_all' -- all dependencies passed with no checks.
# 'test_compile' -- check by making test program.
# 'file_magic [[regex]]' -- check by looking for files in library path
# which responds to the $file_magic_cmd with a given extended regex.
# If you have `file' or equivalent on your system and you're not sure
# whether `pass_all' will *always* work, you probably want this one.

case $host_os in
aix[4-9]*)
    lt_cv_deplibs_check_method=pass_all
    ;;

beos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

```



```

bsdi[45]*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib)'
    lt_cv_file_magic_cmd='/usr/bin/file -L'
    lt_cv_file_magic_test_file=/shlib/libc.so
    ;;

cygwin*)
    # func_win32_libid is a shell function defined in ltmain.sh
    lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86 DLL'
    lt_cv_file_magic_cmd='func_win32_libid'
    ;;

mingw* | pw32*)
    # Base MSYS/MinGW do not provide the 'file' command needed by
    # func_win32_libid shell function, so use a weaker test based on
    'objdump',
    # unless we find 'file', for example because we are cross-compiling.
    # func_win32_libid assumes BSD nm, so disallow it if using MS
    dumpbin.
    if ( test "$lt_cv_nm_interface" = "BSD nm" && file / ) >/dev/null
2>&1; then
        lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86
DLL'
        lt_cv_file_magic_cmd='func_win32_libid'
    else
        # Keep this pattern in sync with the one in func_win32_libid.
        lt_cv_deplibs_check_method='file_magic file format (pei*-
i386(*architecture: i386)?|pe-arm-wince|pe-x86-64)'
        lt_cv_file_magic_cmd='$OBJDUMP -f'
    fi
    ;;

cegcc*)
    # use the weaker test based on 'objdump'. See mingw*.
    lt_cv_deplibs_check_method='file_magic file format pe-arm-
.*little(*architecture: arm)?'
    lt_cv_file_magic_cmd='$OBJDUMP -f'
    ;;

darwin* | rhapsody*)
    lt_cv_deplibs_check_method=pass_all
    ;;

freebsd* | dragonfly*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
        case $host_cpu in
            i*86 )
                # Not sure whether the presence of OpenBSD here was a mistake.
                # Let's accept both of them until this is cleared up.

```

```

        lt_cv_deplibs_check_method='file_magic
(FreeBSD|OpenBSD|DragonFly)/i[3-9]86 (compact )?demand paged shared
library'
        lt_cv_file_magic_cmd=/usr/bin/file
        lt_cv_file_magic_test_file=`echo /usr/lib/libc.so.*`
        ;;
    esac
else
    lt_cv_deplibs_check_method=pass_all
fi
;;

gnu*)
    lt_cv_deplibs_check_method=pass_all
    ;;

haiku*)
    lt_cv_deplibs_check_method=pass_all
    ;;

hpux10.20* | hpux11*)
    lt_cv_file_magic_cmd=/usr/bin/file
    case $host_cpu in
    ia64*)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF-[0-
9][0-9]) shared object file - IA64'
        lt_cv_file_magic_test_file=/usr/lib/hpux32/libc.so
        ;;
    hppa*64*)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF[ -
][0-9][0-9]) (-bit)?( [LM]SB)? shared object( file)?[, -]* PA-RISC [0-
9]\.[0-9]'
        lt_cv_file_magic_test_file=/usr/lib/pa20_64/libc.sl
        ;;
    *)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|PA-
RISC[0-9]\.[0-9]) shared library'
        lt_cv_file_magic_test_file=/usr/lib/libc.sl
        ;;
    esac
    ;;

interix[3-9]*)
    # PIC code is broken on Interix 3.x, that's why |\a not |\_pic\a
here
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so|\a)$'
    ;;

irix5* | irix6* | nonstopux*)
    case $LD in
    *-32|*" -32 ") libmagic=32-bit;;
    *-n32|*" -n32 ") libmagic=N32;;

```

```

*-64|*" -64 ") libmagic=64-bit;;
*) libmagic=never-match;;
esac
lt_cv_deplibs_check_method=pass_all
;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
  lt_cv_deplibs_check_method=pass_all
  ;;

netbsd*)
  if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|_pic\.a)$'
  else
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so|_pic\.a)$'
  fi
  ;;

newos6*)
  lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(executable|dynamic lib)'
  lt_cv_file_magic_cmd=/usr/bin/file
  lt_cv_file_magic_test_file=/usr/lib/libnls.so
  ;;

*nto* | *qnx*)
  lt_cv_deplibs_check_method=pass_all
  ;;

openbsd*)
  if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|\.[0-9]+|_pic\.a)$'
  else
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|_pic\.a)$'
  fi
  ;;

osf3* | osf4* | osf5*)
  lt_cv_deplibs_check_method=pass_all
  ;;

rdos*)
  lt_cv_deplibs_check_method=pass_all
  ;;

solaris*)

```

```

    lt_cv_deplibs_check_method=pass_all
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv4 | sysv4.3*)
    case $host_vendor in
    motorola)
        lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib) M[0-9][0-9]* Version [0-9]'
        lt_cv_file_magic_test_file=`echo /usr/lib/libc.so*`
        ;;
    ncr)
        lt_cv_deplibs_check_method=pass_all
        ;;
    sequent)
        lt_cv_file_magic_cmd='/bin/file'
        lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [LM]SB
(shared object|dynamic lib )'
        ;;
    sni)
        lt_cv_file_magic_cmd='/bin/file'
        lt_cv_deplibs_check_method="file_magic ELF [0-9][0-9]*-bit [LM]SB
dynamic lib"
        lt_cv_file_magic_test_file=/lib/libc.so
        ;;
    siemens)
        lt_cv_deplibs_check_method=pass_all
        ;;
    pc)
        lt_cv_deplibs_check_method=pass_all
        ;;
    esac
    ;;

tpf*)
    lt_cv_deplibs_check_method=pass_all
    ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_deplibs_check_method" >&5
$as_echo "$lt_cv_deplibs_check_method" >&6; }

file_magic_glob=
want_nocaseglob=no
if test "$build" = "$host"; then
    case $host_os in
    mingw* | pw32*)

```

```

    if ( shopt | grep nocaseglob ) >/dev/null 2>&1; then
        want_nocaseglob=yes
    else
        file_magic_glob=`echo
aAbBcCdDeEfFgGhHiIjJkKlLmMnNoOpPqQrRsStTuUvVwWxXyYzZ | $SED -e
"s/\(..\)\/s\/[\1]\/[\1]\/g;/g"`
        fi
        ;;
    esac
fi

file_magic_cmd=${lt_cv_file_magic_cmd}
deplibs_check_method=${lt_cv_deplibs_check_method}
test -z "$deplibs_check_method" && deplibs_check_method=unknown

```

```

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}dlltool", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}dlltool; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_DLLTOOL+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$DLLTOOL"; then
            ac_cv_prog_DLLTOOL="$DLLTOOL" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS

```

```

test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_DLLTOOL="{ac_tool_prefix}dlltool"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
DLLTOOL=$ac_cv_prog_DLLTOOL
if test -n "$DLLTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DLLTOOL" >&5
$as_echo "$DLLTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_DLLTOOL"; then
  ac_ct_DLLTOOL=$DLLTOOL
  # Extract the first word of "dlltool", so it can be a program name
  with args.
  set dummy dlltool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_DLLTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_DLLTOOL"; then
      ac_cv_prog_ac_ct_DLLTOOL="$ac_ct_DLLTOOL" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
          for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_ac_ct_DLLTOOL="dlltool"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
          done
      done
    fi
  fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
ac_ct_DLLTOOL=$ac_cv_prog_ac_ct_DLLTOOL
if test -n "$ac_ct_DLLTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DLLTOOL" >&5
$as_echo "$ac_ct_DLLTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_DLLTOOL" = x; then
    DLLTOOL="false"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DLLTOOL=$ac_ct_DLLTOOL
  fi
else
  DLLTOOL="$ac_cv_prog_DLLTOOL"
fi

test -z "$DLLTOOL" && DLLTOOL=dlltool

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to associate
runtime and link libraries" >&5
$as_echo_n "checking how to associate runtime and link libraries... "
>&6; }
if ${lt_cv_sharedlib_from_linklib_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_sharedlib_from_linklib_cmd='unknown'

case $host_os in

```

```

cygwin* | mingw* | pw32* | cegcc*)
  # two different shell functions defined in ltmain.sh
  # decide which to use based on capabilities of $DLLTOOL
  case ` $DLLTOOL --help 2>&1 ` in
  *--identify-strict*)
    lt_cv_sharedlib_from_linklib_cmd=func_cygming_dll_for_implib
    ;;
  *)

lt_cv_sharedlib_from_linklib_cmd=func_cygming_dll_for_implib_fallback
  ;;
  esac
  ;;
*)
  # fallback: assume linklib IS sharedlib
  lt_cv_sharedlib_from_linklib_cmd="$ECHO"
  ;;
  esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sharedlib_from_linklib_cmd" >&5
$as_echo "$lt_cv_sharedlib_from_linklib_cmd" >&6; }
sharedlib_from_linklib_cmd=$lt_cv_sharedlib_from_linklib_cmd
test -z "$sharedlib_from_linklib_cmd" &&
sharedlib_from_linklib_cmd=$ECHO

if test -n "$ac_tool_prefix"; then
  for ac_prog in ar
  do
    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
    be a program name with args.
    set dummy $ac_tool_prefix$ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_AR+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$AR"; then
        ac_cv_prog_AR="$AR" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.

```



```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_AR="$ac_tool_prefix$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
    done
IFS=$as_save_IFS

fi
fi
AR=$ac_cv_prog_AR
if test -n "$AR"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $AR" >&5
$as_echo "$AR" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$AR" && break
done
fi
if test -z "$AR"; then
    ac_ct_AR=$AR
    for ac_prog in ar
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_AR+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_AR"; then
        ac_cv_prog_ac_ct_AR="$ac_ct_AR" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_AR="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2

```

```

    fi
done
    done
IFS=$as_save_IFS

fi
fi
ac_ct_AR=$ac_cv_prog_ac_ct_AR
if test -n "$ac_ct_AR"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_AR" >&5
$as_echo "$ac_ct_AR" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$ac_ct_AR" && break
done

    if test "x$ac_ct_AR" = x; then
      AR="false"
    else
      case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
      AR=$ac_ct_AR
    fi
fi

: ${AR=ar}
: ${AR_FLAGS=cru}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for archiver @FILE
support" >&5
$as_echo_n "checking for archiver @FILE support... " >&6; }
if ${lt_cv_ar_at_file+:} false; then :
```

```

    $as_echo_n "(cached) " >&6
else
    lt_cv_ar_at_file=no
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    echo conftest.$ac_objext > conftest.lst
    lt_ar_try='$AR $AR_FLAGS libconftest.a @conftest.lst >&5'
    { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$lt_ar_try\""; } >&5
    (eval $lt_ar_try) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }
        if test "$ac_status" -eq 0; then
            # Ensure the archiver fails upon bogus file names.
            rm -f conftest.$ac_objext libconftest.a
            { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}: \"$lt_ar_try\"";
} >&5
            (eval $lt_ar_try) 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
            test $ac_status = 0; }
                if test "$ac_status" -ne 0; then
                    lt_cv_ar_at_file=@
                fi
            fi
            rm -f conftest.* libconftest.a

fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ar_at_file"
>&5
$as_echo "$lt_cv_ar_at_file" >&6; }

if test "x$lt_cv_ar_at_file" = xno; then
    archiver_list_spec=
else
    archiver_list_spec=$lt_cv_ar_at_file
fi

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}strip", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}strip; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_STRIP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$STRIP"; then
      ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_STRIP="${ac_tool_prefix}strip"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      STRIP=$ac_cv_prog_STRIP
      if test -n "$STRIP"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
        $as_echo "$STRIP" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi
      fi
      if test -z "$ac_cv_prog_STRIP"; then
        ac_ct_STRIP=$STRIP
        # Extract the first word of "strip", so it can be a program name
        with args.
        set dummy strip; ac_word=$2

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_STRIP"; then
    ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions'; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_STRIP="strip"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
if test -n "$ac_ct_STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_STRIP" = x; then
    STRIP=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    STRIP=$ac_ct_STRIP
  fi
else
  STRIP="$ac_cv_prog_STRIP"
fi

```

```

test -z "$STRIP" && STRIP=:

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}ranlib", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}ranlib; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_RANLIB+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$RANLIB"; then
      ac_cv_prog_RANLIB="$RANLIB" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_RANLIB="${ac_tool_prefix}ranlib"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      RANLIB=$ac_cv_prog_RANLIB
      if test -n "$RANLIB"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $RANLIB" >&5
        $as_echo "$RANLIB" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi
      if test -z "$ac_cv_prog_RANLIB"; then
        ac_ct_RANLIB=$RANLIB

```

```

# Extract the first word of "ranlib", so it can be a program name
with args.
set dummy ranlib; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_RANLIB+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_RANLIB"; then
    ac_cv_prog_ac_ct_RANLIB="$ac_ct_RANLIB" # Let the user override the
test.
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
          ac_cv_prog_ac_ct_RANLIB="ranlib"
          $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
          break 2
        fi
      done
    done
    IFS=$as_save_IFS

    fi
    fi
    ac_ct_RANLIB=$ac_cv_prog_ac_ct_RANLIB
    if test -n "$ac_ct_RANLIB"; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_RANLIB" >&5
$as_echo "$ac_ct_RANLIB" >&6; }
    else
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    fi

    if test "x$ac_ct_RANLIB" = x; then
      RANLIB=":"
    else
      case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
      RANLIB=$ac_ct_RANLIB
    fi

```

```

else
  RANLIB="$ac_cv_prog_RANLIB"
fi

test -z "$RANLIB" && RANLIB=:

# Determine commands to create old-style static archives.
old_archive_cmds='$AR $AR_FLAGS $oldlib$oldobjs'
old_postinstall_cmds='chmod 644 $oldlib'
old_postuninstall_cmds=

if test -n "$RANLIB"; then
  case $host_os in
    openbsd*)
      old_postinstall_cmds="$old_postinstall_cmds~\${RANLIB} -t
\${tool_oldlib}"
      ;;
    *)
      old_postinstall_cmds="$old_postinstall_cmds~\${RANLIB}
\${tool_oldlib}"
      ;;
  esac
  old_archive_cmds="$old_archive_cmds~\${RANLIB} \${tool_oldlib}"
fi

case $host_os in
  darwin*)
    lock_old_archive_extraction=yes ;;
  *)
    lock_old_archive_extraction=no ;;
esac

```



```
# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Check for command to grab the raw symbol name followed by C symbol
from nm.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking command to parse $NM
output from $compiler object" >&5
$as_echo_n "checking command to parse $NM output from $compiler
object... " >&6; }
if ${lt_cv_sys_global_symbol_pipe+:} false; then :
  $as_echo_n "(cached) " >&6
else
# These are sane defaults that work on at least a few old systems.
# [They come from Ultrix.  What could be older than Ultrix?!! ;)]

# Character class describing NM global symbol codes.
symcode=' [BCDEGRST] '

# Regexp to match symbols that can be accessed directly from C.
sympat='\ ([_A-Za-z][_A-Za-z0-9]*\)'
```

```

# Define system-specific variables.
case $host_os in
aix*)
    symcode='[BCDT]'
    ;;
cygwin* | mingw* | pw32* | cegcc*)
    symcode='[ABCDGISTW]'
    ;;
hpux*)
    if test "$host_cpu" = ia64; then
        symcode='[ABCDEGRST]'
    fi
    ;;
irix* | nonstopux*)
    symcode='[BCDEGRST]'
    ;;
osf*)
    symcode='[BCDEGQRST]'
    ;;
solaris*)
    symcode='[BDRT]'
    ;;
sco3.2v5*)
    symcode='[DT]'
    ;;
sysv4.2uw2*)
    symcode='[DT]'
    ;;
sysv5* | sco5v6* | unixware* | OpenUNIX*)
    symcode='[ABDT]'
    ;;
sysv4)
    symcode='[DFNSTU]'
    ;;
esac

# If we're using GNU nm, then use its standard symbol codes.
case ` $NM -V 2>&1 ` in
*GNU* | *'with BFD'*)
    symcode='[ABCDGIRSTW]' ;;
esac

# Transform an extracted symbol line into a proper C declaration.
# Some systems (esp. on ia64) link data and code symbols differently,
# so use this general approach.
lt_cv_sys_global_symbol_to_cdecl="sed -n -e 's/^T .* \\.*/extern
int \1();/p' -e 's/^$symcode* .* \\.*/extern char \1;/p'"

# Transform an extracted symbol line into symbol name and symbol
address

```

```

lt_cv_sys_global_symbol_to_c_name_address="sed -n -e 's/^: \([^ ]*\)[
]*$/ \{\}\1\}\", (void *) 0},/p' -e 's/^$symcode* \([^ ]*\) \([^
]*\)$/ {\}\2\}", (void *) \&2},/p'"
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix="sed -n -e 's/^:
\([^ ]*\)[ ]*$/ \{\}\1\}\", (void *) 0},/p' -e 's/^$symcode* \([^
]*\)\ (lib\([^ ]*\))$/ {\}\2\}", (void *) \&2},/p' -e 's/^$symcode* \([^
]*\)\ \([^ ]*\)$/ {\}lib\2\}", (void *) \&2},/p'"

# Handle CRLF in mingw tool chain
opt_cr=
case $build_os in
mingw*)
    opt_cr=`$ECHO 'x\{0,1\}' | tr x '\015'` # option cr in regexp
    ;;
esac

# Try without a prefix underscore, then with it.
for ac_symprfx in "" "_"; do

    # Transform symcode, sympat, and symprfx into a raw symbol and a C
    symbol.
    symxfrm="\1 $ac_symprfx\2 \2"

    # Write the raw and C identifiers.
    if test "$lt_cv_nm_interface" = "MS dumpbin"; then
        # Fake it for dumpbin and say T for any non-static function
        # and D for any global variable.
        # Also find C++ and __fastcall symbols from MSVC++,
        # which start with @ or ?.
        lt_cv_sys_global_symbol_pipe="$AWK '\
"      {last_section=section; section=\$ 3};"\
"      /^COFF SYMBOL TABLE/{for(i in hide) delete hide[i]};"\
"      /Section length .*#relocs.*(pick any){hide[last_section]=1};"\
"      \$ 0!~/External *\\/{next};"\
"      / 0+ UNDEF /{next}; / UNDEF \([^|\\)*()/ {next};"\
"      {if(hide[section]) next};"\
"      {f=0}; \$ 0~/\\(\\).*\\/{f=1}; {printf f ? \"T \" : \"D \"};"\
"      {split(\$ 0, a, /\\|\\r/); split(a[2], s)};"\
"      s[1]~/^[@?]/{print s[1], s[1]; next};"\
"      s[1]~prfx {split(s[1],t,\"@\\"); print t[1],\
substr(t[1],length(prfx))}"\
"      ' prfx=$ac_symprfx"
    else
        lt_cv_sys_global_symbol_pipe="sed -n -e 's/^.*[
]\($symcode$symcode*\)[
]*$ac_symprfx$sympat$opt_cr$/ $symxfrm/p'"
    fi
    lt_cv_sys_global_symbol_pipe="$lt_cv_sys_global_symbol_pipe | sed '/
__gnu_lto/d'"

    # Check to see that the pipe works correctly.
    pipe_works=no

```

```

    rm -f confptest*
    cat > confptest.$ac_ext <<_LT_EOF
#ifdef __cplusplus
extern "C" {
#endif
char nm_test_var;
void nm_test_func(void);
void nm_test_func(void){}
#ifdef __cplusplus
}
#endif
int main(){nm_test_var='a';nm_test_func();return(0);}
_LT_EOF

    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    # Now try to grab the symbols.
    nlist=confptest.nm
    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}: \"$NM
confptest.$ac_objext \|"${lt_cv_sys_global_symbol_pipe}" \> $nlist\""; }
>&5
    (eval $NM confptest.$ac_objext \|"${lt_cv_sys_global_symbol_pipe}" \>
$nlist) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; } && test -s "$nlist"; then
    # Try sorting and uniquifying the output.
    if sort "$nlist" | uniq > "$nlist.T"; then
    mv -f "$nlist.T" "$nlist"
    else
    rm -f "$nlist.T"
    fi

    # Make sure that we snagged all the symbols we need.
    if $GREP ' nm_test_var$' "$nlist" >/dev/null; then
    if $GREP ' nm_test_func$' "$nlist" >/dev/null; then
    cat <<_LT_EOF > confptest.$ac_ext
/* Keep this code in sync between libtool.m4, ltmain, lt_system.h, and
tests. */
#ifdef __WIN32 || defined(__CYGWIN__) || defined(__WIN32_WCE)
/* DATA imports from DLLs on WIN32 can't be const, because runtime
relocations are performed -- see ld's documentation on pseudo-
relocs. */
# define LT@&t@_DLSYM_CONST
#elif defined(__osf__)
/* This system does not cope well with relocations in const data. */
# define LT@&t@_DLSYM_CONST

```

```

#else
# define LT@&t@_DLSYM_CONST const
#endif

#ifdef __cplusplus
extern "C" {
#endif

_LT_EOF
# Now generate the symbol file.
eval "$lt_cv_sys_global_symbol_to_cdecl" < "$nlist" | $GREP -v
main >> conftest.$ac_ext'

cat <<_LT_EOF >> conftest.$ac_ext

/* The mapping between symbol names and symbols. */
LT@&t@_DLSYM_CONST struct {
  const char *name;
  void *address;
}
lt__PROGRAM__LTX_preloaded_symbols[] =
{
  {"@PROGRAM@", (void *) 0 },
_LT_EOF
  $SED "s/^\$symcode\$symcode* \(.*\) \(.*)$/ {\\"2\", (void *)
&2},/" < "$nlist" | $GREP -v main >> conftest.$ac_ext
  cat <<\_LT_EOF >> conftest.$ac_ext
  {0, (void *) 0}
};

/* This works around a problem in FreeBSD linker */
#ifdef FREEBSD_WORKAROUND
static const void *lt_preloaded_setup() {
  return lt__PROGRAM__LTX_preloaded_symbols;
}
#endif

#ifdef __cplusplus
}
#endif
_LT_EOF
# Now try linking the two files.
mv conftest.$ac_objext conftstm.$ac_objext
lt_globsym_save_LIBS=$LIBS
lt_globsym_save_CFLAGS=$CFLAGS
LIBS="conftstm.$ac_objext"
CFLAGS="$CFLAGS$lt_prog_compiler_no_built_in_flag"
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$ac_link\""; } >&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5

```

```

test $ac_status = 0; } && test -s confctest${ac_exeext}; then
    pipe_works=yes
fi
LIBS=$lt_globsym_save_LIBS
CFLAGS=$lt_globsym_save_CFLAGS
else
    echo "cannot find nm_test_func in $nlist" >&5
fi
else
    echo "cannot find nm_test_var in $nlist" >&5
fi
else
    echo "cannot run $lt_cv_sys_global_symbol_pipe" >&5
fi
else
    echo "$progname: failed program was:" >&5
    cat confctest.$ac_ext >&5
fi
rm -rf confctest* confctst*

# Do not use the global_symbol_pipe unless it works.
if test "$pipe_works" = yes; then
    break
else
    lt_cv_sys_global_symbol_pipe=
fi
done

fi

if test -z "$lt_cv_sys_global_symbol_pipe"; then
    lt_cv_sys_global_symbol_to_cdecl=
fi
if test -z
"$lt_cv_sys_global_symbol_pipe$lt_cv_sys_global_symbol_to_cdecl"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: failed" >&5
$as_echo "failed" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: ok" >&5
$as_echo "ok" >&6; }
fi

# Response file support.
if test "$lt_cv_nm_interface" = "MS dumpbin"; then
    nm_file_list_spec='@'
elif $NM --help 2>/dev/null | grep '@FILE' >/dev/null; then
    nm_file_list_spec='@'
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for sysroot" >&5
$as_echo_n "checking for sysroot... " >&6; }

@%:@ Check whether --with-libtool-sysroot was given.
if test "${with_libtool_sysroot+set}" = set; then :
  withval=$with_libtool_sysroot;
else
  with_libtool_sysroot=no
fi

lt_sysroot=
case ${with_libtool_sysroot} in #(
  yes)
  if test "$GCC" = yes; then
    lt_sysroot=`$CC --print-sysroot 2>/dev/null`
  fi
  ;; #(
/*)
  lt_sysroot=`echo "$with_libtool_sysroot" | sed -e
"$sed_quote_subst"`
  ;; #(
no|'')
  ;; #(
*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
${with_libtool_sysroot}" >&5
$as_echo "${with_libtool_sysroot}" >&6; }
  as_fn_error $? "The sysroot must be an absolute path." "$LINENO" 5

```

```

    ;;
esac

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: ${lt_sysroot:-no}"
>&5
$zas_echo "${lt_sysroot:-no}" >&6; }

@%:@ Check whether --enable-libtool-lock was given.
if test "${enable_libtool_lock+set}" = set; then :
  enableval=$enable_libtool_lock;
fi

test "x$enable_libtool_lock" != xno && enable_libtool_lock=yes

# Some flags need to be propagated to the compiler or linker for good
# libtool support.
case $host in
ia64-*-hpux*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\$sas_me\":"${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
    ac_status=$?
    $zas_echo "$sas_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    case `usr/bin/file conftest.$ac_objext` in
      *ELF-32*)
        HPUX_IA64_MODE="32"
        ;;
      *ELF-64*)
        HPUX_IA64_MODE="64"
        ;;
    esac
  fi
  rm -rf conftest*
  ;;
*-*-irix6*)
  # Find out which ABI we are using.
  echo '#line '$LINENO' "configure"' > conftest.$ac_ext
  if { { eval echo "\"\$sas_me\":"${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
    ac_status=$?
    $zas_echo "$sas_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    if test "$lt_cv_prog_gnu_ld" = yes; then
      case `usr/bin/file conftest.$ac_objext` in

```



```

*32-bit*)
    LD="${LD-ld} -melf32bsmip"
    ;;
*N32*)
    LD="${LD-ld} -melf32bmipn32"
    ;;
*64-bit*)
    LD="${LD-ld} -melf64bmip"
    ;;
esac
else
case ` /usr/bin/file confptest.$ac_objext ` in
*32-bit*)
    LD="${LD-ld} -32"
    ;;
*N32*)
    LD="${LD-ld} -n32"
    ;;
*64-bit*)
    LD="${LD-ld} -64"
    ;;
esac
fi
fi
rm -rf confptest*
;;

x86_64-*kfreebsd*-gnu|x86_64-*linux*|ppc*-*linux*|powerpc*-*linux*| \
s390*-*linux*|s390*-*tpf*|sparc*-*linux*)
# Find out which ABI we are using.
echo 'int i;' > confptest.$ac_ext
if { { eval echo "\"\${as_me}\"":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; }; then
case ` /usr/bin/file confptest.o ` in
*32-bit*)
case $host in
x86_64-*kfreebsd*-gnu)
    LD="${LD-ld} -m elf_i386_fbsd"
    ;;
x86_64-*linux*)
    LD="${LD-ld} -m elf_i386"
    ;;
ppc64-*linux*|powerpc64-*linux*)
    LD="${LD-ld} -m elf32ppclinux"
    ;;
s390x-*linux*)
    LD="${LD-ld} -m elf_s390"
    ;;

```

```

    sparc64-*linux*)
        LD="${LD-ld} -m elf32_sparc"
        ;;
    esac
    ;;
    *64-bit*)
    case $host in
        x86_64-*kfreebsd*-gnu)
            LD="${LD-ld} -m elf_x86_64_fbsd"
            ;;
        x86_64-*linux*)
            LD="${LD-ld} -m elf_x86_64"
            ;;
        ppc*-*linux*|powerpc*-*linux*)
            LD="${LD-ld} -m elf64ppc"
            ;;
        s390*-*linux*|s390*-*tpf*)
            LD="${LD-ld} -m elf64_s390"
            ;;
        sparc*-*linux*)
            LD="${LD-ld} -m elf64_sparc"
            ;;
    esac
    ;;
    esac
fi
rm -rf conftest*
;;

*-*sco3.2v5*)
    # On SCO OpenServer 5, we need -belf to get full-featured binaries.
    SAVE_CFLAGS="$CFLAGS"
    CFLAGS="$CFLAGS -belf"
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
compiler needs -belf" >&5
$as_echo_n "checking whether the C compiler needs -belf... " >&6; }
if ${lt_cv_cc_needs_belf+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_ext=c
    ac_cpp='$CPP $CPPFLAGS'
    ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
    ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
    ac_compiler_gnu=$ac_cv_c_compiler_gnu

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

```

```

;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_cc_needs_belf=yes
else
  lt_cv_cc_needs_belf=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  ac_ext=c
ac_cpp='`$CPP $CPPFLAGS`'
ac_compile='`$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5`'
ac_link='`$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5`'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_cc_needs_belf"
>&5
$as_echo "$lt_cv_cc_needs_belf" >&6; }
if test x"$lt_cv_cc_needs_belf" != x"yes"; then
  # this is probably gcc 2.8.0, egcs 1.0 or newer; no need for -belf
  CFLAGS="$SAVE_CFLAGS"
fi
;;
*-*solaris*)
# Find out which ABI we are using.
echo 'int i;' > conftest.$ac_ext
if { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status\" >&5
test $ac_status = 0; }; then
  case ` /usr/bin/file conftest.o` in
    *64-bit*)
      case $lt_cv_prog_gnu_ld in
        yes*)
          case $host in
            i?86-*-*solaris*)
              LD="{LD-ld} -m elf_x86_64"
              ;;
            sparc*-*-*solaris*)
              LD="{LD-ld} -m elf64_sparc"
              ;;
          esac
          # GNU ld 2.21 introduced _sol2 emulations. Use them if
available.
          if {LD-ld} -V | grep _sol2 >/dev/null 2>&1; then

```

```

        LD="${LD-ld}_sol2"
    fi
    ;;
*)
if ${LD-ld} -64 -r -o conftest2.o conftest.o >/dev/null 2>&1;
then
    LD="${LD-ld} -64"
    fi
    ;;
esac
    ;;
esac
fi
rm -rf conftest*
;;
esac

need_locks="$enable_libtool_lock"

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}mt", so it can be a
    # program name with args.
    set dummy ${ac_tool_prefix}mt; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_MANIFEST_TOOL+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$MANIFEST_TOOL"; then
            ac_cv_prog_MANIFEST_TOOL="$MANIFEST_TOOL" # Let the user override
            the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_MANIFEST_TOOL="${ac_tool_prefix}mt"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
                        $as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS
        fi
    fi
    MANIFEST_TOOL=$ac_cv_prog_MANIFEST_TOOL
    if test -n "$MANIFEST_TOOL"; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MANIFEST_TOOL" >&5
$as_echo "$MANIFEST_TOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_MANIFEST_TOOL"; then
    ac_ct_MANIFEST_TOOL=$MANIFEST_TOOL
    # Extract the first word of "mt", so it can be a program name with
args.
set dummy mt; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_MANIFEST_TOOL"; then
        ac_cv_prog_ac_ct_MANIFEST_TOOL="$ac_ct_MANIFEST_TOOL" # Let the user
override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_ac_ct_MANIFEST_TOOL="mt"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_MANIFEST_TOOL=$ac_cv_prog_ac_ct_MANIFEST_TOOL
if test -n "$ac_ct_MANIFEST_TOOL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_ct_MANIFEST_TOOL" >&5
$as_echo "$ac_ct_MANIFEST_TOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test "x$ac_ct_MANIFEST_TOOL" = x; then

```

```

    MANIFEST_TOOL=":"
else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    MANIFEST_TOOL=$ac_ct_MANIFEST_TOOL
    fi
else
    MANIFEST_TOOL="$ac_cv_prog_MANIFEST_TOOL"
    fi

test -z "$MANIFEST_TOOL" && MANIFEST_TOOL=mt
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $MANIFEST_TOOL is
a manifest tool" >&5
$as_echo_n "checking if $MANIFEST_TOOL is a manifest tool... " >&6; }
if ${lt_cv_path_manifest_tool+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_path_manifest_tool=no
    echo "$as_me:$LINENO: $MANIFEST_TOOL '-?'" >&5
    $MANIFEST_TOOL '-?' 2>conftest.err > conftest.out
    cat conftest.err >&5
    if $GREP 'Manifest Tool' conftest.out > /dev/null; then
        lt_cv_path_manifest_tool=yes
    fi
    rm -f conftest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_path_manifest_tool" >&5
$as_echo "$lt_cv_path_manifest_tool" >&6; }
if test "x$lt_cv_path_manifest_tool" != xyes; then
    MANIFEST_TOOL=:
fi

case $host_os in
    rhapsody* | darwin*)
        if test -n "$ac_tool_prefix"; then
            # Extract the first word of "${ac_tool_prefix}dsymutil", so it can
            be a program name with args.
            set dummy ${ac_tool_prefix}dsymutil; ac_word=$2
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
            $as_echo_n "checking for $ac_word... " >&6; }

```

```

if ${ac_cv_prog_DSYMUTIL+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$DSYMUTIL"; then
    ac_cv_prog_DSYMUTIL="$DSYMUTIL" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_DSYMUTIL="${ac_tool_prefix}dsymutil"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
DSYMUTIL=$ac_cv_prog_DSYMUTIL
if test -n "$DSYMUTIL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DSYMUTIL" >&5
$as_echo "$DSYMUTIL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_DSYMUTIL"; then
  ac_ct_DSYMUTIL=$DSYMUTIL
  # Extract the first word of "dsymutil", so it can be a program name
  with args.
  set dummy dsymutil; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_DSYMUTIL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_DSYMUTIL"; then
      ac_cv_prog_ac_ct_DSYMUTIL="$ac_ct_DSYMUTIL" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_ac_ct_DSYMUTIL="dsymutil"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DSYMUTIL=$ac_cv_prog_ac_ct_DSYMUTIL
if test -n "$ac_ct_DSYMUTIL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DSYMUTIL"
>&5
$as_echo "$ac_ct_DSYMUTIL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_DSYMUTIL" = x; then
    DSYMUTIL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DSYMUTIL=$ac_ct_DSYMUTIL
  fi
else
  DSYMUTIL="$ac_cv_prog_DSYMUTIL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}nmedit", so it can be
a program name with args.
set dummy ${ac_tool_prefix}nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_NMEDIT+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$NMEDIT"; then

```



```

    ac_cv_prog_NMEDIT="$NMEDIT" # Let the user override the test.
else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_NMEDIT="{ac_tool_prefix}nmedit"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
NMEDIT=$ac_cv_prog_NMEDIT
if test -n "$NMEDIT"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $NMEDIT" >&5
$as_echo "$NMEDIT" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_NMEDIT"; then
    ac_ct_NMEDIT=$NMEDIT
    # Extract the first word of "nmedit", so it can be a program name
    with args.
    set dummy nmedit; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_NMEDIT+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$ac_ct_NMEDIT"; then
            ac_cv_prog_ac_ct_NMEDIT="$ac_ct_NMEDIT" # Let the user override the
            test.
        else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then

```

```

        ac_cv_prog_ac_ct_NMEDIT="nmedit"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_NMEDIT=$ac_cv_prog_ac_ct_NMEDIT
if test -n "$ac_ct_NMEDIT"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_NMEDIT" >&5
$as_echo "$ac_ct_NMEDIT" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_NMEDIT" = x; then
        NMEDIT=":"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        NMEDIT=$ac_ct_NMEDIT
    fi
else
    NMEDIT="$ac_cv_prog_NMEDIT"
fi

    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}lipo", so it can be a
program name with args.
set dummy ${ac_tool_prefix}lipo; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_LIPO+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$LIPO"; then
        ac_cv_prog_LIPO="$LIPO" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_LIPO="${ac_tool_prefix}lipo"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
LIPO=$ac_cv_prog_LIPO
if test -n "$LIPO"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LIPO" >&5
$as_echo "$LIPO" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_LIPO"; then
  ac_ct_LIPO=$LIPO
  # Extract the first word of "lipo", so it can be a program name with
  args.
  set dummy lipo; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_LIPO+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_LIPO"; then
      ac_cv_prog_ac_ct_LIPO="$ac_ct_LIPO" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_LIPO="lipo"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        fi
      done
    fi
  fi

```

```

done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_LIPO=$ac_cv_prog_ac_ct_LIPO
if test -n "$ac_ct_LIPO"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_LIPO" >&5
$as_echo "$ac_ct_LIPO" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_LIPO" = x; then
    LIPO=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    LIPO=$ac_ct_LIPO
  fi
else
  LIPO="$ac_cv_prog_LIPO"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool", so it can be a
program name with args.
set dummy ${ac_tool_prefix}otool; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_OTOOL+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$OTOOL"; then
    ac_cv_prog_OTOOL="$OTOOL" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_OTOOL="${ac_tool_prefix}otool"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
OTOOL=$ac_cv_prog_OTOOL
if test -n "$OTOOL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL" >&5
$as_echo "$OTOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL"; then
    ac_ct_OTOOL=$OTOOL
    # Extract the first word of "otool", so it can be a program name
    with args.
    set dummy otool; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_OTOOL+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$ac_ct_OTOOL"; then
            ac_cv_prog_ac_ct_OTOOL="$ac_ct_OTOOL" # Let the user override the
            test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '$ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_ac_ct_OTOOL="otool"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

fi
fi

```

```

fi
ac_ct_OTOOL=$ac_cv_prog_ac_ct_OTOOL
if test -n "$ac_ct_OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL" >&5
$as_echo "$ac_ct_OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_OTOOL" = x; then
    OTOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OTOOL=$ac_ct_OTOOL
  fi
else
  OTOOL="$ac_cv_prog_OTOOL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool64", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}otool64; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_OTOOL64+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$OTOOL64"; then
        ac_cv_prog_OTOOL64="$OTOOL64" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_OTOOL64="${ac_tool_prefix}otool64"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
      fi
    fi
  fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
OTOOL64=$ac_cv_prog_OTOOL64
if test -n "$OTOOL64"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL64" >&5
$as_echo "$OTOOL64" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_OTOOL64"; then
  ac_ct_OTOOL64=$OTOOL64
  # Extract the first word of "otool64", so it can be a program name
  with args.
  set dummy otool64; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL64+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL64"; then
      ac_cv_prog_ac_ct_OTOOL64="$ac_ct_OTOOL64" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_OTOOL64="otool64"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_OTOOL64=$ac_cv_prog_ac_ct_OTOOL64
if test -n "$ac_ct_OTOOL64"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL64" >&5
$as_echo "$ac_ct_OTOOL64" >&6; }

```

```

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_OTOOL64" = x; then
    OTOOL64=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OTOOL64=$ac_ct_OTOOL64
  fi
else
  OTOOL64="$ac_cv_prog_OTOOL64"
fi

```

```

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
single_module linker flag" >&5
$as_echo_n "checking for -single_module linker flag... " >&6; }
if ${lt_cv_apple_cc_single_mod+:} false; then :

```



```

    $as_echo_n "(cached) " >&6
else
    lt_cv_apple_cc_single_mod=no
    if test -z "${LT_MULTI_MODULE}"; then
        # By default we will add the -single_module flag. You can
        # override
        # by either setting the environment variable LT_MULTI_MODULE
        # non-empty at configure time, or by adding -multi_module to the
        # link flags.
        rm -rf libconfptest.dylib*
        echo "int foo(void){return 1;}" > confptest.c
        echo "$LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
-dynamiclib -Wl,-single_module confptest.c" >&5
        $LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
        -dynamiclib -Wl,-single_module confptest.c 2>confptest.err
        _lt_result=$?
        # If there is a non-empty error log, and "single_module"
        # appears in it, assume the flag caused a linker warning
        if test -s confptest.err && $GREP single_module confptest.err;
then
            cat confptest.err >&5
            # Otherwise, if the output was created with a 0 exit code from
            # the compiler, it worked.
            elif test -f libconfptest.dylib && test $_lt_result -eq 0; then
                lt_cv_apple_cc_single_mod=yes
            else
                cat confptest.err >&5
            fi
            rm -rf libconfptest.dylib*
            rm -f confptest.*
            fi
        fi
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
    $lt_cv_apple_cc_single_mod" >&5
    $as_echo "$lt_cv_apple_cc_single_mod" >&6; }

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
    exported_symbols_list linker flag" >&5
    $as_echo_n "checking for -exported_symbols_list linker flag... " >&6;
    }
    if ${lt_cv_ld_exported_symbols_list+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        lt_cv_ld_exported_symbols_list=no
        save_LDFLAGS=$LDFLAGS
        echo "_main" > confptest.sym
        LDFLAGS="$LDFLAGS -Wl,-exported_symbols_list,confptest.sym"
        cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
    /* end confdefs.h. */

    int
    main ()

```

```

{
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    lt_cv_ld_exported_symbols_list=yes
else
    lt_cv_ld_exported_symbols_list=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_exported_symbols_list" >&5
$as_echo "$lt_cv_ld_exported_symbols_list" >&6; }

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -force_load
linker flag" >&5
$as_echo_n "checking for -force_load linker flag... " >&6; }
if ${lt_cv_ld_force_load+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_ld_force_load=no
    cat > conftest.c << _LT_EOF
int forced_loaded() { return 2;}
_LT_EOF
    echo "$LTCC $LTCFLAGS -c -o conftest.o conftest.c" >&5
    $LTCC $LTCFLAGS -c -o conftest.o conftest.c 2>&5
    echo "$AR cru libconftest.a conftest.o" >&5
    $AR cru libconftest.a conftest.o 2>&5
    echo "$RANLIB libconftest.a" >&5
    $RANLIB libconftest.a 2>&5
    cat > conftest.c << _LT_EOF
int main() { return 0;}
_LT_EOF
    echo "$LTCC $LTCFLAGS $LDFLAGS -o conftest conftest.c -Wl,-
force_load,./libconftest.a" >&5
    $LTCC $LTCFLAGS $LDFLAGS -o conftest conftest.c -Wl,-
force_load,./libconftest.a 2>conftest.err
    _lt_result=$?
    if test -s conftest.err && $GREP force_load conftest.err; then
        cat conftest.err >&5
    elif test -f conftest && test $_lt_result -eq 0 && $GREP
forced_load conftest >/dev/null 2>&1 ; then
        lt_cv_ld_force_load=yes
    else
        cat conftest.err >&5
    fi

```

```

    rm -f confptest.err libconfptest.a confptest confptest.c
    rm -rf confptest.dSYM

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ld_force_load"
>&5
$as_echo "$lt_cv_ld_force_load" >&6; }
  case $host_os in
    rhapsody* | darwin1.[012])
      _lt_dar_allow_undefined='${wl}-undefined ${wl}suppress' ;;
    darwin1.*)
      _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
    darwin*) # darwin 5.x on
      # if running on 10.5 or later, the deployment target defaults
      # to the OS version, if on x86, and 10.4, the deployment
      # target defaults to 10.4. Don't you love it?
      case ${MACOSX_DEPLOYMENT_TARGET-10.0},$host in
        10.0,*86*-darwin8*|10.0,*-darwin[91]*)
          _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
;;
        10.[012]*)
          _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
        10.*)
          _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
;;
      esac
    ;;
  esac
  if test "$lt_cv_apple_cc_single_mod" = "yes"; then
    _lt_dar_single_mod='${single_module}'
  fi
  if test "$lt_cv_ld_exported_symbols_list" = "yes"; then
    _lt_dar_export_syms=' ${wl}-
exported_symbols_list,$output_objdir/${libname}-symbols.expsym'
  else
    _lt_dar_export_syms='~$NMEDIT -s $output_objdir/${libname}-
symbols.expsym ${lib}'
  fi
  if test "$DSYMUTIL" != ":" && test "$lt_cv_ld_force_load" = "no";
then
    _lt_dsymutil='~$DSYMUTIL $lib || :'
  else
    _lt_dsymutil=
  fi
  ;;
esac

# On IRIX 5.3, sys/types and inttypes.h are conflicting.
for ac_header in sys/types.h sys/stat.h stdlib.h string.h memory.h
strings.h \

```

```

        inttypes.h stdint.h unistd.h
do :
  as_ac_Header=`$as_echo "ac_cv_header_$ac_header" | $as_tr_sh`
ac_fn_c_check_header_compile "$LINENO" "$ac_header" "$as_ac_Header"
"$ac_includes_default"
"
if eval test \"x\$$as_ac_Header\" = x"yes"; then :
  cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_header" | $as_tr_cpp` 1
_ACEOF

fi

done

for ac_header in dlfcn.h
do :
  ac_fn_c_check_header_compile "$LINENO" "dlfcn.h"
"ac_cv_header_dlfcn_h" "$ac_includes_default"
"
if test "x$ac_cv_header_dlfcn_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DLFCN_H 1
_ACEOF

fi

done

# Set options

        enable_dlopen=no

        enable_win32_dll=no

        @%:@ Check whether --enable-shared was given.
if test "${enable_shared+set}" = set; then :
  enableval=$enable_shared; p=${PACKAGE-default}
  case $enableval in
    yes) enable_shared=yes ;;
    no) enable_shared=no ;;
    *)
      enable_shared=no

```

```

        # Look at the argument we got.  We use all the common list
separators.
        lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
        for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
            enable_shared=yes
        fi
        done
        IFS="$lt_save_ifs"
        ;;
    esac
else
    enable_shared=yes
fi

```

```

@%:@ Check whether --enable-static was given.
if test "${enable_static+set}" = set; then :
    enableval=$enable_static; p=${PACKAGE-default}
    case $enableval in
    yes) enable_static=yes ;;
    no) enable_static=no ;;
    *)
        enable_static=no
        # Look at the argument we got.  We use all the common list
separators.
        lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
        for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
            enable_static=yes
        fi
        done
        IFS="$lt_save_ifs"
        ;;
    esac
else
    enable_static=yes
fi

```

```

@%:@ Check whether --with-pic was given.
if test "${with_pic+set}" = set; then :
  withval=$with_pic; lt_p=${PACKAGE-default}
  case $withval in
    yes|no) pic_mode=$withval ;;
    *)
      pic_mode=default
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for lt_pkg in $withval; do
        IFS="$lt_save_ifs"
        if test "X$lt_pkg" = "X$lt_p"; then
          pic_mode=yes
        fi
      done
      IFS="$lt_save_ifs"
      ;;
  esac
else
  pic_mode=default
fi

test -z "$pic_mode" && pic_mode=default

```

```

@%:@ Check whether --enable-fast-install was given.
if test "${enable_fast_install+set}" = set; then :
  enableval=$enable_fast_install; p=${PACKAGE-default}
  case $enableval in
    yes) enable_fast_install=yes ;;
    no) enable_fast_install=no ;;
    *)
      enable_fast_install=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_fast_install=yes

```

```
    fi
    done
    IFS="$lt_save_ifs"
    ;;
  esac
else
  enable_fast_install=yes
fi
```

```
# This can be used to rebuild libtool when needed
LIBTOOL_DEPS="$ltmain"
```

```
# Always use our own libtool.
LIBTOOL='$(top_builddir) '
LIBTOOL="$LIBTOOL/${host_alias}-libtool"
```

```
test -z "$LN_S" && LN_S="ln -s"
```

```
if test -n "${ZSH_VERSION+set}" ; then  
    setopt NO_GLOB_SUBST  
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for objdir" >&5  
$as_echo_n "checking for objdir... " >&6; }  
if ${lt_cv_objdir+:} false; then :  
    $as_echo_n "(cached) " >&6  
else  
    rm -f .libs 2>/dev/null  
mkdir .libs 2>/dev/null  
if test -d .libs; then  
    lt_cv_objdir=.libs  
else  
    # MS-DOS does not allow filenames that begin with a dot.  
    lt_cv_objdir=_libs  
fi  
rmdir .libs 2>/dev/null  
fi  
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_objdir" >&5  
$as_echo "$lt_cv_objdir" >&6; }  
objdir=$lt_cv_objdir
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define LT_OBJDIR "$lt_cv_objdir/"  
_ACEOF
```



```

case $host_os in
aix3*)
    # AIX sometimes has problems with the GCC collect2 program.  For
    some
    # reason, if we set the COLLECT_NAMES environment variable, the
    problems
    # vanish in a puff of smoke.
    if test "X${COLLECT_NAMES+set}" != Xset; then
        COLLECT_NAMES=
        export COLLECT_NAMES
    fi
    ;;
esac

# Global variables:
ofile=${host_alias}-libtool
can_build_shared=yes

# All known linkers require a `.a' archive for static linking (except
MSVC,
# which needs '.lib').
libext=a

with_gnu_ld="$lt_cv_prog_gnu_ld"

old_CC="$CC"
old_CFLAGS="$CFLAGS"

# Set sane defaults for various variables
test -z "$CC" && CC=cc
test -z "$LTCC" && LTCC=$CC
test -z "$LTCFLAGS" && LTCFLAGS=$CFLAGS
test -z "$LD" && LD=ld
test -z "$ac_objext" && ac_objext=o

for cc_temp in $compiler""; do
    case $cc_temp in
        compile | *[\//]compile | ccache | *[\//]ccache ) ;;
        distcc | *[\//]distcc | purify | *[\//]purify ) ;;
        \-*) ;;
        *) break;;
    esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^$host_alias-%%" `

# Only perform the check for file, if the check method requires it
test -z "$MAGIC_CMD" && MAGIC_CMD=file
case $deplibs_check_method in
file_magic*)
    if test "$file_magic_cmd" = '$MAGIC_CMD'; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
${ac_tool_prefix}file" >&5
$as_echo_n "checking for ${ac_tool_prefix}file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
  [\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
  for ac_dir in $ac_dummy; do
    IFS="$lt_save_ifs"
    test -z "$ac_dir" && ac_dir=.
    if test -f $ac_dir/${ac_tool_prefix}file; then
      lt_cv_path_MAGIC_CMD="$ac_dir/${ac_tool_prefix}file"
      if test -n "$file_magic_test_file"; then
        case $deplibs_check_method in
        "file_magic ")
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

_LT_EOF
          fi ;;
        esac
      fi
    break
  fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac

```

```

fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test -z "$lt_cv_path_MAGIC_CMD"; then
  if test -n "$ac_tool_prefix"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for file" >&5
$as_echo_n "checking for file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
[\\/*] | ?:[\\/*]*)
  lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
  ;;
*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
  for ac_dir in $ac_dummy; do
    IFS="$lt_save_ifs"
    test -z "$ac_dir" && ac_dir=.
    if test -f $ac_dir/file; then
      lt_cv_path_MAGIC_CMD="$ac_dir/file"
      if test -n "$file_magic_test_file"; then
        case $deplibs_check_method in
"file_magic "*)
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that

```

*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

```
_LT_EOF
    fi ;;
  esac
  fi
  break
fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

else
  MAGIC_CMD=:
fi
fi

fi
;;
esac

# Use C for the default configuration in the libtool script

lt_save_CC="$CC"
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

# Source file extension for C test sources.
ac_ext=c

# Object file extension for compiled C test sources.
```

```

objext=o
objext=$objext

# Code to be used in simple compile tests
lt_simple_compile_test_code="int some_variable = 0;"

# Code to be used in simple link tests
lt_simple_link_test_code='int main(){return(0);}'

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Save the default compiler, since it gets overwritten when the other
# tags are being tested, and _LT_TAGVAR(compiler, []) is a NOP.
compiler_DEFAULT=$CC

# save warnings/boilerplate of simple test code
ac_outfile=confptest.$ac_objext
echo "$lt_simple_compile_test_code" >confptest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>confptest.err
_lt_compiler_boilerplate=`cat confptest.err`
$RM confptest*

ac_outfile=confptest.$ac_objext
echo "$lt_simple_link_test_code" >confptest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >confptest.err
_lt_linker_boilerplate=`cat confptest.err`
$RM -r confptest*

## CAVEAT EMPTOR:
## There is no encapsulation within the following macros, do not
change
## the running order or otherwise move them around unless you know
exactly
## what you are doing...
if test -n "$compiler"; then

lt_prog_compiler_no_built_in_flag=

```

```

if test "$GCC" = yes; then
  case $cc_basename in
  nvcc*)
    lt_prog_compiler_no_builtin_flag=' -Xcompiler -fno-builtin' ;;
  *)
    lt_prog_compiler_no_builtin_flag=' -fno-builtin' ;;
  esac

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -fno-rtti -fno-exceptions" >&5
$as_echo_n "checking if $compiler supports -fno-rtti -fno-
exceptions... " >&6; }
if ${lt_cv_prog_compiler_rtti_exceptions+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_rtti_exceptions=no
  ac_outfile=conftest.$ac_objext
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext
  lt_compiler_flag="-fno-rtti -fno-exceptions"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>conftest.err)
  ac_status=$?
  cat conftest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if test ! -s conftest.er2 || diff conftest.exp conftest.er2
>/dev/null; then
      lt_cv_prog_compiler_rtti_exceptions=yes
    fi
  fi
  $RM conftest*

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_rtti_exceptions" >&5

```

```
$as_echo "$lt_cv_prog_compiler_rtti_exceptions" >&6; }

if test x"$lt_cv_prog_compiler_rtti_exceptions" = xyes; then

lt_prog_compiler_no_builtin_flag="$lt_prog_compiler_no_builtin_flag -
fno-rtti -fno-exceptions"
else
    :
fi

fi
```

```
lt_prog_compiler_wl=
lt_prog_compiler_pic=
lt_prog_compiler_static=
```

```
if test "$GCC" = yes; then
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_static='-static'

    case $host_os in
        aix*)
            # All AIX code is PIC.
            if test "$host_cpu" = ia64; then
                # AIX 5 now supports IA64 processor
                lt_prog_compiler_static='-Bstatic'
            fi
            ;;

        amigaos*)
            case $host_cpu in
                powerpc)
                    # see comment about AmigaOS4 .so support
                    lt_prog_compiler_pic='-fPIC'
                    ;;
                m68k)
                    # FIXME: we need at least 68020 code to build shared
                    libraries, but
                    # adding the '-m68020' flag to GCC prevents building
                    anything better,
                    # like '-m68040'.
                    lt_prog_compiler_pic='-m68020 -resident32 -malways-
                    restore-a4'
                    ;;
            esac
            ;;
    esac
    ;;
```

```

beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)
  # PIC is the default for these OSes.
  ;;

mingw* | cygwin* | pw32* | os2* | cegcc*)
  # This hack is so that the source file can tell whether it is
being
  # built for inclusion in a dll (and should export symbols for
example).
  # Although the cygwin gcc ignores -fPIC, still need this for
old-style
  # (--disable-auto-import) libraries
  lt_prog_compiler_pic='-DDLL_EXPORT'
  ;;

darwin* | rhapsody*)
  # PIC is the default on this platform
  # Common symbols not allowed in MH_DYLIB files
  lt_prog_compiler_pic='-fno-common'
  ;;

haiku*)
  # PIC is the default for Haiku.
  # The "-static" flag exists, but is broken.
  lt_prog_compiler_static=
  ;;

hpux*)
  # PIC is the default for 64-bit PA HP-UX, but not for 32-bit
  # PA HP-UX.  On IA64 HP-UX, PIC is the default but the pic flag
  # sets the default TLS model and affects inlining.
  case $host_cpu in
  hppa*64*)
  # +Z the default
  ;;
  *)
  lt_prog_compiler_pic='-fPIC'
  ;;
  esac
  ;;

interix[3-9]*)
  # Interix 3.x gcc -fpic/-fPIC options generate broken code.
  # Instead, we relocate shared libraries at runtime.
  ;;

msdosdjgpp*)
  # Just because we use GCC doesn't mean we suddenly get shared
libraries
  # on systems that don't support them.
  lt_prog_compiler_can_build_shared=no

```



```

    enable_shared=no
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'
    ;;

sysv4*MP*)
    if test -d /usr/nec; then
        lt_prog_compiler_pic=-Kconform_pic
    fi
    ;;

*)
    lt_prog_compiler_pic='-fPIC'
    ;;
esac

case $cc_basename in
nvcc*) # Cuda Compiler Driver 2.2
    lt_prog_compiler_wl='-Xlinker '
    if test -n "$lt_prog_compiler_pic"; then
        lt_prog_compiler_pic="-Xcompiler $lt_prog_compiler_pic"
    fi
    ;;
esac
else
    # PORTME Check for flag to pass linker flags through the system
compiler.
    case $host_os in
aix*)
        lt_prog_compiler_wl='-Wl,'
        if test "$host_cpu" = ia64; then
            # AIX 5 now supports IA64 processor
            lt_prog_compiler_static='-Bstatic'
        else
            lt_prog_compiler_static='-bnso -bI:/lib/syscalls.exp'
        fi
        ;;

mingw* | cygwin* | pw32* | os2* | cegcc*)
    # This hack is so that the source file can tell whether it is
being
    # built for inclusion in a dll (and should export symbols for
example).
    lt_prog_compiler_pic='-DDLL_EXPORT'
    ;;

hpux9* | hpux10* | hpux11*)

```

```

lt_prog_compiler_wl='-Wl,'
# PIC is the default for IA64 HP-UX and 64-bit HP-UX, but
# not for PA HP-UX.
case $host_cpu in
hppa*64*|ia64*)
# +Z the default
;;
*)
lt_prog_compiler_pic='+Z'
;;
esac
# Is there a better lt_prog_compiler_static that works with the
bundled CC?
lt_prog_compiler_static='${wl}-a ${wl}archive'
;;

irix5* | irix6* | nonstopux*)
lt_prog_compiler_wl='-Wl,'
# PIC (with -KPIC) is the default.
lt_prog_compiler_static='-non_shared'
;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
case $cc_basename in
# old Intel for x86_64 which still supported -KPIC.
ecc*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-static'
;;
# icc used to be incompatible with GCC.
# ICC 10 doesn't accept -KPIC any more.
icc* | ifort*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fPIC'
lt_prog_compiler_static='-static'
;;
# Lahey Fortran 8.1.
lf95*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='--shared'
lt_prog_compiler_static='--static'
;;
nagfor*)
# NAG Fortran compiler
lt_prog_compiler_wl='-Wl,-Wl,,'
lt_prog_compiler_pic='-PIC'
lt_prog_compiler_static='-Bstatic'
;;
pgcc* | pgf77* | pgf90* | pgf95* | pgfortran*)
# Portland Group compilers (*not* the Pentium gcc compiler,
# which looks to be a dead project)

```

```

lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fpic'
lt_prog_compiler_static='-Bstatic'
;;
ccc*)
  lt_prog_compiler_wl='-Wl,'
  # All Alpha code is PIC.
  lt_prog_compiler_static='-non_shared'
  ;;
x1* | bgx1* | bgf* | mpixl*)
# IBM XL C 8.0/Fortran 10.1, 11.1 on PPC and BlueGene
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-qpic'
lt_prog_compiler_static='-qstaticlink'
;;
*)
case ` $CC -V 2>&1 | sed 5q ` in
*Sun\ Ceres\ Fortran* | *Sun*Fortran*\ [1-7].* | *Sun*Fortran*\
8.[0-3]*)
  # Sun Fortran 8.3 passes all unrecognized flags to the linker
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl=''
  ;;
*Sun\ F* | *Sun*Fortran*)
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl='-Qoption ld '
  ;;
*Sun\ C*)
  # Sun C 5.9
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl='-Wl,'
  ;;
*Intel*\ [CF]*Compiler*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-fPIC'
  lt_prog_compiler_static='-static'
  ;;
*Portland\ Group*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-fpic'
  lt_prog_compiler_static='-Bstatic'
  ;;
esac
;;
esac
;;

newsos6)
  lt_prog_compiler_pic='-KPIC'

```

```

    lt_prog_compiler_static='-Bstatic'
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'
    ;;

osf3* | osf4* | osf5*)
    lt_prog_compiler_wl='-Wl,'
    # All OSF/1 code is PIC.
    lt_prog_compiler_static='-non_shared'
    ;;

rdos*)
    lt_prog_compiler_static='-non_shared'
    ;;

solaris*)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    case $cc_basename in
    f77* | f90* | f95* | sunf77* | sunf90* | sunf95*)
    lt_prog_compiler_wl='-Qoption ld ';;
    *)
    lt_prog_compiler_wl='-Wl, ';;
    esac
    ;;

sunos4*)
    lt_prog_compiler_wl='-Qoption ld '
    lt_prog_compiler_pic='-PIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4 | sysv4.2uw2* | sysv4.3*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4*MP*)
    if test -d /usr/nec ;then
    lt_prog_compiler_pic='-Kconform_pic'
    lt_prog_compiler_static='-Bstatic'
    fi
    ;;

sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
    lt_prog_compiler_wl='-Wl,'

```

```

    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

unicos*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_can_build_shared=no
    ;;

uts4*)
    lt_prog_compiler_pic='-pic'
    lt_prog_compiler_static='-Bstatic'
    ;;

*)
    lt_prog_compiler_can_build_shared=no
    ;;
esac
fi

case $host_os in
# For platforms which do not support PIC, -DPIC is meaningless:
*djgpp*)
    lt_prog_compiler_pic=
    ;;
*)
    lt_prog_compiler_pic="$lt_prog_compiler_pic@&t@ -DPIC"
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_pic=$lt_prog_compiler_pic
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic" >&5
$as_echo "$lt_cv_prog_compiler_pic" >&6; }
lt_prog_compiler_pic=$lt_cv_prog_compiler_pic

#
# Check to make sure the PIC flag actually works.
#
if test -n "$lt_prog_compiler_pic"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works+:} false; then :

```

```

    $sas_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_works=no
    ac_outfile=confptest.$ac_objext
    echo "$lt_simple_compile_test_code" > confptest.$ac_ext
    lt_compiler_flag="$lt_prog_compiler_pic@&t@ -DPIC"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confptest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    # The option is referenced via a variable to avoid confusing sed.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
    (eval echo "`echo \"$sas_me:$LINENO: $lt_compile\"`" >&5)
    (eval "$lt_compile" 2>confptest.err)
    ac_status=$?
    cat confptest.err >&5
    echo "$sas_me:$LINENO: \$? = $ac_status" >&5
    if (exit $ac_status) && test -s "$ac_outfile"; then
        # The compiler can only warn and ignore the option if not
recognized
        # So say no if there are warnings other than the usual output.
        $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
        $SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
        if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
            lt_cv_prog_compiler_pic_works=yes
        fi
    fi
    $RM confptest*

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works" >&5
$sas_echo "$lt_cv_prog_compiler_pic_works" >&6; }

if test x"$lt_cv_prog_compiler_pic_works" = xyes; then
    case $lt_prog_compiler_pic in
        "" | " *") ;;
        *) lt_prog_compiler_pic="$lt_prog_compiler_pic" ;;
    esac
else
    lt_prog_compiler_pic=
    lt_prog_compiler_can_build_shared=no
fi

fi

```

```

#
# Check to make sure the static flag actually works.
#
wl=$lt_prog_compiler_wl eval
lt_tmp_static_flag="\$lt_prog_compiler_static\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_static_works=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
  # The linker can only warn and ignore the option if not
  recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&5
    $ECHO "$lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_static_works=yes
    fi
  else
    lt_cv_prog_compiler_static_works=yes
  fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works" >&5
$as_echo "$lt_cv_prog_compiler_static_works" >&6; }

if test x"$lt_cv_prog_compiler_static_works" = xyes; then

```

```

:
else
    lt_prog_compiler_static=
fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o=no
    $RM -r conftest 2>/dev/null
    mkdir conftest
    cd conftest
    mkdir out
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

    lt_compiler_flag="-o out/conftest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "conftest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
    (eval echo "\"$as_me:$LINENO: $lt_compile\"" >&5)
    (eval "$lt_compile" 2>out/conftest.err)
    ac_status=$?
    cat out/conftest.err >&5
    echo "$as_me:$LINENO: \$? = $ac_status" >&5
    if (exit $ac_status) && test -s out/conftest2.$ac_objext
    then
        # The compiler can only warn and ignore the option if not
recognized
        # So say no if there are warnings
        $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/conftest.exp
        $SED '/^$/d; /^ *+/d' out/conftest.err >out/conftest.er2
        if test ! -s out/conftest.er2 || diff out/conftest.exp
out/conftest.er2 >/dev/null; then
            lt_cv_prog_compiler_c_o=yes

```



```

    fi
fi
chmod u+w . 2>&5
$RM conftest*
# SGI C++ compiler will create directory out/ii_files/ for
# template instantiation
test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r conftest
$RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o=no
  $RM -r conftest 2>/dev/null
  mkdir conftest
  cd conftest
  mkdir out
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext

  lt_compiler_flag="-o out/conftest2.$ac_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&;; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>out/conftest.err)
  ac_status=$?
  cat out/conftest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5

```

```

    if (exit $ac_status) && test -s out/confptest2.$ac_objext
    then
        # The compiler can only warn and ignore the option if not
        # recognized
        # So say no if there are warnings
        $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
        $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
        if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
            lt_cv_prog_compiler_c_o=yes
        fi
    fi
    chmod u+w . 2>&5
    $RM confptest*
    # SGI C++ compiler will create directory out/ii_files/ for
    # template instantiation
    test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
    $RM out/* && rmdir out
    cd ..
    $RM -r confptest
    $RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o" = no && test "$need_locks" != no;
then
    # do not overwrite the value of need_locks provided by the user
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
    hard_links=yes
    $RM confptest*
    ln confptest.a confptest.b 2>/dev/null && hard_links=no
    touch confptest.a
    ln confptest.a confptest.b 2>&5 || hard_links=no
    ln confptest.a confptest.b 2>/dev/null && hard_links=no
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }
    if test "$hard_links" = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: `gcc' does not
support `-c -o', so `make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: `gcc' does not support `-c -o', so `make
-j' may be unsafe" >&2;}
        need_locks=warn
    fi
fi

```

```
fi
else
  need_locks=no
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }
```

```
runpath_var=
allow_undefined_flag=
always_export_symbols=no
archive_cmds=
archive_expsym_cmds=
compiler_needs_object=no
enable_shared_with_static_runtimes=no
export_dynamic_flag_spec=
export_symbols_cmds='$NM $libobjs $convenience | $global_symbol_pipe
| $SED '\''s/.* //'\' | sort | uniq > $export_symbols'
hardcode_automatic=no
hardcode_direct=no
hardcode_direct_absolute=no
hardcode_libdir_flag_spec=
hardcode_libdir_separator=
hardcode_minus_L=no
hardcode_shlibpath_var=unsupported
inherit_rpath=no
link_all_deplibs=unknown
module_cmds=
module_expsym_cmds=
old_archive_from_new_cmds=
old_archive_from_expsyms_cmds=
thread_safe_flag_spec=
whole_archive_flag_spec=
# include_expsyms should be a list of space-separated symbols to be
*always*
# included in the symbol list
include_expsyms=
# exclude_expsyms can be an extended regexp of symbols to exclude
# it will be wrapped by ` (' and `)$', so one must not match
beginning or
# end of line. Example: `a|bc|.*d.*' will exclude the symbols `a'
and `bc',
# as well as any symbol that contains `d'.
exclude_expsyms='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'
```

```

# Although _GLOBAL_OFFSET_TABLE_ is a valid symbol C name, most
a.out
# platforms (ab)use it in PIC code, but their linkers get confused
if
# the symbol is explicitly referenced. Since portable code cannot
# rely on this symbol name, it's probably fine to never include it
in
# preloaded symbol tables.
# Exclude shared library initialization/finalization symbols.
extract_expsyms_cmds=

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
# FIXME: the MSVC++ port hasn't been tested in a loooong time
# When not using gcc, we currently assume that we are using
# Microsoft Visual C++.
if test "$GCC" != yes; then
with_gnu_ld=no
fi
;;
interix*)
# we just hope/assume this is gcc and not c89 (= MSVC++)
with_gnu_ld=yes
;;
openbsd*)
with_gnu_ld=no
;;
esac

ld_shlibs=yes

# On some targets, GNU ld is compatible enough with the native
linker
# that we're better off using the native interface for both.
lt_use_gnu_ld_interface=no
if test "$with_gnu_ld" = yes; then
case $host_os in
aix*)
# The AIX port of GNU ld has always aspired to compatibility
# with the native linker. However, as the warning in the GNU ld
# block says, versions before 2.19.5* couldn't really create
working
# shared libraries, regardless of the interface used.
case ` $LD -v 2>&1 ` in
*\ (GNU\ Binutils)\ 2.19.5*) ;;
*\ (GNU\ Binutils)\ 2.[2-9]*) ;;
*\ (GNU\ Binutils)\ [3-9]*) ;;
*)
lt_use_gnu_ld_interface=yes
;;
esac
;;

```

```

        *)
        lt_use_gnu_ld_interface=yes
        ;;
    esac
fi

if test "$lt_use_gnu_ld_interface" = yes; then
    # If archive_cmds runs LD, not CC, wlarc should be empty
    wlarc='${wl}'

    # Set some defaults for GNU ld with shared library support. These
    # are reset later if shared libraries are not supported. Putting
them
    # here allows them to be overridden if necessary.
    runpath_var=LD_RUN_PATH
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    export_dynamic_flag_spec='${wl}--export-dynamic'
    # ancient GNU ld didn't support --whole-archive et. al.
    if $LD --help 2>&1 | $GREP 'no-whole-archive' > /dev/null; then
        whole_archive_flag_spec="$wlarc"--whole-archive$convenience
"$wlarc"--no-whole-archive'
    else
        whole_archive_flag_spec=
    fi
    supports_anon_versioning=no
    case ` $LD -v 2>&1 ` in
        *GNU\ gold*) supports_anon_versioning=yes ;;
        *\ [01].* | *\ 2.[0-9].* | *\ 2.10.*) ;; # catch versions < 2.11
        *\ 2.11.93.0.2\ *) supports_anon_versioning=yes ;; # RH7.3 ...
        *\ 2.11.92.0.12\ *) supports_anon_versioning=yes ;; # Mandrake
8.2 ...
        *\ 2.11.*) ;; # other 2.11 versions
        *) supports_anon_versioning=yes ;;
    esac

    # See if GNU ld supports shared libraries.
    case $host_os in
    aix[3-9]*)
        # On AIX/PPC, the GNU linker is very broken
        if test "$host_cpu" != ia64; then
            ld_shlibs=no
            cat <<_LT_EOF 1>&2

*** Warning: the GNU linker, at least up to release 2.19, is reported
*** to be unable to reliably create shared libraries on AIX.
*** Therefore, libtool is disabling shared libraries support.  If you
*** really care for shared libraries, you may want to install binutils
*** 2.20 or above, or modify your PATH so that a non-GNU linker is
found.
*** You will then need to restart the configuration process.

_LT_EOF

```

```

fi
;;

amigaos*)
case $host_cpu in
powerpc)
# see comment about AmigaOS4 .so support
archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
archive_expsym_cmds=''
;;
m68k)
archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
hardcode_libdir_flag_spec='-L$libdir'
hardcode_minus_L=yes
;;
esac
;;

beos*)
if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
allow_undefined_flag=unsupported
# Joseph Beckenbach <jrb3@best.com> says some releases of gcc
# support --undefined. This deserves some investigation. FIXME
archive_cmds='$CC -nostart $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
else
ld_shlibs=no
fi
;;

cygwin* | mingw* | pw32* | cegcc*)
# _LT_TAGVAR(hardcode_libdir_flag_spec, ) is actually
meaningless,
# as there is no search path for DLLs.
hardcode_libdir_flag_spec='-L$libdir'
export_dynamic_flag_spec='${wl}--export-all-symbols'
allow_undefined_flag=unsupported
always_export_symbols=no
enable_shared_with_static_runtimes=yes
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\ ]*\)/\1
DATA;/s/^\.*[ ]__nm_\([^\ ]*\)[ ]\([^\ ]*\)/\1 DATA;/^I[ ]/d;/^[AITW][
]/s/.* //'\' | sort | uniq > $export_symbols'

```

```

exclude_expsyms='[_]+GLOBAL_OFFSET_TABLE_|[_]+GLOBAL__[FID]_.*|[_]+head_[A-Za-z0-9_]+_dll|[A-Za-z0-9_]+_dll_iname'

    if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then
        archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
        # If the export-symbols file already is a .def file (1st line
        # is EXPORTS), use it as is; otherwise, prepend...
        archive_expsym_cmds='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
            cp $export_symbols $output_objdir/$soname.def;
        else
            echo EXPORTS > $output_objdir/$soname.def;
            cat $export_symbols >> $output_objdir/$soname.def;
        fi~
        $CC -shared $output_objdir/$soname.def $libobjs $deplibs
$compiler_flags -o $output_objdir/$soname ${wl}--enable-auto-image-
base -Xlinker --out-implib -Xlinker $lib'
        else
            ld_shlibs=no
        fi
    ;;

haiku*)
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    link_all_deplibs=yes
    ;;

interix[3-9]*)
    hardcode_direct=no
    hardcode_shlibpath_var=no
    hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
    export_dynamic_flag_spec='${wl}-E'
    # Hack: On Interix 3.x, we cannot compile PIC because of a
broken gcc.
    # Instead, shared libraries are loaded at an image base
(0x10000000 by
    # default) and relocated if they conflict, which is a slow very
memory
    # consuming and fragmenting process. To avoid this, we pick a
random,
    # 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000
at link
    # time. Moving up from 0x10000000 also allows more sbrk(2)
space.
    archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,`expr ${RANDOM} %
4096 / 2 \* 262144 + 1342177280` -o $lib'

```

```

        archive_expsym_cmds='sed "s,^,_, " $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,`expr ${RANDOM-
$$} % 4096 / 2 \* 262144 + 1342177280` -o $lib'
        ;;

gnu* | linux* | tpf* | k*bsd*-gnu | kopensolaris*-gnu)
        tmp_diet=no
        if test "$host_os" = linux-dietlibc; then
        case $cc_basename in
                diet\ *) tmp_diet=yes;; # linux-dietlibc with static linking
(!diet-dyn)
        esac
        fi
        if $LD --help 2>&1 | $EGREP ': supported targets:.* elf' >
/dev/null \
        && test "$tmp_diet" = no
        then
        tmp_addflag=' $pic_flag'
        tmp_sharedflag='-shared'
        case $cc_basename,$host_cpu in
                pgcc*) # Portland Group C compiler
                whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\"` ${wl}--no-whole-archive'
                tmp_addflag=' $pic_flag'
                ;;
                pgf77* | pgf90* | pgf95* | pgfortran*)
                # Portland Group f77 and f90 compilers
                whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\"` ${wl}--no-whole-archive'
                tmp_addflag=' $pic_flag -Mnomain' ;;
                ecc*,ia64* | icc*,ia64*) # Intel C compiler on ia64
                tmp_addflag=' -i_dynamic' ;;
                efc*,ia64* | ifort*,ia64*) # Intel Fortran compiler on ia64
                tmp_addflag=' -i_dynamic -nofor_main' ;;
                ifc* | ifort*) # Intel Fortran compiler
                tmp_addflag=' -nofor_main' ;;
                lf95*) # Lahey Fortran 8.1
                whole_archive_flag_spec=
                tmp_sharedflag='--shared' ;;
                xl[cC]* | bgxl[cC]* | mpixl[cC]*) # IBM XL C 8.0 on PPC (deal
with xlf below)
                tmp_sharedflag='-qmkshrojb'
                tmp_addflag= ;;
                nvcc*) # Cuda Compiler Driver 2.2
                whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`; do test -n \"$conv\" &&

```



```

new_convenience="\$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\"` ${wl}--no-whole-archive'
    compiler_needs_object=yes
    ;;
esac
case `\$CC -V 2>&1 | sed 5q` in
*Sun\ C*)                # Sun C 5.9
    whole_archive_flag_spec='${wl}--whole-archive`new_convenience=;
for conv in \$convenience\""; do test -z \"\$conv\" ||
new_convenience="\$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\"` ${wl}--no-whole-archive'
    compiler_needs_object=yes
    tmp_sharedflag='-G' ;;
*Sun\ F*)                # Sun Fortran 8.3
    tmp_sharedflag='-G' ;;
esac
archive_cmds='\$CC \"\$tmp_sharedflag\"\$tmp_addflag\"' \$libobjs
\$deplibs \$compiler_flags ${wl}-soname \$wl\$soname -o \$lib'

    if test "x\$supports_anon_versioning" = xyes; then
        archive_expsym_cmds='echo "{ global:" >
\$output_objdir/\$libname.ver~
        cat \$export_symbols | sed -e "s/\(.*\)/\1;/" >>
\$output_objdir/\$libname.ver~
        echo "local: *; };" >> \$output_objdir/\$libname.ver~
        \$CC \"\$tmp_sharedflag\"\$tmp_addflag\"' \$libobjs \$deplibs
\$compiler_flags ${wl}-soname \$wl\$soname ${wl}-version-script
${wl}\$output_objdir/\$libname.ver -o \$lib'
    fi

    case \$cc_basename in
    xlf* | bgf* | bgxlf* | mpixlf*)
        # IBM XL Fortran 10.1 on PPC cannot create shared libs itself
        whole_archive_flag_spec='--whole-archive\$convenience --no-
whole-archive'
        hardcode_libdir_flag_spec='${wl}-rpath ${wl}\$libdir'
        archive_cmds='\$LD -shared \$libobjs \$deplibs \$linker_flags -
soname \$soname -o \$lib'
        if test "x\$supports_anon_versioning" = xyes; then
            archive_expsym_cmds='echo "{ global:" >
\$output_objdir/\$libname.ver~
            cat \$export_symbols | sed -e "s/\(.*\)/\1;/" >>
\$output_objdir/\$libname.ver~
            echo "local: *; };" >> \$output_objdir/\$libname.ver~
            \$LD -shared \$libobjs \$deplibs \$linker_flags -soname \$soname
-version-script \$output_objdir/\$libname.ver -o \$lib'
        fi
    ;;
esac
else
    ld_shlibs=no
fi

```

```

;;

netbsd*)
  if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
    archive_cmds='$LD -Bshareable $libobjs $deplibs $linker_flags -o
$lib'
    wlarc=
  else
    archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
  fi
;;

```

```

solaris*)
  if $LD -v 2>&1 | $GREP 'BFD 2\.8' > /dev/null; then
    ld_shlibs=no
    cat <<_LT_EOF 1>&2

```

```

*** Warning: The releases 2.8.* of the GNU linker cannot reliably
*** create shared libraries on Solaris systems. Therefore, libtool
*** is disabling shared libraries support. We urge you to upgrade GNU
*** binutils to release 2.9.1 or newer. Another option is to modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

```

```

_LT_EOF
  elif $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
    archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
  else
    ld_shlibs=no
  fi
;;

```

```

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX*)
  case ` $LD -v 2>&1 ` in
    *\ [01].* | *\ 2.[0-9].* | *\ 2.1[0-5].*)
    ld_shlibs=no
    cat <<_LT_EOF 1>&2

```

```

*** Warning: Releases of the GNU linker prior to 2.16.91.0.3 can not
*** reliably create shared libraries on SCO systems. Therefore,
libtool
*** is disabling shared libraries support. We urge you to upgrade GNU

```

*** binutils to release 2.16.91.0.3 or newer. Another option is to modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

```
_LT_EOF
;;
*)
# For security reasons, it is highly recommended that you
always
# use absolute paths for naming shared libraries, and exclude
the
# DT_RUNPATH tag from executables and libraries. But doing so
# requires that you compile everything twice, which is a pain.
if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    else
        ld_shlibs=no
    fi
;;
esac
;;

sunos4*)
    archive_cmds='$LD -assert pure-text -Bshareable -o $lib $libobjs
$deplibs $linker_flags'
    wlarc=
    hardcode_direct=yes
    hardcode_shlibpath_var=no
;;

*)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
        else
            ld_shlibs=no
        fi
        ;;
    esac

    if test "$ld_shlibs" = no; then
```

```

        runpath_var=
        hardcode_libdir_flag_spec=
        export_dynamic_flag_spec=
        whole_archive_flag_spec=
    fi
else
    # PORTME fill in a description of your system's linker (not GNU
ld)
    case $host_os in
    aix3*)
        allow_undefined_flag=unsupported
        always_export_symbols=yes
        archive_expsym_cmds='$LD -o $output_objdir/$soname $libobjs
$deplibs $linker_flags -bE:$export_symbols -T512 -H512 -bM:SRE~$AR
$AR_FLAGS $lib $output_objdir/$soname'
        # Note: this linker hardcodes the directories in LIBPATH if
there
        # are no directories specified by -L.
        hardcode_minus_L=yes
        if test "$GCC" = yes && test -z "$lt_prog_compiler_static"; then
        # Neither direct hardcoding nor static linking is supported with
a
        # broken collect2.
        hardcode_direct=unsupported
        fi
        ;;

    aix[4-9]*)
        if test "$host_cpu" = ia64; then
        # On IA64, the linker does run time linking by default, so we
don't
        # have to do anything special.
        aix_use_runtimelinking=no
        exp_sym_flag='-Bexport'
        no_entry_flag=""
        else
        # If we're using GNU nm, then we don't want the "-C" option.
        # -C means demangle to AIX nm, but means don't demangle with GNU
nm
        # Also, AIX nm treats weak defined symbols like other global
        # defined symbols, whereas GNU nm marks them as "W".
        if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then
            export_symbols_cmds='$NM -Bpg $libobjs $convenience | awk '\''{
if ((\($ 2 == "T") || (\$ 2 == "D") || (\$ 2 == "B") || (\$ 2 == "W"))
&& (substr(\$ 3,1,1) != ".")) { print \$ 3 } }'\'' | sort -u >
$export_symbols'
        else
            export_symbols_cmds='$NM -BCpg $libobjs $convenience | awk
'\''{ if ((\($ 2 == "T") || (\$ 2 == "D") || (\$ 2 == "B")) &&
(substr(\$ 3,1,1) != ".")) { print \$ 3 } }'\'' | sort -u >
$export_symbols'
        fi
    fi

```

```

aix_use_runtimelinking=no

# Test if we are trying to use run time linking or normal
# AIX style linking. If -brtl is somewhere in LDFLAGS, we
# need to do runtime linking.
case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)
    for ld_flag in $LDFLAGS; do
        if (test $ld_flag = "-brtl" || test $ld_flag = "-Wl,-brtl");
then
            aix_use_runtimelinking=yes
            break
        fi
    done
    ;;
esac

exp_sym_flag='-bexport'
no_entry_flag='-bnoentry'
fi

# When large executables or shared objects are built, AIX ld can
# have problems creating the table of contents.  If linking a
library
# or program results in "error TOC overflow" add -mminimal-toc
to
# CXXFLAGS/CFLAGS for g++/gcc.  In the cases where that is not
# enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

archive_cmds=''
hardcode_direct=yes
hardcode_direct_absolute=yes
hardcode_libdir_separator=':'
link_all_deplibs=yes
file_list_spec='${wl}-f,'

if test "$GCC" = yes; then
case $host_os in aix4.[012]|aix4.[012].*)
# We only want to do this on AIX 4.2 and lower, the check
# below for broken collect2 doesn't work under 4.3+
collect2name=`${CC} -print-prog-name=collect2`
if test -f "$collect2name" &&
strings "$collect2name" | $GREP resolve_lib_name >/dev/null
then
# We have reworked collect2
:
else
# We have old collect2
hardcode_direct=unsupported
# It fails to find uninstalled libraries when the uninstalled
# path is not listed in the libpath.  Setting hardcode_minus_L
# to unsupported forces relinking
hardcode_minus_L=yes

```

```

        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_libdir_separator=
    fi
    ;;
esac
shared_flag='-shared'
if test "$aix_use_runtimelinking" = yes; then
    shared_flag="$shared_flag '${wl}-G'
fi
else
# not using gcc
if test "$host_cpu" = ia64; then
# VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3 Release
# chokes on -Wl,-G. The following line is correct:
    shared_flag='-G'
else
    if test "$aix_use_runtimelinking" = yes; then
        shared_flag='${wl}-G'
    else
        shared_flag='${wl}-bM:SRE'
    fi
fi
fi

export_dynamic_flag_spec='${wl}-bexpall'
# It seems that -bexpall does not export symbols beginning with
# underscore (_), so it is better to generate a list of symbols
to export.
always_export_symbols=yes
if test "$aix_use_runtimelinking" = yes; then
# Warning - without using the other runtime loading flags (-
brtl),
# -berok will link without error, but may produce a broken
library.
    allow_undefined_flag='-berok'
    # Determine the default libpath from the value encoded in an
    # empty executable.
    if test "${lt_cv_aix_libpath+set}" = set; then
        aix_libpath=$lt_cv_aix_libpath
    else
        if ${lt_cv_aix_libpath_+} false; then :
            $as_echo_n "(cached) " >&6
        else
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

;
return 0;

```

```

}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_cv_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0 *\[^\ ]*\) *$/\1/
                p
            }
        }'
    lt_cv_aix_libpath_=`dump -H conftest$sac_exeext 2>/dev/null | $SED -n
-e "$lt_cv_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_cv_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_
fi

    hardcode_libdir_flag_spec='${wl}-
blibpath:$libdir:"$aix_libpath"
    archive_expsym_cmds='$CC -o $output_objdir/$soname $libobjs
$deplibs '"\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else ;; fi`
'"\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
    else
        if test "$host_cpu" = ia64; then
            hardcode_libdir_flag_spec='${wl}-R $libdir:/usr/lib:/lib'
            allow_undefined_flag="-z nodefs"
            archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs '"\${wl}$no_entry_flag"'
$compiler_flags ${wl}${allow_undefined_flag}
'"\${wl}$exp_sym_flag:\$export_symbols"
        else
            # Determine the default libpath from the value encoded in an
            # empty executable.
            if test "${lt_cv_aix_libpath+set}" = set; then
                aix_libpath=$lt_cv_aix_libpath
            else
                if ${lt_cv_aix_libpath+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0  *\([^ ]*\) *$/\1/
                p
            }
        }'

    lt_cv_aix_libpath_=`dump -H conftest$ac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$ac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi

rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

    aix_libpath=$lt_cv_aix_libpath_
fi

    hardcode_libdir_flag_spec='${wl}-
bllibpath:$libdir:'"$aix_libpath"
    # Warning - without using the other run time loading flags,
    # -berok will link without error, but may produce a broken
library.
    no_undefined_flag='${wl}-bernotok'
    allow_undefined_flag='${wl}-berok'
    if test "$with_gnu_ld" = yes; then
        # We only use this code for GNU lds that support --whole-
archive.

```



```

        whole_archive_flag_spec='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
    else
        # Exported symbols can be pulled into shared objects from
archives
        whole_archive_flag_spec='$convenience'
    fi
    archive_cmds_need_lc=yes
    # This is similar to how AIX traditionally builds its shared
libraries.
    archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
    fi
    fi
    ;;

amigaos*)
    case $host_cpu in
    powerpc)
        # see comment about AmigaOS4 .so support
        archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds=''
        ;;
    m68k)
        archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_minus_L=yes
        ;;
    esac
    ;;

bsd[45]*)
    export_dynamic_flag_spec=-rdynamic
    ;;

cygwin* | mingw* | pw32* | cegcc*)
    # When not using gcc, we currently assume that we are using
    # Microsoft Visual C++.
    # hardcode_libdir_flag_spec is actually meaningless, as there is
    # no search path for DLLs.
    case $cc_basename in
    cl*)
        # Native MSVC

```

```

hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
always_export_symbols=yes
file_list_spec='@'
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
archive_expsym_cmds='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
    sed -n -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' -
e '1\\\\\\\\!p' < $export_symbols > $output_objdir/$soname.exp;
    else
        sed -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
$export_symbols > $output_objdir/$soname.exp;
    fi~
    $CC -o $tool_output_objdir$soname $libobjs $compiler_flags
$deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
IMPLIB:"$tool_output_objdir$libname.dll.lib"~
    linknames='
# The linker will not automatically build a static lib if we
build a DLL.
# _LT_TAGVAR(old_archive_from_new_cmds, )='true'
enable_shared_with_static_runtimes=yes
exclude_expsyms='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_.*'
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*/[ ]\([\^
]*\)/\1,DATA/'\'' | $SED -e '\''/^([AITW])[ ]/s/.*/[ ]/'\'' | sort |
uniq > $export_symbols'
# Don't use ranlib
old_postinstall_cmds='chmod 644 $oldlib'
postlink_cmds='lt_outputfile="@OUTPUT@"~
lt_tool_outputfile="@TOOL_OUTPUT@"~
case $lt_outputfile in
*.exe|*.EXE) ;;
*)
    lt_outputfile="$lt_outputfile.exe"
    lt_tool_outputfile="$lt_tool_outputfile.exe"
    ;;
esac~
if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
    $MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
    $RM "$lt_outputfile.manifest";
fi'
;;
*)
# Assume MSVC wrapper

```

```

hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $lib $libobjs $compiler_flags `func_echo_all
"$deplibs" | $SED '\`'s/ -lc$//'\`' -link -dll~linknames='
# The linker will automatically build a .lib file if we build a
DLL.
old_archive_from_new_cmds='true'
# FIXME: Should let the user specify the lib program.
old_archive_cmds='lib -OUT:$oldlib$oldobjs$old_deplibs'
enable_shared_with_static_runtimes=yes
;;
esac
;;

```

darwin* | rhapsody*)

```

archive_cmds_need_lc=no
hardcode_direct=no
hardcode_automatic=yes
hardcode_shlibpath_var=unsupported
if test "$lt_cv_ld_force_load" = "yes"; then
  whole_archive_flag_spec='`for conv in $convenience\`"; do test -
n "$conv" && new_convenience="$new_convenience ${wl}-
force_load,$conv\`; done; func_echo_all "$new_convenience\`'
else
  whole_archive_flag_spec='`
fi
link_all_deplibs=yes
allow_undefined_flag="$lt_dar_allow_undefined"
case $cc_basename in
  ifort*) _lt_dar_can_shared=yes ;;
  *) _lt_dar_can_shared=$GCC ;;
esac
if test "$lt_dar_can_shared" = "yes"; then
  output_verbose_link_cmd=func_echo_all
  archive_cmds="\$CC -dynamiclib \$allow_undefined_flag -o \$lib
\$libobjs \$deplibs \$compiler_flags -install_name \$rpath/\$soname
\$verstring \$lt_dar_single_mod${_lt_dsymutil}"
  module_cmds="\$CC \$allow_undefined_flag -o \$lib -bundle
\$libobjs \$deplibs \$compiler_flags${_lt_dsymutil}"
  archive_expsym_cmds="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -dynamiclib
\$allow_undefined_flag -o \$lib \$libobjs \$deplibs \$compiler_flags -
install_name \$rpath/\$soname \$verstring
\${_lt_dar_single_mod}\${_lt_dar_export_syms}\${_lt_dsymutil}"

```

```

    module_expsym_cmds="sed -e 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\${CC} \$allow_undefined_flag
-o \$lib -bundle \$libobjs \$deplibs
\$compiler_flags\${_lt_dar_export_syms}\${_lt_dsymutil}"

    else
    ld_shlibs=no
    fi

    ;;

    dgux*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_shlibpath_var=no
    ;;

    # FreeBSD 2.2.[012] allows us to include c++rt0.o to get C++
    constructor
    # support.  Future versions do this automatically, but an explicit
    c++rt0.o
    # does not break anything, and helps significantly (at the cost of
    a little
    # extra space).
    freebsd2.2*)
    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags /usr/lib/c++rt0.o'
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

    # Unfortunately, older versions of FreeBSD 2 do not have this
    feature.
    freebsd2.*)
    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_direct=yes
    hardcode_minus_L=yes
    hardcode_shlibpath_var=no
    ;;

    # FreeBSD 3 and greater uses gcc -shared to do shared libraries.
    freebsd* | dragonfly*)
    archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

```

```

hpux9*)
    if test "$GCC" = yes; then
        archive_cmds='$RM $output_objdir/$soname~$CC -shared $pic_flag
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $libobjs
$deplibs $compiler_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
    else
        archive_cmds='$RM $output_objdir/$soname~$LD -b +b
$install_libdir -o $output_objdir/$soname $libobjs $deplibs
$linker_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
    fi
    hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_direct=yes

    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
    export_dynamic_flag_spec='${wl}-E'
    ;;

hpux10*)
    if test "$GCC" = yes && test "$with_gnu_ld" = no; then
        archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
    else
        archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
    fi
    if test "$with_gnu_ld" = no; then
        hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
        hardcode_libdir_separator=:
        hardcode_direct=yes
        hardcode_direct_absolute=yes
        export_dynamic_flag_spec='${wl}-E'
        # hardcode_minus_L: Not really in the search PATH,
        # but as the default location of the library.
        hardcode_minus_L=yes
    fi
    ;;

hpux11*)
    if test "$GCC" = yes && test "$with_gnu_ld" = no; then
        case $host_cpu in
            hppa*64*)
                archive_cmds='$CC -shared ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
                ;;
            ia64*)
                archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $libobjs $deplibs $compiler_flags'
                ;;
        esac
    fi

```

```

        ;;
    *)
        archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+b ${wl}$install_libdir -o $lib $libobjs $deplibs
$compiler_flags'
        ;;
    esac
    else
    case $host_cpu in
    hppa*64*)
        archive_cmds='$CC -b ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
        ;;
    ia64*)
        archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+nodefaulttrpath
-o $lib $libobjs $deplibs $compiler_flags'
        ;;
    *)
        # Older versions of the 11.00 compiler do not understand -b yet
        # (HP92453-01 A.11.01.20 doesn't, HP92453-01 B.11.X.35175-
35176.GP does)
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $CC
understands -b" >&5
$as_echo_n "checking if $CC understands -b... " >&6; }
if ${lt_cv_prog_compiler__b+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler__b=no
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -b"
    echo "$lt_simple_link_test_code" > conftest.$ac_ext
    if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
        # The linker can only warn and ignore the option if not
recognized
        # So say no if there are warnings
        if test -s conftest.err; then
            # Append any errors to the config.log.
            cat conftest.err 1>&5
            $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
            $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
            if diff conftest.exp conftest.er2 >/dev/null; then
                lt_cv_prog_compiler__b=yes
            fi
        else
            lt_cv_prog_compiler__b=yes
        fi
    fi
    fi
    $RM -r conftest*
    LDFLAGS="$save_LDFLAGS"

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_b" >&5
$as_echo "$lt_cv_prog_compiler_b" >&6; }

if test x"$lt_cv_prog_compiler_b" = xyes; then
    archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
else
    archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
fi

    ;;
esac
fi
if test "$with_gnu_ld" = no; then
hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
hardcode_libdir_separator=:

case $host_cpu in
hppa*64*|ia64*)
    hardcode_direct=no
    hardcode_shlibpath_var=no
    ;;
*)
    hardcode_direct=yes
    hardcode_direct_absolute=yes
    export_dynamic_flag_spec='${wl}-E'

    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
    ;;
esac
fi
;;

irix5* | irix6* | nonstopux*)
    if test "$GCC" = yes; then
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations -o $lib'
        # Try to use the -exported_symbol ld option, if it does not
        # work, assume that -exports_file does not work either and
        # implicitly export all symbols.
        # This should be the same for all languages, so no per-tag cache
        variable.
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$host_os linker accepts -exported_symbol" >&5

```

```

$as_echo_n "checking whether the $host_os linker accepts -
exported_symbol... " >&6; }
if ${lt_cv_irix_exported_symbol+:} false; then :
  $as_echo_n "(cached) " >&6
else
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS -shared ${wl}-exported_symbol ${wl}foo
${wl}-update_registry ${wl}/dev/null"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
int foo (void) { return 0; }
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_irix_exported_symbol=yes
else
  lt_cv_irix_exported_symbol=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest.$ac_exeext conftest.$ac_ext
  LDFLAGS="$save_LDFLAGS"
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_irix_exported_symbol" >&5
$as_echo "$lt_cv_irix_exported_symbol" >&6; }
  if test "$lt_cv_irix_exported_symbol" = yes; then
    archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations ${wl}-exports_file
${wl}$export_symbols -o $lib'
  fi
  else
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -
soname $soname `test -n "$verstring" && func_echo_all "-set_version
$verstring"` -update_registry ${output_objdir}/so_locations -o $lib'
    archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags -soname $soname `test -n "$verstring" && func_echo_all
"-set_version $verstring"` -update_registry
${output_objdir}/so_locations -exports_file $export_symbols -o $lib'
  fi
  archive_cmds_need_lc='no'
  hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
  hardcode_libdir_separator=:
  inherit_rpath=yes
  link_all_deplibs=yes
  ;;

netbsd*)
  if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags' # a.out
  else

```



```

        archive_cmds='$LD -shared -o $lib $libobjs $deplibs
$linker_flags'          # ELF
        fi
        hardcode_libdir_flag_spec='-R$libdir'
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        ;;

newsos6)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=yes
        hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
        hardcode_libdir_separator=:
        hardcode_shlibpath_var=no
        ;;

*nto* | *qnx*)
        ;;

openbsd*)
        if test -f /usr/libexec/ld.so; then
            hardcode_direct=yes
            hardcode_shlibpath_var=no
            hardcode_direct_absolute=yes
            if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
                archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
                archive_expsym_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags ${wl}-retain-symbols-file,$export_symbols'
                hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
                export_dynamic_flag_spec='${wl}-E'
            else
                case $host_os in
                    openbsd[01].* | openbsd2.[0-7] | openbsd2.[0-7].*)
                        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
                        hardcode_libdir_flag_spec='-R$libdir'
                        ;;
                    *)
                        archive_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags'
                        hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
                        ;;
                esac
            fi
        else
            ld_shlibs=no
        fi
        ;;

```

```

os2*)
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_minus_L=yes
    allow_undefined_flag=unsupported
    archive_cmds='$ECHO "LIBRARY $libname INITINSTANCE" >
$output_objdir/$libname.def~$ECHO "DESCRIPTION \"$libname\"" >>
$output_objdir/$libname.def~echo DATA >>
$output_objdir/$libname.def~echo " SINGLE NONSHARED" >>
$output_objdir/$libname.def~echo EXPORTS >>
$output_objdir/$libname.def~emxexp $libobjs >>
$output_objdir/$libname.def~$CC -Zdll -Zcrtdll -o $lib $libobjs
$deplibs $compiler_flags $output_objdir/$libname.def'
    old_archive_from_new_cmds='emximp -o $output_objdir/$libname.a
$output_objdir/$libname.def'
    ;;

osf3*)
    if test "$GCC" = yes; then
        allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$verstring" && func_echo_all "${wl}-set_version ${wl}$verstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
    else
        allow_undefined_flag=' -expect_unresolved \*'
        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -soname $soname `test -n "$verstring" &&
func_echo_all "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
    fi
    archive_cmds_need_lc='no'
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    ;;

osf4* | osf5*)    # as osf3* with the addition of -msym flag
    if test "$GCC" = yes; then
        allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
        archive_cmds='$CC -shared${allow_undefined_flag} $pic_flag
$libobjs $deplibs $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$verstring" && func_echo_all "${wl}-set_version
${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
        hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    else
        allow_undefined_flag=' -expect_unresolved \*'
        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -msym -soname $soname `test -n "$verstring"
&& func_echo_all "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
    fi

```

```

        archive_expsym_cmds='for i in `cat $export_symbols`; do printf
"%s %s\n" -exported_symbol "\$i" >> $lib.exp; done; printf "%s\n" "-
hidden">> $lib.exp~
        $CC -shared${allow_undefined_flag} ${wl}-input ${wl}$lib.exp
$compiler_flags $libobjs $deplibs -soname $soname `test -n
"$verstring" && $ECHO "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib~$RM $lib.exp'

        # Both c and cxx compiler support -rpath directly
hardcode_libdir_flag_spec='-rpath $libdir'
        fi
        archive_cmds_need_lc='no'
hardcode_libdir_separator=:
        ;;

solaris*)
        no_undefined_flag='-z defs'
        if test "$GCC" = yes; then
                wlarc='${wl}'
                archive_cmds='$CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-h
${wl}$soname -o $lib $libobjs $deplibs $compiler_flags'
                archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
                $CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-M ${wl}$lib.exp
${wl}-h ${wl}$soname -o $lib $libobjs $deplibs $compiler_flags~$RM
$lib.exp'
                else
                case ` $CC -V 2>&1 ` in
                *"Compilers 5.0"*)
                        wlarc=''
                        archive_cmds='$LD -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $linker_flags'
                        archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
                        $LD -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $linker_flags~$RM $lib.exp'
                        ;;
                *)
                        wlarc='${wl}'
                        archive_cmds='$CC -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $compiler_flags'
                        archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
                        $CC -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $compiler_flags~$RM $lib.exp'
                        ;;
                esac
        fi
        hardcode_libdir_flag_spec='-R$libdir'

```

```

hardcode_shlibpath_var=no
case $host_os in
solaris2.[0-5] | solaris2.[0-5].*) ;;
*)
# The compiler driver will combine and reorder linker options,
# but understands '-z linker_flag'. GCC discards it without
`$wl',
# but is careful enough not to reorder.
# Supported since Solaris 2.6 (maybe 2.5.1?)
if test "$GCC" = yes; then
whole_archive_flag_spec='${wl}-z ${wl}allextract$convenience
`${wl}-z ${wl}defaultextract'
else
whole_archive_flag_spec='-z allextract$convenience -z
defaultextract'
fi
;;
esac
link_all_deplibs=yes
;;

sunos4*)
if test "x$host_vendor" = xsequent; then
# Use $CC to link under sequent, because it throws in some extra
.o
# files that make .init and .fini sections work.
archive_cmds='$CC -G ${wl}-h $soname -o $lib $libobjs $deplibs
$compiler_flags'
else
archive_cmds='$LD -assert pure-text -Bstatic -o $lib $libobjs
$deplibs $linker_flags'
fi
hardcode_libdir_flag_spec='-L$libdir'
hardcode_direct=yes
hardcode_minus_L=yes
hardcode_shlibpath_var=no
;;

sysv4)
case $host_vendor in
sni)
archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
hardcode_direct=yes # is this really true???
;;
siemens)
## LD is ld it makes a PLAMLIB
## CC just makes a GrossModule.
archive_cmds='$LD -G -o $lib $libobjs $deplibs $linker_flags'
reload_cmds='$CC -r -o $output$reload_objs'
hardcode_direct=no
;;

```

```

        motorola)
            archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
            hardcode_direct=no #Motorola manual says yes, but my tests say
they lie
            ;;
            esac
            runpath_var='LD_RUN_PATH'
            hardcode_shlibpath_var=no
            ;;

sysv4.3*)
            archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
            hardcode_shlibpath_var=no
            export_dynamic_flag_spec='-Bexport'
            ;;

sysv4*MP*)
            if test -d /usr/nec; then
                archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
                hardcode_shlibpath_var=no
                runpath_var=LD_RUN_PATH
                hardcode_runpath_var=yes
                ld_shlibs=yes
            fi
            ;;

sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
            no_undefined_flag='${wl}-z,text'
            archive_cmds_need_lc=no
            hardcode_shlibpath_var=no
            runpath_var='LD_RUN_PATH'

            if test "$GCC" = yes; then
                archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
                archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
            else
                archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
                archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
            fi
            ;;

sysv5* | sco3.2v5* | sco5v6*)
            # Note: We can NOT use -z defs as we might desire, because we do
not

```

```

# link with -lc, and that would cause any symbols used from libc
to
# always be unresolved, which means just about no library would
# ever link correctly.  If we're not using GNU ld we use -z text
# though, which does catch some bad symbols but isn't as heavy-
handed
# as -z defs.
no_undefined_flag='${wl}-z,text'
allow_undefined_flag='${wl}-z,nodefs'
archive_cmds_need_lc=no
hardcode_shlibpath_var=no
hardcode_libdir_flag_spec='${wl}-R,$libdir'
hardcode_libdir_separator=':'
link_all_deplibs=yes
export_dynamic_flag_spec='${wl}-Bexport'
runpath_var='LD_RUN_PATH'

if test "$GCC" = yes; then
  archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
  archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
else
  archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
  archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
fi
;;

uts4*)
  archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
  hardcode_libdir_flag_spec='-L$libdir'
  hardcode_shlibpath_var=no
  ;;

*)
  ld_shlibs=no
  ;;
esac

if test x$host_vendor = xsni; then
  case $host in
    sysv4 | sysv4.2uw2* | sysv4.3* | sysv5*)
      export_dynamic_flag_spec='${wl}-Blargedynsym'
      ;;
    esac
fi
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs" >&5

```

```

$as_echo "$ld_shlibs" >&6; }
test "$ld_shlibs" = no && can_build_shared=no

with_gnu_ld=$with_gnu_ld

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc" in
x|xyes)
    # Assume -lc should be added
    archive_cmds_need_lc=yes

    if test "$enable_shared" = yes && test "$GCC" = yes; then
        case $archive_cmds in
        *'~'*)
            # FIXME: we may have to deal with multi-command sequences.
            ;;
        '$CC '* )
            # Test whether the compiler implicitly links with -lc since on
some
            # systems, -lgcc has to come before -lc. If gcc already passes -
lc
            # to ld, don't add -lc before -lgcc.
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$as_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }
if ${lt_cv_archive_cmds_need_lc+:} false; then :
    $as_echo_n "(cached) " >&6
else
    $RM conftest*
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

    if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?

```

```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } 2>confptest.err; then
    soname=confptest
    lib=confptest
    libobjs=confptest.$ac_objext
    deplibs=
    wl=$lt_prog_compiler_wl
    pic_flag=$lt_prog_compiler_pic
    compiler_flags=-v
    linker_flags=-v
    verstring=
    output_objdir=.
    libname=confptest
    lt_save_allow_undefined_flag=$allow_undefined_flag
    allow_undefined_flag=
    if { { eval echo "\"\$as_me\"":${as_lineno-$LINENO}:
\"$archive_cmds 2\>\&1 \ | $GREP \" -lc \" \>/dev/null 2\>\&1\""; } >&5
    (eval $archive_cmds 2\>\&1 \ | $GREP \" -lc \" \>/dev/null 2\>\&1)
2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
    test $ac_status = 0; }
        then
            lt_cv_archive_cmds_need_lc=no
        else
            lt_cv_archive_cmds_need_lc=yes
        fi
        allow_undefined_flag=$lt_save_allow_undefined_flag
    else
        cat confptest.err 1>&5
    fi
    $RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc" >&5
$as_echo "$lt_cv_archive_cmds_need_lc" >&6; }
    archive_cmds_need_lc=$lt_cv_archive_cmds_need_lc
    ;;
esac
fi
;;
esac

```



```
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }

if test "$GCC" = yes; then
  case $host_os in
    darwin*) lt_awk_arg="/^libraries:/,/LR/" ;;
    *) lt_awk_arg="/^libraries:/" ;;
  esac
  case $host_os in
    mingw* | cegcc*) lt_sed_strip_eq="s,=\([A-Za-z]:\) ,\1,g" ;;
    *) lt_sed_strip_eq="s,=/,/,g" ;;
  esac
esac
```

```

    lt_search_path_spec=`$CC -print-search-dirs | awk $lt_awk_arg | $SED
-e "s/^libraries:/" -e $lt_sed_strip_eq`
    case $lt_search_path_spec in
    *\;* )
        # if the path contains ";" then we assume it to be the separator
        # otherwise default to the standard path separator (i.e. ":") - it
is
        # assumed that no part of a normal pathname contains ";" but that
should
        # okay in the real world where ";" in dirpaths is itself
problematic.
        lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED 's/;/
/g'`
        ;;
    *)
        lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED
"s/$PATH_SEPARATOR/ /g"`
        ;;
    esac
    # Ok, now we have the path, separated by spaces, we can step through
it
    # and add multilib dir if necessary.
    lt_tmp_lt_search_path_spec=
    lt_multi_os_dir=`$CC $CPPFLAGS $CFLAGS $LDFLAGS -print-multi-os-
directory 2>/dev/null`
    for lt_sys_path in $lt_search_path_spec; do
        if test -d "$lt_sys_path/$lt_multi_os_dir"; then
            lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path/$lt_multi_os_dir"
        else
            test -d "$lt_sys_path" && \
                lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path"
        fi
    done
    lt_search_path_spec=`$ECHO "$lt_tmp_lt_search_path_spec" | awk '
BEGIN {RS=" "; FS="|\n";} {
    lt_foo="";
    lt_count=0;
    for (lt_i = NF; lt_i > 0; lt_i--) {
        if ($lt_i != "" && $lt_i != ".") {
            if ($lt_i == "..") {
                lt_count++;
            } else {
                if (lt_count == 0) {
                    lt_foo="/" $lt_i lt_foo;
                } else {
                    lt_count--;
                }
            }
        }
    }
}'`
}

```

```

    if (lt_foo != "") { lt_freq[lt_foo]++; }
    if (lt_freq[lt_foo] == 1) { print lt_foo; }
}'`
# AWK program above erroneously prepends '/' to C:/dos/paths
# for these hosts.
case $host_os in
    mingw* | cegcc*) lt_search_path_spec=`$ECHO "$lt_search_path_spec"
|\
    $SED 's,/\/\([A-Za-z]:\),\1,g'` ;;
    esac
    sys_lib_search_path_spec=`$ECHO "$lt_search_path_spec" | $lt_NL2SP`
else
    sys_lib_search_path_spec="/lib /usr/lib /usr/local/lib"
fi
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
finish_eval=
shlibpath_var=
shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
aix3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
    shlibpath_var=LIBPATH

    # AIX 3 has no versioning support, so we append a major version to
the name.
    soname_spec='${libname}${release}${shared_ext}$major'
    ;;

aix[4-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no

```

```

need_version=no
hardcode_into_libs=yes
if test "$host_cpu" = ia64; then
    # AIX 5 supports IA64
    library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
else
    # With GCC up to 2.95.x, collect2 would create an import file
    # for dependence libraries. The import file would start with
    # the line `#! .'. This would cause the generated library to
    # depend on `.', always an invalid library. This was fixed in
    # development snapshots of GCC prior to 3.0.
    case $host_os in
        aix4 | aix4.[01] | aix4.[01].*)
            if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)'
                echo ' yes '
                echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
                :
            else
                can_build_shared=no
            fi
        ;;
    esac
    # AIX (on Power*) has no versioning support, so currently we can
    not hardcode correct
    # soname into executable. Probably we can add versioning support
    to
    # collect2, so additional links can be useful in future.
    if test "$aix_use_runtimelinking" = yes; then
        # If using run time linking (on AIX 4.2 or later) use
        lib<name>.so
        # instead of lib<name>.a to let people know that these are not
        # typical AIX shared libraries.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    else
        # We preserve .a as extension for shared libraries through
        AIX4.2
        # and later when we are not doing run time linking.
        library_names_spec='${libname}${release}.a $libname.a'
        soname_spec='${libname}${release}${shared_ext}$major'
    fi
    shlibpath_var=LIBPATH
fi
;;

amigaos*)
    case $host_cpu in
        powerpc)
            # Since July 2007 AmigaOS4 officially supports .so libraries.

```

```

    # When compiling the executable, add -use-dynld -lsobjs: to the
    compileline.
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    ;;
m68k)
    library_names_spec='$libname.ixlibrary $libname.a'
    # Create ${libname}_ixlibrary.a entries in /sys/libs.
    finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
\'\'s^\./\([^/]*\)\.ixlibrary$%\1%\''\'`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
    ;;
esac
;;

beos*)
    library_names_spec='${libname}${shared_ext}'
    dynamic_linker="$host_os ld.so"
    shlibpath_var=LIBRARY_PATH
    ;;

bsdi[45]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
    sys_lib_dlsearch_path_spec="/shlib /usr/lib /usr/local/lib"
    # the default ld.so.conf also contains /usr/contrib/lib and
    # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
    # libtool to hard-code these into programs
    ;;

cygwin* | mingw* | pw32* | cegcc*)
    version_type=windows
    shrext_cmds=".dll"
    need_version=no
    need_lib_prefix=no

    case $GCC,$cc_basename in
    yes,*)
        # gcc
        library_names_spec='$libname.dll.a'

```

```

# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
  dlpath=`$SHELL 2>&1 -c '\'''. $dir/\'''\${base_file}\'''\`i; echo
\${dlname}\'''\`~
  dldir=$destdir/`dirname \${dlpath}`~
  test -d \${dldir} || mkdir -p \${dldir}~
  $install_prog $dir/\${dlname} \${dldir}/\${dlname}~
  chmod a+x \${dldir}/\${dlname}~
  if test -n '\'''\${striptme}\'''\` && test -n '\'''\${striplib}\'''\`; then
    eval '\'''\${striplib} \${dldir}/\${dlname}\'''\` || exit \${?};
  fi'
postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\'''. $file; echo
\${dlname}\'''\`~
  dlpath=$dir/\${dldll}~
  $RM \${dlpath}'
shlibpath_overrides_runpath=yes

case $host_os in
cygwin*)
  # Cygwin DLLs use 'cyg' prefix rather than 'lib'
  soname_spec=`echo \${libname} | sed -e 's/^lib/cyg/'``echo
\${release} | $SED -e 's/[.]/-/g'\` \${versuffix}\${shared_ext}'

  sys_lib_search_path_spec="$sys_lib_search_path_spec
/usr/lib/w32api"
  ;;
mingw* | cegcc*)
  # MinGW DLLs use traditional 'lib' prefix
  soname_spec='\${libname}`echo \${release} | $SED -e 's/[.]/-
/g'\` \${versuffix}\${shared_ext}'
  ;;
pw32*)
  # pw32 DLLs use 'pw' prefix rather than 'lib'
  library_names_spec=`echo \${libname} | sed -e 's/^lib/pw/'``echo
\${release} | $SED -e 's/[.]/-/g'\` \${versuffix}\${shared_ext}'
  ;;
esac
dynamic_linker='Win32 ld.exe'
;;

*,cl*)
# Native MSVC
libname_spec='\$name'
soname_spec='\${libname}`echo \${release} | $SED -e 's/[.]/-
/g'\` \${versuffix}\${shared_ext}'
library_names_spec='\${libname}.dll.lib'

case $build_os in
mingw*)
  sys_lib_search_path_spec=
  lt_save_ifs=$IFS
  IFS=';'

```



```

for lt_path in $LIB
do
  IFS=$lt_save_ifs
  # Let DOS variable expansion print the short 8.3 style file
name.
  lt_path=`cd "$lt_path" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si"`
  sys_lib_search_path_spec="$sys_lib_search_path_spec $lt_path"
done
  IFS=$lt_save_ifs
  # Convert to MSYS style.
  sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\|/|g' -e 's| \\\([a-zA-Z]\\|) :| /\\|g' -e 's|^| |'`
  ;;
cygwin*)
  # Convert to unix form, then to dos form, then back to unix form
  # but this time dos style (no spaces!) so that the unix form
looks
  # like /cygdrive/c/PROGRA~1:/cygdr...
  sys_lib_search_path_spec=`cygpath --path --unix "$LIB"`
  sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null`
  sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g"`
  ;;
*)
  sys_lib_search_path_spec="$LIB"
  if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zA-Z]:/'
>/dev/null; then
    # It is most probably a Windows format PATH.
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's;/;/ /g'`
  else
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g"`
  fi
  # FIXME: find the short name or the path components, as spaces
are
  # common. (e.g. "Program Files" -> "PROGRA~1")
  ;;
esac

# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
dldir=`$SHELL 2>&1 -c '\\'. $dir/\\'\${base_file}'\\'`; echo
\${dldir}'\\'~
dldir=$destdir/`dirname \${dldir}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dldir} \${dldir}/\${dldir}'
postuninstall_cmds='dldir=`$SHELL 2>&1 -c '\\'. $file; echo
\${dldir}'\\'~
dldir=$dir/\${dldir}~

```

```

    $RM \${dpath}'
shlibpath_overrides_runpath=yes
dynamic_linker='Win32 link.exe'
;;

*)
# Assume MSVC wrapper
library_names_spec='${libname}`echo ${release} | $SED -e 's/[.]'/-
/g'`${versuffix}${shared_ext} $libname.lib'
dynamic_linker='Win32 ld.exe'
;;
esac
# FIXME: first we should search . and the directory the executable
is in
shlibpath_var=PATH
;;

darwin* | rhapsody*)
dynamic_linker="$host_os dyld"
version_type=darwin
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${major}${shared_ext}
${libname}${shared_ext}'
soname_spec='${libname}${release}${major}${shared_ext}'
shlibpath_overrides_runpath=yes
shlibpath_var=DYLD_LIBRARY_PATH
shrext_cmds='`test .$module = .yes && echo .so || echo .dylib`'

sys_lib_search_path_spec="$sys_lib_search_path_spec /usr/local/lib"
sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
;;

dgux*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}${versuffix}
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
shlibpath_var=LD_LIBRARY_PATH
;;

freebsd* | dragonfly*)
# DragonFly does not have a.out.  When/if they implement a new
# versioning mechanism, adjust this.
if test -x /usr/bin/objformat; then
  objformat=`/usr/bin/objformat`
else
  case $host_os in
    freebsd[23].*) objformat=aout ;;

```

```

    *) objformat=elf ;;
    esac
fi
version_type=freebsd- $\$objformat$ 
case  $\$version\_type$  in
    freebsd-elf*)
        library_names_spec=' $\{libname\}\{release\}\{shared\_ext\}\$versuffix$ 
 $\{libname\}\{release\}\{shared\_ext\} \$libname\{shared\_ext\}$ '
        need_version=no
        need_lib_prefix=no
        ;;
    freebsd-*)
        library_names_spec=' $\{libname\}\{release\}\{shared\_ext\}\$versuffix$ 
 $\$libname\{shared\_ext\}\$versuffix$ '
        need_version=yes
        ;;
    esac
shlibpath_var=LD_LIBRARY_PATH
case  $\$host\_os$  in
    freebsd2.*)
        shlibpath_overrides_runpath=yes
        ;;
    freebsd3.[01]* | freebsdelf3.[01]*)
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
    freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
    freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
        shlibpath_overrides_runpath=no
        hardcode_into_libs=yes
        ;;
    *) # from 4.6 on, and DragonFly
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
    esac
;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
    refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec=' $\{libname\}\{release\}\{shared\_ext\}\$versuffix$ 
 $\{libname\}\{release\}\{shared\_ext\}\{major\} \$libname\{shared\_ext\}$ '
    soname_spec=' $\{libname\}\{release\}\{shared\_ext\}\$major$ '
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

haiku*)

```

```

    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in
    ia64*)
        shrext_cmds='.so'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.so"
        shlibpath_var=LD_LIBRARY_PATH
        shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        if test "X$HPUX_IA64_MODE" = X32; then
            sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
        else
            sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
        fi
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
    ;;
    hppa*64*)
        shrext_cmds='.sl'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.sl"
        shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
    ;;

```

```

*)
  shrext_cmds='.sl'
  dynamic_linker="$host_os dld.sl"
  shlibpath_var=SHLIB_PATH
  shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  ;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
  version_type=linux # correct to gnu/linux during the next big
refactor
  need_lib_prefix=no
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
  shlibpath_var=LD_LIBRARY_PATH
  shlibpath_overrides_runpath=no
  hardcode_into_libs=yes
  ;;

irix5* | irix6* | nonstopux*)
  case $host_os in
    nonstopux*) version_type=nonstopux ;;
    *)
      if test "$lt_cv_prog_gnu_ld" = yes; then
        version_type=linux # correct to gnu/linux during the next
big refactor
      else
        version_type=irix
      fi ;;
  esac
  need_lib_prefix=no
  need_version=no
  soname_spec='${libname}${release}${shared_ext}$major'
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext} $libname${shared_ext}'
  case $host_os in
    irix5* | nonstopux*)
      libsuff= shlibsuff=

```

```

;;
*)
case $LD in # libtool.m4 will add one of these switches to LD
*-32|*" -32 "|*-melf32bsmip|*" -melf32bsmip ")
    libsuff= shlibsuff= libmagic=32-bit;;
*-n32|*" -n32 "|*-melf32bmipn32|*" -melf32bmipn32 ")
    libsuff=32 shlibsuff=N32 libmagic=N32;;
*-64|*" -64 "|*-melf64bmip|*" -melf64bmip ")
    libsuff=64 shlibsuff=64 libmagic=64-bit;;
*) libsuff= shlibsuff= libmagic=never-match;;
esac
;;
esac
shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
shlibpath_overrides_runpath=no
sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
/usr/local/lib${libsuff}"
sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
hardcode_into_libs=yes
;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)
    dynamic_linker=no
;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no

    # Some binutils ld are patched to set DT_RUNPATH
    if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        lt_cv_shlibpath_overrides_runpath=no
        save_LDFLAGS=$LDFLAGS
        save_libdir=$libdir
        eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl\"; \
            LDFLAGS=\"\$LDFLAGS $hardcode_libdir_flag_spec\""
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int

```

```

main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    if ($OBJDUMP -p conftest$sac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
        lt_cv_shlibpath_overrides_runpath=yes
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
    LDFLAGS=$save_LDFLAGS
    libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.
# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
    lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \2)); skip = 1; } { if (!skip) print \2; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ ]*hwcap[ ]/d;s/[: , ]/
/g;s/=[^=]*$/;/s/=[^= ]* / /g;s/"//g;/^$/d' | tr '\n' ' '`
    sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker.  Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.
dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'

```

```

    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m \$libdir'
    dynamic_linker='NetBSD (a.out) ld.so'
else
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='NetBSD ld.elf_so'
fi
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
;;

newsos6)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    ;;

*nto* | *qnx*)
    version_type=qnx
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    dynamic_linker='ldqnx.so'
    ;;

openbsd*)
    version_type=sunos
    sys_lib_dlsearch_path_spec="/usr/lib"
    need_lib_prefix=no
    # Some older versions of OpenBSD (3.3 at least) *do* need versioned
libs.
    case $host_os in
        openbsd3.3 | openbsd3.3.*)    need_version=yes ;;
        *)                            need_version=no  ;;
    esac
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m \$libdir'
    shlibpath_var=LD_LIBRARY_PATH
    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        case $host_os in

```



```

        openbsd2.[89] | openbsd2.[89].*)
shlibpath_overrides_runpath=no
;;
    *)
shlibpath_overrides_runpath=yes
;;
    esac
else
shlibpath_overrides_runpath=yes
fi
;;

os2*)
libname_spec='$name'
shrext_cmds=".dll"
need_lib_prefix=no
library_names_spec='$libname${shared_ext} $libname.a'
dynamic_linker='OS/2 ld.exe'
shlibpath_var=LIBPATH
;;

osf3* | osf4* | osf5*)
version_type=osf
need_lib_prefix=no
need_version=no
soname_spec='${libname}${release}${shared_ext}$major'
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
shlibpath_var=LD_LIBRARY_PATH
sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
;;

rdos*)
dynamic_linker=no
;;

solaris*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
# ldd complains unless libraries are executable
postinstall_cmds='chmod +x $lib'
;;

```

```

sunos4*)
    version_type=sunos
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
;;

```

```

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)
            shlibpath_overrides_runpath=no
            need_lib_prefix=no
            runpath_var=LD_RUN_PATH
            ;;
        siemens)
            need_lib_prefix=no
            ;;
        motorola)
            need_lib_prefix=no
            need_version=no
            shlibpath_overrides_runpath=no
            sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
            ;;
    esac
;;

```

```

sysv4*MP*)
    if test -d /usr/nec ;then
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='$libname${shared_ext}.$versuffix
$libname${shared_ext}.$major $libname${shared_ext}'
        soname_spec='$libname${shared_ext}.$major'
        shlibpath_var=LD_LIBRARY_PATH
    fi
;;

```

```

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf

```

```

    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
            ;;
        esac
    fi
    sys_lib_dlsearch_path_spec='/usr/lib'
;;

tpf*)
    # TPF is a cross-target only. Preferred cross-host = GNU/Linux.
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
;;

uts4*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
;;

*)
    dynamic_linker=no
;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

```

```
variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then
  variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec+set}" = set; then
  sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec+set}" = set; then
  sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi
```



```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking how to hardcode
library paths into programs" >&5
$as_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action=
if test -n "$hardcode_libdir_flag_spec" ||
    test -n "$runpath_var" ||
    test "X$hardcode_automatic" = "Xyes" ; then

    # We can hardcode non-existent directories.
    if test "$hardcode_direct" != no &&
        # If the only mechanism to avoid hardcoding is shlibpath_var, we
        # have to relink, otherwise we might link with an installed
library
        # when we should be linking with a yet-to-be-installed one
        ## test "$_LT_TAGVAR(hardcode_shlibpath_var, )" != no &&
        test "$hardcode_minus_L" != no; then
        # Linking always hardcodes the temporary library directory.
        hardcode_action=relink
    else
        # We can link without hardcoding, and we can hardcode nonexisting
dirs.
        hardcode_action=immediate
    fi
else
    # We cannot hardcode anything, or else we can only hardcode existing
# directories.
    hardcode_action=unsupported
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hardcode_action" >&5
$as_echo "$hardcode_action" >&6; }

if test "$hardcode_action" = relink ||
    test "$inherit_rpath" = yes; then
    # Fast installation is not supported
    enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
    test "$enable_shared" = no; then
    # Fast installation is not necessary
    enable_fast_install=needless
fi

    if test "x$enable_dlopen" != xyes; then
        enable_dlopen=unknown
        enable_dlopen_self=unknown
        enable_dlopen_self_static=unknown
    else

```

```

lt_cv_dlopen=no
lt_cv_dlopen_libs=

case $host_os in
beos*)
  lt_cv_dlopen="load_add_on"
  lt_cv_dlopen_libs=
  lt_cv_dlopen_self=yes
  ;;

mingw* | pw32* | cegcc*)
  lt_cv_dlopen="LoadLibrary"
  lt_cv_dlopen_libs=
  ;;

cygwin*)
  lt_cv_dlopen="dlopen"
  lt_cv_dlopen_libs=
  ;;

darwin*)
  # if libdl is installed we need to link against it
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_dl_dlopen=yes
else
  ac_cv_lib_dl_dlopen=no

```

```

fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else

    lt_cv_dlopen="dyld"
    lt_cv_dlopen_libs=
    lt_cv_dlopen_self=yes

fi

;;

*)
    ac_fn_c_check_func "$LINENO" "shl_load" "ac_cv_func_shl_load"
if test "x$ac_cv_func_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for shl_load in -
ldld" >&5
$as_echo_n "checking for shl_load in -ldld... " >&6; }
if ${ac_cv_lib_dld_shl_load+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char shl_load ();
int
main ()
{
return shl_load ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

```



```

    ac_cv_lib_dld_shl_load=yes
else
    ac_cv_lib_dld_shl_load=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_shl_load" >&5
$as_echo "$ac_cv_lib_dld_shl_load" >&6; }
if test "x$ac_cv_lib_dld_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load" lt_cv_dlopen_libs="-ldld"
else
    ac_fn_c_check_func "$LINENO" "dlopen" "ac_cv_func_dlopen"
if test "x$ac_cv_func_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
lsvld" >&5
$as_echo_n "checking for dlopen in -lsvld... " >&6; }
if ${ac_cv_lib_svld_dlopen+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lsvld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_svld_dlopen=yes
else
  ac_cv_lib_svld_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_svld_dlopen" >&5
$as_echo "$ac_cv_lib_svld_dlopen" >&6; }
if test "x$ac_cv_lib_svld_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-lsvld"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dld_link in -
ldld" >&5
$as_echo_n "checking for dld_link in -ldld... " >&6; }
if ${ac_cv_lib_dld_dld_link+:} false; then :

```

```

    $sas_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dld_link ();
int
main ()
{
return dld_link ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dld_dld_link=yes
else
    ac_cv_lib_dld_dld_link=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_dld_link" >&5
$sas_echo "$ac_cv_lib_dld_dld_link" >&6; }
if test "x$ac_cv_lib_dld_dld_link" = xyes; then :
    lt_cv_dlopen="dld_link" lt_cv_dlopen_libs="-ldld"
fi

fi

fi

fi

fi

fi

```

```

    ;;
esac

if test "x$lt_cv_dlopen" != xno; then
    enable_dlopen=yes
else
    enable_dlopen=no
fi

case $lt_cv_dlopen in
dlopen)
    save_CPPFLAGS="$CPPFLAGS"
    test "x$ac_cv_header_dlfcn_h" = xyes && CPPFLAGS="$CPPFLAGS -
DHAVE_DLFCN_H"

    save_LDFLAGS="$LDFLAGS"
    wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$export_dynamic_flag_spec\`"

    save_LIBS="$LIBS"
    LIBS="$lt_cv_dlopen_libs $LIBS"

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
program can dlopen itself" >&5
$as_echo_n "checking whether a program can dlopen itself... " >&6; }
if ${lt_cv_dlopen_self+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test "$cross_compiling" = yes; then :
        lt_cv_dlopen_self=cross
    else
        lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
        lt_status=$lt_dlunknown
        cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

#ifdef RTLD_GLOBAL
#   define LT_DLGLOBAL          RTLD_GLOBAL
#else
#   ifdef DL_GLOBAL
#       define LT_DLGLOBAL          DL_GLOBAL
#   else
#       define LT_DLGLOBAL          0
#   endif
#endif

```

```

#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
#  ifdef RTLD_LAZY
#    define LT_DLLAZY_OR_NOW          RTLD_LAZY
#  else
#    ifdef DL_LAZY
#      define LT_DLLAZY_OR_NOW        DL_LAZY
#    else
#      ifdef RTLD_NOW
#        define LT_DLLAZY_OR_NOW      RTLD_NOW
#      else
#        ifdef DL_NOW
#          define LT_DLLAZY_OR_NOW      DL_NOW
#        else
#          define LT_DLLAZY_OR_NOW      0
#        endif
#      endif
#    endif
#  endif
#endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#if defined(__GNUC__) && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOB|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else
        {
          if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
          else puts (dlerror ());
        }
      /* dlclose (self); */
    }
  else
    puts (dlerror ());

  return status;
}

```

```

_LT_EOF
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
  (eval $ac_link) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
  (./conftest; exit; ) >&5 2>/dev/null
  lt_status=$?
  case x$lt_status in
    x$lt_dlno_uscore) lt_cv_dlopen_self=yes ;;
    x$lt_dlneed_uscore) lt_cv_dlopen_self=yes ;;
    x$lt_dlunknown|x*) lt_cv_dlopen_self=no ;;
  esac
else :
  # compilation failed
  lt_cv_dlopen_self=no
fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_dlopen_self"
>&5
$as_echo "$lt_cv_dlopen_self" >&6; }

  if test "x$lt_cv_dlopen_self" = xyes; then
    wl=$lt_prog_compiler_wl eval LDFLAGS="\${LDFLAGS}
$lt_prog_compiler_static\"
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
statically linked program can dlopen itself" >&5
$as_echo_n "checking whether a statically linked program can dlopen
itself... " >&6; }
if ${lt_cv_dlopen_self_static+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    lt_cv_dlopen_self_static=cross
  else
    lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
    lt_status=$lt_dlunknown
    cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#ifdef HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

```

```

#ifdef RTLD_GLOBAL
# define LT_DLGLOBAL      RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL      DL_GLOBAL
# else
#   define LT_DLGLOBAL      0
# endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
# ifdef RTLD_LAZY
#   define LT_DLLAZY_OR_NOW      RTLD_LAZY
# else
#   ifdef DL_LAZY
#     define LT_DLLAZY_OR_NOW      DL_LAZY
#   else
#     ifdef RTLD_NOW
#       define LT_DLLAZY_OR_NOW RTLD_NOW
#     else
#       ifdef DL_NOW
#         define LT_DLLAZY_OR_NOW      DL_NOW
#       else
#         define LT_DLLAZY_OR_NOW      0
#       endif
#     endif
#   endif
# endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#ifdef __GNUC__ && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else
        {
          if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
        }
    }
}

```

```

        else puts (dlerror ());
    }
    /* dlclose (self); */
}
else
    puts (dlerror ());

return status;
}
_LT_EOF
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; } && test -s confptest${ac_exeext} 2>/dev/null;
then
    (./confptest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self_static=no ;;
    esac
else :
    # compilation failed
    lt_cv_dlopen_self_static=no
fi
fi
rm -fr confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_dlopen_self_static" >&5
$as_echo "$lt_cv_dlopen_self_static" >&6; }
fi

    CPPFLAGS="$save_CPPFLAGS"
    LDFLAGS="$save_LDFLAGS"
    LIBS="$save_LIBS"
    ;;
esac

case $lt_cv_dlopen_self in
yes|no) enable_dlopen_self=$lt_cv_dlopen_self ;;
*) enable_dlopen_self=unknown ;;
esac

case $lt_cv_dlopen_self_static in
yes|no) enable_dlopen_self_static=$lt_cv_dlopen_self_static ;;
*) enable_dlopen_self_static=unknown ;;

```



```
    esac
fi
```

```
striplib=
old_striplib=
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether stripping
libraries is possible" >&5
$as_echo_n "checking whether stripping libraries is possible... " >&6;
}
if test -n "$STRIP" && $STRIP -V 2>&1 | $GREP "GNU strip" >/dev/null;
then
    test -z "$old_striplib" && old_striplib="$STRIP --strip-debug"
    test -z "$striplib" && striplib="$STRIP --strip-unneeded"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
# FIXME - insert some real tests, host_os isn't really good enough
case $host_os in
darwin*)
    if test -n "$STRIP" ; then
        striplib="$STRIP -x"
        old_striplib="$STRIP -S"
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    fi
    ;;
*)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    ;;
esac
fi
```

```

# Report which library types will actually be built
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking if libtool
supports shared libraries" >&5
$sas_echo_n "checking if libtool supports shared libraries... " >&6; }
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $scan_build_shared"
>&5
$sas_echo "$scan_build_shared" >&6; }

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build
shared libraries" >&5
$sas_echo_n "checking whether to build shared libraries... " >&6; }
test "$scan_build_shared" = "no" && enable_shared=no

# On AIX, shared libraries and static libraries use the same
namespace, and
# are all built from PIC.
case $host_os in
aix3*)
test "$enable_shared" = yes && enable_static=no
if test -n "$RANLIB"; then
archive_cmds="$archive_cmds~\${RANLIB} \${lib}"
postinstall_cmds='${RANLIB} \${lib}'
fi
;;
aix[4-9]*)
if test "$host_cpu" != ia64 && test "$aix_use_runtimelinking" = no
; then
test "$enable_shared" = yes && enable_static=no
fi
;;
esac
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $enable_shared" >&5
$sas_echo "$enable_shared" >&6; }

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build
static libraries" >&5
$sas_echo_n "checking whether to build static libraries... " >&6; }
# Make sure either enable_shared or enable_static is yes.
test "$enable_shared" = yes || enable_static=yes
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $enable_static" >&5

```

```
$as_echo "$enable_static" >&6; }
```

```
fi  
ac_ext=c  
ac_cpp='$CPP $CPPFLAGS'  
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'  
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS  
conftest.$ac_ext $LIBS >&5'  
ac_compiler_gnu=$ac_cv_c_compiler_gnu  
  
CC="$lt_save_CC"
```

```
ac_config_commands="$ac_config_commands libtool"
```

```
# Only expand once:
```

```
# compress spaces in flags  
CFLAGS=`echo "$CFLAGS" | sed -e 's/ +/ /g'`  
CPPFLAGS=`echo "$CPPFLAGS" | sed -e 's/ +/ /g'`
```

```
if test x$enable_gcov = xyes; then  
    # so that config.h changes when you toggle gcov support
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define DBUS_GCOV_ENABLED __GNUC__ * 10000 + __GNUC_MINOR__ * 100 +  
__GNUC_PATCHLEVEL__  
_ACEOF
```

```
fi
```

```

#### Various functions
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing socket" >&5
$as_echo_n "checking for library containing socket... " >&6; }
if ${ac_cv_search_socket+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char socket ();
int
main ()
{
return socket ();
  ;
  return 0;
}
_ACEOF
for ac_lib in ' ' socket; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_socket=$ac_res
  fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
  if ${ac_cv_search_socket+:} false; then :
    break
  fi
done
if ${ac_cv_search_socket+:} false; then :

else
  ac_cv_search_socket=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_search_socket"
>&5

```

```

$as_echo "$ac_cv_search_socket" >&6; }
ac_res=$ac_cv_search_socket
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether socklen_t is
defined" >&5
$as_echo_n "checking whether socklen_t is defined... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>

int
main ()
{

socklen_t foo;
foo = 1;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  dbus_have_socklen_t=yes
else
  dbus_have_socklen_t=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_socklen_t"
>&5
$as_echo "$dbus_have_socklen_t" >&6; }

if test "x$dbus_have_socklen_t" = "xyes"; then

$as_echo "@%:@define HAVE_SOCKLEN_T 1" >>confdefs.h

fi

#### Abstract sockets

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'

```

```

ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking abstract socket
namespace" >&5
$as_echo_n "checking abstract socket namespace... " >&6; }
if ${ac_cv_have_abstract_sockets+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
>&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "cannot run test program while cross compiling
See \`config.log' for more details" "$LINENO" 5; }
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <stdlib.h>
#include <string.h>
#include <stdio.h>
#include <sys/socket.h>
#include <sys/un.h>
#include <errno.h>

int
main ()
{

  int listen_fd;
  struct sockaddr_un addr;

  listen_fd = socket (PF_UNIX, SOCK_STREAM, 0);

  if (listen_fd < 0)
    {
      fprintf (stderr, "socket() failed: %s\n", strerror (errno));
      exit (1);
    }

  memset (&addr, '\0', sizeof (addr));
  addr.sun_family = AF_UNIX;
  strcpy (addr.sun_path, "X/tmp/dbus-fake-socket-path-used-in-
configure-test");
  addr.sun_path[0] = '\0'; /* this is what makes it abstract */

  if (bind (listen_fd, (struct sockaddr*) &addr, SUN_LEN (&addr)) < 0)
    {
      fprintf (stderr, "Abstract socket namespace bind() failed:
%s\n",
              strerror (errno));

```

```

        exit (1);
    }
else
    exit (0);

;
return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    ac_cv_have_abstract_sockets=yes
else
    ac_cv_have_abstract_sockets=no

fi

rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$sac_cv_have_abstract_sockets" >&5
$as_echo "$ac_cv_have_abstract_sockets" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$sac_ext >&5'
ac_link='$CC -o conftest$sac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$sac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test x$enable_abstract_sockets = xyes; then
    if test x$sac_cv_have_abstract_sockets = xno; then
        as_fn_error $? "Abstract sockets explicitly required, and support
not detected." "$LINENO" 5
    fi
fi

if test x$enable_abstract_sockets = xno; then
    ac_cv_have_abstract_sockets=no;
fi

if test x$sac_cv_have_abstract_sockets = xyes ; then
    DBUS_PATH_OR_ABSTRACT=abstract

$as_echo "@%:@define HAVE_ABSTRACT_SOCKETS 1" >>confdefs.h

else
    DBUS_PATH_OR_ABSTRACT=path
fi

# this is used in addresses to prefer abstract, e.g.

```

```

# unix:path=/foo or unix:abstract=/foo

#### Sort out XML library

# see what we have
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
XML_ParserCreate_MM in -lexpat" >&5
$as_echo_n "checking for XML_ParserCreate_MM in -lexpat... " >&6; }
if ${ac_cv_lib_expat_XML_ParserCreate_MM+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lexpat $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char XML_ParserCreate_MM ();
int
main ()
{
return XML_ParserCreate_MM ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_expat_XML_ParserCreate_MM=yes
else
  ac_cv_lib_expat_XML_ParserCreate_MM=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_expat_XML_ParserCreate_MM" >&5
$as_echo "$ac_cv_lib_expat_XML_ParserCreate_MM" >&6; }
if test "x$ac_cv_lib_expat_XML_ParserCreate_MM" = xyes; then :
  for ac_header in expat.h
do :
  ac_fn_c_check_header_mongrel "$LINENO" "expat.h"
"ac_cv_header_expat_h" "$ac_includes_default"
if test "x$ac_cv_header_expat_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXPAT_H 1

```



```

_ACEOF
_have_expat=true
else
    have_expat=false
fi

done

else
    have_expat=false
fi

if ! $have_expat ; then
    as_fn_error $? "expat library not found, check config.log for failed
attempts" "$LINENO" 5
fi

XML_LIBS=-lexpat
XML_CFLAGS=

#### Set up final flags

if test "x${ac_cv_env_PKG_CONFIG_set}" != "xset"; then
    if test -n "${ac_tool_prefix}"; then
        # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
        be a program name with args.
        set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_path_PKG_CONFIG+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            case $PKG_CONFIG in
            [\\/] * | ?:[\\/] *)
                ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
                with a path.
                ;;
            *)
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in '' $ac_executable_extensions; do

```

```

    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
    ac_pt_PKG_CONFIG=$PKG_CONFIG
    # Extract the first word of "pkg-config", so it can be a program
    name with args.
    set dummy pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        case $ac_pt_PKG_CONFIG in
            [\\/]*) | ?:[\\/]*)
                ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
                override the test with a path.
                ;;
            *)
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in ' $ac_executable_extensions; do
                        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                            ac_cv_path_ac_pt_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
                            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                            break 2
                        fi
                    fi
                done
            fi
        fi
    fi
fi

```

```

done
  done
IFS=$as_save_IFS

  ;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
>&5
$as_echo "$ac_pt_PKG_CONFIG" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_pt_PKG_CONFIG" = x; then
    PKG_CONFIG=""
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    PKG_CONFIG=$ac_pt_PKG_CONFIG
  fi
else
  PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
  _pkg_min_version=0.9.0
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
$as_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }
  if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    PKG_CONFIG=""
  fi
fi
fi

```

```

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS" >&5
$as_echo_n "checking for DBUS... " >&6; }

if test -n "$DBUS_CFLAGS"; then
    pkg_cv_DBUS_CFLAGS="$DBUS_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-1 >= 1.2.16\>"; } >&5
        ($PKG_CONFIG --exists --print-errors "dbus-1 >= 1.2.16") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_CFLAGS=`$PKG_CONFIG --cflags "dbus-1 >= 1.2.16"
2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
if test -n "$DBUS_LIBS"; then
    pkg_cv_DBUS_LIBS="$DBUS_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-1 >= 1.2.16\>"; } >&5
        ($PKG_CONFIG --exists --print-errors "dbus-1 >= 1.2.16") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_LIBS=`$PKG_CONFIG --libs "dbus-1 >= 1.2.16" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
if test $_pkg_short_errors_supported = yes; then

```

```

        DBUS_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "dbus-1 >= 1.2.16" 2>&1`
        else
            DBUS_PKG_ERRORS=`$PKG_CONFIG --print-errors "dbus-1 >=
1.2.16" 2>&1`
        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_PKG_ERRORS" >&5

        as_fn_error $? "Package requirements (dbus-1 >= 1.2.16) were not
met:

$DBUS_PKG_ERRORS

Consider adjusting the PKG_CONFIG_PATH environment variable if you
installed software in a non-standard prefix.

Alternatively, you may set the environment variables DBUS_CFLAGS
and DBUS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details." "$LINENO" 5
    elif test $pkg_failed = untried; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

Alternatively, you may set the environment variables DBUS_CFLAGS
and DBUS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details.

To get pkg-config, see <http://pkg-config.freedesktop.org/>.
See `config.log' for more details" "$LINENO" 5; }
    else
        DBUS_CFLAGS=$pkg_cv_DBUS_CFLAGS
        DBUS_LIBS=$pkg_cv_DBUS_LIBS
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    fi

# Glib detection

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS_GLIB" >&5
$as_echo_n "checking for DBUS_GLIB... " >&6; }

```

```

if test -n "$DBUS_GLIB_CFLAGS"; then
    pkg_cv_DBUS_GLIB_CFLAGS="$DBUS_GLIB_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"gobject-2.0 >= 2.26, gio-2.0 >= 2.26\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gobject-2.0 >= 2.26, gio-2.0
>= 2.26") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_CFLAGS=`$PKG_CONFIG --cflags "gobject-2.0 >= 2.26,
gio-2.0 >= 2.26" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
else
    pkg_failed=untried
fi
if test -n "$DBUS_GLIB_LIBS"; then
    pkg_cv_DBUS_GLIB_LIBS="$DBUS_GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"gobject-2.0 >= 2.26, gio-2.0 >= 2.26\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gobject-2.0 >= 2.26, gio-2.0
>= 2.26") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_LIBS=`$PKG_CONFIG --libs "gobject-2.0 >= 2.26, gio-
2.0 >= 2.26" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
fi

if test $pkg_failed = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
    $as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
if
    if test $_pkg_short_errors_supported = yes; then

```

```

        DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "gobject-2.0 >= 2.26, gio-2.0 >= 2.26" 2>&1`
        else
            DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors
"gobject-2.0 >= 2.26, gio-2.0 >= 2.26" 2>&1`
        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_GLIB_PKG_ERRORS" >&5

        as_fn_error $? "Package requirements (gobject-2.0 >= 2.26, gio-
2.0 >= 2.26) were not met:

```

```
$DBUS_GLIB_PKG_ERRORS
```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables DBUS_GLIB_CFLAGS and DBUS_GLIB_LIBS to avoid the need to call pkg-config.

See the pkg-config man page for more details." "\$LINENO" 5

```
elif test $pkg_failed = untried; then
```

```
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
```

```
$as_echo "no" >&6; }
```

```
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
```

```
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
```

```
as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
```

```
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.
```

Alternatively, you may set the environment variables DBUS_GLIB_CFLAGS and DBUS_GLIB_LIBS to avoid the need to call pkg-config.

See the pkg-config man page for more details.

To get pkg-config, see <<http://pkg-config.freedesktop.org/>>.

```
See `config.log' for more details" "$LINENO" 5; }
```

```
else
```

```
    DBUS_GLIB_CFLAGS=$pkg_cv_DBUS_GLIB_CFLAGS
```

```
    DBUS_GLIB_LIBS=$pkg_cv_DBUS_GLIB_LIBS
```

```
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
```

```
$as_echo "yes" >&6; }
```

```
fi
```

```
pkg_failed=no
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
```

```
DBUS_GLIB_THREADS" >&5
```

```
$as_echo_n "checking for DBUS_GLIB_THREADS... " >&6; }
```

```
if test -n "$DBUS_GLIB_THREADS_CFLAGS"; then
```

```
    pkg_cv_DBUS_GLIB_THREADS_CFLAGS="$DBUS_GLIB_THREADS_CFLAGS"
```

```

elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"gthread-2.0 >= 2.6\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gthread-2.0 >= 2.6") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_THREADS_CFLAGS=`$PKG_CONFIG --cflags "gthread-2.0
>= 2.6" 2>/dev/null`
    else
        pkg_failed=yes
    fi
    else
        pkg_failed=untried
    fi
if test -n "$DBUS_GLIB_THREADS_LIBS"; then
    pkg_cv_DBUS_GLIB_THREADS_LIBS="$DBUS_GLIB_THREADS_LIBS"
    elif test -n "$PKG_CONFIG"; then
        if test -n "$PKG_CONFIG" && \
            { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"gthread-2.0 >= 2.6\""; } >&5
            ($PKG_CONFIG --exists --print-errors "gthread-2.0 >= 2.6") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
            test $ac_status = 0; }; then
            pkg_cv_DBUS_GLIB_THREADS_LIBS=`$PKG_CONFIG --libs "gthread-2.0 >=
2.6" 2>/dev/null`
        else
            pkg_failed=yes
        fi
        else
            pkg_failed=untried
        fi
fi

if test $pkg_failed = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
    $as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        DBUS_GLIB_THREADS_PKG_ERRORS=`$PKG_CONFIG --short-errors
--print-errors "gthread-2.0 >= 2.6" 2>&1`
    else
        DBUS_GLIB_THREADS_PKG_ERRORS=`$PKG_CONFIG --print-errors
"gthread-2.0 >= 2.6" 2>&1`

```



```

        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_GLIB_THREADS_PKG_ERRORS" >&5

        have_glib_threads=no
    elif test $pkg_failed = untried; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        have_glib_threads=no
    else
        DBUS_GLIB_THREADS_CFLAGS=$pkg_cv_DBUS_GLIB_THREADS_CFLAGS
        DBUS_GLIB_THREADS_LIBS=$pkg_cv_DBUS_GLIB_THREADS_LIBS
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
        have_glib_threads=yes
    fi

    if test x$have_glib_threads = xyes; then
        HAVE_GLIB_THREADS_TRUE=
        HAVE_GLIB_THREADS_FALSE='#'
    else
        HAVE_GLIB_THREADS_TRUE='#'
        HAVE_GLIB_THREADS_FALSE=
    fi

GLIB_GENMARSHAL=`$PKG_CONFIG --variable=glib_genmarshal glib-2.0`

DBUS_GLIB_TOOL_CFLAGS=$XML_CFLAGS
DBUS_GLIB_TOOL_LIBS="$XML_LIBS"

### gtk-doc Documentation

    # Extract the first word of "gtkdoc-check", so it can be a program
    name with args.
    set dummy gtkdoc-check; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_GTKDOC_CHECK+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        case $GTKDOC_CHECK in
        [\\/] * | ?:[\\/] *)

```

```

    ac_cv_path_GTKDOC_CHECK="$GTKDOC_CHECK" # Let the user override the
test with a path.
    ;;
*)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_GTKDOC_CHECK="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

    ;;
esac
fi
GTKDOC_CHECK=$ac_cv_path_GTKDOC_CHECK
if test -n "$GTKDOC_CHECK"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_CHECK" >&5
$as_echo "$GTKDOC_CHECK" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    for ac_prog in gtkdoc-rebase
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_GTKDOC_REBASE+:} false; then :
    $as_echo_n "(cached) " >&6
else
    case $GTKDOC_REBASE in
    [\\/] * | ?:[\\/] *)
        ac_cv_path_GTKDOC_REBASE="$GTKDOC_REBASE" # Let the user override
the test with a path.
        ;;
    *)
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_GTKDOC_REBASE="$as_dir/$ac_word$ac_exec_ext"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

;;
esac
fi
GTKDOC_REBASE=$ac_cv_path_GTKDOC_REBASE
if test -n "$GTKDOC_REBASE"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_REBASE" >&5
$as_echo "$GTKDOC_REBASE" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

test -n "$GTKDOC_REBASE" && break
done
test -n "$GTKDOC_REBASE" || GTKDOC_REBASE="true"

# Extract the first word of "gtkdoc-mkpdf", so it can be a program
name with args.
set dummy gtkdoc-mkpdf; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_GTKDOC_MKPDF+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $GTKDOC_MKPDF in
  [\\/] * | ?:[\\/] *)
    ac_cv_path_GTKDOC_MKPDF="$GTKDOC_MKPDF" # Let the user override the
test with a path.
    ;;
  *)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_GTKDOC_MKPDF="$as_dir/$ac_word$ac_exec_ext"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
GTKDOC_MKPDF=$ac_cv_path_GTKDOC_MKPDF
if test -n "$GTKDOC_MKPDF"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_MKPDF" >&5
$as_echo "$GTKDOC_MKPDF" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

@%:@ Check whether --with-html-dir was given.
if test "${with_html_dir+set}" = set; then :
    withval=$with_html_dir;
else
    with_html_dir='${datadir}/gtk-doc/html'
fi

HTML_DIR="$with_html_dir"

@%:@ Check whether --enable-gtk-doc was given.
if test "${enable_gtk_doc+set}" = set; then :
    enableval=$enable_gtk_doc;
else
    enable_gtk_doc=no
fi

if test x$enable_gtk_doc = xyes; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"gtk-doc >= 1.4\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gtk-doc >= 1.4") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        :
    else

```

```

    as_fn_error $? "You need to have gtk-doc >= 1.4 installed to build
$PACKAGE_NAME" "$LINENO" 5
fi
    if test "x$PACKAGE_NAME" != "xglib"; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GTKDOC_DEPS" >&5
$as_echo_n "checking for GTKDOC_DEPS... " >&6; }

if test -n "$GTKDOC_DEPS_CFLAGS"; then
    pkg_cv_GTKDOC_DEPS_CFLAGS="$GTKDOC_DEPS_CFLAGS"
    elif test -n "$PKG_CONFIG"; then
        if test -n "$PKG_CONFIG" && \
            { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0\""; } >&5
            ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.10.0 gobject-2.0
>= 2.10.0") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
            test $ac_status = 0; }; then
                pkg_cv_GTKDOC_DEPS_CFLAGS=`$PKG_CONFIG --cflags "glib-2.0 >= 2.10.0
gobject-2.0 >= 2.10.0" 2>/dev/null`
            else
                pkg_failed=yes
            fi
        else
            pkg_failed=untried
        fi
    if test -n "$GTKDOC_DEPS_LIBS"; then
        pkg_cv_GTKDOC_DEPS_LIBS="$GTKDOC_DEPS_LIBS"
        elif test -n "$PKG_CONFIG"; then
            if test -n "$PKG_CONFIG" && \
                { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0\""; } >&5
                ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.10.0 gobject-2.0
>= 2.10.0") 2>&5
                ac_status=$?
                $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
                test $ac_status = 0; }; then
                    pkg_cv_GTKDOC_DEPS_LIBS=`$PKG_CONFIG --libs "glib-2.0 >= 2.10.0
gobject-2.0 >= 2.10.0" 2>/dev/null`
                else
                    pkg_failed=yes
                fi
            else
                pkg_failed=untried
            fi
        fi
    if test $pkg_failed = yes; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        GTKDOC_DEPS_PKG_ERRORS=`$PKG_CONFIG --short-errors --
print-errors "glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0" 2>&1`
    else
        GTKDOC_DEPS_PKG_ERRORS=`$PKG_CONFIG --print-errors "glib-
2.0 >= 2.10.0 gobject-2.0 >= 2.10.0" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$GTKDOC_DEPS_PKG_ERRORS" >&5

    as_fn_error $? "Package requirements (glib-2.0 >= 2.10.0 gobject-
2.0 >= 2.10.0) were not met:

$GTKDOC_DEPS_PKG_ERRORS

```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables

```

GTKDOC_DEPS_CFLAGS
and GTKDOC_DEPS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details." "$LINENO" 5
elif test $pkg_failed = untried; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

```

Alternatively, you may set the environment variables

```

GTKDOC_DEPS_CFLAGS
and GTKDOC_DEPS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details.

```

To get pkg-config, see <<http://pkg-config.freedesktop.org/>>.

See `config.log' for more details" "\$LINENO" 5; }

```

else
    GTKDOC_DEPS_CFLAGS=$pkg_cv GTKDOC_DEPS_CFLAGS
    GTKDOC_DEPS_LIBS=$pkg_cv GTKDOC_DEPS_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```

```

fi
    fi
fi

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build
gtk-doc documentation" >&5
$sas_echo_n "checking whether to build gtk-doc documentation... " >&6;
}
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $enable_gtk_doc"
>&5
$sas_echo "$enable_gtk_doc" >&6; }

    @%:@ Check whether --enable-gtk-doc-html was given.
if test "${enable_gtk_doc_html+set}" = set; then :
    enableval=$enable_gtk_doc_html;
else
    enable_gtk_doc_html=yes
fi

    @%:@ Check whether --enable-gtk-doc-pdf was given.
if test "${enable_gtk_doc_pdf+set}" = set; then :
    enableval=$enable_gtk_doc_pdf;
else
    enable_gtk_doc_pdf=no
fi

if test -z "$GTKDOC_MKPDF"; then
    enable_gtk_doc_pdf=no
fi

    if test x$enable_gtk_doc = xyes; then
        ENABLE_GTK_DOC_TRUE=
        ENABLE_GTK_DOC_FALSE='#'
    else
        ENABLE_GTK_DOC_TRUE='#'
        ENABLE_GTK_DOC_FALSE=
    fi

    if test x$enable_gtk_doc_html = xyes; then
        GTK_DOC_BUILD_HTML_TRUE=
        GTK_DOC_BUILD_HTML_FALSE='#'
    else
        GTK_DOC_BUILD_HTML_TRUE='#'
        GTK_DOC_BUILD_HTML_FALSE=
    fi

    if test x$enable_gtk_doc_pdf = xyes; then
        GTK_DOC_BUILD_PDF_TRUE=
        GTK_DOC_BUILD_PDF_FALSE='#'

```

```

else
  GTK_DOC_BUILD_PDF_TRUE='#'
  GTK_DOC_BUILD_PDF_FALSE=
fi

  if test -n "$LIBTOOL"; then
    GTK_DOC_USE_LIBTOOL_TRUE=
    GTK_DOC_USE_LIBTOOL_FALSE='#'
  else
    GTK_DOC_USE_LIBTOOL_TRUE='#'
    GTK_DOC_USE_LIBTOOL_FALSE=
  fi

  if test -n "$GTKDOC_REBASE"; then
    GTK_DOC_USE_REBASE_TRUE=
    GTK_DOC_USE_REBASE_FALSE='#'
  else
    GTK_DOC_USE_REBASE_TRUE='#'
    GTK_DOC_USE_REBASE_FALSE=
  fi

##### Have to go $localstatedir->$prefix/var->/usr/local/var
##### someone please fix this a better way...

##### find the actual value for $prefix that we'll end up with
## (I know this is broken and should be done in the Makefile, but
## that's a major pain and almost nobody actually seems to care)
REAL_PREFIX=
if test "x$prefix" = "xNONE"; then
  REAL_PREFIX=$ac_default_prefix
else
  REAL_PREFIX=$prefix
fi

## temporarily change prefix and exec_prefix
old_prefix=$prefix
prefix=$REAL_PREFIX

if test "x$exec_prefix" = xNONE ; then
  REAL_EXEC_PREFIX=$REAL_PREFIX
else
  REAL_EXEC_PREFIX=$exec_prefix
fi
old_exec_prefix=$exec_prefix
exec_prefix=$REAL_EXEC_PREFIX

## eval everything
LOCALSTATEDIR_TMP="$localstatedir"
EXPANDED_LOCALSTATEDIR=`eval echo $LOCALSTATEDIR_TMP`

```



```
SYSCONFDIR_TMP="$sysconfdir"
EXPANDED_SYSCONFDIR=`eval echo $SYSCONFDIR_TMP`
```

```
BINDIR_TMP="$bindir"
EXPANDED_BINDIR=`eval echo $BINDIR_TMP`
```

```
LIBDIR_TMP="$libdir"
EXPANDED_LIBDIR=`eval echo $LIBDIR_TMP`
```

```
DATADIR_TMP="$datadir"
EXPANDED_DATADIR=`eval echo $DATADIR_TMP`
```

```
## put prefix and exec_prefix back
prefix=$old_prefix
exec_prefix=$old_exec_prefix
```

```
#### Tell tests where to find certain stuff in builddir
ABSOLUTE_TOP_BUILDDIR=`cd ${ac_top_builddir}. && pwd`
```

```
TEST_SERVICE_DIR=${ABSOLUTE_TOP_BUILDDIR}/test/data/valid-service-
files
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_SERVICE_DIR "$TEST_SERVICE_DIR"
_ACEOF
```

```
TEST_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-service
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_SERVICE_BINARY "$TEST_SERVICE_BINARY"
_ACEOF
```

```
TEST_SHELL_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-shell-
service
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_SHELL_SERVICE_BINARY "$TEST_SHELL_SERVICE_BINARY"
_ACEOF
```

```
TEST_CORE_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/core/test-  
service-glib
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_CORE_SERVICE_BINARY "$TEST_CORE_SERVICE_BINARY"  
_ACEOF
```

```
TEST_INTERFACES_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/interface  
s/test-service
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_INTERFACES_SERVICE_BINARY  
"$TEST_INTERFACES_SERVICE_BINARY"  
_ACEOF
```

```
TEST_EXIT_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-exit
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_EXIT_BINARY "$TEST_EXIT_BINARY"  
_ACEOF
```

```
TEST_SEGFAULT_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-segfault
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SEGFAULT_BINARY "$TEST_SEGFAULT_BINARY"  
_ACEOF
```

```
TEST_SLEEP_FOREVER_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-sleep-  
forever
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SLEEP_FOREVER_BINARY "$TEST_SLEEP_FOREVER_BINARY"  
_ACEOF
```

```
if ! test -z "$with_test_socket_dir" ; then
    TEST_SOCKET_DIR="$with_test_socket_dir"
else
    TEST_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_SOCKET_DIR "$TEST_SOCKET_DIR"
_ACEOF
```

```
ac_config_files="$ac_config_files Makefile m4/Makefile doc/Makefile
doc/reference/Makefile doc/reference/version.xml dbus/Makefile
dbus/examples/Makefile dbus/examples/statemachine/Makefile
test/Makefile test/core/Makefile test/interfaces/Makefile
test/data/valid-service-files/debug-glib.service test/data/valid-
service-files/debug-echo.service test/data/valid-service-
files/interfaces-test.service test/lib/Makefile test/manual/Makefile
tools/Makefile dbus-glib-1.pc dbus-glib-1-uninstalled.pc"
```

```
cat >confcache <<\_ACEOF
# This file is a shell script that caches the results of configure
# tests run on this system so they can be shared between configure
# scripts and configure runs, see configure's option --config-cache.
# It is not useful on other systems.  If it contains results you don't
# want to keep, you may remove or edit it.
#
# config.status only pays attention to the cache file if you give it
# the --recheck option to rerun configure.
#
# `ac_cv_env_foo' variables (set or unset) will be overridden when
# loading this file, other *unset* `ac_cv_foo' will be assigned the
# following values.
```

```
_ACEOF
```

```
# The following way of writing the cache mishandles newlines in
values,
# but we know of no workaround that is simple, portable, and
efficient.
# So, we kill variables containing newlines.
# Ultrix sh set writes to stderr and can't be redirected directly,
# and sets the high bit in the cache file unless we assign to the
vars.
(
  for ac_var in `(set) 2>&1 | sed -n 's/^\([a-zA-Z_][a-zA-Z0-
9_]*\)=.*/\1/p'`; do
    eval ac_val=\${$ac_var}
    case $ac_val in #(
```

```

*${as_nl}*)
  case $ac_var in #(
    *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5
$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
  esac
  case $ac_var in #(
    _ | IFS | as_nl) ;; #(
    BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
    *) { eval $ac_var=; unset $ac_var;} ;;
  esac ;;
esac
done

(set) 2>&1 |
  case $as_nl `(ac_space=' '; set) 2>&1` in #(
    *${as_nl}ac_space=\ *)
      # `set' does not quote correctly, so add quotes: double-quote
      # substitution turns \\ \\ into \, and sed turns \ into \.
      sed -n \
      "s/'/'\\\\\\\\'/g;

s/^\([_${as_cr_alnum}]*_cv_[_${as_cr_alnum}]*\)=\(.*\)/\1='\\2'/p"
      ;; #(
    *)
      # `set' quotes correctly as required by POSIX, so do not add
      quotes.
      sed -n "/^[_${as_cr_alnum}]*_cv_[_${as_cr_alnum}]*=/p"
      ;;
  esac |
  sort
) |
  sed '
/^ac_cv_env_/b end
t clear
:clear
s/^\([^=]*\)=\(.*\)[{}].*\)/test "${\1+set}" = set || &/
t end
s/^\([^=]*\)=\(.*\)/\1=${\1=\2}/
:end' >>confcache
if diff "$cache_file" confcache >/dev/null 2>&1; then ;; else
  if test -w "$cache_file"; then
    if test "x$cache_file" != "x/dev/null"; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: updating cache
$cache_file" >&5
$as_echo "$as_me: updating cache $cache_file" >&6;}
      if test ! -f "$cache_file" || test -h "$cache_file"; then
        cat confcache >"$cache_file"
      else
        case $cache_file in #(
          */* | ?:* )

```

```

        mv -f confcache "$cache_file"$$ &&
        mv -f "$cache_file"$$ "$cache_file" ;; #(
            *)
        mv -f confcache "$cache_file" ;;
    esac
    fi
fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: not updating unwritable
cache $cache_file" >&5
$as_echo "$as_me: not updating unwritable cache $cache_file" >&6;}
    fi
fi
rm -f confcache

test "x$prefix" = xNONE && prefix=$ac_default_prefix
# Let make expand exec_prefix.
test "x$exec_prefix" = xNONE && exec_prefix='${prefix}'

DEFS=-DHAVE_CONFIG_H

ac_libobjs=
ac_ltlibobjs=
U=
for ac_i in : $LIB@&t@OBSJ; do test "x$ac_i" = x: && continue
# 1. Remove the extension, and $U if already installed.
ac_script='s/\$U\././;s/\.o$//;s/\.obj$//'
ac_i=`$as_echo "$ac_i" | sed "$ac_script"`
# 2. Prepend LIBOBJDIR.  When used with automake>=1.10 LIBOBJDIR
# will be set to the directory where LIBOBSJ objects are built.
as_fn_append ac_libobjs " \${LIBOBJDIR}$ac_i\$U.$ac_objext"
as_fn_append ac_ltlibobjs " \${LIBOBJDIR}$ac_i"'\$U.lo'
done
LIB@&t@OBSJ=$ac_libobjs

LTLIBOBSJ=$ac_ltlibobjs

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking that generated files
are newer than configure" >&5
$as_echo_n "checking that generated files are newer than configure...
" >&6; }
    if test -n "$am_sleep_pid"; then
        # Hide warnings about reused PIDs.
        wait $am_sleep_pid 2>/dev/null
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: done" >&5
$as_echo "done" >&6; }
    if test -n "$EXEEXT"; then
        am_EXEEXT_TRUE=
        am_EXEEXT_FALSE='#'
    else

```

```

    am__EXEEXT_TRUE='#'
    am__EXEEXT_FALSE=
fi

if test -z "${MAINTAINER_MODE_TRUE}" && test -z
"${MAINTAINER_MODE_FALSE}"; then
    as_fn_error $? "conditional \"MAINTAINER_MODE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${AMDEP_TRUE}" && test -z "${AMDEP_FALSE}"; then
    as_fn_error $? "conditional \"AMDEP\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCC_TRUE}" && test -z
"${am__fastdepCC_FALSE}"; then
    as_fn_error $? "conditional \"am__fastdepCC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BASH_COMPLETION_TRUE}" && test -z
"${DBUS_BASH_COMPLETION_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BASH_COMPLETION\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUILD_TESTS_TRUE}" && test -z
"${DBUS_BUILD_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUILD_TESTS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_GLIB_THREADS_TRUE}" && test -z
"${HAVE_GLIB_THREADS_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_GLIB_THREADS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${ENABLE_GTK_DOC_TRUE}" && test -z
"${ENABLE_GTK_DOC_FALSE}"; then
    as_fn_error $? "conditional \"ENABLE_GTK_DOC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_BUILD_HTML_TRUE}" && test -z
"${GTK_DOC_BUILD_HTML_FALSE}"; then
    as_fn_error $? "conditional \"GTK_DOC_BUILD_HTML\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5

```

```

fi
if test -z "${GTK_DOC_BUILD_PDF_TRUE}" && test -z
"${GTK_DOC_BUILD_PDF_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_BUILD_PDF\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_USE_LIBTOOL_TRUE}" && test -z
"${GTK_DOC_USE_LIBTOOL_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_USE_LIBTOOL\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_USE_REBASE_TRUE}" && test -z
"${GTK_DOC_USE_REBASE_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_USE_REBASE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

: "${CONFIG_STATUS=./config.status}"
ac_write_fail=0
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files $CONFIG_STATUS"
{ $as_echo "$as_me:${as_lineno-$LINENO}: creating $CONFIG_STATUS" >&5
$as_echo "$as_me: creating $CONFIG_STATUS" >&6;}
as_write_fail=0
cat >$CONFIG_STATUS <<_ASEOF || as_write_fail=1
#! $SHELL
# Generated by $as_me.
# Run this file to recreate the current configuration.
# Compiler output produced by configure, useful for debugging
# configure, is in config.log if it exists.

debug=false
ac_cs_recheck=false
ac_cs_silent=false

SHELL=\${CONFIG_SHELL-$SHELL}
export SHELL
_ASEOF
cat >>$CONFIG_STATUS <<\_ASEOF || as_write_fail=1
## ----- ##
## M4sh Initialization. ##
## ----- ##

# Be more Bourne compatible
DUALCASE=1; export DUALCASE # for MKS sh
if test -n "${ZSH_VERSION+set}" && (emulate sh) >/dev/null 2>&1; then
:

```



```

    as_echo_n='sh -c $as_echo_n_body as_echo'
fi
export as_echo_body
as_echo='sh -c $as_echo_body as_echo'
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
  PATH_SEPARATOR=:
  (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
    (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
      PATH_SEPARATOR=';'
  }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " $as_nl

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
  *[\ \/]* ) as_myself=$0 ;;
  *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
  as_myself=$0
fi
if test ! -f "$as_myself"; then
  $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
  exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in

```

```

# pre-3.0 UWIN ksh).  But do not cause bugs in bash 2.01; the "|| exit
1"
# suppresses any "Segmentation fault" message there.  '((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
  && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr.  If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
  as_status=$1; test $as_status -eq 0 && as_status=1
  if test "$4"; then
    as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
  fi
  $as_echo "$as_me: error: $2" >&2
  as_fn_exit $as_status
} @%:@ as_fn_error

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @S|@? to STATUS, without forking.
as_fn_set_status ()
{
  return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS

```

```

@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$as_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
        {
            eval $1+=\$2
        }'
else
    as_fn_append ()
    {
        eval $1=\$ $1\$2
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \${(( 1 + 1 ))} = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
        {
            as_val=$(( $* ))
        }'

```

```

else
  as_fn_arith ()
  {
    as_val=`expr "$@" || test $? -eq 1`
  }
fi # as_fn_arith

if expr a : '\(a\)' >/dev/null 2>&1 &&
  test "X`expr 00001 : '.*\(...\)`" = X001; then
  as_expr=expr
else
  as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
  "X/"; then
  as_basename=basename
else
  as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]*\)/*$' \| \| \
  X"$0" : 'X\(\(\)\)$' \| \| \
  X"$0" : 'X\(\)\)' \| \| . 2>/dev/null ||
$as_echo X/"$0" |
  sed '/^\.*\/\([^\/]*\)\/*$/ {
    s//\1/
    q
  }
/^X\(\(\)\)$/ {
  s//\1/
  q
}
/^X\(\(\)\)\.*$/ {
  s//\1/
  q
}
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxyz'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS

```

```

as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*)
  case `echo 'xy\c'` in
  *c*) ECHO_T=' ';; # ECHO_T is single tab character.
  xy) ECHO_C='\c';;
  *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
     ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$$ conf$$$exe conf$$$file
if test -d conf$$$dir; then
  rm -f conf$$$dir/conf$$$file
else
  rm -f conf$$$dir
  mkdir conf$$$dir 2>/dev/null
fi
if (echo >conf$$$file) 2>/dev/null; then
  if ln -s conf$$$file conf$$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$$file conf$$$dir 2>/dev/null && test ! -f conf$$$exe
  ||
    as_ln_s='cp -pR'
  elif ln conf$$$file conf$$$ 2>/dev/null; then
    as_ln_s=ln
  else
    as_ln_s='cp -pR'
  fi
else
  as_ln_s='cp -pR'
fi
rm -f conf$$$ conf$$$exe conf$$$dir/conf$$$file conf$$$file
rmdir conf$$$dir 2>/dev/null

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "@S|@as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{

```

```

case $as_dir in #(
-*) as_dir=./$as_dir;;
esac
test -d "$as_dir" || eval $as_mkdir_p || {
  as_dirs=
  while ;; do
    case $as_dir in #(
*\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\'/g"`;;
#'(
*) as_qdir=$as_dir;;
esac
as_dirs="'$as_qdir' $as_dirs"
as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\([^\/\\\)\]//*\[^\][^\]*/*$' \| \| \
X"$as_dir" : 'X\([^\/\\\)\][^\]' \| \| \
X"$as_dir" : 'X\([^\/\\\)\]$' \| \| \
X"$as_dir" : 'X\([^\/\\\)\)' \| \| . 2>/dev/null ||
$as_echo X"$as_dir" |
sed '/^X\([^\/\\\)\]\/\//*\[^\][^\]*\/*$/ {
s//\1/
q
}
/^X\([^\/\\\)\][^\].*/ {
s//\1/
q
}
/^X\([^\/\\\)\]$/ {
s//\1/
q
}
/^X\([^\/\\\)\).*/ {
s//\1/
q
}
s/.*/./; q'`
test -d "$as_dir" && break
done
test -z "$as_dirs" || eval "mkdir $as_dirs"
} || test -d "$as_dir" || as_fn_error $? "cannot create directory
$as_dir"

} @%:@ as_fn_mkdir_p
if mkdir -p . 2>/dev/null; then
  as_mkdir_p='mkdir -p "$as_dir"'
else
  test -d ./-p && rmdir ./-p
  as_mkdir_p=false
fi

```

```

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+_%pp%;s%[^_$as_cr_alnum]%%_g'"

exec 6>&1
## ----- ##
## Main body of $CONFIG_STATUS script. ##
## ----- ##
_ASEOF
test $as_write_fail = 0 && chmod +x $CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# Save the log message, to keep $0 and so on meaningful, and to
# report actual input values of CONFIG_FILES etc. instead of their
# values after options handling.
ac_log=""
This file was extended by dbus-glib $as_me 0.100.2, which was
generated by GNU Autoconf 2.69.  Invocation command line was

    CONFIG_FILES    = $CONFIG_FILES
    CONFIG_HEADERS  = $CONFIG_HEADERS
    CONFIG_LINKS    = $CONFIG_LINKS
    CONFIG_COMMANDS = $CONFIG_COMMANDS
$ $0 $@

on `(hostname || uname -n) 2>/dev/null | sed 1q`
"

_ACEOF

case $ac_config_files in *)
*) set x $ac_config_files; shift; ac_config_files=$*;
esac

case $ac_config_headers in *)
*) set x $ac_config_headers; shift; ac_config_headers=$*;
esac

```

```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
# Files that config.status was made for.
config_files="$ac_config_files"
config_headers="$ac_config_headers"
config_commands="$ac_config_commands"
```

_ACEOF

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
ac_cs_usage="\
`$as_me' instantiates files and other configuration actions
from templates according to the current configuration. Unless the
files
and actions are specified as TAGs, all are instantiated by default.
```

Usage: \$0 [OPTION]... [TAG]...

```
-h, --help          print this help, then exit
-V, --version       print version number and configuration settings,
then exit
--config           print configuration, then exit
-q, --quiet, --silent
do not print progress messages
-d, --debug        don't remove temporary files
--recheck          update $as_me by reconfiguring in the same
conditions
--file=FILE[:TEMPLATE]
instantiate the configuration file FILE
--header=FILE[:TEMPLATE]
instantiate the configuration header FILE
```

Configuration files:
\$config_files

Configuration headers:
\$config_headers

Configuration commands:
\$config_commands

Report bugs to
<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLib>."

_ACEOF

```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_cs_config="\`$as_echo "$ac_configure_args" | sed 's/^ //;
s/[\\\"'\"`\\$]/\\\\\\&/g'`"
ac_cs_version="\\
dbus-glib config.status 0.100.2
configured by $0, generated by GNU Autoconf 2.69,
```



```
with options \\\"$ac_cs_config\\\"
```

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This config.status script is free software; the Free Software
Foundation
gives unlimited permission to copy, distribute and modify it."

```
ac_pwd='$ac_pwd'  
srcdir='$srcdir'  
INSTALL='$INSTALL'  
MKDIR_P='$MKDIR_P'  
AWK='$AWK'  
test -n "\\$AWK" || AWK=awk  
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1  
# The default lists apply if the user does not specify any file.  
ac_need_defaults=:  
while test $# != 0  
do  
  case $1 in  
    --*=?*)  
      ac_option=`expr "X$1" : 'X\[^\]=*\)`  
      ac_optarg=`expr "X$1" : 'X\[^\]=*\(.*\)`  
      ac_shift=:  
      ;;  
    --*=)  
      ac_option=`expr "X$1" : 'X\[^\]=*\)`  
      ac_optarg=  
      ac_shift=:  
      ;;  
    *)  
      ac_option=$1  
      ac_optarg=$2  
      ac_shift=shift  
      ;;  
  esac  
  
  case $ac_option in  
    # Handling of the options.  
    -recheck | --recheck | --recheck | --reche | --reche | --rech | --rec | --re |  
    --r)  
      ac_cs_recheck=: ;;  
    --version | --versio | --versi | --vers | --ver | --ve | --v | -V )  
      $as_echo "$ac_cs_version"; exit ;;  
    --config | --confi | --conf | --con | --co | --c )  
      $as_echo "$ac_cs_config"; exit ;;  
    --debug | --debu | --deb | --de | --d | -d )  
      debug=: ;;  
    --file | --fil | --fi | --f )  
      $ac_shift  
      case $ac_optarg in
```

```

        *\'*) ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
    ') as_fn_error $? "missing file argument" ;;
esac
as_fn_append CONFIG_FILES " '$ac_optarg'"
ac_need_defaults=false;;
--header | --heade | --head | --hea )
    $ac_shift
    case $ac_optarg in
        *\'*) ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
    esac
as_fn_append CONFIG_HEADERS " '$ac_optarg'"
ac_need_defaults=false;;
--he | --h)
    # Conflict between --help and --header
    as_fn_error $? "ambiguous option: \`$1'"
Try \`$0 --help' for more information.";;
--help | --hel | -h )
    $as_echo "$ac_cs_usage"; exit ;;
-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil | --si | --s)
    ac_cs_silent=: ;;

# This is an error.
-*) as_fn_error $? "unrecognized option: \`$1'"
Try \`$0 --help' for more information." ;;

*) as_fn_append ac_config_targets " $1"
    ac_need_defaults=false ;;

    esac
    shift
done

ac_configure_extra_args=

if $ac_cs_silent; then
    exec 6>/dev/null
    ac_configure_extra_args="$ac_configure_extra_args --silent"
fi

_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
if \${ac_cs_recheck}; then
    set X $SHELL '$0' $ac_configure_args \${ac_configure_extra_args} --no-
create --no-recursion
    shift
    \${as_echo "running CONFIG_SHELL=$SHELL \$*" } >&6
    CONFIG_SHELL='$SHELL'
    export CONFIG_SHELL
    exec "\$@"

```

fi

```
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
exec 5>>config.log
{
  echo
  sed 'h;s/./-/g;s/^\.../@%:@%:@ /;s/...$/ @%:@%:@/;p;x;p;x' <<_ASBOX
  @%:@%:@ Running $as_me. @%:@%:@
  _ASBOX
  $as_echo "$ac_log"
} >&5
```

```
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
#
# INIT-COMMANDS
#
AMDEP_TRUE="$AMDEP_TRUE" ac_aux_dir="$ac_aux_dir"
```

```
# The HP-UX ksh and POSIX shell print the target directory to stdout
# if CDPATH is set.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH
```

```
sed_quote_subst='`$sed_quote_subst`'
double_quote_subst='`$double_quote_subst`'
delay_variable_subst='`$delay_variable_subst`'
macro_version='`$ECHO "$macro_version" | $SED
"$delay_single_quote_subst"``'
macro_revision='`$ECHO "$macro_revision" | $SED
"$delay_single_quote_subst"``'
enable_shared='`$ECHO "$enable_shared" | $SED
"$delay_single_quote_subst"``'
enable_static='`$ECHO "$enable_static" | $SED
"$delay_single_quote_subst"``'
pic_mode='`$ECHO "$pic_mode" | $SED "$delay_single_quote_subst"``'
enable_fast_install='`$ECHO "$enable_fast_install" | $SED
"$delay_single_quote_subst"``'
SHELL='`$ECHO "$SHELL" | $SED "$delay_single_quote_subst"``'
ECHO='`$ECHO "$ECHO" | $SED "$delay_single_quote_subst"``'
PATH_SEPARATOR='`$ECHO "$PATH_SEPARATOR" | $SED
"$delay_single_quote_subst"``'
host_alias='`$ECHO "$host_alias" | $SED "$delay_single_quote_subst"``'
host='`$ECHO "$host" | $SED "$delay_single_quote_subst"``'
host_os='`$ECHO "$host_os" | $SED "$delay_single_quote_subst"``'
build_alias='`$ECHO "$build_alias" | $SED
"$delay_single_quote_subst"``'
build='`$ECHO "$build" | $SED "$delay_single_quote_subst"``'
build_os='`$ECHO "$build_os" | $SED "$delay_single_quote_subst"``'
SED='`$ECHO "$SED" | $SED "$delay_single_quote_subst"``'
Xsed='`$ECHO "$Xsed" | $SED "$delay_single_quote_subst"``'
```

```
GREP='`$ECHO "$GREP" | $SED "$delay_single_quote_subst"``'  
EGREP='`$ECHO "$EGREP" | $SED "$delay_single_quote_subst"``'  
FGREP='`$ECHO "$FGREP" | $SED "$delay_single_quote_subst"``'  
LD='`$ECHO "$LD" | $SED "$delay_single_quote_subst"``'  
NM='`$ECHO "$NM" | $SED "$delay_single_quote_subst"``'  
LN_S='`$ECHO "$LN_S" | $SED "$delay_single_quote_subst"``'  
max_cmd_len='`$ECHO "$max_cmd_len" | $SED  
"$delay_single_quote_subst"``'  
ac_objext='`$ECHO "$ac_objext" | $SED "$delay_single_quote_subst"``'  
exeext='`$ECHO "$exeext" | $SED "$delay_single_quote_subst"``'  
lt_unset='`$ECHO "$lt_unset" | $SED "$delay_single_quote_subst"``'  
lt_SP2NL='`$ECHO "$lt_SP2NL" | $SED "$delay_single_quote_subst"``'  
lt_NL2SP='`$ECHO "$lt_NL2SP" | $SED "$delay_single_quote_subst"``'  
lt_cv_to_host_file_cmd='`$ECHO "$lt_cv_to_host_file_cmd" | $SED  
"$delay_single_quote_subst"``'  
lt_cv_to_tool_file_cmd='`$ECHO "$lt_cv_to_tool_file_cmd" | $SED  
"$delay_single_quote_subst"``'  
reload_flag='`$ECHO "$reload_flag" | $SED  
"$delay_single_quote_subst"``'  
reload_cmds='`$ECHO "$reload_cmds" | $SED  
"$delay_single_quote_subst"``'  
OBJDUMP='`$ECHO "$OBJDUMP" | $SED "$delay_single_quote_subst"``'  
deplibs_check_method='`$ECHO "$deplibs_check_method" | $SED  
"$delay_single_quote_subst"``'  
file_magic_cmd='`$ECHO "$file_magic_cmd" | $SED  
"$delay_single_quote_subst"``'  
file_magic_glob='`$ECHO "$file_magic_glob" | $SED  
"$delay_single_quote_subst"``'  
want_nocaseglob='`$ECHO "$want_nocaseglob" | $SED  
"$delay_single_quote_subst"``'  
DLLTOOL='`$ECHO "$DLLTOOL" | $SED "$delay_single_quote_subst"``'  
sharedlib_from_linklib_cmd='`$ECHO "$sharedlib_from_linklib_cmd" |  
$SED "$delay_single_quote_subst"``'  
AR='`$ECHO "$AR" | $SED "$delay_single_quote_subst"``'  
AR_FLAGS='`$ECHO "$AR_FLAGS" | $SED "$delay_single_quote_subst"``'  
archiver_list_spec='`$ECHO "$archiver_list_spec" | $SED  
"$delay_single_quote_subst"``'  
STRIP='`$ECHO "$STRIP" | $SED "$delay_single_quote_subst"``'  
RANLIB='`$ECHO "$RANLIB" | $SED "$delay_single_quote_subst"``'  
old_postinstall_cmds='`$ECHO "$old_postinstall_cmds" | $SED  
"$delay_single_quote_subst"``'  
old_postuninstall_cmds='`$ECHO "$old_postuninstall_cmds" | $SED  
"$delay_single_quote_subst"``'  
old_archive_cmds='`$ECHO "$old_archive_cmds" | $SED  
"$delay_single_quote_subst"``'  
lock_old_archive_extraction='`$ECHO "$lock_old_archive_extraction" |  
$SED "$delay_single_quote_subst"``'  
CC='`$ECHO "$CC" | $SED "$delay_single_quote_subst"``'  
CFLAGS='`$ECHO "$CFLAGS" | $SED "$delay_single_quote_subst"``'  
compiler='`$ECHO "$compiler" | $SED "$delay_single_quote_subst"``'  
GCC='`$ECHO "$GCC" | $SED "$delay_single_quote_subst"``'
```

```
lt_cv_sys_global_symbol_pipe=`$ECHO "$lt_cv_sys_global_symbol_pipe" |
$SED "$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_cdecl=`$ECHO
"$lt_cv_sys_global_symbol_to_cdecl" | $SED
"$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_c_name_address=`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address" | $SED
"$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix=`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address_lib_prefix" | $SED
"$delay_single_quote_subst"`
nm_file_list_spec=`$ECHO "$nm_file_list_spec" | $SED
"$delay_single_quote_subst"`
lt_sysroot=`$ECHO "$lt_sysroot" | $SED "$delay_single_quote_subst"`
objdir=`$ECHO "$objdir" | $SED "$delay_single_quote_subst"`
MAGIC_CMD=`$ECHO "$MAGIC_CMD" | $SED "$delay_single_quote_subst"`
lt_prog_compiler_no_builtin_flag=`$ECHO
"$lt_prog_compiler_no_builtin_flag" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_pic=`$ECHO "$lt_prog_compiler_pic" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_wl=`$ECHO "$lt_prog_compiler_wl" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_static=`$ECHO "$lt_prog_compiler_static" | $SED
"$delay_single_quote_subst"`
lt_cv_prog_compiler_c_o=`$ECHO "$lt_cv_prog_compiler_c_o" | $SED
"$delay_single_quote_subst"`
need_locks=`$ECHO "$need_locks" | $SED "$delay_single_quote_subst"`
MANIFEST_TOOL=`$ECHO "$MANIFEST_TOOL" | $SED
"$delay_single_quote_subst"`
DSYMUTIL=`$ECHO "$DSYMUTIL" | $SED "$delay_single_quote_subst"`
NMEDIT=`$ECHO "$NMEDIT" | $SED "$delay_single_quote_subst"`
LIPO=`$ECHO "$LIPO" | $SED "$delay_single_quote_subst"`
OTOOL=`$ECHO "$OTOOL" | $SED "$delay_single_quote_subst"`
OTOOL64=`$ECHO "$OTOOL64" | $SED "$delay_single_quote_subst"`
libext=`$ECHO "$libext" | $SED "$delay_single_quote_subst"`
shrext_cmds=`$ECHO "$shrext_cmds" | $SED
"$delay_single_quote_subst"`
extract_expsyms_cmds=`$ECHO "$extract_expsyms_cmds" | $SED
"$delay_single_quote_subst"`
archive_cmds_need_lc=`$ECHO "$archive_cmds_need_lc" | $SED
"$delay_single_quote_subst"`
enable_shared_with_static_runtimes=`$ECHO
"$enable_shared_with_static_runtimes" | $SED
"$delay_single_quote_subst"`
export_dynamic_flag_spec=`$ECHO "$export_dynamic_flag_spec" | $SED
"$delay_single_quote_subst"`
whole_archive_flag_spec=`$ECHO "$whole_archive_flag_spec" | $SED
"$delay_single_quote_subst"`
compiler_needs_object=`$ECHO "$compiler_needs_object" | $SED
"$delay_single_quote_subst"`
```

```
old_archive_from_new_cmds='`$ECHO "$old_archive_from_new_cmds" | $SED
"$delay_single_quote_subst"`'
old_archive_from_expsyms_cmds='`$ECHO "$old_archive_from_expsyms_cmds"
| $SED "$delay_single_quote_subst"`'
archive_cmds='`$ECHO "$archive_cmds" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds='`$ECHO "$archive_expsym_cmds" | $SED
"$delay_single_quote_subst"`'
module_cmds='`$ECHO "$module_cmds" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds='`$ECHO "$module_expsym_cmds" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld='`$ECHO "$with_gnu_ld" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag='`$ECHO "$allow_undefined_flag" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag='`$ECHO "$no_undefined_flag" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_flag_spec='`$ECHO "$hardcode_libdir_flag_spec" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_separator='`$ECHO "$hardcode_libdir_separator" | $SED
"$delay_single_quote_subst"`'
hardcode_direct='`$ECHO "$hardcode_direct" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_absolute='`$ECHO "$hardcode_direct_absolute" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L='`$ECHO "$hardcode_minus_L" | $SED
"$delay_single_quote_subst"`'
hardcode_shlibpath_var='`$ECHO "$hardcode_shlibpath_var" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic='`$ECHO "$hardcode_automatic" | $SED
"$delay_single_quote_subst"`'
inherit_rpath='`$ECHO "$inherit_rpath" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs='`$ECHO "$link_all_deplibs" | $SED
"$delay_single_quote_subst"`'
always_export_symbols='`$ECHO "$always_export_symbols" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds='`$ECHO "$export_symbols_cmds" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms='`$ECHO "$exclude_expsyms" | $SED
"$delay_single_quote_subst"`'
include_expsyms='`$ECHO "$include_expsyms" | $SED
"$delay_single_quote_subst"`'
prelink_cmds='`$ECHO "$prelink_cmds" | $SED
"$delay_single_quote_subst"`'
postlink_cmds='`$ECHO "$postlink_cmds" | $SED
"$delay_single_quote_subst"`'
file_list_spec='`$ECHO "$file_list_spec" | $SED
"$delay_single_quote_subst"`'
variables_saved_for_relink='`$ECHO "$variables_saved_for_relink" |
$SED "$delay_single_quote_subst"`'
```

```

need_lib_prefix='`$ECHO "$need_lib_prefix" | $SED
"$delay_single_quote_subst"`'
need_version='`$ECHO "$need_version" | $SED
"$delay_single_quote_subst"`'
version_type='`$ECHO "$version_type" | $SED
"$delay_single_quote_subst"`'
runpath_var='`$ECHO "$runpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_var='`$ECHO "$shlibpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_overrides_runpath='`$ECHO "$shlibpath_overrides_runpath" |
$SED "$delay_single_quote_subst"`'
libname_spec='`$ECHO "$libname_spec" | $SED
"$delay_single_quote_subst"`'
library_names_spec='`$ECHO "$library_names_spec" | $SED
"$delay_single_quote_subst"`'
soname_spec='`$ECHO "$soname_spec" | $SED
"$delay_single_quote_subst"`'
install_override_mode='`$ECHO "$install_override_mode" | $SED
"$delay_single_quote_subst"`'
postinstall_cmds='`$ECHO "$postinstall_cmds" | $SED
"$delay_single_quote_subst"`'
postuninstall_cmds='`$ECHO "$postuninstall_cmds" | $SED
"$delay_single_quote_subst"`'
finish_cmds='`$ECHO "$finish_cmds" | $SED
"$delay_single_quote_subst"`'
finish_eval='`$ECHO "$finish_eval" | $SED
"$delay_single_quote_subst"`'
hardcode_into_libs='`$ECHO "$hardcode_into_libs" | $SED
"$delay_single_quote_subst"`'
sys_lib_search_path_spec='`$ECHO "$sys_lib_search_path_spec" | $SED
"$delay_single_quote_subst"`'
sys_lib_dlsearch_path_spec='`$ECHO "$sys_lib_dlsearch_path_spec" |
$SED "$delay_single_quote_subst"`'
hardcode_action='`$ECHO "$hardcode_action" | $SED
"$delay_single_quote_subst"`'
enable_dlopen='`$ECHO "$enable_dlopen" | $SED
"$delay_single_quote_subst"`'
enable_dlopen_self='`$ECHO "$enable_dlopen_self" | $SED
"$delay_single_quote_subst"`'
enable_dlopen_self_static='`$ECHO "$enable_dlopen_self_static" | $SED
"$delay_single_quote_subst"`'
old_striplib='`$ECHO "$old_striplib" | $SED
"$delay_single_quote_subst"`'
striplib='`$ECHO "$striplib" | $SED "$delay_single_quote_subst"`'

LTCC='$LTCC'
LTCFLAGS='$LTCFLAGS'
compiler='$compiler_DEFAULT'

# A function that is used when there is no print builtin or printf.
func_fallback_echo ()

```

```

{
  eval 'cat <<_LTECHO_EOF
\$1
_LTECHO_EOF'
}

# Quote evaled strings.
for var in SHELL \
ECHO \
PATH_SEPARATOR \
SED \
GREP \
EGREP \
FGREP \
LD \
NM \
LN_S \
lt_SP2NL \
lt_NL2SP \
reload_flag \
OBJDUMP \
deplibs_check_method \
file_magic_cmd \
file_magic_glob \
want_nocaseglob \
DLLTOOL \
sharedlib_from_linklib_cmd \
AR \
AR_FLAGS \
archiver_list_spec \
STRIP \
RANLIB \
CC \
CFLAGS \
compiler \
lt_cv_sys_global_symbol_pipe \
lt_cv_sys_global_symbol_to_cdecl \
lt_cv_sys_global_symbol_to_c_name_address \
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix \
nm_file_list_spec \
lt_prog_compiler_no_builtin_flag \
lt_prog_compiler_pic \
lt_prog_compiler_wl \
lt_prog_compiler_static \
lt_cv_prog_compiler_c_o \
need_locks \
MANIFEST_TOOL \
DSYMUTIL \
NMEDIT \
LIPO \
OTOOL \
OTOOL64 \

```



```

shrex_t_cmds \
export_dynamic_flag_spec \
whole_archive_flag_spec \
compiler_needs_object \
with_gnu_ld \
allow_undefined_flag \
no_undefined_flag \
hardcode_libdir_flag_spec \
hardcode_libdir_separator \
exclude_expsyms \
include_expsyms \
file_list_spec \
variables_saved_for_relink \
libname_spec \
library_names_spec \
soname_spec \
install_override_mode \
finish_eval \
old_strip_lib \
strip_lib; do
    case `eval \\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var"\\\\\\\\\\"` in
    *[\\\\\\\\\\\`\\\\\\"\\\\\\\\\\$]*)
        eval "lt_\\$var=\\\\\\\\\\\\\\\\\\"\\\\\\\\\\`\\\\\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var\\\\\\\\\\" | \\\\\\\$SED
\\\\\\\\\\$sed_quote_subst\\\\\\\\\\"\\\\\\\\\\`\\\\\\\\\\\\\\\\\\""
        ;;
    *)
        eval "lt_\\$var=\\\\\\\\\\\\\\\\\\"\\\\\\\\\\$\\$var\\\\\\\\\\\\\\\\\\""
        ;;
    esac
done

```

```

# Double-quote double-evaluated strings.

```

```

for var in reload_cmds \
old_postinstall_cmds \
old_postuninstall_cmds \
old_archive_cmds \
extract_expsyms_cmds \
old_archive_from_new_cmds \
old_archive_from_expsyms_cmds \
archive_cmds \
archive_expsym_cmds \
module_cmds \
module_expsym_cmds \
export_symbols_cmds \
prelink_cmds \
postlink_cmds \
postinstall_cmds \
postuninstall_cmds \
finish_cmds \
sys_lib_search_path_spec \
sys_lib_dlsearch_path_spec; do
    case `eval \\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var"\\\\\\\\\\"` in

```

```

*) [\\\\\\\\\\\\`\\\\"\\\\\\$]*)
    eval "lt_\\$var=\\\\\\\\\\\\\\\\"\\\\\\\\`\\\\\\\\$ECHO \\\\\"\\\\\\\\$\\$var\\\\\\" | \\\\\"$SED -e
\\\\"\\\\\\\\$double_quote_subst\\\\\\" -e \\\\\"\\\\\\\\$sed_quote_subst\\\\\\" -e
\\\\"\\\\\\\\$delay_variable_subst\\\\\\"\\\\\\\\`\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\"
    ;;
*)
    eval "lt_\\$var=\\\\\\\\\\\\\\\\"\\\\\\\\$\\$var\\\\\\\\\\\\\\\\"
    ;;
esac
done

```

```

ac_aux_dir='$ac_aux_dir'
xsi_shell='$xsi_shell'
lt_shell_append='$lt_shell_append'

```

```

# See if we are running on zsh, and set the options which allow our
# commands through without removal of \ escapes INIT.
if test -n "\\${ZSH_VERSION+set}" ; then
    setopt NO_GLOB_SUBST
fi

```

```

PACKAGE='$PACKAGE'
VERSION='$VERSION'
TIMESTAMP='$TIMESTAMP'
RM='$RM'
ofile='$ofile'

```

```
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\\_ACEOF || ac_write_fail=1
```

```

# Handling of arguments.
for ac_config_target in $ac_config_targets
do
    case $ac_config_target in
        "config.h") CONFIG_HEADERS="$CONFIG_HEADERS config.h" ;;
        "depfiles") CONFIG_COMMANDS="$CONFIG_COMMANDS depfiles" ;;
        "libtool") CONFIG_COMMANDS="$CONFIG_COMMANDS libtool" ;;
        "Makefile") CONFIG_FILES="$CONFIG_FILES Makefile" ;;
        "m4/Makefile") CONFIG_FILES="$CONFIG_FILES m4/Makefile" ;;
        "doc/Makefile") CONFIG_FILES="$CONFIG_FILES doc/Makefile" ;;
        "doc/reference/Makefile") CONFIG_FILES="$CONFIG_FILES
doc/reference/Makefile" ;;
        "doc/reference/version.xml") CONFIG_FILES="$CONFIG_FILES
doc/reference/version.xml" ;;
        "dbus/Makefile") CONFIG_FILES="$CONFIG_FILES dbus/Makefile" ;;
        "dbus/examples/Makefile") CONFIG_FILES="$CONFIG_FILES
dbus/examples/Makefile" ;;
    esac
done

```

```

    "dbus/examples/statemachine/Makefile") CONFIG_FILES="$CONFIG_FILES
dbus/examples/statemachine/Makefile" ;;
    "test/Makefile") CONFIG_FILES="$CONFIG_FILES test/Makefile" ;;
    "test/core/Makefile") CONFIG_FILES="$CONFIG_FILES
test/core/Makefile" ;;
    "test/interfaces/Makefile") CONFIG_FILES="$CONFIG_FILES
test/interfaces/Makefile" ;;
    "test/data/valid-service-files/debug-glib.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/debug-
glib.service" ;;
    "test/data/valid-service-files/debug-echo.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/debug-
echo.service" ;;
    "test/data/valid-service-files/interfaces-test.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/interfaces-
test.service" ;;
    "test/lib/Makefile") CONFIG_FILES="$CONFIG_FILES
test/lib/Makefile" ;;
    "test/manual/Makefile") CONFIG_FILES="$CONFIG_FILES
test/manual/Makefile" ;;
    "tools/Makefile") CONFIG_FILES="$CONFIG_FILES tools/Makefile" ;;
    "dbus-glib-1.pc") CONFIG_FILES="$CONFIG_FILES dbus-glib-1.pc" ;;
    "dbus-glib-1-uninstalled.pc") CONFIG_FILES="$CONFIG_FILES dbus-
glib-1-uninstalled.pc" ;;

```

```

    *) as_fn_error $? "invalid argument: \`${ac_config_target}'" "$LINENO"
5;;
    esac
done

```

```

# If the user did not use the arguments to specify the items to
# instantiate,
# then the envvar interface is used.  Set only those that are not.
# We use the long form for the default assignment because of an
# extremely
# bizarre bug on SunOS 4.1.3.
if $ac_need_defaults; then
    test "${CONFIG_FILES+set}" = set || CONFIG_FILES=$config_files
    test "${CONFIG_HEADERS+set}" = set || CONFIG_HEADERS=$config_headers
    test "${CONFIG_COMMANDS+set}" = set ||
CONFIG_COMMANDS=$config_commands
fi

```

```

# Have a temporary directory for convenience.  Make it in the build
# tree
# simply because there is no reason against having it here, and in
# addition,
# creating and moving files from /tmp can sometimes cause problems.
# Hook for its removal unless debugging.
# Note that there is a small window in which the directory will not be
# cleaned:

```

```

# after its creation but before its name has been assigned to `$tmp'.
$debug ||
{
  tmp= ac_tmp=
  trap 'exit_status=$?'
  : "${ac_tmp:= $tmp}"
  { test ! -d "$ac_tmp" || rm -fr "$ac_tmp"; } && exit $exit_status
' 0
  trap 'as_fn_exit 1' 1 2 13 15
}
# Create a (secure) tmp directory for tmp files.

{
  tmp=`(umask 077 && mktemp -d "./confXXXXXX") 2>/dev/null` &&
  test -d "$tmp"
} ||
{
  tmp=./conf$$-$RANDOM
  (umask 077 && mkdir "$tmp")
} || as_fn_error $? "cannot create a temporary directory in ."
"$LINENO" 5
ac_tmp=$tmp

# Set up the scripts for CONFIG_FILES section.
# No need to generate them if there are no CONFIG_FILES.
# This happens for instance with `./config.status config.h'.
if test -n "$CONFIG_FILES"; then

ac_cr=`echo X | tr X '\015'`
# On cygwin, bash can eat \r inside `` if the user requested igncr.
# But we know of no other shell where ac_cr would be empty at this
# point, so we can use a bashism as a fallback.
if test "x$ac_cr" = x; then
  eval ac_cr=\$\'\r\'
fi
ac_cs_awk_cr=`$AWK 'BEGIN { print "a\rb" }' </dev/null 2>/dev/null`
if test "$ac_cs_awk_cr" = "a${ac_cr}b"; then
  ac_cs_awk_cr='\r'
else
  ac_cs_awk_cr=$ac_cr
fi

echo 'BEGIN {' >"$ac_tmp/subs1.awk" &&
_ACEOF

{
  echo "cat >conf$$$subs.awk <<_ACEOF" &&
  echo "$ac_subst_vars" | sed 's/./&!\$\$\$ac_delim/' &&
  echo "_ACEOF"
} >conf$$$subs.sh ||

```

```

    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
ac_delim_num=`echo "$ac_subst_vars" | grep -c '^`
ac_delim='%!_!# '
for ac_last_try in false false false false false ; do
  . ./conf$$subs.sh ||
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5

  ac_delim_n=`sed -n "s/.*$ac_delim\$/X/p" conf$$subs.awk | grep -c X`
  if test $ac_delim_n = $ac_delim_num; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
  else
    ac_delim="$ac_delim!$ac_delim _$ac_delim!! "
  fi
done
rm -f conf$$subs.sh

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
cat >>"$ac_tmp/subs1.awk" <<\"_ACAWK &&
_ACEOF
sed -n '
h
s/^[S["/; s/!.*"/]=/
p
g
s/^[^!]*!//
:repl
t repl
s/"$ac_delim"$//
t delim
:nl
h
s/\\.\\{148\\}\\)..*/\\1/
t more1
s/["\\]/\\&/g; s/^"/; s/$/\\n"\\
p
n
b repl
:more1
s/["\\]/\\&/g; s/^"/; s/$/"\\
p
g
s/\\.\\{148\\}//
t nl
:delim
h
s/\\.\\{148\\}\\)..*/\\1/
t more2
s/["\\]/\\&/g; s/^"/; s/$"/
p
b

```

```

:more2
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/.\{148\}//
t delim
' <conf$$subs.awk | sed '
/^[^"]/{
    N
    s/\n//
}
' >>$CONFIG_STATUS || ac_write_fail=1
rm -f conf$$subs.awk
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
_ACAWK
cat >>"\${ac_tmp}/subs1.awk" <<_ACAWK &&
    for (key in S) S_is_set[key] = 1
    FS = " "
}
{
    line = $ 0
    nfields = split(line, field, "@")
    substed = 0
    len = length(field[1])
    for (i = 2; i < nfields; i++) {
        key = field[i]
        keylen = length(key)
        if (S_is_set[key]) {
            value = S[key]
            line = substr(line, 1, len) "" value "" substr(line, len +
keylen + 3)
            len += length(value) + length(field[++i])
            substed = 1
        } else
            len += 1 + keylen
    }

    print line
}

_ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
if sed "s/\${ac_cr}//" < /dev/null > /dev/null 2>&1; then
    sed "s/\${ac_cr}\$//; s/\${ac_cr}/\${ac_cs_awk_cr}/g"
else
    cat
fi < "\${ac_tmp}/subs1.awk" > "\${ac_tmp}/subs.awk" \
    || as_fn_error $? "could not setup config files machinery" "$LINENO"
5
_ACEOF

```

```

# VPATH may cause trouble with some makes, so we remove sole
$(srcdir),
# ${srcdir} and @srcdir@ entries from VPATH if srcdir is ".", strip
leading and
# trailing colons and then remove the whole line if VPATH becomes
empty
# (actually we leave an empty line to preserve line numbers).
if test "x$srcdir" = x.; then
  ac_vpsub='/^[ ]*VPATH[ ]*=[ ]*{/
h
s///
s/^\:/
s/[ ]*$\:/
s/:\$(srcdir):::/g
s/:\${srcdir}:::/g
s/:@srcdir@:::/g
s/^\:*//
s/:\:*$//
x
s/\(=[ ]*\)\.*\/\1/
G
s/\n//
s/^[^=]*=[ ]*$//
}'
fi

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
fi # test -n "$CONFIG_FILES"

# Set up the scripts for CONFIG_HEADERS section.
# No need to generate them if there are no CONFIG_HEADERS.
# This happens for instance with './config.status Makefile'.
if test -n "$CONFIG_HEADERS"; then
cat >"$ac_tmp/defines.awk" <<\_ACAWK ||
BEGIN {
\_ACEOF

# Transform confdefs.h into an awk script `defines.awk', embedded as
# here-document in config.status, that substitutes the proper values
into
# config.h.in to produce config.h.

# Create a delimiter string that does not exist in confdefs.h, to ease
# handling of long lines.
ac_delim='%!_!# '
for ac_last_try in false false ;; do
  ac_tt=`sed -n "/$ac_delim/p" confdefs.h`
  if test -z "$ac_tt"; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_HEADERS" "$LINENO" 5

```

```

else
    ac_delim="$ac_delim!$ac_delim_$ac_delim!! "
fi
done

# For the awk script, D is an array of macro values keyed by name,
# likewise P contains macro parameters if any. Preserve backslash
# newline sequences.

ac_word_re=[_$_$as_cr_Letters][_$_$as_cr_alnum]*
sed -n '
s/.\{148\}/&"$ac_delim"/g
t rset
:rset
s/^[ ]*#[ ]*define[ ]*[ ]*/ /
t def
d
:def
s/\\$//
t bsnl
s/["\\]/\\&/g
s/^\ ("$ac_word_re"\)\ ([[^\]]*)\ [ ]*\ (.*) /P["\1"]="\2"\
D["\1"]=" \3"/p
s/^\ ("$ac_word_re"\)[ ]*\ (.*) /D["\1"]=" \2"/p
d
:bsnl
s/["\\]/\\&/g
s/^\ ("$ac_word_re"\)\ ([[^\]]*)\ [ ]*\ (.*) /P["\1"]="\2"\
D["\1"]=" \3\\n"/p
t cont
s/^\ ("$ac_word_re"\)[ ]*\ (.*) /D["\1"]=" \2\\n"/p
t cont
d
:cont
n
s/.\{148\}/&"$ac_delim"/g
t clear
:clear
s/\\$//
t bsnlc
s/["\\]/\\&/g; s/^\ //; s/$//p
d
:bsnlc
s/["\\]/\\&/g; s/^\ //; s/$/\\n"/p
b cont
' <confdefs.h | sed '
s/"$ac_delim"/"\\
"/g' >>$CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
for (key in D) D_is_set[key] = 1
FS = " "

```



```

}
/^[ \t ]*#[ \t ]*(define|undef)[ \t ]+${_word_re}([ \t ]|\$)/ {
    line = \$0
    split(line, arg, " ")
    if (arg[1] == "#") {
        defundef = arg[2]
        mac1 = arg[3]
    } else {
        defundef = substr(arg[1], 2)
        mac1 = arg[2]
    }
    split(mac1, mac2, "(")
    macro = mac2[1]
    prefix = substr(line, 1, index(line, defundef) - 1)
    if (D_is_set[macro]) {
        # Preserve the white space surrounding the "#".
        print prefix "define", macro P[macro] D[macro]
        next
    } else {
        # Replace #undef with comments. This is necessary, for example,
        # in the case of _POSIX_SOURCE, which is predefined and required
        # on some systems where configure will not decide to define it.
        if (defundef == "undef") {
            print "/*", prefix defundef, macro, "*/"
            next
        }
    }
}
}
{ print }
_ACAWK
_ACEOF
cat >>${CONFIG_STATUS} <<\_ACEOF || ac_write_fail=1
    as_fn_error $? "could not setup config headers machinery" "$LINENO"
5
fi # test -n "${CONFIG_HEADERS}"

eval set X " :F $CONFIG_FILES :H $CONFIG_HEADERS :C
$CONFIG_COMMANDS"
shift
for ac_tag
do
    case $ac_tag in
        :[FHLC]) ac_mode=$ac_tag; continue;;
    esac
    case $ac_mode$ac_tag in
        :[FHL]*:*);;
        :L* | :C*:* ) as_fn_error $? "invalid tag \"$ac_tag\"" "$LINENO" 5;;
        :[FH]-) ac_tag=-:-;;
        :[FH]*) ac_tag=$ac_tag:$ac_tag.in;;
    esac
    ac_save_IFS=$IFS

```

```

IFS=:
set x $ac_tag
IFS=$ac_save_IFS
shift
ac_file=$1
shift

case $ac_mode in
:L) ac_source=$1;;
:[FH])
  ac_file_inputs=
  for ac_f
  do
    case $ac_f in
    -) ac_f="$ac_tmp/stdin";;
    *) # Look for the file first in the build tree, then in the
source tree
      # (if the path is not absolute). The absolute path cannot be
DOS-style,
      # because $ac_f cannot contain `:'.
      test -f "$ac_f" ||
        case $ac_f in
        [\\/$]*) false;;
        *) test -f "$srcdir/$ac_f" && ac_f="$srcdir/$ac_f";;
        esac ||
          as_fn_error 1 "cannot find input file: \`$ac_f'" "$LINENO" 5;;
        esac
        case $ac_f in *\'*) ac_f=`$as_echo "$ac_f" | sed
"s/'/'\\\\"'/g"`;; esac
        as_fn_append ac_file_inputs " '$ac_f'"
      done

      # Let's still pretend it is `configure' which instantiates (i.e.,
don't
      # use $as_me), people would be surprised to read:
      # /* config.h. Generated by config.status. */
      configure_input='Generated from '`
        $as_echo "$*" | sed 's|^[^:]*||;s|:[^:]*|, |g'
        ` by configure.'
      if test x"$ac_file" != x-; then
        configure_input="$ac_file. $configure_input"
        { $as_echo "$as_me:${as_lineno-$LINENO}: creating $ac_file" >&5
$as_echo "$as_me: creating $ac_file" >&6;}
      fi
      # Neutralize special characters interpreted by sed in replacement
strings.
      case $configure_input in #(
*\&* | *\\|* | *\\*)
        ac_sed_conf_input=`$as_echo "$configure_input" |
sed 's/[\\&|]/\\\\&/g'`; # (
*) ac_sed_conf_input=$configure_input;;
      esac

```

```

case $ac_tag in
*:-:* | *:-) cat >"$ac_tmp/stdin" \
  || as_fn_error $? "could not create $ac_file" "$LINENO" 5 ;;
esac
;;
esac

ac_dir=`$as_dirname -- "$ac_file" ||
$as_expr X"$ac_file" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \|\ \
  X"$ac_file" : 'X\(//\)[^/]' \|\ \
  X"$ac_file" : 'X\(//\)$' \|\ \
  X"$ac_file" : 'X\(/\)' \|\ . 2>/dev/null ||
$as_echo X"$ac_file" |
  sed '/^X\(.*[^/]\)\|\/*[^/][^/]*\/*$/{
    s//\1/
    q
  }
/^X\(\\\/\)\[^/].*/{
  s//\1/
  q
}
/^X\(\\\/\)$/{
  s//\1/
  q
}
/^X\(\\\/\).*/{
  s//\1/
  q
}
s/.*\/./; q'`
ac_dir="$ac_dir"; as_fn_mkdir_p
ac_buildidir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_buildidir_sub=. ac_top_build_prefix= ;;
*)
  ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.([\//]|||)`
  # A "." for each directory in $ac_dir_suffix.
  ac_top_buildidir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\/]*|/..|g;s|/|||`
  case $ac_top_buildidir_sub in
  "") ac_top_buildidir_sub=. ac_top_build_prefix= ;;
  *) ac_top_build_prefix=$ac_top_buildidir_sub/ ;;
  esac ;;
esac
esac
ac_abs_top_buildidir=$ac_pwd
ac_abs_buildidir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_buildidir=$ac_top_build_prefix

case $srcdir in

```

```

.) # We are building in place.
  ac_srcdir=.
  ac_top_srcdir=$ac_top_builddir_sub
  ac_abs_top_srcdir=$ac_pwd ;;
[\\/* | ?:[\\/* ] # Absolute name.
  ac_srcdir=$srcdir$ac_dir_suffix;
  ac_top_srcdir=$srcdir
  ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
  ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
  ac_top_srcdir=$ac_top_build_prefix$srcdir
  ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

case $ac_mode in
:F)
#
# CONFIG_FILE
#

case $INSTALL in
[\\/* | ?:[\\/* ] ac_INSTALL=$INSTALL ;;
*) ac_INSTALL=$ac_top_build_prefix$INSTALL ;;
esac
ac_MKDIR_P=$MKDIR_P
case $MKDIR_P in
[\\/* | ?:[\\/* ] ) ;;
*/*) ac_MKDIR_P=$ac_top_build_prefix$MKDIR_P ;;
esac
_ACEOF

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# If the template does not know about datarootdir, expand it.
# FIXME: This hack should be removed a few years after 2.60.
ac_datarootdir_hack=; ac_datarootdir_seen=
ac_sed_dataroot='
/datarootdir/ {
  p
  q
}
/@datadir@/p
/@docdir@/p
/@infodir@/p
/@localedir@/p
/@mandir@/p'
case `eval "sed -n \"\$ac_sed_dataroot\" \$ac_file_inputs"` in
*datarootdir*) ac_datarootdir_seen=yes;;
*@datadir@*|*@docdir@*|*@infodir@*|*@localedir@*|*@mandir@*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file_inputs
seems to ignore the --datarootdir setting" >&5

```

```

$as_echo "$as_me: WARNING: $ac_file_inputs seems to ignore the --
datarootdir setting" >&2;}
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
  ac_datarootdir_hack='
  s@datadir@&$datadir&g
  s@docdir@&$docdir&g
  s@infodir@&$infodir&g
  s@localedir@&$localedir&g
  s@mandir@&$mandir&g
  s\\$\\{datarootdir}&$datarootdir&g' ;;
esac
_ACEOF

# Neutralize VPATH when `srcdir' = `.'.
# Shell code in configure.ac might set extrasub.
# FIXME: do we really want to maintain this feature?
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_sed_extra="$ac_vpsub
$extrasub
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
:t
/@[a-zA-Z_][a-zA-Z_0-9]*@/!b
s|@configure_input@|${ac_sed_conf_input}|;t t
s@top_builddir@&$ac_top_builddir_sub&;t t
s@top_build_prefix@&$ac_top_build_prefix&;t t
s@srcdir@&$ac_srcdir&;t t
s@abs_srcdir@&$ac_abs_srcdir&;t t
s@top_srcdir@&$ac_top_srcdir&;t t
s@abs_top_srcdir@&$ac_abs_top_srcdir&;t t
s@builddir@&$ac_builddir&;t t
s@abs_builddir@&$ac_abs_builddir&;t t
s@abs_top_builddir@&$ac_abs_top_builddir&;t t
s@INSTALL@&$ac_INSTALL&;t t
s@MKDIR_P@&$ac_MKDIR_P&;t t
$ac_datarootdir_hack
"
eval sed "\${ac_sed_extra}" "$ac_file_inputs" | $AWK -f
"$ac_tmp/subs.awk" \
  >$ac_tmp/out || as_fn_error $? "could not create $ac_file" "$LINENO"
5

test -z "$ac_datarootdir_hack$ac_datarootdir_seen" &&
  { ac_out=`sed -n '/\${datarootdir}/p' "$ac_tmp/out"`; test -n
"$ac_out"; } &&
  { ac_out=`sed -n '/^[ ]*datarootdir[ ]*:*=/p' \
    "$ac_tmp/out"`; test -z "$ac_out"; } &&
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file contains
a reference to the variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&5

```

```

$as_echo "$as_me: WARNING: $ac_file contains a reference to the
variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&2;}

rm -f "$ac_tmp/stdin"
case $ac_file in
-) cat "$ac_tmp/out" && rm -f "$ac_tmp/out";;
*) rm -f "$ac_file" && mv "$ac_tmp/out" "$ac_file";;
esac \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
;;
:H)
#
# CONFIG_HEADER
#
if test x"$ac_file" != x-; then
{
$as_echo "/* $configure_input */" \
&& eval '$AWK -f "$ac_tmp/defines.awk" "$ac_file_inputs"
} >"$ac_tmp/config.h" \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
if diff "$ac_file" "$ac_tmp/config.h" >/dev/null 2>&1; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: $ac_file is unchanged"
>&5
$as_echo "$as_me: $ac_file is unchanged" >&6;}
else
rm -f "$ac_file"
mv "$ac_tmp/config.h" "$ac_file" \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
fi
else
$as_echo "/* $configure_input */" \
&& eval '$AWK -f "$ac_tmp/defines.awk" "$ac_file_inputs" \
|| as_fn_error $? "could not create -" "$LINENO" 5
fi
# Compute "$ac_file"'s index in $config_headers.
_am_arg="$ac_file"
_am_stamp_count=1
for _am_header in $config_headers ;; do
case $_am_header in
$_am_arg | $_am_arg:* )
break ;;
* )
_am_stamp_count=`expr $_am_stamp_count + 1` ;;
esac
done
echo "timestamp for $_am_arg" >`$as_dirname -- "$_am_arg" ||
$as_expr X"$_am_arg" : 'X\([^/]\)\/*\([^/]\)\/*$' \|| \
X"$_am_arg" : 'X\(/\)\[^/]' \|| \
X"$_am_arg" : 'X\(/\)\$' \|| \
X"$_am_arg" : 'X\(/)\$' \|| . 2>/dev/null ||
$as_echo X"$_am_arg" |

```

```

sed '/^X\(.*[^\)]\)\)\)\/*[^\)]\[^)]*\/*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\[^)]\.*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\)$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\.*$/{
    s//\1/
    q
}
s/.*\/./; q'\`/stamp-h$_am_stamp_count
;;

:C) { $sas_echo "$sas_me:${as_lineno-$LINENO}: executing $ac_file
commands" >&5
$sas_echo "$sas_me: executing $ac_file commands" >&6;}
;;
esac

case $ac_file$ac_mode in
  "depfiles":C) test x"$SAMDEP_TRUE" != x"" || {
# Autoconf 2.62 quotes --file arguments for eval, but not when files
# are listed without --file. Let's play safe and only enable the
eval
# if we detect the quoting.
case $CONFIG_FILES in
*\`*) eval set x "$CONFIG_FILES" ;;
*) set x $CONFIG_FILES ;;
esac
shift
for mf
do
# Strip MF so we end up with the name of the file.
mf=`echo "$mf" | sed -e 's/:.*$//'\`
# Check whether this is an Automake generated Makefile or not.
# We used to match only the files named 'Makefile.in', but
# some people rename them; so instead we look at the file content.
# Grep'ing the first line is not enough: some people post-process
# each Makefile.in and add a new line on top of each file to say
so.
# Grep'ing the whole file is not good either: AIX grep has a line
# limit of 2048, but all sed's we know have understand at least
4000.
if sed -n 's,^#.*generated by automake.*,X,p' "$mf" | grep X
>/dev/null 2>&1; then

```

```

        dirpart=`$as_dirname -- "$mf" ||
$as_expr X"$mf" : 'X\(.^[^/]\)\/*[^/][^/]*/*$' \|\ \
    X"$mf" : 'X\(/\)\ [^/]' \|\ \
    X"$mf" : 'X\(/\)\$' \|\ \
    X"$mf" : 'X\(/)\ ' \|\ . 2>/dev/null ||
$as_echo X"$mf" |
    sed '/^X\(.^[^/]\)\*\/*[^/][^/]*\/*$/{
        s//\1/
        q
    }
/^X\(\/\)\ [^/].*/{
    s//\1/
    q
}
/^X\(\/\)\$/{
    s//\1/
    q
}
/^X\(\/\).*/{
    s//\1/
    q
}
s/.*./.; q'`
else
    continue
fi
# Extract the definition of DEPDIR, am__include, and am__quote
# from the Makefile without running 'make'.
DEPDIR=`sed -n 's/^DEPDIR = //p' < "$mf"`
test -z "$DEPDIR" && continue
am__include=`sed -n 's/^am__include = //p' < "$mf"`
test -z "am__include" && continue
am__quote=`sed -n 's/^am__quote = //p' < "$mf"`
# Find all dependency output files, they are included files with
# $(DEPDIR) in their names. We invoke sed twice because it is the
# simplest approach to changing $(DEPDIR) to its actual value in
the
# expansion.
for file in `sed -n "
    s/^$am__include $am__quote\(.*(DEPDIR).*\)$am__quote"'\$/\1/p'
<"$mf" | \
    sed -e 's/\$(DEPDIR)/'"$DEPDIR"'/g`; do
    # Make sure the directory exists.
    test -f "$dirpart/$file" && continue
    fdir=`$as_dirname -- "$file" ||
$as_expr X"$file" : 'X\(.^[^/]\)\/*[^/][^/]*/*$' \|\ \
    X"$file" : 'X\(/\)\ [^/]' \|\ \
    X"$file" : 'X\(/\)\$' \|\ \
    X"$file" : 'X\(/)\ ' \|\ . 2>/dev/null ||
$as_echo X"$file" |
    sed '/^X\(.^[^/]\)\*\/*[^/][^/]*\/*$/{
        s//\1/

```



```

        q
    }
    /^X\(\\\/\\\/)[^/].*/{
        s//\1/
        q
    }
    /^X\(\\\/\\\/)${/ {
        s//\1/
        q
    }
    /^X\(\\\/).*/{
        s//\1/
        q
    }
    s/.*\/./; q`
as_dir=$dirpart/$fdir; as_fn_mkdir_p
# echo "creating $dirpart/$file"
echo '# dummy' > "$dirpart/$file"
done
done
}
;;
"libtool":C)

# See if we are running on zsh, and set the options which allow
our
# commands through without removal of \ escapes.
if test -n "${ZSH_VERSION+set}" ; then
    setopt NO_GLOB_SUBST
fi

cfgfile="${ofile}T"
trap "$RM \"$cfgfile\"; exit 1" 1 2 15
$RM "$cfgfile"

cat <<_LT_EOF >> "$cfgfile"
#! $SHELL

# `ECHO "$ofile" | sed 's%^.*/%%'` - Provide generalized library-
building support services.
# Generated automatically by $as_me ($PACKAGE$TIMESTAMP) $VERSION
# Libtool was configured on host `(hostname || uname -n) 2>/dev/null |
sed lq`:
# NOTE: Changes made to this file will be lost: look at ltmain.sh.
#
# Copyright (C) 1996, 1997, 1998, 1999, 2000, 2001, 2003, 2004,
2005,
#           2006, 2007, 2008, 2009, 2010, 2011 Free Software
#           Foundation, Inc.
# Written by Gordon Matzigkeit, 1996
#
# This file is part of GNU Libtool.

```

```
#
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# 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

# The names of the tagged configurations supported by this script.
available_tags=""

# ### BEGIN LIBTOOL CONFIG

# Which release of libtool.m4 was used?
macro_version=$macro_version
macro_revision=$macro_revision

# Whether or not to build shared libraries.
build_libtool_libs=$enable_shared

# Whether or not to build static libraries.
build_old_libs=$enable_static

# What type of objects to build.
pic_mode=$pic_mode

# Whether or not to optimize for fast installation.
fast_install=$enable_fast_install

# Shell to use when invoking shell scripts.
SHELL=$lt_SHELL

# An echo program that protects backslashes.
ECHO=$lt_ECHO

# The PATH separator for the build system.
PATH_SEPARATOR=$lt_PATH_SEPARATOR
```

```
# The host system.
host_alias=$host_alias
host=$host
host_os=$host_os

# The build system.
build_alias=$build_alias
build=$build
build_os=$build_os

# A sed program that does not truncate output.
SED=$lt_SED

# Sed that helps us avoid accidentally triggering echo(1) options like
-n.
Xsed="\$SED -e 1s/^X//"

# A grep program that handles long lines.
GREP=$lt_GREP

# An ERE matcher.
EGREP=$lt_EGREP

# A literal string matcher.
FGREP=$lt_FGREP

# A BSD- or MS-compatible name lister.
NM=$lt_NM

# Whether we need soft or hard links.
LN_S=$lt_LN_S

# What is the maximum length of a command?
max_cmd_len=$max_cmd_len

# Object file suffix (normally "o").
objext=$ac_objext

# Executable file suffix (normally "").
exeext=$exeext

# whether the shell understands "unset".
lt_unset=$lt_unset

# turn spaces into newlines.
SP2NL=$lt_lt_SP2NL

# turn newlines into spaces.
NL2SP=$lt_lt_NL2SP

# convert \$build file names to \$host format.
```

```
to_host_file_cmd=$lt_cv_to_host_file_cmd

# convert \${build} files to toolchain format.
to_tool_file_cmd=$lt_cv_to_tool_file_cmd

# An object symbol dumper.
OBJDUMP=$lt_OBJDUMP

# Method to check whether dependent libraries are shared objects.
deplibs_check_method=$lt_deplibs_check_method

# Command to use when deplibs_check_method = "file_magic".
file_magic_cmd=$lt_file_magic_cmd

# How to find potential files when deplibs_check_method =
"file_magic".
file_magic_glob=$lt_file_magic_glob

# Find potential files using nocaseglob when deplibs_check_method =
"file_magic".
want_nocaseglob=$lt_want_nocaseglob

# DLL creation program.
DLLTOOL=$lt_DLLTOOL

# Command to associate shared and link libraries.
sharedlib_from_linklib_cmd=$lt_sharedlib_from_linklib_cmd

# The archiver.
AR=$lt_AR

# Flags to create an archive.
AR_FLAGS=$lt_AR_FLAGS

# How to feed a file listing to the archiver.
archiver_list_spec=$lt_archiver_list_spec

# A symbol stripping program.
STRIP=$lt_STRIP

# Commands used to install an old-style archive.
RANLIB=$lt_RANLIB
old_postinstall_cmds=$lt_old_postinstall_cmds
old_postuninstall_cmds=$lt_old_postuninstall_cmds

# Whether to use a lock for old archive extraction.
lock_old_archive_extraction=$lock_old_archive_extraction

# A C compiler.
LTCC=$lt_CC

# LTCC compiler flags.
```

```
LTCFLAGS=$lt_CFLAGS

# Take the output of nm and produce a listing of raw symbols and C
names.
global_symbol_pipe=$lt_lt_cv_sys_global_symbol_pipe

# Transform the output of nm in a proper C declaration.
global_symbol_to_cdecl=$lt_lt_cv_sys_global_symbol_to_cdecl

# Transform the output of nm in a C name address pair.
global_symbol_to_c_name_address=$lt_lt_cv_sys_global_symbol_to_c_name_
address

# Transform the output of nm in a C name address pair when lib prefix
is needed.
global_symbol_to_c_name_address_lib_prefix=$lt_lt_cv_sys_global_symbol
_to_c_name_address_lib_prefix

# Specify filename containing input files for \${NM}.
nm_file_list_spec=$lt_nm_file_list_spec

# The root where to search for dependent libraries, and in which our
libraries should be installed.
lt_sysroot=$lt_sysroot

# The name of the directory that contains temporary libtool files.
objdir=${objdir}

# Used to examine libraries when file_magic_cmd begins with "file".
MAGIC_CMD=${MAGIC_CMD}

# Must we lock files when doing compilation?
need_locks=$lt_need_locks

# Manifest tool.
MANIFEST_TOOL=$lt_MANIFEST_TOOL

# Tool to manipulate archived DWARF debug symbol files on Mac OS X.
DSYMUTIL=$lt_DSYMUTIL

# Tool to change global to local symbols on Mac OS X.
NMEDIT=$lt_NMEDIT

# Tool to manipulate fat objects and archives on Mac OS X.
LIPO=$lt_LIPO

# ldd/readelf like tool for Mach-O binaries on Mac OS X.
OTOOL=$lt_OTOOL

# ldd/readelf like tool for 64 bit Mach-O binaries on Mac OS X 10.4.
OTOOL64=$lt_OTOOL64
```

```
# Old archive suffix (normally "a").
libext=$libext

# Shared library suffix (normally ".so").
shrext_cmds=$lt_shrext_cmds

# The commands to extract the exported symbol list from a shared
archive.
extract_expsyms_cmds=$lt_extract_expsyms_cmds

# Variables whose values should be saved in libtool wrapper scripts
and
# restored at link time.
variables_saved_for_relink=$lt_variables_saved_for_relink

# Do we need the "lib" prefix for modules?
need_lib_prefix=$need_lib_prefix

# Do we need a version for libraries?
need_version=$need_version

# Library versioning type.
version_type=$version_type

# Shared library runtime path variable.
runpath_var=$runpath_var

# Shared library path variable.
shlibpath_var=$shlibpath_var

# Is shlibpath searched before the hard-coded library search path?
shlibpath_overrides_runpath=$shlibpath_overrides_runpath

# Format of library name prefix.
libname_spec=$lt_libname_spec

# List of archive names.  First name is the real one, the rest are
links.
# The last name is the one that the linker finds with -lNAME
library_names_spec=$lt_library_names_spec

# The coded name of the library, if different from the real name.
soname_spec=$lt_soname_spec

# Permission mode override for installation of shared libraries.
install_override_mode=$lt_install_override_mode

# Command to use after installation of a shared archive.
postinstall_cmds=$lt_postinstall_cmds

# Command to use after uninstallation of a shared archive.
postuninstall_cmds=$lt_postuninstall_cmds
```

```
# Commands used to finish a libtool library installation in a
directory.
finish_cmds=$lt_finish_cmds

# As "finish_cmds", except a single script fragment to be evaled but
# not shown.
finish_eval=$lt_finish_eval

# Whether we should hardcode library paths into libraries.
hardcode_into_libs=$hardcode_into_libs

# Compile-time system search path for libraries.
sys_lib_search_path_spec=$lt_sys_lib_search_path_spec

# Run-time system search path for libraries.
sys_lib_dlsearch_path_spec=$lt_sys_lib_dlsearch_path_spec

# Whether dlopen is supported.
dlopen_support=$enable_dlopen

# Whether dlopen of programs is supported.
dlopen_self=$enable_dlopen_self

# Whether dlopen of statically linked programs is supported.
dlopen_self_static=$enable_dlopen_self_static

# Commands to strip libraries.
old_striplib=$lt_old_striplib
striplib=$lt_striplib

# The linker used to build libraries.
LD=$lt_LD

# How to create reloadable object files.
reload_flag=$lt_reload_flag
reload_cmds=$lt_reload_cmds

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds

# A language specific compiler.
CC=$lt_compiler

# Is the compiler the GNU compiler?
with_gcc=$GCC

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag

# Additional compiler flags for building library objects.
```

```
pic_flag=$lt_lt_prog_compiler_pic

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_runtimes

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds
archive_expsym_cmds=$lt_archive_expsym_cmds

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds
module_expsym_cmds=$lt_module_expsym_cmds

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag
```



```
# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=${lt_hardcode_libdir_flag_spec}

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=${lt_hardcode_libdir_separator}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=${hardcode_direct}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=${hardcode_direct_absolute}

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=${hardcode_minus_L}

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=${hardcode_shlibpath_var}

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=${hardcode_automatic}

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=${inherit_rpath}

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=${link_all_deplibs}

# Set to "yes" if exported symbols are required.
always_export_symbols=${always_export_symbols}

# The commands to list exported symbols.
export_symbols_cmds=${lt_export_symbols_cmds}

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=${lt_exclude_expsyms}
```

```

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action

# ### END LIBTOOL CONFIG

_LT_EOF

case $host_os in
aix3*)
    cat <<\_LT_EOF >> "$cfgfile"
# AIX sometimes has problems with the GCC collect2 program.  For some
# reason, if we set the COLLECT_NAMES environment variable, the
problems
# vanish in a puff of smoke.
if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
fi
_LT_EOF
;;
esac

ltmain="$ac_aux_dir/ltmain.sh"

# We use sed instead of cat because bash on DJGPP gets confused if
# if finds mixed CR/LF and LF-only lines.  Since sed operates in
# text mode, it properly converts lines to CR/LF.  This bash problem
# is reportedly fixed, but why not run on old versions too?
sed '$q' "$ltmain" >> "$cfgfile" \
    || (rm -f "$cfgfile"; exit 1)

if test x"$xsi_shell" = xyesh; then
    sed -e '/^func_dirname ()$/,/^{ } # func_dirname /c\
func_dirname ()\
{\
\    case ${1} in\

```

```

\      */*) func_dirname_result="${1%/*}${2}" ;;\
\      * ) func_dirname_result="${3}" ;;\
\    esac\
} # Extended-shell func_dirname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_basename ()$/,/^\} # func_basename /c\
func_basename ()\
{\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_basename implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_dirname_and_basename ()$/,/^\} #
func_dirname_and_basename /c\
func_dirname_and_basename ()\
{\
\   case ${1} in\
\     */*) func_dirname_result="${1%/*}${2}" ;;\
\     * ) func_dirname_result="${3}" ;;\
\   esac\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_dirname_and_basename implementation'
"$cfgfile" > $cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_stripname ()$/,/^\} # func_stripname /c\
func_stripname ()\
{\
\   # pdksh 5.2.14 does not do ${X%$Y} correctly if both X and Y are\
\   # positional parameters, so assign one to ordinary parameter
first.\
\   func_stripname_result=${3}\
\   func_stripname_result=${func_stripname_result#"${1}"}\
\   func_stripname_result=${func_stripname_result%"${2}"}\
} # Extended-shell func_stripname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \

```

```
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:
```

```
    sed -e '/^func_split_long_opt ()$/,/^\} # func_split_long_opt /c\
func_split_long_opt ()\
{\
\   func_split_long_opt_name=${1%*=*}\
\   func_split_long_opt_arg=${1#*=}\
} # Extended-shell func_split_long_opt implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:
```

```
    sed -e '/^func_split_short_opt ()$/,/^\} # func_split_short_opt /c\
func_split_short_opt ()\
{\
\   func_split_short_opt_arg=${1#??}\
\   func_split_short_opt_name=${1%"$func_split_short_opt_arg"}\
} # Extended-shell func_split_short_opt implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:
```

```
    sed -e '/^func_lo2o ()$/,/^\} # func_lo2o /c\
func_lo2o ()\
{\
\   case ${1} in\
\     *.lo) func_lo2o_result=${1%.lo}.${objext} ;;\
\     *)   func_lo2o_result=${1} ;;\
\   esac\
} # Extended-shell func_lo2o implementation' "$cfgfile" > $cfgfile.tmp
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:
```

```
    sed -e '/^func_xform ()$/,/^\} # func_xform /c\
func_xform ()\
{\
\   func_xform_result=${1%.*}.lo\
} # Extended-shell func_xform implementation' "$cfgfile" >
$cfgfile.tmp \
```

```

    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_arith ()$/,/^{ } # func_arith /c\
func_arith ()\
{\
    func_arith_result=$(( $* ))\
} # Extended-shell func_arith implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_len ()$/,/^{ } # func_len /c\
func_len ()\
{\
    func_len_result=${#1}\
} # Extended-shell func_len implementation' "$cfgfile" > $cfgfile.tmp
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

fi

if test x"$lt_shell_append" = xyes; then
    sed -e '/^func_append ()$/,/^{ } # func_append /c\
func_append ()\
{\
    eval "${1}+=\\${2}"\
} # Extended-shell func_append implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_append_quoted ()$/,/^{ } # func_append_quoted /c\
func_append_quoted ()\
{\
    \    func_quote_for_eval "${2}"\
    \    eval "${1}+=\\\ \\\ \\\ $func_quote_for_eval_result"\
} # Extended-shell func_append_quoted implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \

```

```

    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    # Save a `func_append' function call where possible by direct use of
'+='
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1+= "%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
else
    # Save a `func_append' function call even when '+=' is not available
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1=" $\1%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
fi

if test x"$_lt_function_replace_fail" = x":"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Unable to
substitute extended shell functions in $ofile" >&5
$as_echo "$as_me: WARNING: Unable to substitute extended shell
functions in $ofile" >&2;}
fi

    mv -f "$cfgfile" "$ofile" ||
    (rm -f "$ofile" && cp "$cfgfile" "$ofile" && rm -f "$cfgfile")
    chmod +x "$ofile"

;;

esac
done # for ac_tag

as_fn_exit 0
_ACEOF
ac_clean_files=$ac_clean_files_save

test $ac_write_fail = 0 ||
    as_fn_error $? "write failure creating $CONFIG_STATUS" "$LINENO" 5

# configure is writing to config.log, and then calls config.status.
# config.status does its own redirection, appending to config.log.
# Unfortunately, on DOS this fails, as config.log is still kept open

```

```

# by configure, so config.status won't be able to write to it; its
# output is simply discarded.  So we exec the FD to /dev/null,
# effectively closing config.log, so it can be properly (re)opened and
# appended to by config.status.  When coming back to configure, we
# need to make the FD available again.
if test "$no_create" != yes; then
  ac_cs_success=:
  ac_config_status_args=
  test "$silent" = yes &&
    ac_config_status_args="$ac_config_status_args --quiet"
  exec 5>/dev/null
  $SHELL $CONFIG_STATUS $ac_config_status_args || ac_cs_success=false
  exec 5>>config.log
  # Use ||, not &&, to avoid exiting from the if with $? = 1, which
  # would make configure fail if this is the last instruction.
  $ac_cs_success || as_fn_exit 1
fi
if test -n "$ac_unrecognized_opts" && test "$enable_option_checking"
!= no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: unrecognized
options: $ac_unrecognized_opts" >&5
$as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2;}
fi

echo "
          D-BUS GLIB BINDINGS $VERSION
          =====

prefix:                ${prefix}
exec_prefix:           ${exec_prefix}
  libdir:                ${EXPANDED_LIBDIR}
  bindir:                ${EXPANDED_BINDIR}
  sysconfdir:           ${EXPANDED_SYSCONFDIR}
  localstatedir:        ${EXPANDED_LOCALSTATEDIR}
datadir:               ${EXPANDED_DATADIR}
source code location:  ${srcdir}
compiler:              ${CC}
cflags:                ${CFLAGS}
cppflags:              ${CPPFLAGS}
"

echo "
  Maintainer mode:      ${USE_MAINTAINER_MODE}
  gcc coverage profiling:  ${enable_gcov}
  Building unit tests:  ${enable_tests}
  Building verbose mode:  ${enable_verbose_mode}
  Building assertions:  ${enable_asserts}
  Building checks:      ${enable_checks}
  Building Gtk-doc docs:  ${enable_gtk_doc}
  Bash Completion:     ${enable_bash_completion}

```

```

        Using XML parser:          ${with_xml}
        'make check' socket dir:  ${TEST_SOCKET_DIR}
"

if test x$enable_tests = xyes; then
    echo "NOTE: building with unit tests increases the size of the
installed library and renders it insecure."
fi
if test x$enable_tests = xyes -a x$enable_asserts = xno; then
    echo "NOTE: building with unit tests but without assertions
means tests may not properly report failures (this configuration is
only useful when doing something like profiling the tests)"
fi
if test x$enable_gcov = xyes; then
    echo "NOTE: building with coverage profiling is definitely for
developers only."
fi
if test x$enable_verbose_mode = xyes; then
    echo "NOTE: building with verbose mode increases library size,
may slightly increase security risk, and decreases performance."
fi
if test x$enable_asserts = xyes; then
    echo "NOTE: building with assertions increases library size
and decreases performance."
fi
if test x$enable_checks = xno; then
    echo "NOTE: building without checks for arguments passed to
public API makes it harder to debug apps using D-BUS, but will
slightly decrease D-BUS library size and _very_ slightly improve
performance."
fi

```

File = output.0.~1~

```

@%:@! /bin/sh
@%:@ Guess values for system-dependent variables and create Makefiles.
@%:@ Generated by GNU Autoconf 2.69 for dbus 1.6.8.
@%:@
@%:@ Report bugs to
<https://bugs.freedesktop.org/enter\_bug.cgi?product=dbus>.
@%:@
@%:@
@%:@ Copyright (C) 1992-1996, 1998-2012 Free Software Foundation, Inc.
@%:@
@%:@
@%:@ This configure script is free software; the Free Software
Foundation
@%:@ gives unlimited permission to copy, distribute and modify it.
## ----- ##
## M4sh Initialization. ##

```



```

    expr "X$arg" : "X\\(.*\\) $as_nl";
    arg=`expr "X$arg" : ".*$as_nl\\(.*\\)" `;;
    esac;
    expr "X$arg" : "X\\(.*\\)" | tr -d "$as_nl"
,
    export as_echo_n_body
    as_echo_n='sh -c $as_echo_n_body as_echo'
fi
export as_echo_body
as_echo='sh -c $as_echo_body as_echo'
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
    PATH_SEPARATOR=:
    (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
        (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
            PATH_SEPARATOR=';'
    }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " $as_nl

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
    *[\//]* ) as_myself=$0 ;;
    *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
    as_myself=$0
fi
if test ! -f "$as_myself"; then

```

```

    $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
    exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh).  But do not cause bugs in bash 2.01; the "|| exit
# 1"
# suppresses any "Segmentation fault" message there.  '(((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
    && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

# Use a proper internal environment variable to ensure we don't fall
# into an infinite loop, continuously re-executing ourselves.
if test x"${_as_can_reexec}" != xno && test "x$CONFIG_SHELL" != x;
then
    _as_can_reexec=no; export _as_can_reexec;
    # We cannot yet assume a decent shell, so we have to provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec'.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
as_fn_exit 255
fi

```

```

# We don't want this to propagate to other subprocesses.
    { _as_can_reexec=; unset _as_can_reexec;}
if test "x$CONFIG_SHELL" = x; then
    as_bourne_compatible="if test -n \"\${ZSH_VERSION+set}\" && (emulate
sh) >/dev/null 2>&1; then :
    emulate sh
    NULLCMD=:
    # Pre-4.2 versions of Zsh do word splitting on \"\${1+\"$@\"}\", which
    # is contrary to our usage.  Disable this feature.
    alias -g \"\${1+\"$@\"}\"='\"$@\"'
    setopt NO_GLOB_SUBST
else
    case \"(set -o) 2>/dev/null\" in @%:@(
*posix*) :
        set -o posix ;; @%:@(
*) :
        ;;
esac
fi
"
    as_required="as_fn_return () { (exit \$1); }
as_fn_success () { as_fn_return 0; }
as_fn_failure () { as_fn_return 1; }
as_fn_ret_success () { return 0; }
as_fn_ret_failure () { return 1; }

exitcode=0
as_fn_success || { exitcode=1; echo as_fn_success failed.; }
as_fn_failure && { exitcode=1; echo as_fn_failure succeeded.; }
as_fn_ret_success || { exitcode=1; echo as_fn_ret_success failed.; }
as_fn_ret_failure && { exitcode=1; echo as_fn_ret_failure succeeded.; }
}
if ( set x; as_fn_ret_success y && test x = \"\$1\" ); then :

else
    exitcode=1; echo positional parameters were not saved.
fi
test x\$exitcode = x0 || exit 1
test -x / || exit 1"
    as_suggested="
as_lineno_1=";as_suggested=$as_suggested$LINENO;as_suggested=$as_sugge
sted" as_lineno_1a=\$LINENO

as_lineno_2=";as_suggested=$as_suggested$LINENO;as_suggested=$as_sugge
sted" as_lineno_2a=\$LINENO
    eval 'test \"x\$as_lineno_1'\$as_run'\" !=
\"x\$as_lineno_2'\$as_run'\" &&
    test \"x\`expr \$as_lineno_1'\$as_run' + 1`\`\" =
\"x\$as_lineno_2'\$as_run'\" || exit 1
test \"\$( ( 1 + 1 ) ) = 2\" || exit 1

    test -n \"\${ZSH_VERSION+set}\${BASH_VERSION+set}\" || (

```

```

ECHO='////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
\\'
    ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO
    ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO
    PATH=/empty FPATH=/empty; export PATH FPATH
    test \"X\`printf %s \$ECHO\`\" = \"X\$ECHO\" \\\
    || test \"X\`print -r -- \$ECHO\`\" = \"X\$ECHO\" ) || exit 1\"
    if (eval \"$as_required\") 2>/dev/null; then :
    as_have_required=yes
else
    as_have_required=no
fi
    if test x$as_have_required = xyes && (eval \"$as_suggested\")
2>/dev/null; then :

else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
as_found=false
for as_dir in /bin$PATH_SEPARATOR/usr/bin$PATH_SEPARATOR$PATH
do
    IFS=$as_save_IFS
    test -z \"$as_dir\" && as_dir=.
    as_found=:
    case $as_dir in @%:@(
        /*)
            for as_base in sh bash ksh sh5; do
                # Try only shells that exist, to save several forks.
                as_shell=$as_dir/$as_base
                if { test -f \"$as_shell\" || test -f \"$as_shell.exe\"; } &&
                    { $as_echo \"$as_bourne_compatible\" \"$as_required\" |
as_run=a \"$as_shell\"; } 2>/dev/null; then :
                    CONFIG_SHELL=$as_shell as_have_required=yes
                        if { $as_echo \"$as_bourne_compatible\" \"$as_suggested\" |
as_run=a \"$as_shell\"; } 2>/dev/null; then :
                            break 2
                        fi
                    fi
                done;;
            esac
        as_found=false
    done
$as_found || { if { test -f \"$SHELL\" || test -f \"$SHELL.exe\"; } &&
    { $as_echo \"$as_bourne_compatible\" \"$as_required\" | as_run=a
\"$SHELL\"; } 2>/dev/null; then :
        CONFIG_SHELL=$SHELL as_have_required=yes
    fi; }
IFS=$as_save_IFS

```

```

        if test "x$CONFIG_SHELL" != x; then :
export CONFIG_SHELL
        # We cannot yet assume a decent shell, so we have to
provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec`.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
exit 255
fi

        if test x$as_have_required = xno; then :
$as_echo "$0: This script requires a shell more modern than all"
$as_echo "$0: the shells that I found on your system."
if test x${ZSH_VERSION+set} = xset ; then
    $as_echo "$0: In particular, zsh $ZSH_VERSION has bugs and should"
    $as_echo "$0: be upgraded to zsh 4.3.4 or later."
else
    $as_echo "$0: Please tell bug-autoconf@gnu.org and
$0: https://bugs.freedesktop.org/enter\_bug.cgi?product=dbus
$0: about your system, including any error possibly output
$0: before this message. Then install a modern shell, or
$0: manually run the script under such a shell if you do
$0: have one."
fi
        exit 1
fi
fi
fi
SHELL=${CONFIG_SHELL-/bin/sh}
export SHELL
# Unset more variables known to interfere with behavior of common
tools.
CLICOLOR_FORCE= GREP_OPTIONS=
unset CLICOLOR_FORCE GREP_OPTIONS

## ----- ##
## M4sh Shell Functions. ##
## ----- ##
@%:@ as_fn_unset VAR

```

```

@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @$|@? to STATUS, without forking.
as_fn_set_status ()
{
    return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS
@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "@S|@as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{
    case $as_dir in #(
    -*) as_dir=./$as_dir;;
    esac
    test -d "$as_dir" || eval $as_mkdir_p || {
        as_dirs=
        while ;; do
            case $as_dir in #(
            *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\''/g"`;;
            #\'(
            *) as_qdir=$as_dir;;
            esac
            as_dirs="'$as_qdir' $as_dirs"
            as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \\\ \
X"$as_dir" : 'X\(//\) [^/]' \\\ \
X"$as_dir" : 'X\(//\) $' \\\ \
X"$as_dir" : 'X\(/\)' \\\ . 2>/dev/null ||
$as_echo X"$as_dir" |

```

```

sed '/^X\(.*[^\)]\)\)\)\/*[^\)] [^\)]*\/*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\/*[^\)] [^\)]*\/*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)$/{
    s//\1/
    q
}
/^X\(\)\)\)\).*$/{
    s//\1/
    q
}
s/.*/./; q'`
test -d "$as_dir" && break
done
test -z "$as_dirs" || eval "mkdir $as_dirs"
} || test -d "$as_dir" || as_fn_error $? "cannot create directory
$as_dir"

} @%:@ as_fn_mkdir_p

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$as_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
    {
        eval $1+=\$2
    }'
else
    as_fn_append ()
    {
        eval $1=\$1\$2
    }
fi

```



```

    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \${(( 1 + 1 ))} = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
        {
            as_val=$(( $* ))
        }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
    as_status=$1; test $as_status -eq 0 && as_status=1
    if test "$4"; then
        as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
        $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
    fi
    $as_echo "$as_me: error: $2" >&2
    as_fn_exit $as_status
} @%:@ as_fn_error

if expr a : '\(a\)' >/dev/null 2>&1 &&
    test "X`expr 00001 : '.*\(...\)`" = X001; then
    as_expr=expr
else
    as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
    as_basename=basename

```

```

else
  as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]\*\)\/*$' \|| \
X"$0" : 'X\(/\)\$' \|| \
X"$0" : 'X\(/\) ' \|| . 2>/dev/null ||
$as_echo X/"$0" |
sed '/^\.*\/\([^\/]\*\)\/*$/ {
  s//\1/
  q
}
/^X\/\(\//\)\$/{
  s//\1/
  q
}
/^X\/\(\//\)\.*/{
  s//\1/
  q
}
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxy'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

as_lineno_1=$LINENO as_lineno_1a=$LINENO
as_lineno_2=$LINENO as_lineno_2a=$LINENO
eval 'test "x$as_lineno_1'$as_run'" != "x$as_lineno_2'$as_run'" &&
test "x`expr $as_lineno_1'$as_run' + 1`" = "x$as_lineno_2'$as_run'"'
|| {
# Blame Lee E. McMahon (1931-1989) for sed's syntax. :-)
sed -n '
  p
  /[$]LINENO/=
  ' <$as_myself |
  sed '
    s/[$]LINENO.*/&-/
    t lineno
    b

```

```

        :lineno
        N
        :loop
        s/[$]LINENO\([^\$as_cr_alnum'_].*\n\)\(.*\)/\2\1\2/
        t loop
        s/-\n.*//
        ' >$as_me.lineno &&
        chmod +x "$as_me.lineno" ||
        { $as_echo "$as_me: error: cannot create $as_me.lineno; rerun with
a POSIX shell" >&2; as_fn_exit 1; }

# If we had to re-execute with $CONFIG_SHELL, we're ensured to have
# already done that, so ensure we don't try to do so again and fall
# in an infinite loop. This has already happened in practice.
_as_can_reexec=no; export _as_can_reexec
# Don't try to exec as it changes ${0}, causing all sort of problems
# (the dirname of ${0} is not the place where we might find the
# original and so on. Autoconf is especially sensitive to this).
. "$as_me.lineno"
# Exit status is that of the last command.
exit
}

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*))
  case `echo 'xy\c'` in
  *c*) ECHO_T=' ';; # ECHO_T is single tab character.
  xy) ECHO_C='\c';;
  *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
     ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$ conf$$exe conf$$file
if test -d conf$$dir; then
  rm -f conf$$dir/conf$$file
else
  rm -f conf$$dir
  mkdir conf$$dir 2>/dev/null
fi
if (echo >conf$$file) 2>/dev/null; then
  if ln -s conf$$file conf$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.

```

```

    ln -s conf$$file conf$$dir 2>/dev/null && test ! -f conf$$exe
||
    as_ln_s='cp -pR'
elif ln conf$$file conf$$ 2>/dev/null; then
    as_ln_s=ln
else
    as_ln_s='cp -pR'
fi
else
    as_ln_s='cp -pR'
fi
rm -f conf$$ conf$$exe conf$$dir/conf$$file conf$$file
rmdir conf$$dir 2>/dev/null

if mkdir -p . 2>/dev/null; then
    as_mkdir_p='mkdir -p "$as_dir"'
else
    test -d ./-p && rmdir ./-p
    as_mkdir_p=false
fi

as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+%pp%;s%[^_$as_cr_alnum]%%_g'"

SHELL=${CONFIG_SHELL-/bin/sh}

test -n "$DJDIR" || exec 7<&0 </dev/null
exec 6>&1

# Name of the host.
# hostname on some systems (SVR3.2, old GNU/Linux) returns a bogus
# exit status,
# so uname gets run too.
ac_hostname=`(hostname || uname -n) 2>/dev/null | sed 1q`

#
# Initializations.
#
ac_default_prefix=/usr/local
ac_clean_files=
ac_config_libobj_dir=.
LIB@&t@OBS=
cross_compiling=no
subdirs=

```

```
MFLAGS=
MAKEFLAGS=

# Identity of this package.
PACKAGE_NAME='dbus'
PACKAGE_TARNAME='dbus'
PACKAGE_VERSION='1.6.8'
PACKAGE_STRING='dbus 1.6.8'
PACKAGE_BUGREPORT='https://bugs.freedesktop.org/enter_bug.cgi?product=
dbus'
PACKAGE_URL=''

# Factoring default headers for most tests.
ac_includes_default="\
#include <stdio.h>
#ifdef HAVE_SYS_TYPES_H
# include <sys/types.h>
#endif
#ifdef HAVE_SYS_STAT_H
# include <sys/stat.h>
#endif
#ifdef STDC_HEADERS
# include <stdlib.h>
# include <stddef.h>
#else
# ifdef HAVE_STDLIB_H
# include <stdlib.h>
# endif
#endif
#ifdef HAVE_STRING_H
# if !defined STDC_HEADERS && defined HAVE_MEMORY_H
# include <memory.h>
# endif
# include <string.h>
#endif
#ifdef HAVE_STRINGS_H
# include <strings.h>
#endif
#ifdef HAVE_INTTYPES_H
# include <inttypes.h>
#endif
#ifdef HAVE_STDINT_H
# include <stdint.h>
#endif
#ifdef HAVE_UNISTD_H
# include <unistd.h>
#endif"

ac_subst_vars='am__EXEEXT_FALSE
am__EXEEXT_TRUE
LTLIBOBJS
LIB@&t@OBJJS'
```

DBUS_SESSION_BUS_DEFAULT_ADDRESS
DBUS_SESSION_SOCKET_DIR
TEST_LISTEN
TEST_SOCKET_DIR
TEST_LAUNCH_HELPER_BINARY
TEST_BUS_BINARY
DBUS_TEST_EXEC
DBUS_TEST_DATA
DBUS_LIBEXECDIR
DBUS_BINDIR
DBUS_DAEMONDIR
DBUS_DATADIR
DBUS_PREFIX
DBUS_USER
DBUS_CONSOLE_OWNER_FILE
DBUS_CONSOLE_AUTH_DIR
DBUS_SYSTEM_PID_FILE
DBUS_SYSTEM_BUS_DEFAULT_ADDRESS
DBUS_SYSTEM_SOCKET
HAVE_SYSTEMD_FALSE
HAVE_SYSTEMD_TRUE
systemdsystemunitdir
DBUS_INIT_SCRIPTS_CYGWIN_FALSE
DBUS_INIT_SCRIPTS_CYGWIN_TRUE
DBUS_INIT_SCRIPTS_SLACKWARE_FALSE
DBUS_INIT_SCRIPTS_SLACKWARE_TRUE
DBUS_INIT_SCRIPTS_RED_HAT_FALSE
DBUS_INIT_SCRIPTS_RED_HAT_TRUE
EXPANDED_DATADIR
EXPANDED_LIBEXECDIR
EXPANDED_LIBDIR
EXPANDED_BINDIR
EXPANDED_SYSCONFDIR
EXPANDED_LOCALSTATEDIR
EXPANDED_PREFIX
DBUS_CAN_UPLOAD_DOCS_FALSE
DBUS_CAN_UPLOAD_DOCS_TRUE
DBUS_HAVE_MAN2HTML_FALSE
DBUS_HAVE_MAN2HTML_TRUE
MAN2HTML
DBUS_XML_DOCS_ENABLED_FALSE
DBUS_XML_DOCS_ENABLED_TRUE
XMLTO
DBUS_HAVE_XSLTPROC_FALSE
DBUS_HAVE_XSLTPROC_TRUE
XSLTPROC
DBUS_DOXYGEN_DOCS_ENABLED_FALSE
DBUS_DOXYGEN_DOCS_ENABLED_TRUE
DOXYGEN
DBUS_X_LIBS
DBUS_X_CFLAGS
X_EXTRA_LIBS

X_LIBS
X_PRE_LIBS
X_CFLAGS
LIBDBUS_LIBS
VALGRIND_LIBS
VALGRIND_CFLAGS
NETWORK_libs
ADT_LIBS
SELINUX_LIBS
HAVE_LIBAUDIT_FALSE
HAVE_LIBAUDIT_TRUE
SYSTEMD_LIBS
SYSTEMD_CFLAGS
HAVE_CONSOLE_OWNER_FILE_FALSE
HAVE_CONSOLE_OWNER_FILE_TRUE
LAUNCHD_AGENT_DIR
DBUS_ENABLE_LAUNCHD_FALSE
DBUS_ENABLE_LAUNCHD_TRUE
LAUNCHCTL
DBUS_BUS_ENABLE_KQUEUE_FALSE
DBUS_BUS_ENABLE_KQUEUE_TRUE
HAVE_LINUX_EPOLL_FALSE
HAVE_LINUX_EPOLL_TRUE
DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE
DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE
DBUS_BUS_ENABLE_INOTIFY_FALSE
DBUS_BUS_ENABLE_INOTIFY_TRUE
HAVE_SELINUX_FALSE
HAVE_SELINUX_TRUE
THREAD_LIBS
XML_LIBS
XML_CFLAGS
DBUS_USE_LIBXML_FALSE
DBUS_USE_LIBXML_TRUE
DBUS_USE_EXPAT_FALSE
DBUS_USE_EXPAT_TRUE
LIBXML_LIBS
LIBXML_CFLAGS
DBUS_PATH_OR_ABSTRACT
DBUS_INT16_TYPE
DBUS_INT32_TYPE
DBUS_HAVE_INT64
DBUS_UINT64_CONSTANT
DBUS_INT64_CONSTANT
DBUS_INT64_TYPE
R_DYNAMIC_LDFLAG
pkgpyexecdir
pyexecdir
pkgpythondir
pythondir
PYTHON_PLATFORM
PYTHON_EXEC_PREFIX

PYTHON_LIB_PREFIX
PYTHON_PREFIX
PYTHON_VERSION
PYTHON
DBUS_ENABLE_INSTALLED_TESTS_FALSE
DBUS_ENABLE_INSTALLED_TESTS_TRUE
DBUS_WITH_GLIB_FALSE
DBUS_WITH_GLIB_TRUE
DBUS_ENABLE_MODULAR_TESTS_FALSE
DBUS_ENABLE_MODULAR_TESTS_TRUE
DBUS_GLIB_LIBS
DBUS_GLIB_CFLAGS
GLIB_LIBS
GLIB_CFLAGS
DBUS_ENABLE_EMBEDDED_TESTS_FALSE
DBUS_ENABLE_EMBEDDED_TESTS_TRUE
DBUS_BUILD_TESTS_FALSE
DBUS_BUILD_TESTS_TRUE
DBUS_STATIC_BUILD_CPPFLAGS
DBUS_CYGWIN_FALSE
DBUS_CYGWIN_TRUE
DBUS_UNIX_FALSE
DBUS_UNIX_TRUE
DBUS_WINCE_FALSE
DBUS_WINCE_TRUE
DBUS_WIN_FALSE
DBUS_WIN_TRUE
WINDRES
BUILD_FILEVERSION
BUILD_TIMESTAMP
RC
PKG_CONFIG
CXXCPP
OTOOL64
OTOOL
LIPO
NMEDIT
DSYMUTIL
MANIFEST_TOOL
RANLIB
ac_ct_AR
AR
DLLTOOL
OBJDUMP
LN_S
NM
ac_ct_DUMPBIN
DUMPBIN
LD
FGREP
SED
LIBTOOL

EGREP
GREP
CPP
am__fastdepCXX_FALSE
am__fastdepCXX_TRUE
CXXDEPMODE
ac_ct_CXX
CXXFLAGS
CXX
am__fastdepCC_FALSE
am__fastdepCC_TRUE
CCDEPMODE
am__nodep
AMDEPBACKSLASH
AMDEP_FALSE
AMDEP_TRUE
am__quote
am__include
DEPDIR
OBJEXT
EXEEXT
ac_ct_CC
CPPFLAGS
LDFLAGS
CFLAGS
CC
DBUS_VERSION
DBUS_MICRO_VERSION
DBUS_MINOR_VERSION
DBUS_MAJOR_VERSION
LT_AGE
LT_REVISION
LT_CURRENT
AM_BACKSLASH
AM_DEFAULT_VERBOSITY
AM_DEFAULT_V
AM_V
MAINT
MAINTAINER_MODE_FALSE
MAINTAINER_MODE_TRUE
GETTEXT_PACKAGE
am__untar
am__tar
AMTAR
am__leading_dot
SET_MAKE
AWK
mkdir_p
MKDIR_P
INSTALL_STRIP_PROGRAM
STRIP
install_sh

MAKEINFO
AUTOHEADER
AUTOMAKE
AUTOCONF
ACLOCAL
VERSION
PACKAGE
CYGPATH_W
am__isrc
INSTALL_DATA
INSTALL_SCRIPT
INSTALL_PROGRAM
host_os
host_vendor
host_cpu
host
build_os
build_vendor
build_cpu
build
target_alias
host_alias
build_alias
LIBS
ECHO_T
ECHO_N
ECHO_C
DEFS
mandir
localedir
libdir
psdir
pdfdir
dvidir
htmldir
infodir
docdir
oldincludedir
includedir
localstatedir
sharedstatedir
sysconfdir
datadir
datarootdir
libexecdir
sbindir
bindir
program_transform_name
prefix
exec_prefix
PACKAGE_URL
PACKAGE_BUGREPORT

```
PACKAGE_STRING
PACKAGE_VERSION
PACKAGE_TARNAME
PACKAGE_NAME
PATH_SEPARATOR
SHELL'
ac_subst_files=''
ac_user_opts='
enable_option_checking
enable_maintainer_mode
enable_silent_rules
enable_dependency_tracking
enable_shared
enable_static
with_pic
enable_fast_install
with_gnu_ld
with_libtool_sysroot
enable_libtool_lock
enable_compiler_coverage
enable_compiler_optimisations
enable_developer
enable_ansi
enable_verbose_mode
enable_asserts
enable_checks
enable_xml_docs
enable_doxygen_docs
enable_abstract_sockets
enable_selinux
enable_libaudit
enable_dnotify
enable_inotify
enable_kqueue
enable_console_owner_file
enable_userdb_cache
enable_launchd
enable_systemd
with_xml
with_init_scripts
with_session_socket_dir
with_test_socket_dir
with_system_pid_file
with_system_socket
with_console_auth_dir
with_console_owner_file
with_launchd_agent_dir
with_dbus_user
with_dbus_daemon_dir
with_dbus_session_bus_default_address
enable_embedded_tests
enable_modular_tests
```

```
enable_tests
enable_installed_tests
with_64_bit
enable_epoll
with_valgrind
enable_x11_autolaunch
with_x
enable_Werror
with_systemdsystemunitdir
with_dbus_test_dir
enable_stats
'
    ac_precious_vars='build_alias
host_alias
target_alias
CC
CFLAGS
LDFLAGS
LIBS
CPPFLAGS
CXX
CXXFLAGS
CCC
CPP
CXXCPP
PKG_CONFIG
GLIB_CFLAGS
GLIB_LIBS
DBUS_GLIB_CFLAGS
DBUS_GLIB_LIBS
PYTHON
LIBXML_CFLAGS
LIBXML_LIBS
SYSTEMD_CFLAGS
SYSTEMD_LIBS
VALGRIND_CFLAGS
VALGRIND_LIBS
MAN2HTML'
```

```
# Initialize some variables set by options.
ac_init_help=
ac_init_version=false
ac_unrecognized_opts=
ac_unrecognized_sep=
# The variables have the same names as the options, with
# dashes changed to underlines.
cache_file=/dev/null
exec_prefix=NONE
no_create=
no_recursion=
prefix=NONE
```

```

program_prefix=NONE
program_suffix=NONE
program_transform_name=s,x,x,
silent=
site=
srcdir=
verbose=
x_includes=NONE
x_libraries=NONE

# Installation directory options.
# These are left unexpanded so users can "make install
exec_prefix=/foo"
# and all the variables that are supposed to be based on exec_prefix
# by default will actually change.
# Use braces instead of parens because sh, perl, etc. also accept
them.
# (The list follows the same order as the GNU Coding Standards.)
bindir='${exec_prefix}/bin'
sbindir='${exec_prefix}/sbin'
libexecdir='${exec_prefix}/libexec'
datarootdir='${prefix}/share'
datadir='${datarootdir}'
sysconfdir='${prefix}/etc'
sharedstatedir='${prefix}/com'
localstatedir='${prefix}/var'
includedir='${prefix}/include'
oldincludedir='/usr/include'
docdir='${datarootdir}/doc/${PACKAGE_TARNAME}'
infodir='${datarootdir}/info'
htmldir='${docdir}'
dvidir='${docdir}'
pdfdir='${docdir}'
psdir='${docdir}'
libdir='${exec_prefix}/lib'
localedir='${datarootdir}/locale'
mandir='${datarootdir}/man'

ac_prev=
ac_dashdash=
for ac_option
do
    # If the previous option needs an argument, assign it.
    if test -n "$ac_prev"; then
        eval $ac_prev=\$ac_option
        ac_prev=
        continue
    fi

    case $ac_option in
        *=?*) ac_optarg=`expr "X$ac_option" : '[^=]*\(.*\)'` ;;
        *)    ac_optarg= ;;
    esac
done

```

```

*)    ac_optarg=yes ;;
esac

# Accept the important Cygnus configure options, so we can diagnose
typos.

case $ac_dashdash$ac_option in
--)
    ac_dashdash=yes ;;

-bindir | --bindir | --bindi | --bind | --bin | --bi)
    ac_prev=bindir ;;
-bindir=* | --bindir=* | --bindi=* | --bind=* | --bin=* | --bi=*)
    bindir=$ac_optarg ;;

-build | --build | --buil | --bui | --bu)
    ac_prev=build_alias ;;
-build=* | --build=* | --buil=* | --bui=* | --bu=*)
    build_alias=$ac_optarg ;;

-cache-file | --cache-file | --cache-fil | --cache-fi \
| --cache-f | --cache- | --cache | --cach | --cac | --ca | --c)
    ac_prev=cache_file ;;
-cache-file=* | --cache-file=* | --cache-fil=* | --cache-fi=* \
| --cache-f=* | --cache-=* | --cache=* | --cach=* | --cac=* | --ca=*
| --c=*)
    cache_file=$ac_optarg ;;

--config-cache | -C)
    cache_file=config.cache ;;

-datadir | --datadir | --datadi | --datad)
    ac_prev=datadir ;;
-datadir=* | --datadir=* | --datadi=* | --datad=*)
    datadir=$ac_optarg ;;

-datarootdir | --datarootdir | --datarootdi | --datarootd | --
dataroot \
| --dataroo | --dataro | --datar)
    ac_prev=datarootdir ;;
-datarootdir=* | --datarootdir=* | --datarootdi=* | --datarootd=* \
| --dataroot=* | --dataroo=* | --dataro=* | --datar=*)
    datarootdir=$ac_optarg ;;

-disable-* | --disable-*)
    ac_useropt=`expr "x$ac_option" : 'x-*disable-\(.*\)'`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
    as_fn_error $? "invalid feature name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in

```

```

        *"
"enable_${ac_useropt}"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
disable-${ac_useropt_orig}"
        ac_unrecognized_sep=', ';;
    esac
    eval enable_${ac_useropt}=no ;;

-docdir | --docdir | --docdi | --doc | --do)
    ac_prev=docdir ;;
-docdir=* | --docdir=* | --docdi=* | --doc=* | --do=*)
    docdir=${ac_optarg} ;;

-dvidir | --dvidir | --dvidi | --dvid | --dvi | --dv)
    ac_prev=dvidir ;;
-dvidir=* | --dvidir=* | --dvidi=* | --dvid=* | --dvi=* | --dv=*)
    dvidir=${ac_optarg} ;;

-enable-* | --enable-*)
    ac_useropt=`expr "x${ac_option}" : 'x-*enable-\([^=]*\) '`
    # Reject names that are not valid shell variable names.
    expr "x${ac_useropt}" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid feature name: ${ac_useropt}"
    ac_useropt_orig=${ac_useropt}
    ac_useropt=`$as_echo "${ac_useropt}" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *"
"enable_${ac_useropt}"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
enable-${ac_useropt_orig}"
        ac_unrecognized_sep=', ';;
    esac
    eval enable_${ac_useropt}=\${ac_optarg} ;;

-exec-prefix | --exec_prefix | --exec-prefix | --exec-prefi \
| --exec-pref | --exec-pre | --exec-pr | --exec-p | --exec- \
| --exec | --exe | --ex)
    ac_prev=exec_prefix ;;
-exec-prefix=* | --exec_prefix=* | --exec-prefix=* | --exec-prefi=*
\
| --exec-pref=* | --exec-pre=* | --exec-pr=* | --exec-p=* | --exec-
=* \
| --exec=* | --exe=* | --ex=*)
    exec_prefix=${ac_optarg} ;;

-gas | --gas | --ga | --g)
    # Obsolete; use --with-gas.
    with_gas=yes ;;

```

```

-help | --help | --hel | --he | -h)
  ac_init_help=long ;;
-help=r* | --help=r* | --hel=r* | --he=r* | -hr*)
  ac_init_help=recursive ;;
-help=s* | --help=s* | --hel=s* | --he=s* | -hs*)
  ac_init_help=short ;;

-host | --host | --hos | --ho)
  ac_prev=host_alias ;;
-host=* | --host=* | --hos=* | --ho=*)
  host_alias=$ac_optarg ;;

-htmldir | --htmldir | --htmldi | --htmld | --html | --htm | --ht)
  ac_prev=htmldir ;;
-htmldir=* | --htmldir=* | --htmldi=* | --htmld=* | --html=* | --
htm=* \
| --ht=*)
  htmldir=$ac_optarg ;;

-includedir | --includedir | --includedi | --included | --include \
| --includ | --inclu | --incl | --inc)
  ac_prev=includedir ;;
-includedir=* | --includedir=* | --includedi=* | --included=* | --
include=* \
| --includ=* | --inclu=* | --incl=* | --inc=*)
  includedir=$ac_optarg ;;

-infodir | --infodir | --infodi | --infod | --info | --inf)
  ac_prev=infodir ;;
-infodir=* | --infodir=* | --infodi=* | --infod=* | --info=* | --
inf=*)
  infodir=$ac_optarg ;;

-libdir | --libdir | --libdi | --libd)
  ac_prev=libdir ;;
-libdir=* | --libdir=* | --libdi=* | --libd=*)
  libdir=$ac_optarg ;;

-libexecdir | --libexecdir | --libexecdi | --libexecd | --libexec \
| --libexe | --libex | --libe)
  ac_prev=libexecdir ;;
-libexecdir=* | --libexecdir=* | --libexecdi=* | --libexecd=* | --
libexec=* \
| --libexe=* | --libex=* | --libe=*)
  libexecdir=$ac_optarg ;;

-localedir | --localedir | --localedi | --localed | --locale)
  ac_prev=localedir ;;
-localedir=* | --localedir=* | --localedi=* | --localed=* | --
locale=*)
  localedir=$ac_optarg ;;

```



```

-localstatedir | --localstatedir | --localstatedi | --localstated \
| --localstate | --localstat | --localsta | --localst | --locals)
    ac_prev=localstatedir ;;
-localstatedir=* | --localstatedir=* | --localstatedi=* | --
localstated=* \
| --localstate=* | --localstat=* | --localsta=* | --localst=* | --
locals=*)
    localstatedir=$ac_optarg ;;

-mandir | --mandir | --mandi | --mand | --man | --ma | --m)
    ac_prev=mandir ;;
-mandir=* | --mandir=* | --mandi=* | --mand=* | --man=* | --ma=* | -
-m=*)
    mandir=$ac_optarg ;;

-nfp | --nfp | --nf)
    # Obsolete; use --without-fp.
    with_fp=no ;;

-no-create | --no-create | --no-creat | --no-crea | --no-cre \
| --no-cr | --no-c | -n)
    no_create=yes ;;

-no-recursion | --no-recursion | --no-recursio | --no-recursi \
| --no-recurs | --no-recur | --no-recu | --no-rec | --no-re | --no-
r)
    no_recursion=yes ;;

-oldincludedir | --oldincludedir | --oldincludedi | --oldincluded \
| --oldinclude | --oldinclud | --oldinclu | --oldincl | --oldinc \
| --oldin | --oldi | --old | --ol | --o)
    ac_prev=oldincludedir ;;
-oldincludedir=* | --oldincludedir=* | --oldincludedi=* | --
oldincluded=* \
| --oldinclude=* | --oldinclud=* | --oldinclu=* | --oldincl=* | --
oldinc=* \
| --oldin=* | --oldi=* | --old=* | --ol=* | --o=*)
    oldincludedir=$ac_optarg ;;

-prefix | --prefix | --prefi | --pref | --pre | --pr | --p)
    ac_prev=prefix ;;
-prefix=* | --prefix=* | --prefi=* | --pref=* | --pre=* | --pr=* | -
-p=*)
    prefix=$ac_optarg ;;

-program-prefix | --program-prefix | --program-prefi | --program-
pref \
| --program-pre | --program-pr | --program-p)
    ac_prev=program_prefix ;;
-program-prefix=* | --program-prefix=* | --program-prefi=* \

```

```

| --program-pref=* | --program-pre=* | --program-pr=* | --program-
p=*)
    program_prefix=$ac_optarg ;;

-program-suffix | --program-suffix | --program-suffi | --program-
suff \
| --program-suf | --program-su | --program-s)
    ac_prev=program_suffix ;;
-program-suffix=* | --program-suffix=* | --program-suffi=* \
| --program-suff=* | --program-suf=* | --program-su=* | --program-
s=*)
    program_suffix=$ac_optarg ;;

-program-transform-name | --program-transform-name \
| --program-transform-nam | --program-transform-na \
| --program-transform-n | --program-transform- \
| --program-transform | --program-transfor \
| --program-transfo | --program-transf \
| --program-trans | --program-tran \
| --progr-tra | --program-tr | --program-t)
    ac_prev=program_transform_name ;;
-program-transform-name=* | --program-transform-name=* \
| --program-transform-nam=* | --program-transform-na=* \
| --program-transform-n=* | --program-transform-=* \
| --program-transform=* | --program-transfor=* \
| --program-transfo=* | --program-transf=* \
| --program-trans=* | --program-tran=* \
| --progr-tra=* | --program-tr=* | --program-t=*)
    program_transform_name=$ac_optarg ;;

-pdfdir | --pdfdir | --pdfdi | --pdfd | --pdf | --pd)
    ac_prev=pdfdir ;;
-pdfdir=* | --pdfdir=* | --pdfdi=* | --pdfd=* | --pdf=* | --pd=*)
    pdfdir=$ac_optarg ;;

-psdir | --psdir | --psdi | --psd | --ps)
    ac_prev=psdir ;;
-psdir=* | --psdir=* | --psdi=* | --psd=* | --ps=*)
    psdir=$ac_optarg ;;

-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil)
    silent=yes ;;

-sbindir | --sbindir | --sbindi | --sbind | --sbin | --sbi | --sb)
    ac_prev=sbindir ;;
-sbindir=* | --sbindir=* | --sbindi=* | --sbind=* | --sbin=* \
| --sbi=* | --sb=*)
    sbindir=$ac_optarg ;;

-sharedstatedir | --sharedstatedir | --sharedstatedi \
| --sharedstated | --sharedstate | --sharedstat | --sharedsta \

```

```

| --sharedst | --shares | --shared | --share | --shar \
| --sha | --sh)
  ac_prev=sharedstatedir ;;
-sharedstatedir=* | --sharedstatedir=* | --sharedstatedi=* \
| --sharedstated=* | --sharedstate=* | --sharedstat=* | --
sharedsta=* \
| --sharedst=* | --shares=* | --shared=* | --share=* | --shar=* \
| --sha=* | --sh=*)
  sharedstatedir=$ac_optarg ;;

-site | --site | --sit)
  ac_prev=site ;;
-site=* | --site=* | --sit=*)
  site=$ac_optarg ;;

-srcdir | --srcdir | --srcdi | --srcd | --src | --sr)
  ac_prev=srcdir ;;
-srcdir=* | --srcdir=* | --srcdi=* | --srcd=* | --src=* | --sr=*)
  srcdir=$ac_optarg ;;

-sysconfdir | --sysconfdir | --sysconfdi | --sysconfd | --sysconf \
| --syscon | --sysco | --sysc | --sys | --sy)
  ac_prev=sysconfdir ;;
-sysconfdir=* | --sysconfdir=* | --sysconfdi=* | --sysconfd=* | --
sysconf=* \
| --syscon=* | --sysco=* | --sysc=* | --sys=* | --sy=*)
  sysconfdir=$ac_optarg ;;

-target | --target | --targe | --targ | --tar | --ta | --t)
  ac_prev=target_alias ;;
-target=* | --target=* | --targe=* | --targ=* | --tar=* | --ta=* | -
-t=*)
  target_alias=$ac_optarg ;;

-v | -verbose | --verbose | --verbos | --verbo | --verb)
  verbose=yes ;;

-version | --version | --versio | --versi | --vers | -V)
  ac_init_version=: ;;

-with-* | --with-*)
  ac_useropt=`expr "x$ac_option" : 'x-*with-\([^=]*\)'`
  # Reject names that are not valid shell variable names.
  expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
  as_fn_error $? "invalid package name: $ac_useropt"
  ac_useropt_orig=$ac_useropt
  ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
  case $ac_user_opts in
    *)
"with_$ac_useropt"
"*) ;;

```

```

        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--with-
$ac_useropt_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval with_$ac_useropt=\$ac_optarg ;;

-without-* | --without-*)
    ac_useropt=`expr "x$ac_option" : 'x-*without-\(.*\)'\`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid package name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'\`
    case $ac_user_opts in
        *)
"with_$ac_useropt"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
without-$ac_useropt_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval with_$ac_useropt=no ;;

--x)
    # Obsolete; use --with-x.
    with_x=yes ;;

-x-includes | --x-includes | --x-include | --x-includ | --x-inclu \
| --x-incl | --x-inc | --x-in | --x-i)
    ac_prev=x_includes ;;
-x-includes=* | --x-includes=* | --x-include=* | --x-includ=* | --x-
inclu=* \
| --x-incl=* | --x-inc=* | --x-in=* | --x-i=*)
    x_includes=$ac_optarg ;;

-x-libraries | --x-libraries | --x-librarie | --x-librari \
| --x-librar | --x-libra | --x-libr | --x-lib | --x-li | --x-l)
    ac_prev=x_libraries ;;
-x-libraries=* | --x-libraries=* | --x-librarie=* | --x-librari=* \
| --x-librar=* | --x-libra=* | --x-libr=* | --x-lib=* | --x-li=* | -
-x-l=*)
    x_libraries=$ac_optarg ;;

-*) as_fn_error $? "unrecognized option: \`$ac_option'
Try \`$0 --help' for more information"
    ;;

*=*)
    ac_envvar=`expr "x$ac_option" : 'x\([^=]*\)='`
    # Reject names that are not valid shell variable names.

```

```

case $ac_envvar in #(
    '' | [0-9]* | *[_$as_cr_alnum]* )
    as_fn_error $? "invalid variable name: \`$ac_envvar'" ;;
esac
eval $ac_envvar=\$ac_optarg
export $ac_envvar ;;

*)
# FIXME: should be removed in autoconf 3.0.
$as_echo "$as_me: WARNING: you should use --build, --host, --
target" >&2
expr "x$ac_option" : ".*[^-._$as_cr_alnum]" >/dev/null &&
$as_echo "$as_me: WARNING: invalid host type: $ac_option" >&2
: "${build_alias=$ac_option} ${host_alias=$ac_option}
${target_alias=$ac_option}"
;;

esac
done

if test -n "$ac_prev"; then
ac_option=--`echo $ac_prev | sed 's/_/_/g'`
as_fn_error $? "missing argument to $ac_option"
fi

if test -n "$ac_unrecognized_opts"; then
case $enable_option_checking in
no) ;;
fatal) as_fn_error $? "unrecognized options:
$ac_unrecognized_opts" ;;
*)
$as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2 ;;
esac
fi

# Check all directory arguments for consistency.
for ac_var in exec_prefix prefix bindir sbindir libexecdir
datarootdir \
datadir sysconfdir sharedstatedir localstatedir includedir
\
oldincludedir docdir infodir htmdir dvidir pdfdir psdir \
libdir localedir mandir
do
eval ac_val=\$$ac_var
# Remove trailing slashes.
case $ac_val in
*/ )
ac_val=`expr "X$ac_val" : 'X\([^/]\)' \| "X$ac_val" :
'X\(.*)'`
eval $ac_var=\$ac_val;;
esac
# Be sure to have absolute directory names.

```

```

case $ac_val in
  [\\/$]* | ?:[\\/*] ) continue;;
  NONE | ' ' ) case $ac_var in *prefix ) continue;; esac;;
esac
as_fn_error $? "expected an absolute directory name for --$ac_var:
$ac_val"
done

# There might be people who depend on the old broken behavior: ` $host '
# used to hold the argument of --host etc.
# FIXME: To remove some day.
build=$build_alias
host=$host_alias
target=$target_alias

# FIXME: To remove some day.
if test "x$host_alias" != x; then
  if test "x$build_alias" = x; then
    cross_compiling=maybe
  elif test "x$build_alias" != "x$host_alias"; then
    cross_compiling=yes
  fi
fi

ac_tool_prefix=
test -n "$host_alias" && ac_tool_prefix=$host_alias-

test "$silent" = yes && exec 6>/dev/null

ac_pwd=`pwd` && test -n "$ac_pwd" &&
ac_ls_di=`ls -di .` &&
ac_pwd_ls_di=`cd "$ac_pwd" && ls -di .` ||
  as_fn_error $? "working directory cannot be determined"
test "X$ac_ls_di" = "X$ac_pwd_ls_di" ||
  as_fn_error $? "pwd does not report name of working directory"

# Find the source files, if location was not specified.
if test -z "$srcdir"; then
  ac_srcdir_defaulted=yes
  # Try the directory containing this script, then the parent
  directory.
  ac_confdir=`$as_dirname -- "$as_myself" ||
$as_expr X"$as_myself" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$as_myself" : 'X\(//\)[^/]' \| \
  X"$as_myself" : 'X\(//\)$' \| \
  X"$as_myself" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$as_myself" |
  sed '/^X\(.*[^/]\)\/*[^/][^/]*\/*$/{
    s//\1/
  }
q

```

```

    }
    /^X\(\\\/\\\/)\ [^/].*/{
        s//\1/
        q
    }
    /^X\(\\\/\\\/)$/{
        s//\1/
        q
    }
    /^X\(\\\/)\.*/{
        s//\1/
        q
    }
    }
    s/.*\/./; q'`
srcdir=$ac_confdir
if test ! -r "$srcdir/$ac_unique_file"; then
    srcdir=..
fi
else
    ac_srcdir_defaulted=no
fi
if test ! -r "$srcdir/$ac_unique_file"; then
    test "$ac_srcdir_defaulted" = yes && srcdir="$ac_confdir or .."
    as_fn_error $? "cannot find sources ($ac_unique_file) in $srcdir"
fi
ac_msg="sources are in $srcdir, but `cd $srcdir` does not work"
ac_abs_confdir=`(
    cd "$srcdir" && test -r "$ac_unique_file" || as_fn_error $?
"$ac_msg"
    pwd)`
# When building in place, set srcdir=.
if test "$ac_abs_confdir" = "$ac_pwd"; then
    srcdir=.
fi
# Remove unnecessary trailing slashes from srcdir.
# Double slashes in file names in object file debugging info
# mess up M-x gdb in Emacs.
case $srcdir in
*/) srcdir=`expr "X$srcdir" : 'X\([^\/]\)' \| "X$srcdir" :
'X\(.*\)'`;
esac
for ac_var in $ac_precious_vars; do
    eval ac_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_env_${ac_var}_value=\${${ac_var}_value}
    eval ac_cv_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_cv_env_${ac_var}_value=\${${ac_var}_value}
done

#
# Report the --help message.
#
if test "$ac_init_help" = "long"; then

```

```
# Omit some internal or obsolete options to make the list less
imposing.
# This message is too long to be a string in the A/UX 3.1 sh.
cat <<_ACEOF
\`configure' configures dbus 1.6.8 to adapt to many kinds of systems.
```

Usage: \$0 [OPTION]... [VAR=VALUE]...

To assign environment variables (e.g., CC, CFLAGS...), specify them as VAR=VALUE. See below for descriptions of some of the useful variables.

Defaults for the options are specified in brackets.

Configuration:

```
-h, --help                display this help and exit
  --help=short            display options specific to this package
  --help=recursive        display the short help of all the included
packages
-V, --version             display version information and exit
-q, --quiet, --silent    do not print \`checking ...' messages
  --cache-file=FILE      cache test results in FILE [disabled]
-C, --config-cache       alias for \`--cache-file=config.cache'
-n, --no-create           do not create output files
  --srcdir=DIR            find the sources in DIR [configure dir or
\`..']
```

Installation directories:

```
--prefix=PREFIX          install architecture-independent files in
PREFIX
                           @<:@@S|@ac_default_prefix@:>@
--exec-prefix=EPREFIX    install architecture-dependent files in
EPREFIX
                           @<:@PREFIX@:>@
```

By default, \`make install' will install all the files in \`\${ac_default_prefix}/bin', \`\${ac_default_prefix}/lib' etc. You can specify an installation prefix other than \`\${ac_default_prefix}' using \`--prefix', for instance \`--prefix=\$HOME'.

For better control, use the options below.

Fine tuning of the installation directories:

```
--bindir=DIR             user executables [EPREFIX/bin]
--sbindir=DIR            system admin executables [EPREFIX/sbin]
--libexecdir=DIR         program executables [EPREFIX/libexec]
--sysconfdir=DIR         read-only single-machine data [PREFIX/etc]
--sharedstatedir=DIR     modifiable architecture-independent data
[PREFIX/com]
--localstatedir=DIR      modifiable single-machine data [PREFIX/var]
```



```

--libdir=DIR          object code libraries [EPREFIX/lib]
--includedir=DIR     C header files [PREFIX/include]
--oldincludedir=DIR  C header files for non-gcc [/usr/include]
--datarootdir=DIR    read-only arch.-independent data root
[PREFIX/share]
--datadir=DIR        read-only architecture-independent data
[DATAROOTDIR]
--infodir=DIR        info documentation [DATAROOTDIR/info]
--localedir=DIR      locale-dependent data [DATAROOTDIR/locale]
--mandir=DIR         man documentation [DATAROOTDIR/man]
--docdir=DIR         documentation root
@<:@DATAROOTDIR/doc/dbus@:>@
--htmldir=DIR        html documentation [DOCDIR]
--dvidir=DIR         dvi documentation [DOCDIR]
--pdfdir=DIR         pdf documentation [DOCDIR]
--psdir=DIR          ps documentation [DOCDIR]
_ACEOF

```

```
cat <<\_ACEOF
```

Program names:

```

--program-prefix=PREFIX      prepend PREFIX to installed
program names
--program-suffix=SUFFIX      append SUFFIX to installed
program names
--program-transform-name=PROGRAM  run sed PROGRAM on installed
program names

```

X features:

```

--x-includes=DIR    X include files are in DIR
--x-libraries=DIR   X library files are in DIR

```

System types:

```

--build=BUILD      configure for building on BUILD [guessed]
--host=HOST        cross-compile to build programs to run on HOST
[BUILD]

```

```
_ACEOF
```

```
fi
```

```

if test -n "$ac_init_help"; then
  case $ac_init_help in
    short | recursive ) echo "Configuration of dbus 1.6.8:>";;
    esac
  cat <<\_ACEOF

```

Optional Features:

```

--disable-option-checking  ignore unrecognized --enable/--with
options
--disable-FEATURE          do not include FEATURE (same as --enable-
FEATURE=no)
--enable-FEATURE[=ARG]    include FEATURE [ARG=yes]
--disable-maintainer-mode

```

```

useful (and
    disable make rules and dependencies not
    sometimes confusing) to the casual installer
--enable-silent-rules    less verbose build output (undo: "make V=1")
--disable-silent-rules  verbose build output (undo: "make V=0")
--enable-dependency-tracking
                        do not reject slow dependency extractors
--disable-dependency-tracking
                        speeds up one-time build
--enable-shared@<:@=PKGS@:>@  build shared libraries
@<:@default=yes@:>@
--enable-static@<:@=PKGS@:>@  build static libraries
@<:@default=yes@:>@
--enable-fast-install@<:@=PKGS@:>@
                        optimize for fast installation
@<:@default=yes@:>@
--disable-libtool-lock  avoid locking (might break parallel builds)
--enable-compiler-coverage
                        Enable generation of coverage data
--disable-compiler-optimisations
                        Disable compiler optimisations
--enable-developer      set defaults to be appropriate for a D-Bus
developer
                        instead of a distribution/end-user
--enable-ansi           enable -ansi -pedantic gcc flags
--enable-verbose-mode   support verbose debug mode
--enable-asserts       include assertion checks
--enable-checks        include sanity checks on public API
--enable-xml-docs      build XML documentation (requires xmlto)
--enable-doxygen-docs  build DOXYGEN documentation (requires
Doxygen)
--enable-abstract-sockets
                        use abstract socket namespace (linux only)
--enable-selinux       build with SELinux support
--enable-libaudit      build audit daemon support for SELinux
--enable-dnotify       build with dnotify support (linux only)
--enable-inotify       build with inotify support (linux only)
--enable-kqueue        build with kqueue support
--enable-console-owner-file
                        enable console owner file
--enable-userdb-cache  build with userdb-cache support
--enable-launchd       build with launchd auto-launch support
--enable-systemd       build with systemd at_console support
--enable-embedded-tests
binaries
enable unit test code in the library and
--enable-modular-tests
enable modular regression tests (requires
GLib)
--enable-tests        enable/disable all tests, overriding
embedded-tests/modular-tests
--enable-installed-tests
binaries
enable unit test code in the library and

```

```

--enable-epoll          use epoll(4) on Linux
--enable-x11-autolaunch build with X11 auto-launch support
--disable-Werror       compile without -Werror (normally enabled in
                        development builds)
--enable-stats         enable bus daemon usage statistics

Optional Packages:
--with-PACKAGE[=ARG]   use PACKAGE [ARG=yes]
--without-PACKAGE      do not use PACKAGE (same as --with-
PACKAGE=no)
--with-pic@<:@=PKGS@:>@    try to use only PIC/non-PIC objects
@<:@default=use
                        both@:>@
--with-gnu-ld          assume the C compiler uses GNU ld
@<:@default=no@:>@
--with-libtool-sysroot=DIR Search for dependent libraries within DIR
                        (or the compiler's sysroot if not specified).
--with-xml=libxml/expat XML library to use (libxml may be named
libxml2 on
                        some systems)
--with-init-scripts=redhat
                        Style of init scripts to install
--with-session-socket-dir=dirname
                        Where to put sockets for the per-login-
session
                        message bus
--with-test-socket-dir=dirname
                        Where to put sockets for make check
--with-system-pid-file=pidfile
                        PID file for systemwide daemon
--with-system-socket=filename
                        UNIX domain socket for systemwide daemon
--with-console-auth-dir=dirname
                        directory to check for console ownership
--with-console-owner-file=filename
                        file whose owner determines current console
owner
--with-launchd-agent-dir=dirname
                        directory to put the launchd agent (default:
                        /Library/LaunchAgents)
--with-dbus-user=<user> User for running the DBUS daemon
(messagebus)
--with-dbus-daemon-dir=dirname
                        Directory for installing the DBUS daemon
--with-dbus-session-bus-default-address=nonce-
tcp:/autolaunch:/tcp:host:port
                        Transport Type to be used (default: nonce-
tcp:)
--without-64-bit       If you have to use this option, please
report it as
                        a bug

```

```

--with-valgrind      Add instrumentation to help valgrind to
understand
                    our allocator
--with-x             use the X Window System
--with-systemdsystemunitdir=DIR
                    Directory for systemd service files
--with-dbus-test-dir=dirname
                    path where the tests tools are available

```

Some influential environment variables:

```

CC                  C compiler command
CFLAGS              C compiler flags
LDFLAGS             linker flags, e.g. -L<lib dir> if you have libraries in
a
                    nonstandard directory <lib dir>
LIBS                libraries to pass to the linker, e.g. -l<library>
CPPFLAGS            (Objective) C/C++ preprocessor flags, e.g. -I<include
dir> if
                    you have headers in a nonstandard directory <include
dir>
CXX                 C++ compiler command
CXXFLAGS            C++ compiler flags
CPP                 C preprocessor
CXXCPP              C++ preprocessor
PKG_CONFIG           path to pkg-config utility
GLIB_CFLAGS         C compiler flags for GLIB, overriding pkg-config
GLIB_LIBS           linker flags for GLIB, overriding pkg-config
DBUS_GLIB_CFLAGS    C compiler flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_LIBS     linker flags for DBUS_GLIB, overriding pkg-config
PYTHON              the Python interpreter
LIBXML_CFLAGS       C compiler flags for LIBXML, overriding pkg-config
LIBXML_LIBS         linker flags for LIBXML, overriding pkg-config
SYSTEMD_CFLAGS      C compiler flags for SYSTEMD, overriding pkg-config
SYSTEMD_LIBS        linker flags for SYSTEMD, overriding pkg-config
VALGRIND_CFLAGS     C compiler flags for VALGRIND, overriding pkg-config
VALGRIND_LIBS       linker flags for VALGRIND, overriding pkg-config
MAN2HTML            Path to man2html (optional)

```

Use these variables to override the choices made by `configure' or to help it to find libraries and programs with nonstandard names/locations.

Report bugs to

<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus>.

_ACEOF

```

ac_status=$?
fi

if test "$ac_init_help" = "recursive"; then
  # If there are subdirs, report their specific --help.
  for ac_dir in : $ac_subdirs_all; do test "x$ac_dir" = x: && continue
    test -d "$ac_dir" ||
      { cd "$srcdir" && ac_pwd=`pwd` && srcdir=. && test -d "$ac_dir";
    } ||
      continue
  ac_builddir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_builddir_sub=. ac_top_build_prefix= ;;
*)
  ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.([\//]||)'`
  # A ".." for each directory in $ac_dir_suffix.
  ac_top_builddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\//]*|/..|g;s|/||'`
  case $ac_top_builddir_sub in
  "") ac_top_builddir_sub=. ac_top_build_prefix= ;;
  *) ac_top_build_prefix=$ac_top_builddir_sub/ ;;
  esac ;;
esac
ac_abs_top_builddir=$ac_pwd
ac_abs_builddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_builddir=$ac_top_build_prefix

case $srcdir in
.) # We are building in place.
  ac_srcdir=.
  ac_top_srcdir=$ac_top_builddir_sub
  ac_abs_top_srcdir=$ac_pwd ;;
[\\/]*) # Absolute name.
  ac_srcdir=$srcdir$ac_dir_suffix;
  ac_top_srcdir=$srcdir
  ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
  ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
  ac_top_srcdir=$ac_top_build_prefix$srcdir
  ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

cd "$ac_dir" || { ac_status=$?; continue; }
# Check for gusted configure.
if test -f "$ac_srcdir/configure.gnu"; then
  echo &&
  $SHELL "$ac_srcdir/configure.gnu" --help=recursive
elif test -f "$ac_srcdir/configure"; then
  echo &&

```

```

        $SHELL "$ac_srcdir/configure" --help=recursive
    else
        $as_echo "$as_me: WARNING: no configuration information is in
$ac_dir" >&2
        fi || ac_status=$?
        cd "$ac_pwd" || { ac_status=$?; break; }
    done
fi

test -n "$ac_init_help" && exit $ac_status
if $ac_init_version; then
    cat <<\_ACEOF
dbus configure 1.6.8
generated by GNU Autoconf 2.69

Copyright (C) 2012 Free Software Foundation, Inc.
This configure script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it.
_ACEOF
    exit
fi

## ----- ##
## Autoconf initialization. ##
## ----- ##

@%:@ ac_fn_c_try_compile LINENO
@%:@ -----
@%:@ Try to compile conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_compile ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f conftest.$ac_objext
    if { { ac_try="$ac_compile"
case "($ac_try" in
    *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_compile") 2>conftest.err
    ac_status=$?
    if test -s conftest.err; then
        grep -v '^ *+' conftest.err >conftest.er1
        cat conftest.er1 >&5
        mv -f conftest.er1 conftest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
    test $ac_status = 0; } && {
        test -z "$ac_c_werror_flag" ||

```

```

        test ! -s confptest.err
        } && test -s confptest.$ac_objext; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' confptest.$ac_ext >&5

        ac_retval=1
fi
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_compile

@%:@ ac_fn_cxx_try_compile LINENO
@%:@ -----
@%:@ Try to compile confptest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_compile ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f confptest.$ac_objext
    if { { ac_try="$ac_compile"
case "($ac_try" in
    *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_compile") 2>confptest.err
    ac_status=$?
    if test -s confptest.err; then
        grep -v '^ *+' confptest.err >confptest.er1
        cat confptest.er1 >&5
        mv -f confptest.er1 confptest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
    test $ac_status = 0; } && {
        test -z "$ac_cxx_werror_flag" ||
        test ! -s confptest.err
        } && test -s confptest.$ac_objext; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' confptest.$ac_ext >&5

        ac_retval=1
fi
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

```

```

} @%:@ ac_fn_cxx_try_compile

@%:@ ac_fn_c_try_cpp LINENO
@%:@ -----
@%:@ Try to preprocess conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_cpp ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if { { ac_try="$ac_cpp conftest.$ac_ext"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_cpp conftest.$ac_ext") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    grep -v '^ *+' conftest.err >conftest.er1
    cat conftest.er1 >&5
    mv -f conftest.er1 conftest.err
  fi
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } > conftest.i && {
    test -z "$ac_c_preproc_warn_flag$ac_c_werror_flag" ||
    test ! -s conftest.err
  }; then :
    ac_retval=0
  else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' conftest.$ac_ext >&5

    ac_retval=1
  fi
  eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
  as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_cpp

@%:@ ac_fn_c_check_header_mongrel LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists, giving a warning if it cannot be
compiled using
@%:@ the include files in INCLUDES and setting the cache variable VAR
@%:@ accordingly.
ac_fn_c_check_header_mongrel ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if eval \"\${$3+:} false; then :

```



```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval `:${3+:} false; then :
  $as_echo_n "(cached) " >&6
fi
eval ac_res=\${3}
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
else
  # Is the header compilable?
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 usability" >&5
$as_echo_n "checking $2 usability... " >&6; }
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
  /* end confdefs.h. */
  $4
  @%:@include <$2>
  _ACEOF
  if ac_fn_c_try_compile "$LINENO"; then :
    ac_header_compiler=yes
  else
    ac_header_compiler=no
  fi
  rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_compiler"
>&5
$as_echo "$ac_header_compiler" >&6; }

  # Is the header present?
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 presence" >&5
$as_echo_n "checking $2 presence... " >&6; }
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
  /* end confdefs.h. */
  @%:@include <$2>
  _ACEOF
  if ac_fn_c_try_cpp "$LINENO"; then :
    ac_header_preproc=yes
  else
    ac_header_preproc=no
  fi
  rm -f conftest.err conftest.i conftest.$ac_ext
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_preproc"
>&5
$as_echo "$ac_header_preproc" >&6; }

  # So? What about this header?
  case $ac_header_compiler:$ac_header_preproc:$ac_c_preproc_warn_flag in
  #((
    yes:no: )
      { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: accepted by
the compiler, rejected by the preprocessor!" >&5

```

```

$as_echo "$as_me: WARNING: $2: accepted by the compiler, rejected by
the preprocessor!" >&2;}
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
  ;;
  no:yes:* )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: present but
cannot be compiled" >&5
$as_echo "$as_me: WARNING: $2: present but cannot be compiled" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      check
for missing prerequisite headers?" >&5
$as_echo "$as_me: WARNING: $2:      check for missing prerequisite
headers?" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: see the
Autoconf documentation" >&5
$as_echo "$as_me: WARNING: $2: see the Autoconf documentation" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      section
\"Present But Cannot Be Compiled\"" >&5
$as_echo "$as_me: WARNING: $2:      section \"Present But Cannot Be
Compiled\"" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
  ( $as_echo "## -----
----- ##
## Report this to
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus ##
## -----
--- ##"
    ) | sed "s/^/$as_me: WARNING:      /" >&2
  ;;
esac
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval "\${$3+:} false; then :
  $as_echo_n "(cached) " >&6
else
  eval "$3=\$ac_header_compiler"
fi
eval ac_res=\${$3}
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
fi
  eval $as_lineno_stack; ${as_lineno_stack+:} unset as_lineno

} @%:@ ac_fn_c_check_header_mongrel

@%:@ ac_fn_c_try_run LINENO

```

```

@%:@ -----
@%:@ Try to link confctest.@S|@ac_ext, and return whether this
succeeded. Assumes
@%:@ that executables *can* be run.
ac_fn_c_try_run ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; } && { ac_try='./confctest$ac_exeext'
  { { case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; }; then :
  ac_retval=0
else
  $as_echo "$as_me: program exited with status $ac_status" >&5
  $as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' confctest.$ac_ext >&5

  ac_retval=$ac_status
fi
  rm -rf confctest.dSYM confctest_ipa8_confctest.o
  eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
  as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_run

@%:@ ac_fn_c_check_header_compile LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists and can be compiled using the include
files in
@%:@ INCLUDES, setting the cache variable VAR accordingly.
ac_fn_c_check_header_compile ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack

```

```

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $2" >&5
$sas_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
$4
@%:@include <$2>
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    eval "$3=yes"
else
    eval "$3=no"
fi
rm -f core conftest.err conftest.$sas_objext conftest.$sas_ext
fi
eval ac_res=\${$3}
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$sas_echo "$ac_res" >&6; }
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_header_compile

@%:@ ac_fn_c_try_link LINENO
@%:@ -----
@%:@ Try to link conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_link ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f conftest.$sas_objext conftest$sac_exeext
    if { { ac_try="$ac_link"
case "($ac_try" in
    *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$sas_me:${as_lineno-$LINENO}: $ac_try_echo\""
$sas_echo "$ac_try_echo"; } >&5
    (eval "$ac_link") 2>conftest.err
    ac_status=$?
    if test -s conftest.err; then
        grep -v '^ *+' conftest.err >conftest.er1
        cat conftest.er1 >&5
        mv -f conftest.er1 conftest.err
    fi
    $sas_echo "$sas_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; } && {
        test -z "$ac_c_werror_flag" ||
        test ! -s conftest.err

```

```

        } && test -s conftest$ac_exeext && {
        test "$cross_compiling" = yes ||
        test -x conftest$ac_exeext
        }; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' conftest.$ac_ext >&5

        ac_retval=1
fi
# Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
# created by the PGI compiler (conftest_ipa8_conftest.o), as it
would
# interfere with the next link command; also delete a directory that
is
# left behind by Apple's compiler. We do this before executing the
actions.
rm -rf conftest.dSYM conftest_ipa8_conftest.o
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_link

@%:@ ac_fn_c_check_func LINENO FUNC VAR
@%:@ -----
@%:@ Tests whether FUNC exists, setting the cache variable VAR
accordingly
ac_fn_c_check_func ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
    if eval \${$3+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
/* Define $2 to an innocuous variant, in case <limits.h> declares $2.
   For example, HP-UX 11i <limits.h> declares gettimeofday. */
#define $2 innocuous_$2

/* System header to define __stub macros and hopefully few prototypes,
   which can conflict with char $2 (); below.
   Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
   <limits.h> exists even on freestanding compilers. */

#ifdef __STDC__
# include <limits.h>
#else

```

```

#include <assert.h>
#endif

#undef $2

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char $2 ();
/* The GNU C library defines this for functions which it implements
   to always fail with ENOSYS. Some functions are actually named
   something starting with __ and the normal name is an alias. */
#ifdef __stub_$2 || defined __stub___$2
choke me
#endif

int
main ()
{
return $2 ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
eval "$3=yes"
else
eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
fi
eval ac_res=\${$3
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_func

@%:@ ac_fn_cxx_try_cpp LINENO
@%:@ -----
@%:@ Try to preprocess conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_cpp ()
{
as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
if { { ac_try="$ac_cpp conftest.$ac_ext"

```

```

case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
(eval "$ac_cpp conftest.$ac_ext") 2>conftest.err
ac_status=$?
if test -s conftest.err; then
  grep -v '^ *+' conftest.err >conftest.er1
  cat conftest.er1 >&5
  mv -f conftest.er1 conftest.err
fi
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; } > conftest.i && {
  test -z "$ac_cxx_preproc_warn_flag$ac_cxx_werror_flag" ||
  test ! -s conftest.err
}; then :
  ac_retval=0
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' conftest.$ac_ext >&5

  ac_retval=1
fi
eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_cxx_try_cpp

@%:@ ac_fn_cxx_try_link LINENO
@%:@ -----
@%:@ Try to link conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_link ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  rm -f conftest.$ac_objext conftest$ac_exeext
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    grep -v '^ *+' conftest.err >conftest.er1
    cat conftest.er1 >&5
    mv -f conftest.er1 conftest.err

```

```

fi
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } && {
    test -z "$ac_cxx_werror_flag" ||
    test ! -s conftest.err
    } && test -s conftest$ac_exeext && {
    test "$cross_compiling" = yes ||
    test -x conftest$ac_exeext
    }; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' conftest.$ac_ext >&5

    ac_retval=1
fi
# Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
# created by the PGI compiler (conftest_ipa8_conftest.o), as it
would
# interfere with the next link command; also delete a directory that
is
# left behind by Apple's compiler. We do this before executing the
actions.
rm -rf conftest.dSYM conftest_ipa8_conftest.o
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_cxx_try_link

@%:@ ac_fn_c_compute_int LINENO EXPR VAR INCLUDES
@%:@ -----
@%:@ Tries to find the compile-time value of EXPR in a program that
includes
@%:@ INCLUDES, setting VAR accordingly. Returns whether the value
could be
@%:@ computed
ac_fn_c_compute_int ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if test "$cross_compiling" = yes; then
        # Depending upon the size, compute the lo and hi bounds.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !((($2) >= 0)@>:@;
test_array @<:@0@>:@ = 0;
return test_array @<:@0@>:@;

```



```

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_lo=0 ac_mid=0
while ;; do
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !((($2) <= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_hi=$ac_mid; break
else
as_fn_arith $ac_mid + 1 && ac_lo=$as_val
if test $ac_lo -le $ac_mid; then
ac_lo= ac_hi=
break
fi
as_fn_arith 2 '*' $ac_mid + 1 && ac_mid=$as_val
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
else
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !((($2) < 0)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_hi=-1 ac_mid=-1
while ;; do

```

```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !(($2) >= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_lo=$ac_mid; break
else
    as_fn_arith '(' $ac_mid ')' - 1 && ac_hi=$as_val
        if test $ac_mid -le $ac_hi; then
            ac_lo= ac_hi=
            break
        fi
    as_fn_arith 2 '*' $ac_mid && ac_mid=$as_val
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
else
    ac_lo= ac_hi=
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
# Binary search between lo and hi bounds.
while test "x$ac_lo" != "x$ac_hi"; do
    as_fn_arith '(' $ac_hi - $ac_lo ')' / 2 + $ac_lo && ac_mid=$as_val
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !(($2) <= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_hi=$ac_mid
else

```

```

    as_fn_arith '(' $ac_mid ')' + 1 && ac_lo=$as_val
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
case $ac_lo in @%:@((
?*) eval "$3=\$ac_lo"; ac_retval=0 ;;
'') ac_retval=1 ;;
esac
    else
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
static long int longval () { return $2; }
static unsigned long int ulongval () { return $2; }
@%:@include <stdio.h>
@%:@include <stdlib.h>
int
main ()
{

    FILE *f = fopen ("conftest.val", "w");
    if (! f)
        return 1;
    if (($2) < 0)
        {
            long int i = longval ();
            if (i != ($2))
                return 1;
            fprintf (f, "%ld", i);
        }
    else
        {
            unsigned long int i = ulongval ();
            if (i != ($2))
                return 1;
            fprintf (f, "%lu", i);
        }
    /* Do not output a trailing newline, as this causes \r\n confusion
       on some platforms. */
    return ferror (f) || fclose (f) != 0;

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    echo >>conftest.val; read $3 <conftest.val; ac_retval=0
else
    ac_retval=1
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
    conftest.$ac_objext conftest.beam conftest.$ac_ext

```

```

rm -f conftest.val

fi
eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_compute_int

@%:@ ac_fn_c_check_decl LINENO SYMBOL VAR INCLUDES
@%:@ -----
@%:@ Tests whether SYMBOL is declared in INCLUDES, setting cache
variable VAR
@%:@ accordingly.
ac_fn_c_check_decl ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  as_decl_name=`echo $2|sed 's/ *(.*/'`
  as_decl_use=`echo $2|sed -e 's/(/' -e 's/)' 0&/' -e 's/,/' 0&
(/g'`
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether
$as_decl_name is declared" >&5
$as_echo_n "checking whether $as_decl_name is declared... " >&6; }
if eval `\$${3+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
@%:@ifndef $as_decl_name
@%:@ifdef __cplusplus
  (void) $as_decl_use;
@%:@else
  (void) $as_decl_name;
@%:@endif
@%:@endif

  ;
  return 0;
}
ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  eval "$3=yes"
else
  eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
eval ac_res=\$3

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
    eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno

} @%:@ ac_fn_c_check_decl
cat >config.log <<_ACEOF
This file contains any messages produced by compilers while
running configure, to aid debugging if configure makes a mistake.

It was created by dbus $as_me 1.6.8, which was
generated by GNU Autoconf 2.69.  Invocation command line was

    $ $0 $@

_ACEOF
exec 5>>config.log
{
cat <<_ASUNAME
## ----- ##
## Platform. ##
## ----- ##

hostname = `(hostname || uname -n) 2>/dev/null | sed 1q`
uname -m = `(uname -m) 2>/dev/null || echo unknown`
uname -r = `(uname -r) 2>/dev/null || echo unknown`
uname -s = `(uname -s) 2>/dev/null || echo unknown`
uname -v = `(uname -v) 2>/dev/null || echo unknown`

/usr/bin/uname -p = `(/usr/bin/uname -p) 2>/dev/null || echo unknown`
/bin/uname -X      = `(/bin/uname -X) 2>/dev/null      || echo unknown`

/bin/arch          = `(/bin/arch) 2>/dev/null          || echo
unknown`
/usr/bin/arch -k   = `(/usr/bin/arch -k) 2>/dev/null   || echo
unknown`
/usr/convex/getsysinfo = `(/usr/convex/getsysinfo) 2>/dev/null || echo
unknown`
/usr/bin/hostinfo  = `(/usr/bin/hostinfo) 2>/dev/null  || echo
unknown`
/bin/machine      = `(/bin/machine) 2>/dev/null      || echo
unknown`
/usr/bin/oslevel  = `(/usr/bin/oslevel) 2>/dev/null   || echo
unknown`
/bin/universe     = `(/bin/universe) 2>/dev/null     || echo
unknown`

_ASUNAME

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  $as_echo "PATH: $as_dir"
done
IFS=$as_save_IFS

} >&5

cat >&5 <<_ACEOF

## ----- ##
## Core tests. ##
## ----- ##

ACEOF

# Keep a trace of the command line.
# Strip out --no-create and --no-recursion so they do not pile up.
# Strip out --silent because we don't want to record it for future
runs.
# Also quote any args containing shell meta-characters.
# Make two passes to allow for proper duplicate-argument suppression.
ac_configure_args=
ac_configure_args0=
ac_configure_args1=
ac_must_keep_next=false
for ac_pass in 1 2
do
  for ac_arg
  do
    case $ac_arg in
      -no-create | --no-c* | -n | -no-recursion | --no-r*) continue ;;
      -q | -quiet | --quiet | --quie | --qui | --qu | --q \
      | -silent | --silent | --silen | --sile | --sil)
        continue ;;
      *\'*)
        ac_arg=`$as_echo "$ac_arg" | sed "s/'/'\\'\\'\\'\\'\\'\\'/'/g"` ;;
    esac
    case $ac_pass in
      1) as_fn_append ac_configure_args0 " '$ac_arg' " ;;
      2)
        as_fn_append ac_configure_args1 " '$ac_arg' "
        if test $ac_must_keep_next = true; then
          ac_must_keep_next=false # Got value, back to normal.
        else
          case $ac_arg in
            *=* | --config-cache | -C | -disable-* | --disable-* \
            | -enable-* | --enable-* | -gas | --g* | -nfp | --nf* \
            | -q | -quiet | --q* | -silent | --sil* | -v | -verb* \
            | -with-* | --with-* | -without-* | --without-* | --x)

```

```

        case "$ac_configure_args0 " in
            "$ac_configure_args1"* " '$ac_arg' "*" ) continue ;;
        esac
        ;;
        -* ) ac_must_keep_next=true ;;
    esac
    fi
    as_fn_append ac_configure_args " '$ac_arg'"
    ;;
esac
done
done
{ ac_configure_args0=; unset ac_configure_args0;}
{ ac_configure_args1=; unset ac_configure_args1;}

# When interrupted or exit'd, cleanup temporary files, and complete
# config.log. We remove comments because anyway the quotes in there
# would cause problems or look ugly.
# WARNING: Use '\'' to represent an apostrophe within the trap.
# WARNING: Do not start the trap code with a newline, due to a FreeBSD
4.0 bug.
trap 'exit_status=$?'
    # Save into config.log some information that might help in
debugging.
    {
        echo

        $as_echo "## ----- ##"
## Cache variables. ##
## ----- ##"
        echo
        # The following way of writing the cache mishandles newlines in
values,
(
    for ac_var in `(set) 2>&1 | sed -n '\''s/^\([a-zA-Z_][a-zA-Z0-
9_]*\)=.*\/\1/p'\''` ; do
        eval ac_val=\${$ac_var}
        case $ac_val in #(
            *${as_nl}*)
                case $ac_var in #(
                    *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5
$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
                esac
            case $ac_var in #(
                _ | IFS | as_nl) ;; #(
                BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
                *) { eval $ac_var=; unset $ac_var;} ;;
            esac ;;
        esac
    done
done

```



```

## ----- ##"
    echo
    cat confdefs.h
    echo
fi
test "$ac_signal" != 0 &&
    $as_echo "$as_me: caught signal $ac_signal"
    $as_echo "$as_me: exit $exit_status"
} >&5
rm -f core *.core core.conftest.* &&
rm -f -r conftest* confdefs* conf$$* $ac_clean_files &&
exit $exit_status
' 0
for ac_signal in 1 2 13 15; do
    trap 'ac_signal='$ac_signal'; as_fn_exit 1' $ac_signal
done
ac_signal=0

# confdefs.h avoids OS command line length limits that DEFS can
# exceed.
rm -f -r conftest* confdefs.h

$as_echo "/* confdefs.h */" > confdefs.h

# Predefined preprocessor variables.

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_NAME "$PACKAGE_NAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_TARNAME "$PACKAGE_TARNAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_VERSION "$PACKAGE_VERSION"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_STRING "$PACKAGE_STRING"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_BUGREPORT "$PACKAGE_BUGREPORT"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_URL "$PACKAGE_URL"
_ACEOF

# Let the site file select an alternate cache file if it wants to.

```

```

# Prefer an explicitly selected file to automatically selected ones.
ac_site_file1=NONE
if test -n "$CONFIG_SITE"; then
  # We do not want a PATH search for config.site.
  case $CONFIG_SITE in @%:@(
    -*) ac_site_file1=./$CONFIG_SITE;;
    */*) ac_site_file1=$CONFIG_SITE;;
    *) ac_site_file1=./$CONFIG_SITE;;
  esac
fi
for ac_site_file in $ac_site_file1
do
  test "x$ac_site_file" = xNONE && continue
  if test /dev/null != "$ac_site_file" && test -r "$ac_site_file";
  then
    { $as_echo "$as_me:${as_lineno-$LINENO}: loading site script
$ac_site_file" >&5
$as_echo "$as_me: loading site script $ac_site_file" >&6;}
    sed 's/^\| /' "$ac_site_file" >&5
    . "$ac_site_file" \
      || { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "failed to load site script $ac_site_file
See \`config.log' for more details" "$LINENO" 5; }
    fi
  done

if test -r "$cache_file"; then
  # Some versions of bash will fail to source /dev/null (special files
  # actually), so we avoid doing that. DJGPP emulates it as a regular
  file.
  if test /dev/null != "$cache_file" && test -f "$cache_file"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: loading cache
$cache_file" >&5
$as_echo "$as_me: loading cache $cache_file" >&6;}
    case $cache_file in
      [\\/] * | ?:[\\/] * ) . "$cache_file";;
      *) . "$cache_file";;
    esac
  fi
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: creating cache $cache_file"
>&5
$as_echo "$as_me: creating cache $cache_file" >&6;}
  >$cache_file
fi

# Check that the precious variables saved in the cache have kept the
same
# value.
ac_cache_corrupted=false

```

```

for ac_var in $ac_precious_vars; do
  eval ac_old_set=\$ac_cv_env_${ac_var}_set
  eval ac_new_set=\$ac_env_${ac_var}_set
  eval ac_old_val=\$ac_cv_env_${ac_var}_value
  eval ac_new_val=\$ac_env_${ac_var}_value
  case $ac_old_set,$ac_new_set in
    set,)
      { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
set to \`$ac_old_val' in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was set to \`$ac_old_val' in the
previous run" >&2;}
      ac_cache_corrupted=: ;;
    ,set)
      { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
not set in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was not set in the previous run"
>&2;}
      ac_cache_corrupted=: ;;
    ,);;
  *)
    if test "x$ac_old_val" != "x$ac_new_val"; then
      # differences in whitespace do not lead to failure.
      ac_old_val_w=`echo x $ac_old_val`
      ac_new_val_w=`echo x $ac_new_val`
      if test "$ac_old_val_w" != "$ac_new_val_w"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' has
changed since the previous run:" >&5
$as_echo "$as_me: error: \`$ac_var' has changed since the previous
run:" >&2;}
        ac_cache_corrupted=:
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: warning: ignoring
whitespace changes in \`$ac_var' since the previous run:" >&5
$as_echo "$as_me: warning: ignoring whitespace changes in \`$ac_var'
since the previous run:" >&2;}
        eval $ac_var=\$ac_old_val
      fi
      { $as_echo "$as_me:${as_lineno-$LINENO}: former value:
\`$ac_old_val'" >&5
$as_echo "$as_me: former value:  \`$ac_old_val'" >&2;}
      { $as_echo "$as_me:${as_lineno-$LINENO}: current value:
\`$ac_new_val'" >&5
$as_echo "$as_me: current value:  \`$ac_new_val'" >&2;}
      fi;;
    esac
  # Pass precious variables to config.status.
  if test "$ac_new_set" = set; then
    case $ac_new_val in
      *\'*) ac_arg=$ac_var=`$as_echo "$ac_new_val" | sed
"s/'/'\\\\\\\\\\\\\\\\\\''/g"` ;;
      *) ac_arg=$ac_var=$ac_new_val ;;
    esac
  fi
done

```

```

    case " $ac_configure_args " in
      *" '$ac_arg' "') ;; # Avoid dups. Use of quotes ensures
accuracy.
      *) as_fn_append ac_configure_args " '$ac_arg'" ;;
    esac
  fi
done
if $ac_cache_corrupted; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "error: in `\$ac_pwd':" >&2;}
  { $as_echo "$as_me:${as_lineno-$LINENO}: error: changes in the
environment can compromise the build" >&5
$as_echo "$as_me: error: changes in the environment can compromise the
build" >&2;}
  as_fn_error $? "run `make distclean' and/or `rm $cache_file' and
start over" "$LINENO" 5
fi
## ----- ##
## Main body of script. ##
## ----- ##

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

ac_aux_dir=
for ac_dir in "$srcdir" "$srcdir/.." "$srcdir/../../.."; do
  if test -f "$ac_dir/install-sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install-sh -c"
    break
  elif test -f "$ac_dir/install.sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install.sh -c"
    break
  elif test -f "$ac_dir/shtool"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/shtool install -c"
    break
  fi
done
if test -z "$ac_aux_dir"; then
  as_fn_error $? "cannot find install-sh, install.sh, or shtool in
`$srcdir` `"$srcdir/.."` `"$srcdir/../../.."`" "$LINENO" 5
fi

# These three variables are undocumented and unsupported,

```

```

# and are intended to be withdrawn in a future Autoconf release.
# They can cause serious problems if a builder's source tree is in a
directory
# whose full name contains unusual characters.
ac_config_guess="$SHELL $ac_aux_dir/config.guess" # Please don't use
this var.
ac_config_sub="$SHELL $ac_aux_dir/config.sub" # Please don't use this
var.
ac_configure="$SHELL $ac_aux_dir/configure" # Please don't use this
var.

# Make sure we can run config.sub.
$SHELL "$ac_aux_dir/config.sub" sun4 >/dev/null 2>&1 ||
  as_fn_error $? "cannot run $SHELL $ac_aux_dir/config.sub" "$LINENO"
5

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking build system type"
>&5
$as_echo_n "checking build system type... " >&6; }
if ${ac_cv_build+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_build_alias=$build_alias
  test "x$ac_build_alias" = x &&
  ac_build_alias=`$SHELL "$ac_aux_dir/config.guess"`
  test "x$ac_build_alias" = x &&
  as_fn_error $? "cannot guess build type; you must specify one"
"$LINENO" 5
ac_cv_build=`$SHELL "$ac_aux_dir/config.sub" $ac_build_alias` ||
  as_fn_error $? "$SHELL $ac_aux_dir/config.sub $ac_build_alias
failed" "$LINENO" 5

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_build" >&5
$as_echo "$ac_cv_build" >&6; }
case $ac_cv_build in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical build" "$LINENO" 5;;
esac
build=$ac_cv_build
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_build
shift
build_cpu=$1
build_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
build_os=$*
IFS=$ac_save_IFS

```

```
case $build_os in *\ *) build_os=`echo "$build_os" | sed 's/ /-/g'`;;
esac
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking host system type"
>&5
$as_echo_n "checking host system type... " >&6; }
if ${ac_cv_host+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$host_alias" = x; then
    ac_cv_host=$ac_cv_build
  else
    ac_cv_host=`$SHELL "$ac_aux_dir/config.sub" $host_alias` ||
    as_fn_error $? "$SHELL $ac_aux_dir/config.sub $host_alias failed"
"$LINENO" 5
  fi
fi
```

```
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_host" >&5
$as_echo "$ac_cv_host" >&6; }
case $ac_cv_host in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical host" "$LINENO" 5;;
esac
host=$ac_cv_host
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_host
shift
host_cpu=$1
host_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
host_os=$*
IFS=$ac_save_IFS
case $host_os in *\ *) host_os=`echo "$host_os" | sed 's/ /-/g'`;;
esac
```

```
ac_config_headers="$ac_config_headers config.h"
```

```
am__api_version='1.12'
```

```
# Find a good install program. We prefer a C program (faster),
# so one script is as good as another. But avoid the broken or
# incompatible versions:
# SysV /etc/install, /usr/sbin/install
# SunOS /usr/etc/install
```

```

# IRIX /sbin/install
# AIX /bin/install
# AmigaOS /C/install, which installs bootblocks on floppy discs
# AIX 4 /usr/bin/installbsd, which doesn't work without a -g flag
# AFS /usr/afsws/bin/install, which mishandles nonexistent args
# SVR4 /usr/ucb/install, which tries to use the nonexistent group
"staff"
# OS/2's system install, which has a completely different semantic
# ./install, which can be erroneously created by make from
./install.sh.
# Reject install programs that cannot install multiple files.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a BSD-compatible
install" >&5
$as_echo_n "checking for a BSD-compatible install... " >&6; }
if test -z "$INSTALL"; then
if ${ac_cv_path_install+:} false; then :
  $as_echo_n "(cached) " >&6
else
  as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
  for as_dir in $PATH
  do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    # Account for people who put trailing slashes in PATH elements.
case $as_dir/ in @%:@(
./ | ../ | /[cC]/* | \
/etc/* | /usr/sbin/* | /usr/etc/* | /sbin/* | /usr/afsws/bin/* | \
?:[\\/]os2[\\/]install[\\/] * | ?:[\\/]OS2[\\/]INSTALL[\\/] * | \
/usr/ucb/* ) ;;
*)
  # OSF1 and SCO ODT 3.0 have their own names for install.
  # Don't use installbsd from OSF since it installs stuff as root
  # by default.
  for ac_prog in ginstall scoinst install; do
    for ac_exec_ext in ' $ac_executable_extensions; do
      if as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext"; then
        if test $ac_prog = install &&
          grep dspmsg "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
then
          # AIX install. It has an incompatible calling convention.
          :
        elif test $ac_prog = install &&
          grep pwplus "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
then
          # program-specific install script used by HP pwplus--don't
          use.
          :
        else
          rm -rf conftest.one conftest.two conftest.dir
          echo one > conftest.one
          echo two > conftest.two
          mkdir conftest.dir

```

```

        if "$as_dir/$ac_prog$ac_exec_ext" -c conftest.one
conftest.two "`pwd`/conftest.dir" &&
            test -s conftest.one && test -s conftest.two &&
            test -s conftest.dir/conftest.one &&
            test -s conftest.dir/conftest.two
        then
            ac_cv_path_install="$as_dir/$ac_prog$ac_exec_ext -c"
            break 3
        fi
    fi
done
done
;;
esac

done
IFS=$as_save_IFS

rm -rf conftest.one conftest.two conftest.dir

fi
if test "${ac_cv_path_install+set}" = set; then
    INSTALL=$ac_cv_path_install
else
    # As a last resort, use the slow shell script.  Don't cache a
    # value for INSTALL within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    INSTALL=$ac_install_sh
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $INSTALL" >&5
$as_echo "$INSTALL" >&6; }

# Use test -z because SunOS4 sh mishandles braces in ${var-val}.
# It thinks the first close brace ends the variable substitution.
test -z "$INSTALL_PROGRAM" && INSTALL_PROGRAM='${INSTALL}'

test -z "$INSTALL_SCRIPT" && INSTALL_SCRIPT='${INSTALL}'

test -z "$INSTALL_DATA" && INSTALL_DATA='${INSTALL} -m 644'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether build
environment is sane" >&5
$as_echo_n "checking whether build environment is sane... " >&6; }
# Reject unsafe characters in $srcdir or the absolute working
directory
# name.  Accept space and tab only in the latter.
am_lf='
'
case `pwd` in

```



```

*[\\"#\$\&\'`$am_lf]*)
    as_fn_error $? "unsafe absolute working directory name" "$LINENO"
5;;
esac
case $srcdir in
*[\\"#\$\&\'`$am_lf\ \]*)
    as_fn_error $? "unsafe srcdir value: '$srcdir'" "$LINENO" 5;;
esac

# Do 'set' in a subshell so we don't clobber the current shell's
# arguments.  Must try -L first in case configure is actually a
# symlink; some systems play weird games with the mod time of symlinks
# (eg FreeBSD returns the mod time of the symlink's containing
# directory).
if (
    am_has_slept=no
    for am_try in 1 2; do
        echo "timestamp, slept: $am_has_slept" > conftest.file
        set X `ls -Lt "$srcdir/configure" conftest.file 2> /dev/null`
        if test "$*" = "X"; then
            # -L didn't work.
            set X `ls -t "$srcdir/configure" conftest.file`
        fi
        if test "$*" != "X $srcdir/configure conftest.file" \
            && test "$*" != "X conftest.file $srcdir/configure"; then

            # If neither matched, then we have a broken ls.  This can happen
            # if, for instance, CONFIG_SHELL is bash and it inherits a
            # broken ls alias from the environment.  This has actually
            # happened.  Such a system could not be considered "sane".
            as_fn_error $? "ls -t appears to fail.  Make sure there is not a
broken
alias in your environment" "$LINENO" 5
        fi
        if test "$2" = conftest.file || test $am_try -eq 2; then
            break
        fi
        # Just in case.
        sleep 1
        am_has_slept=yes
    done
    test "$2" = conftest.file
)
then
    # Ok.
    :
else
    as_fn_error $? "newly created file is older than distributed files!
Check your system clock" "$LINENO" 5
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```

```

# If we didn't sleep, we still need to ensure time stamps of
config.status and
# generated files are strictly newer.
am_sleep_pid=
if grep 'slept: no' conftest.file >/dev/null 2>&1; then
  ( sleep 1 ) &
  am_sleep_pid=$!
fi

rm -f conftest.file

test "$program_prefix" != NONE &&

program_transform_name="s^&$program_prefix&;$program_transform_name"
# Use a double $ so make ignores it.
test "$program_suffix" != NONE &&

program_transform_name="s\&$program_suffix&;$program_transform_name"
# Double any \ or $.
# By default was `s,x,x', remove it if useless.
ac_script='s/[\\$]/&&/g;s/;/s,x,x,$//'
program_transform_name=`$as_echo "$program_transform_name" | sed
"$ac_script"`

# expand $ac_aux_dir to an absolute path
am_aux_dir=`cd $ac_aux_dir && pwd`

if test x"${MISSING+set}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      MISSING="\${SHELL} \"$am_aux_dir/missing\"" ;;
    *)
      MISSING="\${SHELL} $am_aux_dir/missing" ;;
  esac
fi
# Use eval to expand $SHELL
if eval "$MISSING --run true"; then
  am_missing_run="$MISSING --run "
else
  am_missing_run=
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: 'missing' script
is too old or missing" >&5
$as_echo "$as_me: WARNING: 'missing' script is too old or missing"
>&2;}
fi

if test x"${install_sh}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      install_sh="\${SHELL} '$am_aux_dir/install-sh'" ;;
    *)
      install_sh="\${SHELL} $am_aux_dir/install-sh"

```

```

    esac
fi

# Installed binaries are usually stripped using 'strip' when the user
# run "make install-strip". However 'strip' might not be the right
# tool to use in cross-compilation environments, therefore Automake
# will honor the 'STRIP' environment variable to overrule this
program.
if test "$cross_compiling" != no; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$STRIP"; then
        ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in '' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_STRIP="${ac_tool_prefix}strip"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
        IFS=$as_save_IFS
      fi
    fi
    STRIP=$ac_cv_prog_STRIP
    if test -n "$STRIP"; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
      $as_echo "$STRIP" >&6; }
    else
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
      $as_echo "no" >&6; }
    fi
  fi
fi

if test -z "$ac_cv_prog_STRIP"; then
  ac_ct_STRIP=$STRIP

```

```

# Extract the first word of "strip", so it can be a program name
with args.
set dummy strip; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_STRIP"; then
    ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_STRIP="strip"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
if test -n "$ac_ct_STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_STRIP" = x; then
    STRIP=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    STRIP=$ac_ct_STRIP
  fi

```

```

else
  STRIP="$ac_cv_prog_STRIP"
fi

fi

INSTALL_STRIP_PROGRAM="\$(install_sh) -c -s"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a thread-safe
mkdir -p" >&5
$as_echo_n "checking for a thread-safe mkdir -p... " >&6; }
if test -z "$MKDIR_P"; then
  if ${ac_cv_path_mkdir+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH$PATH_SEPARATOR/opt/sfw/bin
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in mkdir gmkdir; do
        for ac_exec_ext in '' $ac_executable_extensions; do
          as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext" || continue
          case `"$as_dir/$ac_prog$ac_exec_ext" --version 2>&1` in #(
            'mkdir (GNU coreutils) '* | \
            'mkdir (coreutils) '* | \
            'mkdir (fileutils) '4.1*)
            ac_cv_path_mkdir=$as_dir/$ac_prog$ac_exec_ext
            break 3;;
          esac
        done
      done
    done
    IFS=$as_save_IFS
  fi

  fi

  test -d ./--version && rmdir ./--version
  if test "${ac_cv_path_mkdir+set}" = set; then
    MKDIR_P="$ac_cv_path_mkdir -p"
  else
    # As a last resort, use the slow shell script. Don't cache a
    # value for MKDIR_P within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    MKDIR_P="$ac_install_sh -d"
  fi
fi

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $MKDIR_P" >&5
$as_echo "$MKDIR_P" >&6; }

for ac_prog in gawk mawk nawk awk
do

```

```

# Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$sas_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_AWK+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    if test -n "$AWK"; then
        ac_cv_prog_AWK="$AWK" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_AWK="$ac_prog"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
AWK=$ac_cv_prog_AWK
if test -n "$AWK"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $AWK" >&5
$sas_echo "$AWK" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$sas_echo "no" >&6; }
fi

    test -n "$AWK" && break
done

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether ${MAKE-make}
sets \${MAKE}" >&5
$sas_echo_n "checking whether ${MAKE-make} sets \${MAKE}... " >&6; }
set x ${MAKE-make}
ac_make=`$sas_echo "$2" | sed 's/+/p/g; s/[^a-zA-Z0-9_]/_/g'`
if eval \${ac_cv_prog_make_${ac_make}_set+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat >conftest.make <<\_ACEOF
SHELL = /bin/sh

```

```

all:
    @echo '@@@%=%$(MAKE)=@@@%%'
_ACEOF
# GNU make sometimes prints "make[1]: Entering ...", which would
confuse us.
case `${MAKE-make} -f conftest.make 2>/dev/null` in
    *@@@%=?*=@@@%*)
        eval ac_cv_prog_make_${ac_make}_set=yes;;
    *)
        eval ac_cv_prog_make_${ac_make}_set=no;;
esac
rm -f conftest.make
fi
if eval test \${ac_cv_prog_make_${ac_make}_set} = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    SET_MAKE=
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    SET_MAKE="MAKE=${MAKE-make}"
fi

rm -rf .tst 2>/dev/null
mkdir .tst 2>/dev/null
if test -d .tst; then
    am__leading_dot=.
else
    am__leading_dot=_
fi
rmdir .tst 2>/dev/null

if test "`cd $srcdir && pwd`" != "`pwd`; then
    # Use -I$(srcdir) only when $(srcdir) != ., so that make's output
    # is not polluted with repeated "-I."
    am__isrc=' -I$(srcdir)'
    # test to see if srcdir already configured
    if test -f $srcdir/config.status; then
        as_fn_error $? "source directory already configured; run \"make
distclean\" there first" "$LINENO" 5
    fi
fi

# test whether we have cygpath
if test -z "$CYGPATH_W"; then
    if (cygpath --version) >/dev/null 2>/dev/null; then
        CYGPATH_W='cygpath -w'
    else
        CYGPATH_W=echo
    fi
fi

```

```

# Define the identity of the package.
PACKAGE='dbus'
VERSION='1.6.8'

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE "$PACKAGE"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define VERSION "$VERSION"
_ACEOF

# Some tools Automake needs.

ACLOCAL=${ACLOCAL-"${am_missing_run}aclocal-${am__api_version}"}

AUTOCONF=${AUTOCONF-"${am_missing_run}autoconf"}

AUTOMAKE=${AUTOMAKE-"${am_missing_run}automake-${am__api_version}"}

AUTOHEADER=${AUTOHEADER-"${am_missing_run}autoheader"}

MAKEINFO=${MAKEINFO-"${am_missing_run}makeinfo"}

# For better backward compatibility.  To be removed once Automake
1.9.x
# dies out for good.  For more background, see:
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00001.html>
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00014.html>
mkdir_p='$(MKDIR_P) '

# We need awk for the "check" target.  The system "awk" is bad on
# some platforms.
# Always define AMTAR for backward compatibility.  Yes, it's still
used
# in the wild :- ( We should find a proper way to deprecate it ...
AMTAR='${TAR-tar}'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to create a
ustar tar archive" >&5
$as_echo_n "checking how to create a ustar tar archive... " >&6; }
# Loop over all known methods to create a tar archive until one works.
_am_tools='gnutar plaintar cpio pax none'
_am_tools=${am_cv_prog_tar_ustar-$_am_tools}

```



```

# Do not fold the above two line into one, because Tru64 sh and
# Solaris sh will not grok spaces in the rhs of '-'.
for _am_tool in $_am_tools
do
  case $_am_tool in
  gnutar)
    for _am_tar in tar gnutar gtar;
    do
      { echo "$as_me:$LINENO: $_am_tar --version" >&5
      ($_am_tar --version) >&5 2>&5
      ac_status=$?
      echo "$as_me:$LINENO: \ $? = $ac_status" >&5
      (exit $ac_status); } && break
    done
    am__tar="$_am_tar --format=ustar -chf - "'"$stardir"'"
    am__tar_="$_am_tar --format=ustar -chf - "'"$stardir"'"
    am__untar="$_am_tar -xf -"
    ;;
  plaintar)
    # Must skip GNU tar: if it does not support --format= it doesn't
create
    # ustar tarball either.
    (tar --version) >/dev/null 2>&1 && continue
    am__tar='tar chf - "'"$stardir"'"
    am__tar_='tar chf - "$stardir"'
    am__untar='tar xf -'
    ;;
  pax)
    am__tar='pax -L -x ustar -w "'"$stardir"'"
    am__tar_='pax -L -x ustar -w "$stardir"'
    am__untar='pax -r'
    ;;
  cpio)
    am__tar='find "'"$stardir"'" -print | cpio -o -H ustar -L'
    am__tar_='find "$stardir" -print | cpio -o -H ustar -L'
    am__untar='cpio -i -H ustar -d'
    ;;
  none)
    am__tar=false
    am__tar_=false
    am__untar=false
    ;;
  esac

# If the value was cached, stop now. We just wanted to have am__tar
# and am__untar set.
test -n "${am_cv_prog_tar_ustar}" && break

# tar/untar a dummy directory, and stop if the command works
rm -rf confptest.dir
mkdir confptest.dir
echo GrepMe > confptest.dir/file

```

```

    { echo "$as_me:$LINENO: tardir=confptest.dir && eval $am__tar_
>confptest.tar" >&5
      (tardir=confptest.dir && eval $am__tar_ >confptest.tar) >&5 2>&5
      ac_status=$?
      echo "$as_me:$LINENO: \$? = $ac_status" >&5
      (exit $ac_status); }
    rm -rf confptest.dir
    if test -s confptest.tar; then
      { echo "$as_me:$LINENO: $am__untar <confptest.tar" >&5
        ($am__untar <confptest.tar) >&5 2>&5
        ac_status=$?
        echo "$as_me:$LINENO: \$? = $ac_status" >&5
        (exit $ac_status); }
      grep GrepMe confptest.dir/file >/dev/null 2>&1 && break
    fi
  done
  rm -rf confptest.dir

if ${am_cv_prog_tar_ustar+:} false; then :
  $as_echo_n "(cached) " >&6
else
  am_cv_prog_tar_ustar=$_am_tool
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_prog_tar_ustar" >&5
$as_echo "$am_cv_prog_tar_ustar" >&6; }

```

```
GETTEXT_PACKAGE=dbus-1
```

```

cat >>confdefs.h <<_ACEOF
@%:@define GETTEXT_PACKAGE "$GETTEXT_PACKAGE"
_ACEOF

```

```

# By default, rebuild autotools files on demand; only use ./missing if
the
# user says --disable-maintainer-mode (some distributions like to do
this)

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to enable
maintainer-specific portions of Makefiles" >&5
$as_echo_n "checking whether to enable maintainer-specific portions of
Makefiles... " >&6; }
  @%:@ Check whether --enable-maintainer-mode was given.
if test "${enable_maintainer_mode+set}" = set; then :

```

```

enableval=$enable_maintainer_mode; USE_MAINTAINER_MODE=$enableval
else
  USE_MAINTAINER_MODE=yes
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$USE_MAINTAINER_MODE" >&5
$as_echo "$USE_MAINTAINER_MODE" >&6; }
  if test $USE_MAINTAINER_MODE = yes; then
    MAINTAINER_MODE_TRUE=
    MAINTAINER_MODE_FALSE='#'
else
  MAINTAINER_MODE_TRUE='#'
  MAINTAINER_MODE_FALSE=
fi

MAINT=$MAINTAINER_MODE_TRUE

@%:@ Check whether --enable-silent-rules was given.
if test "${enable_silent_rules+set}" = set; then :
  enableval=$enable_silent_rules;
fi

case $enable_silent_rules in @%:@ (((
  yes) AM_DEFAULT_VERBOSITY=0;;
  no) AM_DEFAULT_VERBOSITY=1;;
  *) AM_DEFAULT_VERBOSITY=0;;
esac
am_make=${MAKE-make}
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $am_make
supports nested variables" >&5
$as_echo_n "checking whether $am_make supports nested variables... "
>&6; }
if ${am_cv_make_support_nested_variables+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if $as_echo 'TRUE=$(BAR$(V))
BAR0=false
BAR1=true
V=1
am__doit:
  @$(TRUE)
.PHONY: am__doit' | $am_make -f - >/dev/null 2>&1; then
  am_cv_make_support_nested_variables=yes
else
  am_cv_make_support_nested_variables=no
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_make_support_nested_variables" >&5

```

```
$as_echo "$am_cv_make_support_nested_variables" >&6; }
if test $am_cv_make_support_nested_variables = yes; then
  AM_V='$ (V) '
  AM_DEFAULT_V='$ (AM_DEFAULT_VERBOSITY) '
else
  AM_V=$AM_DEFAULT_VERBOSITY
  AM_DEFAULT_V=$AM_DEFAULT_VERBOSITY
fi
AM_BACKSLASH='\'
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DAEMON_NAME "dbus-daemon"
_ACEOF
```

```
# libtool versioning - this applies to libdbus
#
# See
http://sources.redhat.com/autobook/autobook/autobook\_91.html#SEC91 for
details
#
```

```
## increment if the interface has additions, changes, removals.
LT_CURRENT=10
```

```
## increment any time the source changes; set to
## 0 if you increment CURRENT
LT_REVISION=2
```

```
## increment if any interfaces have been added; set to 0
## if any interfaces have been changed or removed. removal has
## precedence over adding, so set to 0 if both happened.
LT_AGE=7
```

```
DBUS_MAJOR_VERSION=1
DBUS_MINOR_VERSION=6
DBUS_MICRO_VERSION=8
DBUS_VERSION=1.6.8
```

```
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
```

```

ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}gcc", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$CC"; then
      ac_cv_prog_CC="$CC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="${ac_tool_prefix}gcc"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      CC=$ac_cv_prog_CC
      if test -n "$CC"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
        $as_echo "$CC" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi
    fi

    fi
    if test -z "$ac_cv_prog_CC"; then
      ac_ct_CC=$CC
      # Extract the first word of "gcc", so it can be a program name with
      args.
      set dummy gcc; ac_word=$2
      { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
      $as_echo_n "checking for $ac_word... " >&6; }

```

```

if ${ac_cv_prog_ac_ct_CC+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_CC"; then
    ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
          ac_cv_prog_ac_ct_CC="gcc"
          $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
          break 2
        fi
      done
    done
    IFS=$as_save_IFS

    fi
    fi
    ac_ct_CC=$ac_cv_prog_ac_ct_CC
    if test -n "$ac_ct_CC"; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
      $as_echo "$ac_ct_CC" >&6; }
    else
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
      $as_echo "no" >&6; }
    fi

    if test "x$ac_ct_CC" = x; then
      CC=""
    else
      case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
      CC=$ac_ct_CC
    fi
  else
    CC="$ac_cv_prog_CC"
  fi

  if test -z "$CC"; then
    if test -n "$ac_tool_prefix"; then

```

```

    # Extract the first word of "${ac_tool_prefix}cc", so it can be a
program name with args.
set dummy ${ac_tool_prefix}cc; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$CC"; then
        ac_cv_prog_CC="$CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="${ac_tool_prefix}cc"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
fi
if test -z "$CC"; then
    # Extract the first word of "cc", so it can be a program name with
args.
set dummy cc; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$CC"; then
        ac_cv_prog_CC="$CC" # Let the user override the test.

```

```

else
  ac_prog_rejected=no
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    if test "$as_dir/$ac_word$ac_exec_ext" = "/usr/ucb/cc"; then
      ac_prog_rejected=yes
      continue
    fi
    ac_cv_prog_CC="cc"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

if test $ac_prog_rejected = yes; then
  # We found a bogon in the path, so make sure we never use it.
  set dummy $ac_cv_prog_CC
  shift
  if test $#:@ != 0; then
    # We chose a different compiler from the bogus one.
    # However, it has the same basename, so the bogon will be chosen
    # first if we set CC to just the basename; use the full file name.
    shift
    ac_cv_prog_CC="$as_dir/$ac_word${1+' '}$@"
  fi
fi
fi
fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$CC"; then
  if test -n "$ac_tool_prefix"; then
    for ac_prog in cl.exe
    do

```



```

    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
    be a program name with args.
    set dummy $ac_tool_prefix$ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_CC+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$CC"; then
            ac_cv_prog_CC="$CC" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_CC="$ac_tool_prefix$ac_prog"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
                        $as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

            fi
            fi
            CC=$ac_cv_prog_CC
            if test -n "$CC"; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
                $as_echo "$CC" >&6; }
            else
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
                $as_echo "no" >&6; }
            fi

            test -n "$CC" && break
        done
    fi
    if test -z "$CC"; then
        ac_ct_CC=$CC
        for ac_prog in cl.exe
        do
            # Extract the first word of "$ac_prog", so it can be a program name
            with args.
            set dummy $ac_prog; ac_word=$2
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
            $as_echo_n "checking for $ac_word... " >&6; }
            if ${ac_cv_prog_ac_ct_CC+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_CC"; then
        ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_CC="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$ac_ct_CC" && break
done

    if test "x$ac_ct_CC" = x; then
        CC=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        CC=$ac_ct_CC
    fi
fi

fi

```

```

test -z "$CC" && { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "no acceptable C compiler found in $PATH
See `config.log' for more details" "$LINENO" 5; }

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\`$ac_try`;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>confptest.err
  ac_status=$?
  if test -s confptest.err; then
    sed '10a\
... rest of stderr output deleted ...
    10q' confptest.err >confptest.er1
    cat confptest.er1 >&5
  fi
  rm -f confptest.er1 confptest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: ` $? = $ac_status" >&5
  test $ac_status = 0; }
done

cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files a.out a.out.dSYM a.exe b.out"
# Try to create an executable without -o first, disregard a.out.
# It will help us diagnose broken compilers, and finding out an
intuition
# of exeext.

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
compiler works" >&5
$as_echo_n "checking whether the C compiler works... " >&6; }
ac_link_default=`$as_echo "$ac_link" | sed 's/ -o *conftest[^\ ]*//'\`

# The possible output files:
ac_files="a.out conftest.exe conftest a.exe a_out.exe b.out
conftest.*"

ac_rmfiles=
for ac_file in $ac_files
do
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    * ) ac_rmfiles="$ac_rmfiles $ac_file";;
  esac
done
rm -f $ac_rmfiles

if { { ac_try="$ac_link_default"
case "($ac_try" in
  *\"* | *\"* | *\"*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link_default") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; then :
  # Autoconf-2.13 could set the ac_cv_exeext variable to `no'.
  # So ignore a value of `no', otherwise this would lead to `EXEEXT =
no'
  # in a Makefile.  We should not override ac_cv_exeext if it was
cached,
  # so that the user can short-circuit this test for compilers unknown
to
  # Autoconf.
for ac_file in $ac_files ''
do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj )
      ;;
    [ab].out )
      # We found the default executable, but exeext='' is most
      # certainly right.
      break;;
    *.* )

```

```

        if test "${ac_cv_exeext+set}" = set && test "$ac_cv_exeext" !=
no;
    then ;; else
        ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)'`
    fi
    # We set ac_cv_exeext here because the later test for it is not
    # safe: cross compilers may not add the suffix if given an `-o'
    # argument, so we may need to know it at that point already.
    # Even if this section looks crufty: it has the advantage of
    # actually working.
    break;;
* )
    break;;
esac
done
test "$ac_cv_exeext" = no && ac_cv_exeext=

else
    ac_file=''
fi
if test -z "$ac_file"; then :
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':" >&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "C compiler cannot create executables
See `config.log' for more details" "$LINENO" 5; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
default output file name" >&5
$as_echo_n "checking for C compiler default output file name... " >&6;
}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_file" >&5
$as_echo "$ac_file" >&6; }
ac_exeext=$ac_cv_exeext

rm -f -r a.out a.out.dSYM a.exe conftest$ac_cv_exeext b.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of
executables" >&5
$as_echo_n "checking for suffix of executables... " >&6; }
if { { ac_try="$ac_link"
case "($ac_try" in
*\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
*) ac_try_echo=$ac_try;;
esac

```

```

eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }; then :
  # If both `conftest.exe' and `conftest' are `present' (well,
  observable)
  # catch `conftest.exe'. For instance with Cygwin, `ls conftest' will
  # work properly (i.e., refer to `conftest.exe'), while it won't with
  # `rm'.
  for ac_file in conftest.exe conftest conftest.*; do
    test -f "$ac_file" || continue
    case $ac_file in
      *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
      *.* ) ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)'`
        break;;
      * ) break;;
    esac
  done
  else
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \"\$ac_pwd':"
  >&5
  $as_echo "$as_me: error: in \"\$ac_pwd':" >&2;}
  as_fn_error $? "cannot compute suffix of executables: cannot compile
  and link
  See `config.log' for more details" "$LINENO" 5; }
  fi
  rm -f conftest conftest$ac_cv_exeext
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_exeext" >&5
  $as_echo "$ac_cv_exeext" >&6; }

  rm -f conftest.$ac_ext
  EXEEXT=$ac_cv_exeext
  ac_exeext=$EXEEXT
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
  /* end confdefs.h. */
  @%:@include <stdio.h>
  int
  main ()
  {
  FILE *f = fopen ("conftest.out", "w");
  return ferror (f) || fclose (f) != 0;

  ;
  return 0;
  }
  _ACEOF
  ac_clean_files="$ac_clean_files conftest.out"
  # Check that the compiler produces executables we can run. If not,
  either

```

```

# the compiler is broken, or we cross compile.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are cross
compiling" >&5
$as_echo_n "checking whether we are cross compiling... " >&6; }
if test "$cross_compiling" != yes; then
  { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }
  if { ac_try='./conftest$ac_cv_exeext'
  { { case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; }; then
    cross_compiling=no
  else
    if test "$cross_compiling" = maybe; then
      cross_compiling=yes
    else
      { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "cannot run C compiled programs.
If you meant to cross compile, use `--host'.
See `config.log' for more details" "$LINENO" 5; }
      fi
    fi
  fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $cross_compiling" >&5
$as_echo "$cross_compiling" >&6; }

rm -f conftest.$ac_ext conftest$ac_cv_exeext conftest.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of object
files" >&5
$as_echo_n "checking for suffix of object files... " >&6; }
if ${ac_cv_objext+:} false; then :
  $as_echo_n "(cached) " >&6
else

```

```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
rm -f conftest.o conftest.obj
if { { ac_try="$ac_compile"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compile") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; } > then :
  for ac_file in conftest.o conftest.obj conftest.*; do
  test -f "$ac_file" || continue;
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM ) ;;
    *) ac_cv_objext=`expr "$ac_file" : '.*\\.\\(.*\\)'`
      break;;
  esac
done
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "cannot compute suffix of object files: cannot compile
See `config.log' for more details" "$LINENO" 5; }
fi
rm -f conftest.$ac_cv_objext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_objext" >&5
$as_echo "$ac_cv_objext" >&6; }
OBJEXT=$ac_cv_objext
ac_objext=$OBJEXT
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C compiler" >&5
$as_echo_n "checking whether we are using the GNU C compiler... " >&6;
}
if ${ac_cv_c_compiler_gnu+:} false; then :

```



```

    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{
#ifdef __GNUC__
    choke me
#endif

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_compiler_gnu=yes
else
    ac_compiler_gnu=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_c_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_c_compiler_gnu" >&5
$as_echo "$ac_cv_c_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
    GCC=yes
else
    GCC=
fi
ac_test_CFLAGS=${CFLAGS+set}
ac_save_CFLAGS=$CFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC accepts
-g" >&5
$as_echo_n "checking whether $CC accepts -g... " >&6; }
if ${ac_cv_prog_cc_g+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_save_c_werror_flag=$ac_c_werror_flag
    ac_c_werror_flag=yes
    ac_cv_prog_cc_g=no
    CFLAGS="-g"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

```

```

    ;
    return 0;
}
__ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_g=yes
else
    CFLAGS=""
    cat confdefs.h - <<__ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
__ACEOF
if ac_fn_c_try_compile "$LINENO"; then :

else
    ac_c_werror_flag=$ac_save_c_werror_flag
    CFLAGS="-g"
    cat confdefs.h - <<__ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
__ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
    ac_c_werror_flag=$ac_save_c_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cc_g" >&5
$as_echo "$ac_cv_prog_cc_g" >&6; }
if test "$ac_test_CFLAGS" = set; then
    CFLAGS=$ac_save_CFLAGS
elif test $ac_cv_prog_cc_g = yes; then
    if test "$GCC" = yes; then
        CFLAGS="-g -O2"

```

```

else
    CFLAGS="-g"
fi
else
    if test "$GCC" = yes; then
        CFLAGS="-O2"
    else
        CFLAGS=
    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $CC option to
accept ISO C89" >&5
$as_echo_n "checking for $CC option to accept ISO C89... " >&6; }
if ${ac_cv_prog_cc_c89+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_cv_prog_cc_c89=no
ac_save_CC=$CC
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdio.h>
struct stat;
/* Most of the following tests are stolen from RCS 5.7's src/conf.sh.
*/
struct buf { int x; };
FILE * (*rcsopen) (struct buf *, struct stat *, int);
static char *e (p, i)
    char **p;
    int i;
{
    return p[i];
}
static char *f (char * (*g) (char **, int), char **p, ...)
{
    char *s;
    va_list v;
    va_start (v,p);
    s = g (p, va_arg (v,int));
    va_end (v);
    return s;
}

/* OSF 4.0 Compaq cc is some sort of almost-ANSI by default.  It has
function prototypes and stuff, but not '\xHH' hex character
constants.
These don't provoke an error unfortunately, instead are silently
treated
as 'x'.  The following induces an error, until -std is added to get
proper ANSI mode.  Curiously '\x00'!='x' always comes out true, for
an

```

```

    array size at least.  It's necessary to write '\x00'==0 to get
something
    that's true only with -std.  */
int osf4_cc_array ['\x00' == 0 ? 1 : -1];

/* IBM C 6 for AIX is almost-ANSI by default, but it replaces macro
parameters
    inside strings and character constants.  */
#define FOO(x) 'x'
int xlc6_cc_array[FOO(a) == 'x' ? 1 : -1];

int test (int i, double x);
struct s1 {int (*f) (int a);};
struct s2 {int (*f) (double a);};
int pairnames (int, char **, FILE *(*) (struct buf *, struct stat *,
int), int, int);
int argc;
char **argv;
int
main ()
{
return f (e, argv, 0) != argv[0] || f (e, argv, 1) != argv[1];
;
return 0;
}
__ACEOF
for ac_arg in ' -qlanglvl=extc89 -qlanglvl=ansi -std \
    -Ae "-Aa -D_HPUX_SOURCE" "-Xc -D__EXTENSIONS__"
do
    CC="$ac_save_CC $ac_arg"
    if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_c89=$ac_arg
fi
rm -f core conftest.err conftest.$ac_objext
test "x$ac_cv_prog_cc_c89" != "xno" && break
done
rm -f conftest.$ac_ext
CC=$ac_save_CC

fi
# AC_CACHE_VAL
case "x$ac_cv_prog_cc_c89" in
x)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: none needed" >&5
$as_echo "none needed" >&6; } ;;
xno)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: unsupported" >&5
$as_echo "unsupported" >&6; } ;;
*)
    CC="$CC $ac_cv_prog_cc_c89"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_prog_cc_c89" >&5

```

```

$as_echo "$ac_cv_prog_cc_c89" >&6; } ;;
esac
if test "x$ac_cv_prog_cc_c89" != xno; then :

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
DEPDIR="`${am__leading_dot}deps"

ac_config_commands="$ac_config_commands depfiles"

am_make=${MAKE-make}
cat > confinc << 'END'
am__doit:
    @echo this is the am__doit target
.PHONY: am__doit
END
# If we don't find an include directive, just comment out the code.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for style of include
used by $am_make" >&5
$as_echo_n "checking for style of include used by $am_make... " >&6; }
am__include="#"
am__quote=
_am_result=none
# First try GNU make style include.
echo "include confinc" > confmf
# Ignore all kinds of additional output from 'make'.
case ` $am_make -s -f confmf 2> /dev/null` in #(
*the\ am__doit\ target*)
    am__include=include
    am__quote=
    _am_result=GNU
    ;;
esac
# Now try BSD make style include.
if test "$am__include" = "#"; then
    echo '.include "confinc"' > confmf
    case ` $am_make -s -f confmf 2> /dev/null` in #(
*the\ am__doit\ target*)
        am__include=.include
        am__quote=""
        _am_result=BSD
        ;;
    esac
fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $_am_result" >&5
$sas_echo "$_am_result" >&6; }
rm -f confinc confmf

@%:@ Check whether --enable-dependency-tracking was given.
if test "${enable_dependency_tracking+set}" = set; then :
  enableval=$enable_dependency_tracking;
fi

if test "x$enable_dependency_tracking" != xno; then
  am_depcomp="$ac_aux_dir/depcomp"
  AMDEPBACKSLASH='\ '
  am__nodep='_no'
fi

if test "x$enable_dependency_tracking" != xno; then
  AMDEP_TRUE=
  AMDEP_FALSE='#'
else
  AMDEP_TRUE='#'
  AMDEP_FALSE=
fi

depcc="$CC"   am_compiler_list=

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$sas_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CC_dependencies_compiler_type+set} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test -z "$AMDEP_TRUE" && test -f "$am_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf conftest.dir
    mkdir conftest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$am_depcomp" conftest.dir
    cd conftest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.

```

```

mkdir sub

am_cv_CC_dependencies_compiler_type=none
if test "$am_compiler_list" = ""; then
    am_compiler_list=`sed -n 's/^#*\([a-zA-Z0-9]*\))$/\1/p' <
./depcomp`
fi
am__universal=false
case " $depcc " in #(
    *\ -arch\ *\ -arch\ *) am__universal=true ;;
    esac

for depmode in $am_compiler_list; do
    # Setup a source with many dependencies, because some compilers
    # like to wrap large dependency lists on column 80 (with \), and
    # we should not choose a depcomp mode which is confused by this.
    #
    # We need to recreate these files for each test, as the compiler
may
    # overwrite some of them when testing with obscure command lines.
    # This happens at least with the AIX C compiler.
    : > sub/confctest.c
    for i in 1 2 3 4 5 6; do
        echo '#include "conf tst'$i'.h"' >> sub/confctest.c
        # Using ": > sub/conf tst$i.h" creates only sub/conf tst1.h with
        # Solaris 10 /bin/sh.
        echo '/* dummy */' > sub/conf tst$i.h
    done
    echo "${am__include} ${am__quote}sub/confctest.Po${am__quote}" >
confmf

    # We check with '-c' and '-o' for the sake of the "dashmstdout"
    # mode. It turns out that the SunPro C++ compiler does not
properly
    # handle '-M -o', and we need to detect this. Also, some Intel
    # versions had trouble with output in subdirs.
    am__obj=sub/confctest.${OBJEXT-o}
    am__minus_obj="-o $am__obj"
    case $depmode in
gcc)
        # This depmode causes a compiler race in universal mode.
        test "$am__universal" = false || continue
        ;;
nosideeffect)
        # After this tag, mechanisms are not by side-effect, so they'll
        # only be used when explicitly requested.
        if test "x$enable_dependency_tracking" = xyes; then
            continue
        else
            break
        fi
        ;;
    ;;
)

```

```

msvc7 | msvc7msys | msvisualcpp | msvcmsys)
  # This compiler won't grok '-c -o', but also, the minuso test
has
  # not run yet.  These depmodes are late enough in the game, and
  # so weak that their functioning should not be impacted.
  am__obj=confptest.${OBJEXT-o}
  am__minus_obj=
  ;;
none) break ;;
esac
if depmode=$depmode \
  source=sub/confptest.c object=$am__obj \
  depfile=sub/confptest.Po tmpdepfile=sub/confptest.TPo \
  $$SHELL ./depcomp $depcc -c $am__minus_obj sub/confptest.c \
  >/dev/null 2>confptest.err &&
  grep sub/confftst1.h sub/confptest.Po > /dev/null 2>&1 &&
  grep sub/confftst6.h sub/confptest.Po > /dev/null 2>&1 &&
  grep $am__obj sub/confptest.Po > /dev/null 2>&1 &&
  ${MAKE-make} -s -f confmf > /dev/null 2>&1; then
  # icc doesn't choke on unknown options, it will just issue
warnings
  # or remarks (even with -Werror).  So we grep stderr for any
message
  # that says an option was ignored or not supported.
  # When given -MP, icc 7.0 and 7.1 complain thusly:
  #   icc: Command line warning: ignoring option '-M'; no argument
required
  # The diagnosis changed in icc 8.0:
  #   icc: Command line remark: option '-MP' not supported
  if (grep 'ignoring option' confptest.err ||
      grep 'not supported' confptest.err) >/dev/null 2>&1; then ;;
else
  am_cv_CC_dependencies_compiler_type=$depmode
  break
  fi
  fi
done

  cd ..
  rm -rf confptest.dir
else
  am_cv_CC_dependencies_compiler_type=none
fi

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CC_dependencies_compiler_type" >&5
$as_echo "$am_cv_CC_dependencies_compiler_type" >&6; }
CCDEPMODE=depmode=$am_cv_CC_dependencies_compiler_type

if
  test "x$enable_dependency_tracking" != xno \

```



```

    && test "$am_cv_CC_dependencies_compiler_type" = gcc3; then
    am__fastdepCC_TRUE=
    am__fastdepCC_FALSE='#'
else
    am__fastdepCC_TRUE='#'
    am__fastdepCC_FALSE=
fi

if test "x$CC" != xcc; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC and cc
understand -c and -o together" >&5
$as_echo_n "checking whether $CC and cc understand -c and -o
together... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether cc
understands -c and -o together" >&5
$as_echo_n "checking whether cc understands -c and -o together... "
>&6; }
fi
set dummy $CC; ac_cc=`$as_echo "$2" |
    sed 's/[^a-zA-Z0-9_]/_/g;s/^[0-9]/_/`
if eval \${ac_cv_prog_cc_${ac_cc}_c_o+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
# Make sure it works both with $CC and with simple cc.
# We do the test twice because some compilers refuse to overwrite an
# existing .o file with -o, though they will create one.
ac_try='$CC -c conftest.$ac_ext -o conftest2.$ac_objext >&5'
rm -f conftest2.*
if { { case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } &&
  test -f conftest2.$ac_objext && { { case "($ac_try" in

```

```

*\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
*) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; };
then
  eval ac_cv_prog_cc_${ac_cc}_c_o=yes
  if test "x$CC" != xcc; then
    # Test first that cc exists at all.
    if { ac_try='cc -c conftest.$ac_ext >&5'
      { { case "($ac_try" in
        *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
        *) ac_try_echo=$ac_try;;
      esac
      eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
      $as_echo "$ac_try_echo"; } >&5
        (eval "$ac_try") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; }; then
          ac_try='cc -c conftest.$ac_ext -o conftest2.$ac_objext >&5'
          rm -f conftest2.*
          if { { case "($ac_try" in
            *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
            *) ac_try_echo=$ac_try;;
          esac
          eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
          $as_echo "$ac_try_echo"; } >&5
            (eval "$ac_try") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
            test $ac_status = 0; } &&
              test -f conftest2.$ac_objext && { { case "($ac_try" in
                *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
                *) ac_try_echo=$ac_try;;
              esac
              eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
              $as_echo "$ac_try_echo"; } >&5
                (eval "$ac_try") 2>&5
                ac_status=$?
                $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
                test $ac_status = 0; };
                then
                  # cc works too.
                  :
                else
                  # cc exists but doesn't like -o.
                  eval ac_cv_prog_cc_${ac_cc}_c_o=no

```

```

        fi
    fi
fi
else
    eval ac_cv_prog_cc_${ac_cc}_c_o=no
fi
rm -f core conftest*

fi
if eval test \${ac_cv_prog_cc_${ac_cc}_c_o} = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

$as_echo "@%:@define NO_MINUS_C_MINUS_O 1" >>confdefs.h

fi

# FIXME: we rely on the cache variable name because
# there is no other way.
set dummy $CC
am_cc=`echo $2 | sed 's/[^a-zA-Z0-9_]/_/g;s/^[0-9]/_/'`
eval am_t=\${ac_cv_prog_cc_${am_cc}_c_o}
if test "$am_t" != yes; then
    # Losing compiler, so override with the script.
    # FIXME: It is wrong to rewrite CC.
    # But if we don't then we get into trouble of one sort or another.
    # A longer-term fix would be to have automake use am__CC in this
case,
    # and then we could set am__CC="\$(top_srcdir)/compile \$(CC)"
    CC="$am_aux_dir/compile $CC"
fi

ac_ext=cpp
ac_cpp='$CXXCPP $CPPFLAGS'
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu
if test -z "$CXX"; then
    if test -n "$CCC"; then
        CXX=$CCC
    else
        if test -n "$ac_tool_prefix"; then
            for ac_prog in g++ c++ gpp aCC CC cxx cc++ cl.exe FCC KCC RCC xlc_r
xlc
            do
                # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
be a program name with args.

```

```

set dummy $ac_tool_prefix$ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CXX+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$CXX"; then
    ac_cv_prog_CXX="$CXX" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_CXX="$ac_tool_prefix$ac_prog"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
CXX=$ac_cv_prog_CXX
if test -n "$CXX"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CXX" >&5
$as_echo "$CXX" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$CXX" && break
done
fi
if test -z "$CXX"; then
  ac_ct_CXX=$CXX
  for ac_prog in g++ c++ gpp aCC CC cxx cc++ cl.exe FCC KCC RCC x1C_r
x1C
do
  # Extract the first word of "$ac_prog", so it can be a program name
  with args.
  set dummy $ac_prog; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_CXX+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  if test -n "$ac_ct_CXX"; then
    ac_cv_prog_ac_ct_CXX="$ac_ct_CXX" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_CXX="$ac_prog"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_CXX=$ac_cv_prog_ac_ct_CXX
if test -n "$ac_ct_CXX"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CXX" >&5
$as_echo "$ac_ct_CXX" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_CXX" && break
done

  if test "x$ac_ct_CXX" = x; then
    CXX="g++"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    CXX=$ac_ct_CXX
  fi
fi

fi
fi

```

```

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C++ compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    sed '10a\
... rest of stderr output deleted ...
    10q' conftest.err >conftest.er1
    cat conftest.er1 >&5
  fi
  rm -f conftest.er1 conftest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
  test $ac_status = 0; }
done

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C++ compiler" >&5
$as_echo_n "checking whether we are using the GNU C++ compiler... "
>&6; }
if ${ac_cv_cxx_compiler_gnu+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{
#ifdef __GNUC__
  choke me
#endif

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_compiler_gnu=yes
else
  ac_compiler_gnu=no
fi

```

```

rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_cxx_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_cxx_compiler_gnu" >&5
$as_echo "$ac_cv_cxx_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
  GXX=yes
else
  GXX=
fi
ac_test_CXXFLAGS=${CXXFLAGS+set}
ac_save_CXXFLAGS=$CXXFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CXX accepts
-g" >&5
$as_echo_n "checking whether $CXX accepts -g... " >&6; }
if ${ac_cv_prog_cxx_g+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_save_cxx_werror_flag=$ac_cxx_werror_flag
  ac_cxx_werror_flag=yes
  ac_cv_prog_cxx_g=no
  CXXFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_cv_prog_cxx_g=yes
else
  CXXFLAGS=""
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :

```

```

else
  ac_cxx_werror_flag=$ac_save_cxx_werror_flag
  CXXFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_cv_prog_cxx_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  ac_cxx_werror_flag=$ac_save_cxx_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cxx_g"
>&5
$as_echo "$ac_cv_prog_cxx_g" >&6; }
if test "$ac_test_CXXFLAGS" = set; then
  CXXFLAGS=$ac_save_CXXFLAGS
elif test $ac_cv_prog_cxx_g = yes; then
  if test "$GXX" = yes; then
    CXXFLAGS="-g -O2"
  else
    CXXFLAGS="-g"
  fi
else
  if test "$GXX" = yes; then
    CXXFLAGS="-O2"
  else
    CXXFLAGS=
  fi
fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

depcc="$CXX"  am_compiler_list=

```



```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$sas_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CXX_dependencies_compiler_type+} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test -z "$SAMDEP_TRUE" && test -f "$sam_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf confptest.dir
    mkdir confptest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$sam_depcomp" confptest.dir
    cd confptest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.
    mkdir sub

    am_cv_CXX_dependencies_compiler_type=none
    if test "$sam_compiler_list" = ""; then
      am_compiler_list=`sed -n 's/^#*\([a-zA-Z0-9]*\))$/\1/p' <
./depcomp`
    fi
    am_universal=false
    case " $depcc " in #(
      *\ -arch\ *\ -arch\ *) am_universal=true ;;
    esac

    for depmode in $sam_compiler_list; do
      # Setup a source with many dependencies, because some compilers
      # like to wrap large dependency lists on column 80 (with \), and
      # we should not choose a depcomp mode which is confused by this.
      #
      # We need to recreate these files for each test, as the compiler
may
      # overwrite some of them when testing with obscure command lines.
      # This happens at least with the AIX C compiler.
      : > sub/confptest.c
      for i in 1 2 3 4 5 6; do
        echo '#include "conftst'$i'.h"' >> sub/confptest.c
        # Using ": > sub/conftst$i.h" creates only sub/conftst1.h with
        # Solaris 10 /bin/sh.
        echo '/* dummy */' > sub/conftst$i.h

```

```

done
echo "${am__include} ${am__quote}sub/confctest.Po${am__quote}" >
confmf

# We check with '-c' and '-o' for the sake of the "dashmstdout"
# mode. It turns out that the SunPro C++ compiler does not
properly
# handle '-M -o', and we need to detect this. Also, some Intel
# versions had trouble with output in subdirs.
am__obj=sub/confctest.${OBJEXT-o}
am__minus_obj="-o $am__obj"
case $depmode in
gcc)
# This depmode causes a compiler race in universal mode.
test "$am__universal" = false || continue
;;
nosideeffect)
# After this tag, mechanisms are not by side-effect, so they'll
# only be used when explicitly requested.
if test "x$enable_dependency_tracking" = xyes; then
continue
else
break
fi
;;
msvc7 | msvc7msys | msvisualcpp | msvcmsys)
# This compiler won't grok '-c -o', but also, the minuso test
has
# not run yet. These depmodes are late enough in the game, and
# so weak that their functioning should not be impacted.
am__obj=confctest.${OBJEXT-o}
am__minus_obj=
;;
none) break ;;
esac
if depmode=$depmode \
source=sub/confctest.c object=$am__obj \
depfile=sub/confctest.Po tmpdepfile=sub/confctest.TPo \
$SHELL ./depcomp $depcc -c $am__minus_obj sub/confctest.c \
>/dev/null 2>confctest.err &&
grep sub/confctst1.h sub/confctest.Po > /dev/null 2>&1 &&
grep sub/confctst6.h sub/confctest.Po > /dev/null 2>&1 &&
grep $am__obj sub/confctest.Po > /dev/null 2>&1 &&
${MAKE-make} -s -f confmf > /dev/null 2>&1; then
# icc doesn't choke on unknown options, it will just issue
warnings
# or remarks (even with -Werror). So we grep stderr for any
message
# that says an option was ignored or not supported.
# When given -MP, icc 7.0 and 7.1 complain thusly:
# icc: Command line warning: ignoring option '-M'; no argument
required

```

```

# The diagnosis changed in icc 8.0:
#   icc: Command line remark: option '-MP' not supported
if (grep 'ignoring option' confptest.err ||
    grep 'not supported' confptest.err) >/dev/null 2>&1; then ;;
else
    am_cv_CXX_dependencies_compiler_type=$depmode
    break
fi
done

cd ..
rm -rf confptest.dir
else
    am_cv_CXX_dependencies_compiler_type=none
fi

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CXX_dependencies_compiler_type" >&5
$as_echo "$am_cv_CXX_dependencies_compiler_type" >&6; }
CXXDEPMODE=depmode=$am_cv_CXX_dependencies_compiler_type

if
    test "x$enable_dependency_tracking" != xno \
    && test "$am_cv_CXX_dependencies_compiler_type" = gcc3; then
    am__fastdepCXX_TRUE=
    am__fastdepCXX_FALSE='#'
else
    am__fastdepCXX_TRUE='#'
    am__fastdepCXX_FALSE=
fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS confptest.$ac_ext >&5'
ac_link='$CC -o confptest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
confptest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to run the C
preprocessor" >&5
$as_echo_n "checking how to run the C preprocessor... " >&6; }
# On Suns, sometimes $CPP names a directory.
if test -n "$CPP" && test -d "$CPP"; then
    CPP=
fi
if test -z "$CPP"; then
    if ${ac_cv_prog_CPP+:} false; then :
        $as_echo_n "(cached) " >&6
    else

```

```

        # Double quotes because CPP needs to be expanded
        for CPP in "$CC -E" "$CC -E -traditional-cpp" "/lib/cpp"
        do
            ac_preproc_ok=false
        for ac_c_preproc_warn_flag in ' yes
        do
            # Use a header file that comes with gcc, so configuring glibc
            # with a fresh cross-compiler works.
            # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
            # <limits.h> exists even on freestanding compilers.
            # On the NeXT, cc -E runs the code through the compiler's parser,
            # not just through cpp. "Syntax error" is here to catch this case.
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

                Syntax error

        _ACEOF
        if ac_fn_c_try_cpp "$LINENO"; then :

        else
            # Broken: fails on valid input.
            continue
        fi
        rm -f conftest.err conftest.i conftest.$ac_ext

            # OK, works on sane cases.  Now check whether nonexistent headers
            # can be detected and how.
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
        _ACEOF
        if ac_fn_c_try_cpp "$LINENO"; then :
            # Broken: success on invalid input.
            continue
        else
            # Passes both tests.
            ac_preproc_ok=:
            break
        fi
        rm -f conftest.err conftest.i conftest.$ac_ext

        done
        # Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
        rm -f conftest.i conftest.err conftest.$ac_ext
        if $ac_preproc_ok; then :
            break
        fi

```

```

done
ac_cv_prog_CPP=$CPP

fi
CPP=$ac_cv_prog_CPP
else
ac_cv_prog_CPP=$CPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CPP" >&5
$as_echo "$CPP" >&6; }
ac_preproc_ok=false
for ac_c_preproc_warn_flag in '' yes
do
# Use a header file that comes with gcc, so configuring glibc
# with a fresh cross-compiler works.
# Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
# <limits.h> exists even on freestanding compilers.
# On the NeXT, cc -E runs the code through the compiler's parser,
# not just through cpp. "Syntax error" is here to catch this case.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

Syntax error

_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :

else
# Broken: fails on valid input.
continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext

# OK, works on sane cases. Now check whether nonexistent headers
# can be detected and how.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
# Broken: success on invalid input.
continue
else
# Passes both tests.
ac_preproc_ok=:
break
fi
rm -f conftest.err conftest.i conftest.$ac_ext

```

```

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :

else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error $? "C preprocessor `'$CPP\' fails sanity check
See `config.log' for more details" "$LINENO" 5; }
fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS confptest.$ac_ext >&5'
ac_link='$CC -o confptest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
confptest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for grep that
handles long lines and -e" >&5
$as_echo_n "checking for grep that handles long lines and -e... " >&6;
}
if ${ac_cv_path_GREP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$GREP"; then
    ac_path_GREP_found=false
    # Loop through the user's path and test for each of PROGNAMES_PATH
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in grep ggrep; do
        for ac_exec_ext in ' $ac_executable_extensions; do
          ac_path_GREP="$as_dir/$ac_prog$ac_exec_ext"
          as_fn_executable_p "$ac_path_GREP" || continue
        # Check for GNU ac_path_GREP and select it if it is found.
        # Check for GNU $ac_path_GREP
        case `"$ac_path_GREP" --version 2>&1` in
        *GNU*)
          ac_cv_path_GREP="$ac_path_GREP" ac_path_GREP_found=:;
        *)
          ac_count=0
          $as_echo_n 0123456789 >"confptest.in"
          while :
          do
            cat "confptest.in" "confptest.in" >"confptest.tmp"
            mv "confptest.tmp" "confptest.in"

```

```

    cp "confptest.in" "confptest.nl"
    $as_echo 'GREP' >> "confptest.nl"
    "$ac_path_GREP" -e 'GREP$' -e '-(cannot match)-' < "confptest.nl"
>"confptest.out" 2>/dev/null || break
diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
as_fn_arith $ac_count + 1 && ac_count=$as_val
if test $ac_count -gt ${ac_path_GREP_max-0}; then
    # Best one so far, save it but keep looking for a better one
    ac_cv_path_GREP="$ac_path_GREP"
    ac_path_GREP_max=$ac_count
fi
# 10*(2^10) chars as input seems more than enough
test $ac_count -gt 10 && break
done
rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

    $ac_path_GREP_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_GREP"; then
    as_fn_error $? "no acceptable grep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_GREP=$GREP
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_GREP" >&5
$as_echo "$ac_cv_path_GREP" >&6; }
GREP="$ac_cv_path_GREP"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for egrep" >&5
$as_echo_n "checking for egrep... " >&6; }
if ${ac_cv_path_EGREP+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if echo a | $GREP -E '(a|b)' >/dev/null 2>&1
    then ac_cv_path_EGREP="$GREP -E"
    else
        if test -z "$EGREP"; then
            ac_path_EGREP_found=false
            # Loop through the user's path and test for each of PROGRAMME-LIST
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.

```

```

    for ac_prog in egrep; do
      for ac_exec_ext in ` $ac_executable_extensions; do
        ac_path_EGREP="$as_dir/$ac_prog$ac_exec_ext"
        as_fn_executable_p "$ac_path_EGREP" || continue
      # Check for GNU ac_path_EGREP and select it if it is found.
      # Check for GNU $ac_path_EGREP
      case `"$ac_path_EGREP" --version 2>&1` in
      *GNU*)
        ac_cv_path_EGREP="$ac_path_EGREP" ac_path_EGREP_found=;;;
      *)
        ac_count=0
        $as_echo_n 0123456789 >"confptest.in"
        while :
        do
          cat "confptest.in" "confptest.in" >"confptest.tmp"
          mv "confptest.tmp" "confptest.in"
          cp "confptest.in" "confptest.nl"
          $as_echo 'EGREP' >> "confptest.nl"
          "$ac_path_EGREP" 'EGREP$' < "confptest.nl" >"confptest.out"
        2>/dev/null || break
          diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
          as_fn_arith $ac_count + 1 && ac_count=$as_val
          if test $ac_count -gt ${ac_path_EGREP_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_EGREP="$ac_path_EGREP"
            ac_path_EGREP_max=$ac_count
          fi
          # 10*(2^10) chars as input seems more than enough
          test $ac_count -gt 10 && break
        done
        rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
      esac

      $ac_path_EGREP_found && break 3
    done
  done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_EGREP"; then
  as_fn_error $? "no acceptable egrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
  ac_cv_path_EGREP=$EGREP
fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_EGREP"
>&5
$as_echo "$ac_cv_path_EGREP" >&6; }
EGREP="$ac_cv_path_EGREP"

```



```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$sas_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_header_stdcl=yes
else
  ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$sas_objext conftest.$sas_ext

if test $ac_cv_header_stdcl = yes; then
  # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$sas_ext") 2>&5 |
  $EGREP "memchr" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <stdlib.h>

```

```

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "free" >/dev/null 2>&1; then :

else
  ac_cv_header_stdc=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdc = yes; then
  # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
  if test "$cross_compiling" = yes; then :
  :
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0x0FF) == 0x020)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
    (('a' <= (c) && (c) <= 'i') \
    || ('j' <= (c) && (c) <= 'r') \
    || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
  int i;
  for (i = 0; i < 256; i++)
    if (XOR (islower (i), ISLOWER (i))
        || toupper (i) != TOUPPER (i))
      return 2;
  return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
  ac_cv_header_stdc=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
  conftest.$ac_objext conftest.beam conftest.$ac_ext

```

```

fi

fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdcl"
>&5
$as_echo "$ac_cv_header_stdcl" >&6; }
if test $ac_cv_header_stdcl = yes; then

$as_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

# On IRIX 5.3, sys/types and inttypes.h are conflicting.
for ac_header in sys/types.h sys/stat.h stdlib.h string.h memory.h
strings.h \
        inttypes.h stdint.h unistd.h
do :
    as_ac_Header=`$as_echo "ac_cv_header_$ac_header" | $as_tr_sh`
    ac_fn_c_check_header_compile "$LINENO" "$ac_header" "$as_ac_Header"
"$ac_includes_default"
    "
if eval test \"x\$$as_ac_Header\" = x\"yes\"; then :
    cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_header" | $as_tr_cpp` 1
_ACEOF
fi

done

    ac_fn_c_check_header_mongrel "$LINENO" "minix/config.h"
"ac_cv_header_minix_config_h" "$ac_includes_default"
if test "x$ac_cv_header_minix_config_h" = xyes; then :
    MINIX=yes
else
    MINIX=
fi

    if test "$MINIX" = yes; then

$as_echo "@%:@define _POSIX_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _POSIX_1_SOURCE 2" >>confdefs.h

$as_echo "@%:@define _MINIX 1" >>confdefs.h

```

```

fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether it is safe
to define __EXTENSIONS__ " >&5
$as_echo_n "checking whether it is safe to define __EXTENSIONS__... "
>&6; }
if ${ac_cv_safe_to_define__extensions_+;} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#       define __EXTENSIONS__ 1
        $ac_includes_default

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_safe_to_define__extensions_=yes
else
    ac_cv_safe_to_define__extensions_=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_safe_to_define__extensions__ " >&5
$as_echo "$ac_cv_safe_to_define__extensions__ " >&6; }
test $ac_cv_safe_to_define__extensions__ = yes &&
    $as_echo "@%:@define __EXTENSIONS__ 1" >>confdefs.h

$as_echo "@%:@define _ALL_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _GNU_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _POSIX_PTHREAD_SEMANTICS 1" >>confdefs.h

$as_echo "@%:@define _TANDEM_SOURCE 1" >>confdefs.h

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing strerror" >&5
$as_echo_n "checking for library containing strerror... " >&6; }
if ${ac_cv_search_strerror+;} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_func_search_save_LIBS=$LIBS

```

```

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char strerror ();
int
main ()
{
return strerror ();
    ;
    return 0;
}
_ACEOF
for ac_lib in ' cposix; do
    if test -z "$ac_lib"; then
        ac_res="none required"
    else
        ac_res=-l$ac_lib
        LIBS="-l$ac_lib $ac_func_search_save_LIBS"
    fi
    if ac_fn_c_try_link "$LINENO"; then :
        ac_cv_search_strerror=$ac_res
    fi
    rm -f core conftest.err conftest.$ac_objext \
        conftest$ac_exeext
    if ${ac_cv_search_strerror+:} false; then :
        break
    fi
done
if ${ac_cv_search_strerror+:} false; then :

else
    ac_cv_search_strerror=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_strerror" >&5
$as_echo "$ac_cv_search_strerror" >&6; }
ac_res=$ac_cv_search_strerror
if test "$ac_res" != no; then :
    test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$sas_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_header_stdcl=yes
else
  ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test $ac_cv_header_stdcl = yes; then
  # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "memchr" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>

_ACEOF

```

```

if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "free" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
  if test "$cross_compiling" = yes; then :
  :
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0xFF) == 0x20)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
    (('a' <= (c) && (c) <= 'i' \
     || ('j' <= (c) && (c) <= 'r' \
     || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
  int i;
  for (i = 0; i < 256; i++)
    if (XOR (islower (i), ISLOWER (i))
        || toupper (i) != TOUPPER (i))
      return 2;
  return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
  ac_cv_header_stdcl=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
  conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

```

```

fi
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdcl"
>&5
$zas_echo "$ac_cv_header_stdcl" >&6; }
if test $ac_cv_header_stdcl = yes; then

$zas_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

{ $zas_echo "$sas_me:${as_lineno-$LINENO}: checking for inline" >&5
$zas_echo_n "checking for inline... " >&6; }
if ${ac_cv_c_inline+:} false; then :
  $zas_echo_n "(cached) " >&6
else
  ac_cv_c_inline=no
  for ac_kw in inline __inline__ inline; do
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#ifdef __cplusplus
typedef int foo_t;
static $ac_kw foo_t static_foo () {return 0; }
$ac_kw foo_t foo () {return 0; }
#endif

_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_c_inline=$ac_kw
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
test "$ac_cv_c_inline" != no && break
done

fi
{ $zas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_c_inline" >&5
$zas_echo "$ac_cv_c_inline" >&6; }

case $ac_cv_c_inline in
  inline | yes) ;;
  *)
    case $ac_cv_c_inline in
      no) ac_val=;;
      *) ac_val=$ac_cv_c_inline;;
    esac
    cat >>confdefs.h <<_ACEOF
#ifdef __cplusplus
#define inline $ac_val
#endif
_ACEOF
  ;;
esac

```



```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to print
strings" >&5
$as_echo_n "checking how to print strings... " >&6; }
# Test print first, because it will be a builtin if present.
if test "X`( print -r -- -n ) 2>/dev/null`" = X-n && \
    test "X`print -r -- $ECHO 2>/dev/null`" = "X$ECHO"; then
    ECHO='print -r --'
elif test "X`printf %s $ECHO 2>/dev/null`" = "X$ECHO"; then
    ECHO='printf %s\n'
else
    # Use this function as a fallback that always works.
    func_fallback_echo ()
    {
        eval 'cat <<_LTECHO_EOF
$1
_LTECHO_EOF'
    }
    ECHO='func_fallback_echo'
fi

# func_echo_all arg...
# Invoke $ECHO with all args, space-separated.
func_echo_all ()
{
    $ECHO ""
}

case "$ECHO" in
    printf*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: printf"
>&5
$as_echo "printf" >&6; } ;;
    print*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: print -r"
>&5
$as_echo "print -r" >&6; } ;;
    *) { $as_echo "$as_me:${as_lineno-$LINENO}: result: cat" >&5
$as_echo "cat" >&6; } ;;
esac

```



```

done
rm -f conftest.in conftest.tmp conftest.nl conftest.out;;
esac

    $ac_path_SED_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_SED"; then
    as_fn_error $? "no acceptable sed could be found in \$PATH"
"$LINENO" 5
fi
else
    ac_cv_path_SED=$SED
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_SED" >&5
$as_echo "$ac_cv_path_SED" >&6; }
SED="$ac_cv_path_SED"
rm -f conftest.sed

test -z "$SED" && SED=sed
Xsed="$SED -e 1s/^X//"

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for fgrep" >&5
$as_echo_n "checking for fgrep... " >&6; }
if ${ac_cv_path_FGREP+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if echo 'ab*c' | $GREP -F 'ab*c' >/dev/null 2>&1
    then ac_cv_path_FGREP="$GREP -F"
    else
        if test -z "$FGREP"; then
            ac_path_FGREP_found=false
            # Loop through the user's path and test for each of PROGRAMME-LIST
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.

```

```

    for ac_prog in fgrep; do
    for ac_exec_ext in ` $ac_executable_extensions; do
        ac_path_FGREP="$as_dir/$ac_prog$ac_exec_ext"
        as_fn_executable_p "$ac_path_FGREP" || continue
# Check for GNU ac_path_FGREP and select it if it is found.
# Check for GNU $ac_path_FGREP
case `"$ac_path_FGREP" --version 2>&1` in
*GNU*)
    ac_cv_path_FGREP="$ac_path_FGREP" ac_path_FGREP_found=;;;
*)
    ac_count=0
    $as_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $as_echo 'FGREP' >> "confptest.nl"
        "$ac_path_FGREP" FGREP < "confptest.nl" >"confptest.out" 2>/dev/null
    || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_FGREP_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_FGREP="$ac_path_FGREP"
            ac_path_FGREP_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

        $ac_path_FGREP_found && break 3
    done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_FGREP"; then
    as_fn_error $? "no acceptable fgrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_FGREP=$FGREP
fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_FGREP"
>&5
$as_echo "$ac_cv_path_FGREP" >&6; }
FGREP="$ac_cv_path_FGREP"

```

```
test -z "$GREP" && GREP=grep
```

```
@%:@ Check whether --with-gnu-ld was given.
if test "${with_gnu_ld+set}" = set; then :
  withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes
else
  with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
$CC" >&5
$as_echo_n "checking for ld used by $CC... " >&6; }
  case $host in
    *-*-mingw*)
      # gcc leaves a trailing carriage return which upsets mingw
      ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
    *)
      ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
  esac
  case $ac_prog in
    # Accept absolute paths.
    [[\/*] | ?:[\/*]*)
      re_direlt='/[^/][^/]*/\.\./'
      # Canonicalize the pathname of ld
      ac_prog=`$ECHO "$ac_prog"| $SED 's%\\\\\%/g'`
      while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
        ac_prog=`$ECHO $ac_prog| $SED "s%$re_direlt%/%"`
      done
      test -z "$LD" && LD="$ac_prog"
```

```

    ;;
    "")
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
    *)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
    esac
elif test "$with_gnu_ld" = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.
        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
          *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break
            ;;
          *)
            test "$with_gnu_ld" != yes && break
            ;;
        esac
      fi
    done
    IFS="$lt_save_ifs"
  else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
  fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5

```

```

$as_echo "$LD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \${PATH}
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
  $as_echo_n "(cached) " >&6
else
  # I'd rather use --version here, but apparently some GNU lds only
accept -v.
case `"$LD" -v 2>&1 </dev/null` in
*GNU* | *'with BFD'*)
  lt_cv_prog_gnu_ld=yes
  ;;
*)
  lt_cv_prog_gnu_ld=no
  ;;
esac
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5
$as_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for BSD- or MS-
compatible name lister (nm)" >&5
$as_echo_n "checking for BSD- or MS-compatible name lister (nm)... "
>&6; }
if ${lt_cv_path_NM+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$NM"; then
    # Let the user override the test.
    lt_cv_path_NM="$NM"
  else
    lt_nm_to_check="${ac_tool_prefix}nm"
    if test -n "$ac_tool_prefix" && test "$build" = "$host"; then
      lt_nm_to_check="$lt_nm_to_check nm"
    fi
  fi

```



```

for lt_tmp_nm in $lt_nm_to_check; do
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  for ac_dir in $PATH /usr/ccs/bin/elf /usr/ccs/bin /usr/ucb /bin;
do
  IFS="$lt_save_ifs"
  test -z "$ac_dir" && ac_dir=.
  tmp_nm="$ac_dir/$lt_tmp_nm"
  if test -f "$tmp_nm" || test -f "$tmp_nm$ac_exeext" ; then
# Check to see if the nm accepts a BSD-compatible flag.
# Adding the `sed 1q' prevents false positives on HP-UX, which
says:
#   nm: unknown option "B" ignored
# Tru64's nm complains that /dev/null is an invalid object file
case `"$tmp_nm" -B /dev/null 2>&1 | sed '1q'` in
*/dev/null* | *'Invalid file or object type'*)
  lt_cv_path_NM="$tmp_nm -B"
  break
  ;;
*)
  case `"$tmp_nm" -p /dev/null 2>&1 | sed '1q'` in
*/dev/null*)
  lt_cv_path_NM="$tmp_nm -p"
  break
  ;;
*)
  lt_cv_path_NM=${lt_cv_path_NM="$tmp_nm"} # keep the first
match, but
  continue # so that we can try to find one that supports BSD
flags
  ;;
esac
  ;;
esac
  fi
done
IFS="$lt_save_ifs"
done
: ${lt_cv_path_NM=no}
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_path_NM" >&5
$as_echo "$lt_cv_path_NM" >&6; }
if test "$lt_cv_path_NM" != "no"; then
  NM="$lt_cv_path_NM"
else
# Didn't find any BSD compatible name lister, look for dumpbin.
if test -n "$DUMPBIN"; then :
# Let the user override the test.
else
  if test -n "$ac_tool_prefix"; then
for ac_prog in dumpbin "link -dump"
do

```

```

    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
be a program name with args.
set dummy $ac_tool_prefix$ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_DUMPBIN+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$DUMPBIN"; then
        ac_cv_prog_DUMPBIN="$DUMPBIN" # Let the user override the test.
    else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_exec_ext in ' $ac_executable_extensions; do
                if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                    ac_cv_prog_DUMPBIN="$ac_tool_prefix$ac_prog"
                    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                    break 2
                fi
            done
        done
        IFS=$as_save_IFS

        fi
        fi
        DUMPBIN=$ac_cv_prog_DUMPBIN
        if test -n "$DUMPBIN"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DUMPBIN" >&5
$as_echo "$DUMPBIN" >&6; }
        else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        fi

        test -n "$DUMPBIN" && break
    done
fi
if test -z "$DUMPBIN"; then
    ac_ct_DUMPBIN=$DUMPBIN
    for ac_prog in dumpbin "link -dump"
    do
        # Extract the first word of "$ac_prog", so it can be a program name
with args.
        set dummy $ac_prog; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_ac_ct_DUMPBIN+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_DUMPBIN"; then
        ac_cv_prog_ac_ct_DUMPBIN="$ac_ct_DUMPBIN" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DUMPBIN="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DUMPBIN=$ac_cv_prog_ac_ct_DUMPBIN
if test -n "$ac_ct_DUMPBIN"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DUMPBIN" >&5
$as_echo "$ac_ct_DUMPBIN" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$ac_ct_DUMPBIN" && break
done

    if test "x$ac_ct_DUMPBIN" = x; then
        DUMPBIN=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        DUMPBIN=$ac_ct_DUMPBIN
    fi
fi

```

```

    case `\$DUMPBIN -symbols /dev/null 2>&1 | sed '1q'` in
    *COFF*)
        DUMPBIN="\$DUMPBIN -symbols"
        ;;
    *)
        DUMPBIN=:
        ;;
    esac
fi

if test "\$DUMPBIN" != ":"; then
    NM="\$DUMPBIN"
fi

test -z "\$NM" && NM=nm

{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: checking the name lister
(\$NM) interface" >&5
\$as_echo_n "checking the name lister (\$NM) interface... " >&6; }
if {\$lt_cv_nm_interface+:} false; then :
    \$as_echo_n "(cached) " >&6
else
    lt_cv_nm_interface="BSD nm"
    echo "int some_variable = 0;" > conftest.\$ac_ext
    (eval echo "\"\$as_me:\$LINENO: \$ac_compile\"" >&5)
    (eval "\$ac_compile" 2>conftest.err)
    cat conftest.err >&5
    (eval echo "\"\$as_me:\$LINENO: \$NM \\\"conftest.\$ac_objext\\\"\""
>&5)
    (eval "\$NM \"conftest.\$ac_objext\" 2>conftest.err > conftest.out)
    cat conftest.err >&5
    (eval echo "\"\$as_me:\$LINENO: output\"" >&5)
    cat conftest.out >&5
    if \$GREP 'External.*some_variable' conftest.out > /dev/null; then
        lt_cv_nm_interface="MS dumpbin"
    fi
    rm -f conftest*
fi
{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: result: \$lt_cv_nm_interface"
>&5
\$as_echo "\$lt_cv_nm_interface" >&6; }

{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: checking whether ln -s works"
>&5
\$as_echo_n "checking whether ln -s works... " >&6; }
LN_S=\$as_ln_s
if test "\$LN_S" = "ln -s"; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no, using $LN_S"
>&5
$as_echo "no, using $LN_S" >&6; }
fi

# find the maximum length of command line arguments
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the maximum length
of command line arguments" >&5
$as_echo_n "checking the maximum length of command line arguments... "
>&6; }
if ${lt_cv_sys_max_cmd_len+:} false; then :
    $as_echo_n "(cached) " >&6
else
    i=0
    teststring="ABCD"

    case $build_os in
msdosdjgpp*)
    # On DJGPP, this test can blow up pretty badly due to problems in
libc
    # (any single argument exceeding 2000 bytes causes a buffer
overrun
    # during glob expansion). Even if it were fixed, the result of
this
    # check would be larger than it should be.
    lt_cv_sys_max_cmd_len=12288;    # 12K is about right
    ;;

gnu*)
    # Under GNU Hurd, this test is not required because there is
    # no limit to the length of command line arguments.
    # Libtool will interpret -1 as no limit whatsoever
    lt_cv_sys_max_cmd_len=-1;
    ;;

cygwin* | mingw* | cegcc*)
    # On Win9x/ME, this test blows up -- it succeeds, but takes
    # about 5 minutes as the teststring grows exponentially.
    # Worse, since 9x/ME are not pre-emptively multitasking,
    # you end up with a "frozen" computer, even though with patience
    # the test eventually succeeds (with a max line length of 256k).
    # Instead, let's just punt: use the minimum linelength reported by
    # all of the supported platforms: 8192 (on NT/2K/XP).
    lt_cv_sys_max_cmd_len=8192;
    ;;

mint*)
    # On MiNT this can take a long time and run out of memory.
    lt_cv_sys_max_cmd_len=8192;

```

```

;;

amigaos*)
# On AmigaOS with pdksh, this test takes hours, literally.
# So we just punt and use a minimum line length of 8192.
lt_cv_sys_max_cmd_len=8192;
;;

netbsd* | freebsd* | openbsd* | darwin* | dragonfly*)
# This has been around since 386BSD, at least. Likely further.
if test -x /sbin/sysctl; then
  lt_cv_sys_max_cmd_len=`/sbin/sysctl -n kern.argmax`
elif test -x /usr/sbin/sysctl; then
  lt_cv_sys_max_cmd_len=`/usr/sbin/sysctl -n kern.argmax`
else
  lt_cv_sys_max_cmd_len=65536      # usable default for all BSDs
fi
# And add a safety zone
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
;;

interix*)
# We know the value 262144 and hardcode it with a safety zone
# (like BSD)
lt_cv_sys_max_cmd_len=196608
;;

os2*)
# The test takes a long time on OS/2.
lt_cv_sys_max_cmd_len=8192
;;

osf*)
# Dr. Hans Ekkehard Plesser reports seeing a kernel panic running
configure
# due to this test when exec_disable_arg_limit is 1 on Tru64. It
is not
# nice to cause kernel panics so lets avoid the loop below.
# First set a reasonable default.
lt_cv_sys_max_cmd_len=16384
#
if test -x /sbin/sysconfig; then
  case ` /sbin/sysconfig -q proc exec_disable_arg_limit` in
    *1*) lt_cv_sys_max_cmd_len=-1 ;;
  esac
fi
;;

sco3.2v5*)
  lt_cv_sys_max_cmd_len=102400
  ;;
sysv5* | sco5v6* | sysv4.2uw2*)

```

```

kargmax=`grep ARG_MAX /etc/conf/cf.d/stune 2>/dev/null`
if test -n "$kargmax"; then
    lt_cv_sys_max_cmd_len=`echo $kargmax | sed 's/.*[      ]//'\`
else
    lt_cv_sys_max_cmd_len=32768
fi
;;
*)
lt_cv_sys_max_cmd_len=`(getconf ARG_MAX) 2> /dev/null`
if test -n "$lt_cv_sys_max_cmd_len"; then
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
else
    # Make teststring a little bigger before we do anything with it.
    # a 1K string should be a reasonable start.
    for i in 1 2 3 4 5 6 7 8 ; do
        teststring=$teststring$teststring
    done
    SHELL=${SHELL-${CONFIG_SHELL-/bin/sh}}
    # If test is not a shell built-in, we'll probably end up
computing a
    # maximum length that is only half of the actual maximum length,
but
    # we can't tell.
    while { test "X"`env echo "$teststring$teststring" 2>/dev/null`
\
        = "X$teststring$teststring"; } >/dev/null 2>&1 &&
        test $i != 17 # 1/2 MB should be enough
    do
        i=`expr $i + 1`
        teststring=$teststring$teststring
    done
    # Only check the string length outside the loop.
    lt_cv_sys_max_cmd_len=`env echo "X$teststring" : ".*" 2>&1`
    teststring=
    # Add a significant safety factor because C++ compilers can tack
on
    # massive amounts of additional arguments before passing them to
the
    # linker. It appears as though 1/2 is a usable value.
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 2`
fi
;;
esac

fi

if test -n $lt_cv_sys_max_cmd_len ; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sys_max_cmd_len" >&5
$as_echo "$lt_cv_sys_max_cmd_len" >&6; }
else

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: none" >&5
$as_echo "none" >&6; }
fi
max_cmd_len=$lt_cv_sys_max_cmd_len

: ${CP="cp -f"}
: ${MV="mv -f"}
: ${RM="rm -f"}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands some XSI constructs" >&5
$as_echo_n "checking whether the shell understands some XSI
constructs... " >&6; }
# Try some XSI features
xsi_shell=no
( _lt_dummy="a/b/c"
  test
"$${_lt_dummy##*/},${_lt_dummy%/*},${_lt_dummy#??}"${_lt_dummy%$_lt_du
mmy"} , \
    = c,a/b,b/c, \
    && eval 'test $(( 1 + 1 )) -eq 2 \
    && test "${#_lt_dummy}" -eq 5' ) >/dev/null 2>&1 \
    && xsi_shell=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $xsi_shell" >&5
$as_echo "$xsi_shell" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands \"+=\\"" >&5
$as_echo_n "checking whether the shell understands \"+=\\"... " >&6; }
lt_shell_append=no
( foo=bar; set foo baz; eval "$1+=\$2" && test "$foo" = barbaz ) \
  >/dev/null 2>&1 \
  && lt_shell_append=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_shell_append" >&5
$as_echo "$lt_shell_append" >&6; }

if ( (MAIL=60; unset MAIL) || exit) >/dev/null 2>&1; then
  lt_unset=unset
else
  lt_unset=false
fi

```



```

# test EBCDIC or ASCII
case `echo X|tr X '\101'` in
A) # ASCII based system
    # \n is not interpreted correctly by Solaris 8 /usr/ucb/tr
    lt_SP2NL='tr \040 \012'
    lt_NL2SP='tr \015\012 \040\040'
    ;;
*) # EBCDIC based system
    lt_SP2NL='tr \100 \n'
    lt_NL2SP='tr \r\n \100\100'
    ;;
esac

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to convert
$build file names to $host format" >&5
$sas_echo_n "checking how to convert $build file names to $host
format... " >&6; }
if ${lt_cv_to_host_file_cmd+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  case $host in
  *-*-mingw* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_host_file_cmd=func_convert_file_msys_to_w32
        ;;
      *-*-cygwin* )
        lt_cv_to_host_file_cmd=func_convert_file_cygwin_to_w32
        ;;
      * ) # otherwise, assume *nix
        lt_cv_to_host_file_cmd=func_convert_file_nix_to_w32
        ;;
    esac
  ;;
  *-*-cygwin* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_host_file_cmd=func_convert_file_msys_to_cygwin
        ;;
      *-*-cygwin* )
        lt_cv_to_host_file_cmd=func_convert_file_noop
        ;;
      * ) # otherwise, assume *nix

```

```

        lt_cv_to_host_file_cmd=func_convert_file_nix_to_cygwin
        ;;
    esac
    ;;
* ) # unhandled hosts (and "normal" native builds)
    lt_cv_to_host_file_cmd=func_convert_file_noop
    ;;
esac

fi

to_host_file_cmd=$lt_cv_to_host_file_cmd
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_to_host_file_cmd" >&5
$as_echo "$lt_cv_to_host_file_cmd" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to convert
$build file names to toolchain format" >&5
$as_echo_n "checking how to convert $build file names to toolchain
format... " >&6; }
if ${lt_cv_to_tool_file_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  #assume ordinary cross tools, or native build.
  lt_cv_to_tool_file_cmd=func_convert_file_noop
  case $host in
    *-*-mingw* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_tool_file_cmd=func_convert_file_msys_to_w32
          ;;
        esac
      ;;
    esac
  ;;
esac

fi

to_tool_file_cmd=$lt_cv_to_tool_file_cmd
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_to_tool_file_cmd" >&5
$as_echo "$lt_cv_to_tool_file_cmd" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $LD option to
reload object files" >&5

```

```

$as_echo_n "checking for $LD option to reload object files... " >&6; }
if ${lt_cv_ld_reload_flag+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_reload_flag='-r'
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_reload_flag" >&5
$as_echo "$lt_cv_ld_reload_flag" >&6; }
reload_flag=$lt_cv_ld_reload_flag
case $reload_flag in
"" | " ") ;;
*) reload_flag="$reload_flag" ;;
esac
reload_cmds='$LD$reload_flag -o $output$reload_objs'
case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
  if test "$GCC" != yes; then
    reload_cmds=false
  fi
  ;;
darwin*)
  if test "$GCC" = yes; then
    reload_cmds='$LTCC $LTCFLAGS -nostdlib ${wl}-r -o
$output$reload_objs'
  else
    reload_cmds='$LD$reload_flag -o $output$reload_objs'
  fi
  ;;
esac

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}objdump", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$OBJDUMP"; then
      ac_cv_prog_OBJDUMP="$OBJDUMP" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR

```

```

for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_OBJDUMP="${ac_tool_prefix}objdump"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
OBJDUMP=$ac_cv_prog_OBJDUMP
if test -n "$OBJDUMP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OBJDUMP" >&5
$as_echo "$OBJDUMP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OBJDUMP"; then
  ac_ct_OBJDUMP=$OBJDUMP
  # Extract the first word of "objdump", so it can be a program name
  with args.
  set dummy objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OBJDUMP"; then
      ac_cv_prog_ac_ct_OBJDUMP="$ac_ct_OBJDUMP" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OBJDUMP="objdump"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5

```

```

        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_OBJDUMP=$ac_cv_prog_ac_ct_OBJDUMP
if test -n "$ac_ct_OBJDUMP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OBJDUMP" >&5
$as_echo "$ac_ct_OBJDUMP" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_OBJDUMP" = x; then
        OBJDUMP="false"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        OBJDUMP=$ac_ct_OBJDUMP
    fi
else
    OBJDUMP="$ac_cv_prog_OBJDUMP"
fi

test -z "$OBJDUMP" && OBJDUMP=objdump

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to recognize
dependent libraries" >&5
$as_echo_n "checking how to recognize dependent libraries... " >&6; }
if ${lt_cv_deplibs_check_method+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_file_magic_cmd='$MAGIC_CMD'
lt_cv_file_magic_test_file=

```

```

lt_cv_deplibs_check_method='unknown'
# Need to set the preceding variable on all platforms that support
# interlibrary dependencies.
# 'none' -- dependencies not supported.
# `unknown' -- same as none, but documents that we really don't know.
# 'pass_all' -- all dependencies passed with no checks.
# 'test_compile' -- check by making test program.
# 'file_magic [[regex]]' -- check by looking for files in library path
# which responds to the $file_magic_cmd with a given extended regex.
# If you have `file' or equivalent on your system and you're not sure
# whether `pass_all' will *always* work, you probably want this one.

case $host_os in
aix[4-9]*)
    lt_cv_deplibs_check_method=pass_all
    ;;

beos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

bsdi[45]*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib)'
    lt_cv_file_magic_cmd='/usr/bin/file -L'
    lt_cv_file_magic_test_file=/shlib/libc.so
    ;;

cygwin*)
    # func_win32_libid is a shell function defined in ltmain.sh
    lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86 DLL'
    lt_cv_file_magic_cmd='func_win32_libid'
    ;;

mingw* | pw32*)
    # Base MSYS/MinGW do not provide the 'file' command needed by
    # func_win32_libid shell function, so use a weaker test based on
    'objdump',
    # unless we find 'file', for example because we are cross-compiling.
    # func_win32_libid assumes BSD nm, so disallow it if using MS
    dumpbin.
    if ( test "$lt_cv_nm_interface" = "BSD nm" && file / ) >/dev/null
2>&1; then
        lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86
DLL'
        lt_cv_file_magic_cmd='func_win32_libid'
    else
        # Keep this pattern in sync with the one in func_win32_libid.
        lt_cv_deplibs_check_method='file_magic file format (pei*-
i386(.?architecture: i386)?|pe-arm-wince|pe-x86-64)'
        lt_cv_file_magic_cmd='$OBJDUMP -f'
    fi

```

```

;;

cegcc*)
# use the weaker test based on 'objdump'. See mingw*.
lt_cv_deplibs_check_method='file_magic file format pe-arm-
.*little(.*architecture: arm)?'
lt_cv_file_magic_cmd='$OBJDUMP -f'
;;

darwin* | rhapsody*)
lt_cv_deplibs_check_method=pass_all
;;

freebsd* | dragonfly*)
if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
  case $host_cpu in
    i*86 )
      # Not sure whether the presence of OpenBSD here was a mistake.
      # Let's accept both of them until this is cleared up.
      lt_cv_deplibs_check_method='file_magic
(FreeBSD|OpenBSD|DragonFly)/i[3-9]86 (compact )?demand paged shared
library'
      lt_cv_file_magic_cmd=/usr/bin/file
      lt_cv_file_magic_test_file=`echo /usr/lib/libc.so.*`
      ;;
    esac
  else
    lt_cv_deplibs_check_method=pass_all
  fi
  ;;

gnu*)
lt_cv_deplibs_check_method=pass_all
;;

haiku*)
lt_cv_deplibs_check_method=pass_all
;;

hpux10.20* | hpux11*)
lt_cv_file_magic_cmd=/usr/bin/file
case $host_cpu in
  ia64*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF-[0-
9][0-9]) shared object file - IA64'
    lt_cv_file_magic_test_file=/usr/lib/hpux32/libc.so
    ;;
  hppa*64*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF[ -
][0-9][0-9]) (-bit)?( [LM]SB)? shared object( file)?[, -]* PA-RISC [0-
9]\.[0-9]'
    lt_cv_file_magic_test_file=/usr/lib/pa20_64/libc.sl

```

```

    ;;
*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|PA-
RISC[0-9]\.[0-9]) shared library'
    lt_cv_file_magic_test_file=/usr/lib/libc.sl
    ;;
esac
;;

interix[3-9]*)
# PIC code is broken on Interix 3.x, that's why |\a not |_pic\a
here
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so|\a)$'
    ;;

irix5* | irix6* | nonstopux*)
case $LD in
*-32|*" -32 ") libmagic=32-bit;;
*-n32|*" -n32 ") libmagic=N32;;
*-64|*" -64 ") libmagic=64-bit;;
*) libmagic=never-match;;
esac
lt_cv_deplibs_check_method=pass_all
;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
    lt_cv_deplibs_check_method=pass_all
    ;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|_pic\a)$'
    else
        lt_cv_deplibs_check_method='match_pattern
/lib[^/]+(\.so|_pic\a)$'
    fi
    ;;

newos6*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(executable|dynamic lib)'
    lt_cv_file_magic_cmd=/usr/bin/file
    lt_cv_file_magic_test_file=/usr/lib/libnls.so
    ;;

*nto* | *qnx*)
    lt_cv_deplibs_check_method=pass_all
    ;;

openbsd*)

```



```

    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|\.so|_pic\.a)$'
    else
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|_pic\.a)$'
    fi
    ;;

osf3* | osf4* | osf5*)
    lt_cv_deplibs_check_method=pass_all
    ;;

rdos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

solaris*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv4 | sysv4.3*)
    case $host_vendor in
        motorola)
            lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib) M[0-9][0-9]* Version [0-9]'
            lt_cv_file_magic_test_file=`echo /usr/lib/libc.so*`
            ;;
        ncr)
            lt_cv_deplibs_check_method=pass_all
            ;;
        sequent)
            lt_cv_file_magic_cmd='/bin/file'
            lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [LM]SB
(shared object|dynamic lib )'
            ;;
        sni)
            lt_cv_file_magic_cmd='/bin/file'
            lt_cv_deplibs_check_method="file_magic ELF [0-9][0-9]*-bit [LM]SB
dynamic lib"
            lt_cv_file_magic_test_file=/lib/libc.so
            ;;
        siemens)
            lt_cv_deplibs_check_method=pass_all
            ;;
        pc)
            lt_cv_deplibs_check_method=pass_all
    esac

```

```

        ;;
    esac
    ;;

tpf*)
    lt_cv_deplibs_check_method=pass_all
    ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_deplibs_check_method" >&5
$as_echo "$lt_cv_deplibs_check_method" >&6; }

file_magic_glob=
want_nocaseglob=no
if test "$build" = "$host"; then
    case $host_os in
    mingw* | pw32*)
        if ( shopt | grep nocaseglob ) >/dev/null 2>&1; then
            want_nocaseglob=yes
        else
            file_magic_glob=`echo
aAbBcCdDeEfFgGhHiIjJkKlLmMnNoOpPqQrRsStTuUvVwWxXyYzZ | $SED -e
"s/\(..\) /s\/[\1]\/[\1]\/g;/g"`
        fi
    ;;
    esac
fi

file_magic_cmd=$lt_cv_file_magic_cmd
deplibs_check_method=$lt_cv_deplibs_check_method
test -z "$deplibs_check_method" && deplibs_check_method=unknown

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}dlltool", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}dlltool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_DLLTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$DLLTOOL"; then
      ac_cv_prog_DLLTOOL="$DLLTOOL" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_DLLTOOL="${ac_tool_prefix}dlltool"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      DLLTOOL=$ac_cv_prog_DLLTOOL
      if test -n "$DLLTOOL"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DLLTOOL" >&5
        $as_echo "$DLLTOOL" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi

      if test -z "$ac_cv_prog_DLLTOOL"; then
        ac_ct_DLLTOOL=$DLLTOOL
        # Extract the first word of "dlltool", so it can be a program name
        with args.
        set dummy dlltool; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_ac_ct_DLLTOOL+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_DLLTOOL"; then
        ac_cv_prog_ac_ct_DLLTOOL="$ac_ct_DLLTOOL" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DLLTOOL="dlltool"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DLLTOOL=$ac_cv_prog_ac_ct_DLLTOOL
if test -n "$ac_ct_DLLTOOL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DLLTOOL" >&5
$as_echo "$ac_ct_DLLTOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_DLLTOOL" = x; then
        DLLTOOL="false"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        DLLTOOL=$ac_ct_DLLTOOL
    fi
else
    DLLTOOL="$ac_cv_prog_DLLTOOL"
fi

test -z "$DLLTOOL" && DLLTOOL=dlltool

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to associate
runtime and link libraries" >&5
$as_echo_n "checking how to associate runtime and link libraries... "
>&6; }
if ${lt_cv_sharedlib_from_linklib_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_sharedlib_from_linklib_cmd='unknown'

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
  # two different shell functions defined in ltmain.sh
  # decide which to use based on capabilities of $DLLTOOL
  case ` $DLLTOOL --help 2>&1 ` in
*--identify-strict*)
  lt_cv_sharedlib_from_linklib_cmd=func_cygmimg_dll_for_implib
  ;;
*)
  lt_cv_sharedlib_from_linklib_cmd=func_cygmimg_dll_for_implib_fallback
  ;;
esac
  ;;
*)
  # fallback: assume linklib IS sharedlib
  lt_cv_sharedlib_from_linklib_cmd="$ECHO"
  ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sharedlib_from_linklib_cmd" >&5
$as_echo "$lt_cv_sharedlib_from_linklib_cmd" >&6; }
sharedlib_from_linklib_cmd=$lt_cv_sharedlib_from_linklib_cmd
test -z "$sharedlib_from_linklib_cmd" &&
sharedlib_from_linklib_cmd=$ECHO

```

```

if test -n "$ac_tool_prefix"; then
  for ac_prog in ar
  do
    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
    be a program name with args.
    set dummy $ac_tool_prefix$ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_AR+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$AR"; then
        ac_cv_prog_AR="$AR" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' ' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_AR="$ac_tool_prefix$ac_prog"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
        IFS=$as_save_IFS

        fi
        fi
        AR=$ac_cv_prog_AR
        if test -n "$AR"; then
          { $as_echo "$as_me:${as_lineno-$LINENO}: result: $AR" >&5
          $as_echo "$AR" >&6; }
        else
          { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
          $as_echo "no" >&6; }
        fi

        test -n "$AR" && break
      done
    fi
  if test -z "$AR"; then
    ac_ct_AR=$AR
    for ac_prog in ar
    do
      # Extract the first word of "$ac_prog", so it can be a program name
      with args.
      set dummy $ac_prog; ac_word=$2

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_AR+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_AR"; then
    ac_cv_prog_ac_ct_AR="$ac_ct_AR" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_AR="$ac_prog"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_AR=$ac_cv_prog_ac_ct_AR
if test -n "$ac_ct_AR"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_AR" >&5
$as_echo "$ac_ct_AR" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_AR" && break
done

  if test "x$ac_ct_AR" = x; then
    AR="false"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    AR=$ac_ct_AR
  fi

```

```

fi

: ${AR=ar}
: ${AR_FLAGS=cru}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for archiver @FILE
support" >&5
$as_echo_n "checking for archiver @FILE support... " >&6; }
if ${lt_cv_ar_at_file+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ar_at_file=no
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  echo conftest.$ac_objext > conftest.lst
  lt_ar_try='$AR $AR_FLAGS libconftest.a @conftest.lst >&5'
  { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}:
\`$lt_ar_try\`"; } >&5
  (eval $lt_ar_try) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
  test $ac_status = 0; }
  if test "$ac_status" -eq 0; then
    # Ensure the archiver fails upon bogus file names.
    rm -f conftest.$ac_objext libconftest.a
    { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}: \`$lt_ar_try\`";
} >&5
  (eval $lt_ar_try) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
  test $ac_status = 0; }
  if test "$ac_status" -ne 0; then

```



```

        lt_cv_ar_at_file=@
    fi
fi
rm -f conftest.* libconftest.a

fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ar_at_file"
>&5
$as_echo "$lt_cv_ar_at_file" >&6; }

if test "x$lt_cv_ar_at_file" = xno; then
    archiver_list_spec=
else
    archiver_list_spec=$lt_cv_ar_at_file
fi

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$STRIP"; then
            ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_STRIP="${ac_tool_prefix}strip"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

```

```

fi
fi
STRIP=$ac_cv_prog_STRIP
if test -n "$STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
$as_echo "$STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_STRIP"; then
  ac_ct_STRIP=$STRIP
  # Extract the first word of "strip", so it can be a program name
  with args.
  set dummy strip; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_STRIP"; then
      ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_STRIP="strip"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS
    fi
  fi
  ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
  if test -n "$ac_ct_STRIP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }
fi

  if test "x$ac_ct_STRIP" = x; then
    STRIP=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    STRIP=$ac_ct_STRIP
  fi
else
  STRIP="$ac_cv_prog_STRIP"
fi

test -z "$STRIP" && STRIP=:

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}ranlib", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}ranlib; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_RANLIB+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$RANLIB"; then
      ac_cv_prog_RANLIB="$RANLIB" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_RANLIB="${ac_tool_prefix}ranlib"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
    fi
  fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
RANLIB=$ac_cv_prog_RANLIB
if test -n "$RANLIB"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $RANLIB" >&5
$as_echo "$RANLIB" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_RANLIB"; then
  ac_ct_RANLIB=$RANLIB
  # Extract the first word of "ranlib", so it can be a program name
  with args.
  set dummy ranlib; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_RANLIB+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_RANLIB"; then
      ac_cv_prog_ac_ct_RANLIB="$ac_ct_RANLIB" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_RANLIB="ranlib"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

fi
fi
ac_ct_RANLIB=$ac_cv_prog_ac_ct_RANLIB
if test -n "$ac_ct_RANLIB"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_RANLIB" >&5
$as_echo "$ac_ct_RANLIB" >&6; }

```

```

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_RANLIB" = x; then
    RANLIB=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    RANLIB=$ac_ct_RANLIB
  fi
else
  RANLIB="$ac_cv_prog_RANLIB"
fi

test -z "$RANLIB" && RANLIB=:

```

```

# Determine commands to create old-style static archives.
old_archive_cmds='$AR $AR_FLAGS $oldlib$oldobjs'
old_postinstall_cmds='chmod 644 $oldlib'
old_postuninstall_cmds=

if test -n "$RANLIB"; then
  case $host_os in
openbsd*)
  old_postinstall_cmds="$old_postinstall_cmds~\ $RANLIB -t
\ $tool_oldlib"
  ;;
*)
  old_postinstall_cmds="$old_postinstall_cmds~\ $RANLIB
\ $tool_oldlib"
  ;;
esac
  old_archive_cmds="$old_archive_cmds~\ $RANLIB \ $tool_oldlib"
fi

case $host_os in
darwin*)
  lock_old_archive_extraction=yes ;;
*)

```

```
    lock_old_archive_extraction=no ;;  
esac
```

```
# If no C compiler was specified, use CC.  
LTCC=${LTCC-"$CC"}
```

```
# If no C compiler flags were specified, use CFLAGS.  
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}
```

```
# Allow CC to be a program name with arguments.  
compiler=$CC
```

```

# Check for command to grab the raw symbol name followed by C symbol
from nm.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking command to parse $NM
output from $compiler object" >&5
$as_echo_n "checking command to parse $NM output from $compiler
object... " >&6; }
if ${lt_cv_sys_global_symbol_pipe+:} false; then :
  $as_echo_n "(cached) " >&6
else

# These are sane defaults that work on at least a few old systems.
# [They come from Ultrix.  What could be older than Ultrix?!! ;)]

# Character class describing NM global symbol codes.
symcode=' [BCDEGRST] '

# Regexp to match symbols that can be accessed directly from C.
sympat='\( [_A-Za-z] [_A-Za-z0-9]* \)'

# Define system-specific variables.
case $host_os in
aix*)
  symcode=' [BCDT] '
  ;;
cygwin* | mingw* | pw32* | cegcc*)
  symcode=' [ABCDGISTW] '
  ;;
hpux*)
  if test "$host_cpu" = ia64; then
    symcode=' [ABCDEGRST] '
  fi
  ;;
irix* | nonstopux*)
  symcode=' [BCDEGRST] '
  ;;
osf*)
  symcode=' [BCDEGQRST] '
  ;;
solaris*)
  symcode=' [BDRT] '
  ;;
sco3.2v5*)
  symcode=' [DT] '
  ;;
sysv4.2uw2*)
  symcode=' [DT] '
  ;;
sysv5* | sco5v6* | unixware* | OpenUNIX*)
  symcode=' [ABDT] '
  ;;
sysv4)
  symcode=' [DFNSTU] '

```

```

;;
esac

# If we're using GNU nm, then use its standard symbol codes.
case `\$NM -V 2>&1` in
*GNU* | *'with BFD'*)
    symcode='[ABCDGIRSTW]' ;;
esac

# Transform an extracted symbol line into a proper C declaration.
# Some systems (esp. on ia64) link data and code symbols differently,
# so use this general approach.
lt_cv_sys_global_symbol_to_cdecl="sed -n -e 's/^T .* \(.*\)$/extern
int \1();/p' -e 's/^\$symcode* .* \(.*\)$/extern char \1;/p'"

# Transform an extracted symbol line into symbol name and symbol
address
lt_cv_sys_global_symbol_to_c_name_address="sed -n -e 's/^: \([^ ]*\)[
]*$/ {\\\"\\1\\\", (void *) 0},/p' -e 's/^\$symcode* \([^ ]*\) \([
]*\)$/ {\\\"\\2\\\", (void *) \\&2},/p'"
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix="sed -n -e 's/^:
\([^ ]*\)[ ]*$/ {\\\"\\1\\\", (void *) 0},/p' -e 's/^\$symcode* \([^
]*\) \(\lib\[^ ]*\)$/ {\\\"\\2\\\", (void *) \\&2},/p' -e 's/^\$symcode* \([
]*\) \(\[^ ]*\)$/ {\\\"lib\\2\\\", (void *) \\&2},/p'"

# Handle CRLF in mingw tool chain
opt_cr=
case \$build_os in
mingw*)
    opt_cr=`\$ECHO 'x\{0,1\}' | tr x '\015'` # option cr in regexp
    ;;
esac

# Try without a prefix underscore, then with it.
for ac_symprfx in "" "_"; do

    # Transform symcode, sympat, and symprfx into a raw symbol and a C
symbol.
    symxfrm="\\1 \$ac_symprfx\\2 \\2"

    # Write the raw and C identifiers.
    if test "\$lt_cv_nm_interface" = "MS dumpbin"; then
        # Fake it for dumpbin and say T for any non-static function
        # and D for any global variable.
        # Also find C++ and __fastcall symbols from MSVC++,
        # which start with @ or ?.
        lt_cv_sys_global_symbol_pipe="\$AWK '\\"
" {last_section=section; section=\\$ 3};\\"
" /^COFF SYMBOL TABLE/{for(i in hide) delete hide[i]};"\
" /Section length .*#relocs.*(pick any){hide[last_section]=1};"\
" \\$ 0!~/External *\\|/{next};"\
" / 0+ UNDEF /{next}; / UNDEF \([^|]\)*()/next};"\

```



```

"      {if(hide[section]) next};"\
"      {f=0}; \${ 0~/\(\).*\|/{f=1}; {printf f ? \ "T \ " : \ "D \ "};"\
"      {split(\$ 0, a, /\|\|r/); split(a[2], s)};"\
"      s[1]~/^[@?]/{print s[1], s[1]; next};"\
"      s[1]~prfx {split(s[1],t,\ "@\"); print t[1],\
substr(t[1],length(prfx))}"\
"      ' prfx=^$ac_symprfx"
else
  lt_cv_sys_global_symbol_pipe="sed -n -e 's/^[^*[]\($symcode$symcode*\)[ \t]*\
]*$ac_symprfx$sympat$opt_cr$/ $symxfrm/p'"
  fi
  lt_cv_sys_global_symbol_pipe="$lt_cv_sys_global_symbol_pipe | sed '/\
__gnu_lto/d'"

# Check to see that the pipe works correctly.
pipe_works=no

rm -f conftest*
cat > conftest.$ac_ext <<_LT_EOF
#ifdef __cplusplus
extern "C" {
#endif
char nm_test_var;
void nm_test_func(void);
void nm_test_func(void){}
#ifdef __cplusplus
}
#endif
int main(){nm_test_var='a';nm_test_func();return(0);}
_LT_EOF

if { { eval echo "\$as_me\":"${as_lineno-$LINENO}:
"\$ac_compile\>"; } >&5
  (eval $ac_compile) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }; then
  # Now try to grab the symbols.
  nlist=conftest.nm
  if { { eval echo "\$as_me\":"${as_lineno-$LINENO}: \ "$NM
conftest.$ac_objext \ | "\$lt_cv_sys_global_symbol_pipe" \> $nlist\>"; }
>&5
  (eval $NM conftest.$ac_objext \ | "\$lt_cv_sys_global_symbol_pipe" \>
$nlist) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; } && test -s "$nlist"; then
  # Try sorting and uniquifying the output.
  if sort "$nlist" | uniq > "$nlist.T"; then
  mv -f "$nlist.T" "$nlist"
  else

```

```

rm -f "$nlist"
fi

# Make sure that we snagged all the symbols we need.
if $GREP ' nm_test_var$' "$nlist" >/dev/null; then
if $GREP ' nm_test_func$' "$nlist" >/dev/null; then
    cat <<_LT_EOF > conftest.$ac_ext
/* Keep this code in sync between libtool.m4, ltmain, lt_system.h, and
tests. */
#if defined(_WIN32) || defined(__CYGWIN__) || defined(_WIN32_WCE)
/* DATA imports from DLLs on WIN32 con't be const, because runtime
relocations are performed -- see ld's documentation on pseudo-
relocs. */
# define LT@&t@_DLSYM_CONST
#elif defined(__osf__)
/* This system does not cope well with relocations in const data. */
# define LT@&t@_DLSYM_CONST
#else
# define LT@&t@_DLSYM_CONST const
#endif

#ifdef __cplusplus
extern "C" {
#endif

_LT_EOF
    # Now generate the symbol file.
    eval "$lt_cv_sys_global_symbol_to_cdecl" < "$nlist" | $GREP -v
main >> conftest.$ac_ext'

    cat <<_LT_EOF >> conftest.$ac_ext

/* The mapping between symbol names and symbols. */
LT@&t@_DLSYM_CONST struct {
    const char *name;
    void *address;
}
lt__PROGRAM__LTX_preloaded_symbols[] =
{
    { "@PROGRAM@", (void *) 0 },
_LT_EOF
    $SED "s/^$symcode$symcode* \(.*\)\ \(.*)$/ {\\"2\", (void *)
&2},/" < "$nlist" | $GREP -v main >> conftest.$ac_ext
    cat <<\_LT_EOF >> conftest.$ac_ext
    {0, (void *) 0}
};

/* This works around a problem in FreeBSD linker */
#ifdef FREEBSD_WORKAROUND
static const void *lt_preloaded_setup() {
    return lt__PROGRAM__LTX_preloaded_symbols;
}

```

```

#endif

#ifdef __cplusplus
}
#endif
_LT_EOF
    # Now try linking the two files.
    mv conftest.$ac_objext conftstm.$ac_objext
    lt_globsym_save_LIBS=$LIBS
    lt_globsym_save_CFLAGS=$CFLAGS
    LIBS="conftstm.$ac_objext"
    CFLAGS="$CFLAGS$lt_prog_compiler_no_builtin_flag"
    if { { eval echo "\"\$as_me\"":${as_lineno-$LINENO}:
\"$ac_link\""; } >&5
    (eval $ac_link) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
    test $ac_status = 0; } && test -s conftest${ac_exeext}; then
        pipe_works=yes
    fi
    LIBS=$lt_globsym_save_LIBS
    CFLAGS=$lt_globsym_save_CFLAGS
    else
        echo "cannot find nm_test_func in $nlist" >&5
    fi
    else
        echo "cannot find nm_test_var in $nlist" >&5
    fi
    else
        echo "cannot run $lt_cv_sys_global_symbol_pipe" >&5
    fi
    else
        echo "$progname: failed program was:" >&5
        cat conftest.$ac_ext >&5
    fi
    rm -rf conftest* conftst*

    # Do not use the global_symbol_pipe unless it works.
    if test "$pipe_works" = yes; then
        break
    else
        lt_cv_sys_global_symbol_pipe=
    fi
done

fi

if test -z "$lt_cv_sys_global_symbol_pipe"; then
    lt_cv_sys_global_symbol_to_cdecl=
fi
if test -z
"$lt_cv_sys_global_symbol_pipe$lt_cv_sys_global_symbol_to_cdecl"; then

```

```
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: failed" >&5
  $sas_echo "failed" >&6; }
else
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: ok" >&5
  $sas_echo "ok" >&6; }
fi

# Response file support.
if test "$lt_cv_nm_interface" = "MS dumpbin"; then
  nm_file_list_spec='@'
elif $NM --help 2>/dev/null | grep '[@]FILE' >/dev/null; then
  nm_file_list_spec='@'
fi
```

```
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for sysroot" >&5
  $sas_echo_n "checking for sysroot... " >&6; }
```

```
@%:@ Check whether --with-libtool-sysroot was given.
if test "${with_libtool_sysroot+set}" = set; then :
  withval=$with_libtool_sysroot;
else
  with_libtool_sysroot=no
fi
```

```
lt_sysroot=
```

```

case ${with_libtool_sysroot} in #(
  yes)
    if test "$GCC" = yes; then
      lt_sysroot=`$CC --print-sysroot 2>/dev/null`
    fi
    ;; #(
/*)
  lt_sysroot=`echo "$with_libtool_sysroot" | sed -e
"$sed_quote_subst"`
  ;; #(
no|'')
  ;; #(
*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
${with_libtool_sysroot}" >&5
$as_echo "$${with_libtool_sysroot}" >&6; }
  as_fn_error $? "The sysroot must be an absolute path." "$LINENO" 5
  ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: ${lt_sysroot:-no}"
>&5
$as_echo "$${lt_sysroot:-no}" >&6; }

```

```

@%:@ Check whether --enable-libtool-lock was given.
if test "${enable_libtool_lock+set}" = set; then :
  enableval=$enable_libtool_lock;
fi

```

```

test "x$enable_libtool_lock" != xno && enable_libtool_lock=yes

```

```

# Some flags need to be propagated to the compiler or linker for good
# libtool support.

```

```

case $host in
ia64-*-hpux*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:"
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
test $ac_status = 0; }; then
  case ` /usr/bin/file conftest.$ac_objext` in
    *ELF-32*)
      HPUX_IA64_MODE="32"
    ;;
    *ELF-64*)

```

```

        HPUX_IA64_MODE="64"
        ;;
    esac
fi
rm -rf confptest*
;;
*-*-irix6*)
# Find out which ABI we are using.
echo '#line '$LINENO' "configure"' > confptest.$ac_ext
if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }; then
    if test "$lt_cv_prog_gnu_ld" = yes; then
        case ` /usr/bin/file confptest.$ac_objext ` in
        *32-bit*)
            LD="{LD-ld} -melf32bsmip"
            ;;
        *N32*)
            LD="{LD-ld} -melf32bmipn32"
            ;;
        *64-bit*)
            LD="{LD-ld} -melf64bmip"
            ;;
        esac
    else
        case ` /usr/bin/file confptest.$ac_objext ` in
        *32-bit*)
            LD="{LD-ld} -32"
            ;;
        *N32*)
            LD="{LD-ld} -n32"
            ;;
        *64-bit*)
            LD="{LD-ld} -64"
            ;;
        esac
    fi
fi
rm -rf confptest*
;;

x86_64-*kfreebsd*-gnu|x86_64-*linux*|ppc*-*linux*|powerpc*-*linux*| \
s390*-*linux*|s390*-*tpf*|sparc*-*linux*)
# Find out which ABI we are using.
echo 'int i;' > confptest.$ac_ext
if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?

```

```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then
  case ` /usr/bin/file conftest.o` in
    *32-bit*)
      case $host in
        x86_64-*kfreebsd*-gnu)
          LD="${LD-ld} -m elf_i386_fbsd"
          ;;
        x86_64-*linux*)
          LD="${LD-ld} -m elf_i386"
          ;;
        ppc64-*linux*|powerpc64-*linux*)
          LD="${LD-ld} -m elf32ppclinux"
          ;;
        s390x-*linux*)
          LD="${LD-ld} -m elf_s390"
          ;;
        sparc64-*linux*)
          LD="${LD-ld} -m elf32_sparc"
          ;;
      esac
    ;;
    *64-bit*)
      case $host in
        x86_64-*kfreebsd*-gnu)
          LD="${LD-ld} -m elf_x86_64_fbsd"
          ;;
        x86_64-*linux*)
          LD="${LD-ld} -m elf_x86_64"
          ;;
        ppc*-*linux*|powerpc*-*linux*)
          LD="${LD-ld} -m elf64ppc"
          ;;
        s390*-*linux*|s390*-*tpf*)
          LD="${LD-ld} -m elf64_s390"
          ;;
        sparc*-*linux*)
          LD="${LD-ld} -m elf64_sparc"
          ;;
      esac
    ;;
  esac
fi
rm -rf conftest*
;;

*-*-sco3.2v5*)
  # On SCO OpenServer 5, we need -belf to get full-featured binaries.
  SAVE_CFLAGS="$CFLAGS"
  CFLAGS="$CFLAGS -belf"
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
  compiler needs -belf" >&5

```

```

$as_echo_n "checking whether the C compiler needs -belf... " >&6; }
if ${lt_cv_cc_needs_belf+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_ext=c
  ac_cpp='$CPP $CPPFLAGS'
  ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
  ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
  ac_compiler_gnu=$ac_cv_c_compiler_gnu

  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_cc_needs_belf=yes
else
  lt_cv_cc_needs_belf=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  ac_ext=c
  ac_cpp='$CPP $CPPFLAGS'
  ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
  ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
  ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_cc_needs_belf"
>&5
$as_echo "$lt_cv_cc_needs_belf" >&6; }
if test x"$lt_cv_cc_needs_belf" != x"yes"; then
  # this is probably gcc 2.8.0, egcs 1.0 or newer; no need for -belf
  CFLAGS="$SAVE_CFLAGS"
fi
;;
*-solaris*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\$as_me\"":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
  (eval $ac_compile) 2>&5
  ac_status=$?

```



```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then
  case ` /usr/bin/file conftest.o` in
    *64-bit*)
      case $lt_cv_prog_gnu_ld in
        yes*)
          case $host in
            i?86-*-solaris*)
              LD="${LD-ld} -m elf_x86_64"
              ;;
            sparc*-*-solaris*)
              LD="${LD-ld} -m elf64_sparc"
              ;;
          esac
          # GNU ld 2.21 introduced _sol2 emulations. Use them if
available.
          if ${LD-ld} -V | grep _sol2 >/dev/null 2>&1; then
            LD="${LD-ld}_sol2"
          fi
          ;;
        *)
          if ${LD-ld} -64 -r -o conftest2.o conftest.o >/dev/null 2>&1;
then
            LD="${LD-ld} -64"
          fi
          ;;
        esac
      ;;
    esac
  fi
  rm -rf conftest*
  ;;
esac

need_locks="$enable_libtool_lock"

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}mt", so it can be a
program name with args.
  set dummy ${ac_tool_prefix}mt; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$MANIFEST_TOOL"; then
      ac_cv_prog_MANIFEST_TOOL="$MANIFEST_TOOL" # Let the user override
the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_MANIFEST_TOOL="${ac_tool_prefix}mt"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
MANIFEST_TOOL=$ac_cv_prog_MANIFEST_TOOL
if test -n "$MANIFEST_TOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MANIFEST_TOOL" >&5
$as_echo "$MANIFEST_TOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_MANIFEST_TOOL"; then
  ac_ct_MANIFEST_TOOL=$MANIFEST_TOOL
  # Extract the first word of "mt", so it can be a program name with
  args.
  set dummy mt; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_MANIFEST_TOOL"; then
      ac_cv_prog_ac_ct_MANIFEST_TOOL="$ac_ct_MANIFEST_TOOL" # Let the user
      override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_MANIFEST_TOOL="mt"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        fi
      done
    fi
  fi

```

```

done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_MANIFEST_TOOL=$ac_cv_prog_ac_ct_MANIFEST_TOOL
if test -n "$ac_ct_MANIFEST_TOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_ct_MANIFEST_TOOL" >&5
$as_echo "$ac_ct_MANIFEST_TOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_MANIFEST_TOOL" = x; then
    MANIFEST_TOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    MANIFEST_TOOL=$ac_ct_MANIFEST_TOOL
  fi
else
  MANIFEST_TOOL="$ac_cv_prog_MANIFEST_TOOL"
fi

test -z "$MANIFEST_TOOL" && MANIFEST_TOOL=mt
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $MANIFEST_TOOL is
a manifest tool" >&5
$as_echo_n "checking if $MANIFEST_TOOL is a manifest tool... " >&6; }
if ${lt_cv_path_manifest_tool+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_path_manifest_tool=no
  echo "$as_me:$LINENO: $MANIFEST_TOOL '-?'" >&5
  $MANIFEST_TOOL '-?' 2>conftest.err > conftest.out
  cat conftest.err >&5
  if $GREP 'Manifest Tool' conftest.out > /dev/null; then
    lt_cv_path_manifest_tool=yes
  fi
  rm -f conftest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_path_manifest_tool" >&5
$as_echo "$lt_cv_path_manifest_tool" >&6; }

```

```

if test "x$lt_cv_path_manifest_tool" != xyes; then
  MANIFEST_TOOL=:
fi

case $host_os in
  rhapsody* | darwin*)
    if test -n "$ac_tool_prefix"; then
      # Extract the first word of "${ac_tool_prefix}dsymutil", so it can
      be a program name with args.
      set dummy ${ac_tool_prefix}dsymutil; ac_word=$2
      { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
      $as_echo_n "checking for $ac_word... " >&6; }
      if ${ac_cv_prog_DSYMUTIL+:} false; then :
        $as_echo_n "(cached) " >&6
      else
        if test -n "$DSYMUTIL"; then
          ac_cv_prog_DSYMUTIL="$DSYMUTIL" # Let the user override the test.
        else
          as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
          for as_dir in $PATH
          do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_exec_ext in ' $ac_executable_extensions; do
              if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                ac_cv_prog_DSYMUTIL="${ac_tool_prefix}dsymutil"
                $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                break 2
              fi
            done
          done
          IFS=$as_save_IFS

          fi
          fi
          DSYMUTIL=$ac_cv_prog_DSYMUTIL
          if test -n "$DSYMUTIL"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DSYMUTIL" >&5
            $as_echo "$DSYMUTIL" >&6; }
          else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
            $as_echo "no" >&6; }
          fi
        fi
      fi
    fi
  fi

```

```

if test -z "$ac_cv_prog_DSYMUTIL"; then
  ac_ct_DSYMUTIL=$DSYMUTIL
  # Extract the first word of "dsymutil", so it can be a program name
  with args.
  set dummy dsymutil; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_DSYMUTIL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_DSYMUTIL"; then
      ac_cv_prog_ac_ct_DSYMUTIL="$ac_ct_DSYMUTIL" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DSYMUTIL="dsymutil"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      ac_ct_DSYMUTIL=$ac_cv_prog_ac_ct_DSYMUTIL
      if test -n "$ac_ct_DSYMUTIL"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DSYMUTIL"
        >&5
        $as_echo "$ac_ct_DSYMUTIL" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      if test "x$ac_ct_DSYMUTIL" = x; then
        DSYMUTIL=":"
      else
        case $cross_compiling:$ac_tool_warned in
        yes:)
          { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
          not prefixed with host triplet" >&5
          $as_echo "$as_me: WARNING: using cross tools not prefixed with host
          triplet" >&2;}
          ac_tool_warned=yes ;;

```

```

esac
    DSYMUTIL=${ac_ct_DSYMUTIL}
    fi
else
    DSYMUTIL="$ac_cv_prog_DSYMUTIL"
fi

    if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}nmedit", so it can be
a program name with args.
set dummy ${ac_tool_prefix}nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_NMEDIT+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$NMEDIT"; then
        ac_cv_prog_NMEDIT="$NMEDIT" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_NMEDIT="${ac_tool_prefix}nmedit"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

fi
fi
NMEDIT=${ac_cv_prog_NMEDIT}
if test -n "$NMEDIT"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $NMEDIT" >&5
$as_echo "$NMEDIT" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_NMEDIT"; then
    ac_ct_NMEDIT=$NMEDIT
    # Extract the first word of "nmedit", so it can be a program name
with args.

```

```

set dummy nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_NMEDIT+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_NMEDIT"; then
    ac_cv_prog_ac_ct_NMEDIT="$ac_ct_NMEDIT" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_NMEDIT="nmedit"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_NMEDIT=$ac_cv_prog_ac_ct_NMEDIT
if test -n "$ac_ct_NMEDIT"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_NMEDIT" >&5
$as_echo "$ac_ct_NMEDIT" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_NMEDIT" = x; then
    NMEDIT=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    NMEDIT=$ac_ct_NMEDIT
  fi
else
  NMEDIT="$ac_cv_prog_NMEDIT"

```

```

fi

    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}lipo", so it can be a
        program name with args.
        set dummy ${ac_tool_prefix}lipo; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_LIPO+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            if test -n "$LIPO"; then
                ac_cv_prog_LIPO="$LIPO" # Let the user override the test.
            else
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in ' ' $ac_executable_extensions; do
                        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                            ac_cv_prog_LIPO="${ac_tool_prefix}lipo"
                            $as_echo "$as_me:${as_lineno-$LINENO}: found
                            $as_dir/$ac_word$ac_exec_ext" >&5
                            break 2
                        fi
                    done
                done
                IFS=$as_save_IFS

            fi
        fi

        LIPO=$ac_cv_prog_LIPO
        if test -n "$LIPO"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LIPO" >&5
            $as_echo "$LIPO" >&6; }
        else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
            $as_echo "no" >&6; }
        fi

    fi

fi

if test -z "$ac_cv_prog_LIPO"; then
    ac_ct_LIPO=$LIPO
    # Extract the first word of "lipo", so it can be a program name with
    args.
    set dummy lipo; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_LIPO+:} false; then :
        $as_echo_n "(cached) " >&6

```



```

else
  if test -n "$ac_ct_LIPO"; then
    ac_cv_prog_ac_ct_LIPO="$ac_ct_LIPO" # Let the user override the
test.
else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_LIPO="lipo"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_LIPO=$ac_cv_prog_ac_ct_LIPO
if test -n "$ac_ct_LIPO"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_LIPO" >&5
$as_echo "$ac_ct_LIPO" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_LIPO" = x; then
    LIPO=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    LIPO=$ac_ct_LIPO
  fi
else
  LIPO="$ac_cv_prog_LIPO"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool", so it can be a
program name with args.

```

```

set dummy ${ac_tool_prefix}otool; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_OTOOL+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$OTOOL"; then
    ac_cv_prog_OTOOL="$OTOOL" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_OTOOL="${ac_tool_prefix}otool"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
OTOOL=$ac_cv_prog_OTOOL
if test -n "$OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL" >&5
$as_echo "$OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL"; then
  ac_ct_OTOOL=$OTOOL
  # Extract the first word of "otool", so it can be a program name
  with args.
  set dummy otool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL"; then
      ac_cv_prog_ac_ct_OTOOL="$ac_ct_OTOOL" # Let the user override the
      test.
    else

```

```

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_OTOOL="otool"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_OTOOL=$ac_cv_prog_ac_ct_OTOOL
if test -n "$ac_ct_OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL" >&5
$as_echo "$ac_ct_OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_OTOOL" = x; then
    OTOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OTOOL=$ac_ct_OTOOL
  fi
else
  OTOOL="$ac_cv_prog_OTOOL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool64", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}otool64; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_OTOOL64+:} false; then :
      $as_echo_n "(cached) " >&6

```

```

else
  if test -n "$OTOOL64"; then
    ac_cv_prog_OTOOL64="$OTOOL64" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_OTOOL64="{ac_tool_prefix}otool64"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
  done
IFS=$as_save_IFS

fi
fi
OTOOL64=$ac_cv_prog_OTOOL64
if test -n "$OTOOL64"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL64" >&5
$as_echo "$OTOOL64" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL64"; then
  ac_ct_OTOOL64=$OTOOL64
  # Extract the first word of "otool64", so it can be a program name
  with args.
  set dummy otool64; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL64+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL64"; then
      ac_cv_prog_ac_ct_OTOOL64="$ac_ct_OTOOL64" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OTOOL64="otool64"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
    done
IFS=$sas_save_IFS

fi
fi
ac_ct_OTOOL64=$ac_cv_prog_ac_ct_OTOOL64
if test -n "$ac_ct_OTOOL64"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL64" >&5
    $sas_echo "$ac_ct_OTOOL64" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $sas_echo "no" >&6; }
fi

    if test "x$ac_ct_OTOOL64" = x; then
        OTOOL64=":"
    else
        case $cross_compiling:$ac_tool_warned in
        yes:)
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
        $sas_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
        ac_tool_warned=yes ;;
        esac
        OTOOL64=$ac_ct_OTOOL64
    fi
else
    OTOOL64="$ac_cv_prog_OTOOL64"
fi

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
single_module linker flag" >&5
$as_echo_n "checking for -single_module linker flag... " >&6; }
if ${lt_cv_apple_cc_single_mod+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_apple_cc_single_mod=no
  if test -z "${LT_MULTI_MODULE}"; then
    # By default we will add the -single_module flag. You can
override
    # by either setting the environment variable LT_MULTI_MODULE
    # non-empty at configure time, or by adding -multi_module to the
    # link flags.
    rm -rf libconfptest.dylib*
    echo "int foo(void){return 1;}" > confptest.c
    echo "$LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
-dynamiclib -Wl,-single_module confptest.c" >&5
    $LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
    -dynamiclib -Wl,-single_module confptest.c 2>confptest.err
    _lt_result=$?
    # If there is a non-empty error log, and "single_module"
    # appears in it, assume the flag caused a linker warning
    if test -s confptest.err && $GREP single_module confptest.err;
then
      cat confptest.err >&5
      # Otherwise, if the output was created with a 0 exit code from
      # the compiler, it worked.
      elif test -f libconfptest.dylib && test $_lt_result -eq 0; then
        lt_cv_apple_cc_single_mod=yes
      else
        cat confptest.err >&5
      fi
      rm -rf libconfptest.dylib*
      rm -f confptest.*
    fi
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_apple_cc_single_mod" >&5
$as_echo "$lt_cv_apple_cc_single_mod" >&6; }

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
exported_symbols_list linker flag" >&5
$as_echo_n "checking for -exported_symbols_list linker flag... " >&6;
}
if ${lt_cv_ld_exported_symbols_list+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_exported_symbols_list=no
  save_LDFLAGS=$LDFLAGS
  echo "_main" > conftest.sym
  LDFLAGS="$LDFLAGS -Wl,-exported_symbols_list,conftest.sym"
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_ld_exported_symbols_list=yes
else
  lt_cv_ld_exported_symbols_list=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_exported_symbols_list" >&5
$as_echo "$lt_cv_ld_exported_symbols_list" >&6; }

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -force_load
linker flag" >&5
$as_echo_n "checking for -force_load linker flag... " >&6; }
if ${lt_cv_ld_force_load+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_force_load=no
  cat > conftest.c << _LT_EOF
int forced_loaded() { return 2;}
_LT_EOF
  echo "$LTCC $LTCFLAGS -c -o conftest.o conftest.c" >&5
  $LTCC $LTCFLAGS -c -o conftest.o conftest.c 2>&5
  echo "$AR cru libconftest.a conftest.o" >&5
  $AR cru libconftest.a conftest.o 2>&5
  echo "$RANLIB libconftest.a" >&5

```

```

        $RANLIB libconfptest.a 2>&5
        cat > confptest.c << _LT_EOF
int main() { return 0;}
_LT_EOF
        echo "$LTCC $LTCFLAGS $LDFLAGS -o confptest confptest.c -Wl,-
force_load,./libconfptest.a" >&5
        $LTCC $LTCFLAGS $LDFLAGS -o confptest confptest.c -Wl,-
force_load,./libconfptest.a 2>confptest.err
        _lt_result=$?
        if test -s confptest.err && $GREP force_load confptest.err; then
            cat confptest.err >&5
        elif test -f confptest && test $_lt_result -eq 0 && $GREP
forced_load confptest >/dev/null 2>&1 ; then
            lt_cv_ld_force_load=yes
        else
            cat confptest.err >&5
        fi
        rm -f confptest.err libconfptest.a confptest confptest.c
        rm -rf confptest.dSYM

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ld_force_load"
>&5
$as_echo "$lt_cv_ld_force_load" >&6; }
        case $host_os in
            rhapsody* | darwin1.[012])
                _lt_dar_allow_undefined='${wl}-undefined ${wl}suppress' ;;
            darwin1.*)
                _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
            darwin*) # darwin 5.x on
                # if running on 10.5 or later, the deployment target defaults
                # to the OS version, if on x86, and 10.4, the deployment
                # target defaults to 10.4. Don't you love it?
                case ${MACOSX_DEPLOYMENT_TARGET-10.0},$host in
                    10.0,*86*-darwin8*|10.0,*-darwin[91]*)
                        _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
                ;;
                    10.[012]*)
                        _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
                    10.*)
                        _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
                ;;
                esac
        ;;
        esac
        ;;
esac
        if test "$lt_cv_apple_cc_single_mod" = "yes"; then
            _lt_dar_single_mod='$single_module'
        fi
        if test "$lt_cv_ld_exported_symbols_list" = "yes"; then

```



```

        _lt_dar_export_syms=' ${wl}-
exported_symbols_list,$output_objdir/${libname}-symbols.expsym'
    else
        _lt_dar_export_syms='~$NMEDIT -s $output_objdir/${libname}-
symbols.expsym ${lib}'
    fi
    if test "$DSYMUTIL" != ":" && test "$lt_cv_ld_force_load" = "no";
then
        _lt_dsymutil='~$DSYMUTIL $lib || :'
    else
        _lt_dsymutil=
    fi
    ;;
esac

```

```

for ac_header in dlfcn.h
do :
    ac_fn_c_check_header_compile "$LINENO" "dlfcn.h"
"ac_cv_header_dlfcn_h" "$ac_includes_default
"
    if test "x$ac_cv_header_dlfcn_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DLFCN_H 1
_ACEOF
    fi
done

```

```

func_stripname_cnf ()
{
    case ${2} in
        .*) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%\\\\\\$2\\$%%" `;;
        *) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%$2\\$%%" `;;
    esac
} # func_stripname_cnf

```

```

# Set options

```

```

    enable_dlopen=no

```

```
enable_win32_dll=no
```

```
    @%:@ Check whether --enable-shared was given.
if test "${enable_shared+set}" = set; then :
  enableval=$enable_shared; p=${PACKAGE-default}
  case $enableval in
    yes) enable_shared=yes ;;
    no) enable_shared=no ;;
    *)
      enable_shared=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_shared=yes
        fi
      done
      IFS="$lt_save_ifs"
      ;;
  esac
else
  enable_shared=yes
fi
```

```
    @%:@ Check whether --enable-static was given.
if test "${enable_static+set}" = set; then :
  enableval=$enable_static; p=${PACKAGE-default}
  case $enableval in
    yes) enable_static=yes ;;
    no) enable_static=no ;;
    *)
      enable_static=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_static=yes
        fi
      done
    fi
```

```

        done
        IFS="$lt_save_ifs"
        ;;
    esac
else
    enable_static=yes
fi

```

```

@%:@ Check whether --with-pic was given.
if test "${with_pic+set}" = set; then :
    withval=$with_pic; lt_p=${PACKAGE-default}
    case $withval in
        yes|no) pic_mode=$withval ;;
        *)
            pic_mode=default
            # Look at the argument we got.  We use all the common list
            separators.
            lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
            for lt_pkg in $withval; do
                IFS="$lt_save_ifs"
                if test "X$lt_pkg" = "X$lt_p"; then
                    pic_mode=yes
                fi
            done
            IFS="$lt_save_ifs"
            ;;
    esac
else
    pic_mode=default
fi

```

```

test -z "$pic_mode" && pic_mode=default

```

```

@%:@ Check whether --enable-fast-install was given.
if test "${enable_fast_install+set}" = set; then :
    enableval=$enable_fast_install; p=${PACKAGE-default}

```

```
case $enableval in
yes) enable_fast_install=yes ;;
no) enable_fast_install=no ;;
*)
    enable_fast_install=no
    # Look at the argument we got. We use all the common list
separators.
    lt_save_ifs="$IFS"; IFS="{IFS}$PATH_SEPARATOR,"
    for pkg in $enableval; do
IFS="$lt_save_ifs"
if test "X$pkg" = "Xp"; then
    enable_fast_install=yes
fi
done
IFS="$lt_save_ifs"
;;
esac
else
    enable_fast_install=yes
fi
```

```
# This can be used to rebuild libtool when needed
LIBTOOL_DEPS="$ltmain"
```

```
# Always use our own libtool.
LIBTOOL='$(top_builddir)'
LIBTOOL="$LIBTOOL/${host_alias}-libtool"
```

```
test -z "$LN_S" && LN_S="ln -s"
```

```
if test -n "${ZSH_VERSION+set}" ; then  
  setopt NO_GLOB_SUBST  
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for objdir" >&5  
$as_echo_n "checking for objdir... " >&6; }  
if ${lt_cv_objdir+:} false; then :  
  $as_echo_n "(cached) " >&6  
else  
  rm -f .libs 2>/dev/null  
  mkdir .libs 2>/dev/null  
  if test -d .libs; then  
    lt_cv_objdir=.libs  
  else  
    # MS-DOS does not allow filenames that begin with a dot.  
    lt_cv_objdir=_libs  
  fi  
  rmdir .libs 2>/dev/null  
fi  
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_objdir" >&5  
$as_echo "$lt_cv_objdir" >&6; }  
objdir=$lt_cv_objdir
```

```

cat >>confdefs.h <<_ACEOF
@%:@define LT_OBJDIR "$lt_cv_objdir/"
_ACEOF

case $host_os in
aix3*)
  # AIX sometimes has problems with the GCC collect2 program.  For
  some
  # reason, if we set the COLLECT_NAMES environment variable, the
  problems
  # vanish in a puff of smoke.
  if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
  fi
  ;;
esac

# Global variables:
ofile=${host_alias}-libtool
can_build_shared=yes

# All known linkers require a `.a' archive for static linking (except
MSVC,
# which needs '.lib').
libext=a

with_gnu_ld="$lt_cv_prog_gnu_ld"

old_CC="$CC"
old_CFLAGS="$CFLAGS"

# Set sane defaults for various variables
test -z "$CC" && CC=cc
test -z "$LTCC" && LTCC=$CC
test -z "$LTCFLAGS" && LTCFLAGS=$CFLAGS
test -z "$LD" && LD=ld
test -z "$ac_objext" && ac_objext=o

for cc_temp in $compiler""; do
  case $cc_temp in
    compile | *[\//]compile | ccache | *[\//]ccache ) ;;
    distcc | *[\//]distcc | purify | *[\//]purify ) ;;
    \-*) ;;
  esac
done

```

```

    *) break;;
  esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^$host_alias-%%"`

# Only perform the check for file, if the check method requires it
test -z "$MAGIC_CMD" && MAGIC_CMD=file
case $deplibs_check_method in
file_magic*)
  if test "$file_magic_cmd" = '$MAGIC_CMD'; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
${ac_tool_prefix}file" >&5
$as_echo_n "checking for ${ac_tool_prefix}file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
[\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
    lt_save_MAGIC_CMD="$MAGIC_CMD"
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
    for ac_dir in $ac_dummy; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f $ac_dir/${ac_tool_prefix}file; then
        lt_cv_path_MAGIC_CMD="$ac_dir/${ac_tool_prefix}file"
        if test -n "$file_magic_test_file"; then
          case $deplibs_check_method in
"file_magic" *)
            file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
            MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
            if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
              $EGREP "$file_magic_regex" > /dev/null; then
              :
            else
              cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

```

```

_LT_EOF
    fi ;;
    esac
    fi
    break
    fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test -z "$lt_cv_path_MAGIC_CMD"; then
  if test -n "$ac_tool_prefix"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for file" >&5
$as_echo_n "checking for file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
  [\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
    lt_save_MAGIC_CMD="$MAGIC_CMD"
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
    for ac_dir in $ac_dummy; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f $ac_dir/file; then
        lt_cv_path_MAGIC_CMD="$ac_dir/file"
        if test -n "$file_magic_test_file"; then
          case $deplibs_check_method in
          "file_magic "*)
            file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`

```



```

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
  $EGREP "$file_magic_regex" > /dev/null; then
  :
else
  cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

_LT_EOF
  fi ;;
esac
fi
break
fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

else
  MAGIC_CMD=:
fi
fi

fi
;;
esac

# Use C for the default configuration in the libtool script

lt_save_CC="$CC"
ac_ext=c

```

```

ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

# Source file extension for C test sources.
ac_ext=c

# Object file extension for compiled C test sources.
objext=o
objext=$objext

# Code to be used in simple compile tests
lt_simple_compile_test_code="int some_variable = 0;"

# Code to be used in simple link tests
lt_simple_link_test_code='int main(){return(0);}'

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Save the default compiler, since it gets overwritten when the other
# tags are being tested, and _LT_TAGVAR(compiler, []) is a NOP.
compiler_DEFAULT=$CC

# save warnings/boilerplate of simple test code
ac_outfile=conftest.$ac_objext
echo "$lt_simple_compile_test_code" >conftest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>conftest.err
_lt_compiler_boilerplate=`cat conftest.err`
$RM conftest*

ac_outfile=conftest.$ac_objext
echo "$lt_simple_link_test_code" >conftest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >conftest.err
_lt_linker_boilerplate=`cat conftest.err`
$RM -r conftest*

```

```

## CAVEAT EMPTOR:
## There is no encapsulation within the following macros, do not
change
## the running order or otherwise move them around unless you know
exactly
## what you are doing...
if test -n "$compiler"; then

lt_prog_compiler_no_builtin_flag=

if test "$GCC" = yes; then
  case $cc_basename in
  nvcc*)
    lt_prog_compiler_no_builtin_flag=' -Xcompiler -fno-builtin' ;;
  *)
    lt_prog_compiler_no_builtin_flag=' -fno-builtin' ;;
  esac

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -fno-rtti -fno-exceptions" >&5
$as_echo_n "checking if $compiler supports -fno-rtti -fno-
exceptions... " >&6; }
if ${lt_cv_prog_compiler_rtti_exceptions+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_rtti_exceptions=no
  ac_outfile=conftest.$ac_objext
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext
  lt_compiler_flag="-fno-rtti -fno-exceptions"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&;; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>conftest.err)
  ac_status=$?
  cat conftest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >conftest.exp

```

```

    $$SED '/^$/d; /^ *+/d' confctest.err >confctest.er2
    if test ! -s confctest.er2 || diff confctest.exp confctest.er2
>/dev/null; then
        lt_cv_prog_compiler_rtti_exceptions=yes
    fi
fi
$RM confctest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_rtti_exceptions" >&5
$as_echo "$lt_cv_prog_compiler_rtti_exceptions" >&6; }

if test x"$lt_cv_prog_compiler_rtti_exceptions" = xyes; then

lt_prog_compiler_no_builtin_flag="$lt_prog_compiler_no_builtin_flag -
fno-rtti -fno-exceptions"
else
    :
fi

fi

fi

```

```

    lt_prog_compiler_wl=
    lt_prog_compiler_pic=
    lt_prog_compiler_static=

```

```

if test "$GCC" = yes; then
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_static='-static'

```

```

case $host_os in
    aix*)
        # All AIX code is PIC.
        if test "$host_cpu" = ia64; then
            # AIX 5 now supports IA64 processor
            lt_prog_compiler_static='-Bstatic'
        fi
        ;;

```

```

amigaos*)
    case $host_cpu in
        powerpc)
            # see comment about AmigaOS4 .so support
            lt_prog_compiler_pic='-fPIC'
        ;;

```

```

    m68k)
        # FIXME: we need at least 68020 code to build shared
libraries, but
        # adding the '-m68020' flag to GCC prevents building
anything better,
        # like '-m68040'.
        lt_prog_compiler_pic='-m68020 -resident32 -malways-
restore-a4'
        ;;
    esac
    ;;

beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)
    # PIC is the default for these OSes.
    ;;

mingw* | cygwin* | pw32* | os2* | cegcc*)
    # This hack is so that the source file can tell whether it is
being
    # built for inclusion in a dll (and should export symbols for
example).
    # Although the cygwin gcc ignores -fPIC, still need this for
old-style
    # (--disable-auto-import) libraries
    lt_prog_compiler_pic='-DDLL_EXPORT'
    ;;

darwin* | rhapsody*)
    # PIC is the default on this platform
    # Common symbols not allowed in MH_DYLIB files
    lt_prog_compiler_pic='-fno-common'
    ;;

haiku*)
    # PIC is the default for Haiku.
    # The "-static" flag exists, but is broken.
    lt_prog_compiler_static=
    ;;

hpux*)
    # PIC is the default for 64-bit PA HP-UX, but not for 32-bit
    # PA HP-UX. On IA64 HP-UX, PIC is the default but the pic flag
    # sets the default TLS model and affects inlining.
    case $host_cpu in
    hppa*64*)
        # +Z the default
        ;;
    *)
        lt_prog_compiler_pic='-fPIC'
        ;;
    esac
    ;;

```

```

interix[3-9]*)
    # Interix 3.x gcc -fpic/-fPIC options generate broken code.
    # Instead, we relocate shared libraries at runtime.
    ;;

msdosdjgpp*)
    # Just because we use GCC doesn't mean we suddenly get shared
libraries
    # on systems that don't support them.
    lt_prog_compiler_can_build_shared=no
    enable_shared=no
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'
    ;;

sysv4*MP*)
    if test -d /usr/nec; then
        lt_prog_compiler_pic=-Kconform_pic
    fi
    ;;

*)
    lt_prog_compiler_pic='-fPIC'
    ;;
esac

case $cc_basename in
nvcc*) # Cuda Compiler Driver 2.2
    lt_prog_compiler_wl='-Xlinker '
    if test -n "$lt_prog_compiler_pic"; then
        lt_prog_compiler_pic="-Xcompiler $lt_prog_compiler_pic"
    fi
    ;;
esac
else
    # PORTME Check for flag to pass linker flags through the system
compiler.
    case $host_os in
aix*)
        lt_prog_compiler_wl='-Wl,'
        if test "$host_cpu" = ia64; then
            # AIX 5 now supports IA64 processor
            lt_prog_compiler_static='-Bstatic'
        else
            lt_prog_compiler_static='-bnso -bI:/lib/syscalls.exp'
        fi
    ;;

```

```

;;

mingw* | cygwin* | pw32* | os2* | cegcc*)
  # This hack is so that the source file can tell whether it is
being
  # built for inclusion in a dll (and should export symbols for
example).
  lt_prog_compiler_pic='-DDLL_EXPORT'
  ;;

hpux9* | hpux10* | hpux11*)
  lt_prog_compiler_wl='-Wl,'
  # PIC is the default for IA64 HP-UX and 64-bit HP-UX, but
  # not for PA HP-UX.
  case $host_cpu in
  hppa*64*|ia64*)
  # +Z the default
  ;;
  *)
  lt_prog_compiler_pic='+Z'
  ;;
  esac
  # Is there a better lt_prog_compiler_static that works with the
bundled CC?
  lt_prog_compiler_static='${wl}-a ${wl}archive'
  ;;

irix5* | irix6* | nonstopux*)
  lt_prog_compiler_wl='-Wl,'
  # PIC (with -KPIC) is the default.
  lt_prog_compiler_static='-non_shared'
  ;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
  case $cc_basename in
  # old Intel for x86_64 which still supported -KPIC.
  ecc*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-static'
  ;;
  # icc used to be incompatible with GCC.
  # ICC 10 doesn't accept -KPIC any more.
  icc* | ifort*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-fPIC'
  lt_prog_compiler_static='-static'
  ;;
  # Lahey Fortran 8.1.
  lf95*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='--shared'

```

```

lt_prog_compiler_static='--static'
;;
nagfor*)
# NAG Fortran compiler
lt_prog_compiler_wl='-Wl,-Wl,,'
lt_prog_compiler_pic='-PIC'
lt_prog_compiler_static='-Bstatic'
;;
pgcc* | pgf77* | pgf90* | pgf95* | pgfortran*)
# Portland Group compilers (*not* the Pentium gcc compiler,
# which looks to be a dead project)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fpic'
lt_prog_compiler_static='-Bstatic'
;;
ccc*)
lt_prog_compiler_wl='-Wl,'
# All Alpha code is PIC.
lt_prog_compiler_static='-non_shared'
;;
xl* | bgxl* | bgf* | mpixl*)
# IBM XL C 8.0/Fortran 10.1, 11.1 on PPC and BlueGene
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-qpik'
lt_prog_compiler_static='-qstaticlink'
;;
*)
case ` $CC -V 2>&1 | sed 5q` in
8.[0-3]*)
# Sun Fortran 8.3 passes all unrecognized flags to the linker
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-Bstatic'
lt_prog_compiler_wl=''
;;
*Sun\ F* | *Sun*Fortran*)
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-Bstatic'
lt_prog_compiler_wl='-Qoption ld '
;;
*Sun\ C*)
# Sun C 5.9
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-Bstatic'
lt_prog_compiler_wl='-Wl,'
;;
*Intel*\ [CF]*Compiler*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fPIC'
lt_prog_compiler_static='-static'
;;
*Portland\ Group*)

```



```

    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-fpic'
    lt_prog_compiler_static='-Bstatic'
    ;;
esac
;;
esac
;;

newsos6)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'
    ;;

osf3* | osf4* | osf5*)
    lt_prog_compiler_wl='-Wl,'
    # All OSF/1 code is PIC.
    lt_prog_compiler_static='-non_shared'
    ;;

rdos*)
    lt_prog_compiler_static='-non_shared'
    ;;

solaris*)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    case $cc_basename in
    f77* | f90* | f95* | sunf77* | sunf90* | sunf95*)
    lt_prog_compiler_wl='-Qoption ld ';;
    *)
    lt_prog_compiler_wl='-Wl, ';;
    esac
    ;;

sunos4*)
    lt_prog_compiler_wl='-Qoption ld '
    lt_prog_compiler_pic='-PIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4 | sysv4.2uw2* | sysv4.3*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'

```

```

;;

sysv4*MP*)
  if test -d /usr/nec ;then
    lt_prog_compiler_pic='-Kconform_pic'
    lt_prog_compiler_static='-Bstatic'
  fi
;;

sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
;;

unicos*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_can_build_shared=no
;;

uts4*)
  lt_prog_compiler_pic='-pic'
  lt_prog_compiler_static='-Bstatic'
;;

*)
  lt_prog_compiler_can_build_shared=no
;;
esac
fi

case $host_os in
# For platforms which do not support PIC, -DPIC is meaningless:
*djgpp*)
  lt_prog_compiler_pic=
  ;;
*)
  lt_prog_compiler_pic="$lt_prog_compiler_pic@&t@ -DPIC"
  ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_pic=$lt_prog_compiler_pic
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic" >&5
$as_echo "$lt_cv_prog_compiler_pic" >&6; }

```

```

lt_prog_compiler_pic=$lt_cv_prog_compiler_pic

#
# Check to make sure the PIC flag actually works.
#
if test -n "$lt_prog_compiler_pic"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_pic_works=no
  ac_outfile=conftest.$ac_objext
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext
  lt_compiler_flag="$lt_prog_compiler_pic&@&t@ -DPIC"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>conftest.err)
  ac_status=$?
  cat conftest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if test ! -s conftest.er2 || diff conftest.exp conftest.er2
>/dev/null; then
      lt_cv_prog_compiler_pic_works=yes
    fi
  fi
  $RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works" >&5
$as_echo "$lt_cv_prog_compiler_pic_works" >&6; }

if test x"$lt_cv_prog_compiler_pic_works" = xyes; then

```

```

    case $lt_prog_compiler_pic in
        "" | " "*) ;;
        *) lt_prog_compiler_pic="$lt_prog_compiler_pic" ;;
    esac
else
    lt_prog_compiler_pic=
    lt_prog_compiler_can_build_shared=no
fi

fi

#
# Check to make sure the static flag actually works.
#
wl=$lt_prog_compiler_wl eval
lt_tmp_static_flag="\$lt_prog_compiler_static\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_static_works=no
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
    echo "$lt_simple_link_test_code" > conftest.$ac_ext
    if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
    # The linker can only warn and ignore the option if not
    recognized
    # So say no if there are warnings
    if test -s conftest.err; then
        # Append any errors to the config.log.
        cat conftest.err 1>&5
        $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
        $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
        if diff conftest.exp conftest.er2 >/dev/null; then
            lt_cv_prog_compiler_static_works=yes
        fi
    else
        lt_cv_prog_compiler_static_works=yes
    fi

```

```

        fi
    fi
    $RM -r confptest*
    LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works" >&5
$as_echo "$lt_cv_prog_compiler_static_works" >&6; }

if test x"$lt_cv_prog_compiler_static_works" = xyes; then
:
else
    lt_prog_compiler_static=
fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o=no
    $RM -r confptest 2>/dev/null
    mkdir confptest
    cd confptest
    mkdir out
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

    lt_compiler_flag="-o out/confptest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confptest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
    (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
    (eval "$lt_compile" 2>out/confptest.err)
    ac_status=$?
    cat out/confptest.err >&5
    echo "$as_me:$LINENO: \$? = $ac_status" >&5

```

```

    if (exit $ac_status) && test -s out/confptest2.$ac_objext
    then
        # The compiler can only warn and ignore the option if not
        # recognized
        # So say no if there are warnings
        $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
        $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
        if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
            lt_cv_prog_compiler_c_o=yes
        fi
    fi
    chmod u+w . 2>&5
    $RM confptest*
    # SGI C++ compiler will create directory out/ii_files/ for
    # template instantiation
    test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
    $RM out/* && rmdir out
    cd ..
    $RM -r confptest
    $RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o=no
    $RM -r confptest 2>/dev/null
    mkdir confptest
    cd confptest
    mkdir out
    echo "$lt_simple_compile_test_code" > confptest.$ac_ext

    lt_compiler_flag="-o out/confptest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confptest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
    begins

```

```

# with a dollar sign (not a hyphen), so the echo should work
correctly.
lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
(eval echo "\\"$as_me:$LINENO: $lt_compile\"" >&5)
(eval "$lt_compile" 2>out/conftest.err)
ac_status=$?
cat out/conftest.err >&5
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
if (exit $ac_status) && test -s out/conftest2.$ac_objext
then
# The compiler can only warn and ignore the option if not
recognized
# So say no if there are warnings
$ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/conftest.exp
$SED '/^$/d; /^ *+/d' out/conftest.err >out/conftest.er2
if test ! -s out/conftest.er2 || diff out/conftest.exp
out/conftest.er2 >/dev/null; then
lt_cv_prog_compiler_c_o=yes
fi
fi
chmod u+w . 2>&5
$RM conftest*
# SGI C++ compiler will create directory out/ii_files/ for
# template instantiation
test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r conftest
$RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o" = no && test "$need_locks" != no;
then
# do not overwrite the value of need_locks provided by the user
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
hard_links=yes
$RM conftest*
ln conftest.a conftest.b 2>/dev/null && hard_links=no

```

```

touch conftest.a
ln conftest.a conftest.b 2>&5 || hard_links=no
ln conftest.a conftest.b 2>/dev/null && hard_links=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }
if test "$hard_links" = no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: \`$CC' does not
support \'-c -o', so \`make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: \`$CC' does not support \'-c -o', so \`make
-j' may be unsafe" >&2;}
  need_locks=warn
fi
else
  need_locks=no
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }

```

```

runpath_var=
allow_undefined_flag=
always_export_symbols=no
archive_cmds=
archive_expsym_cmds=
compiler_needs_object=no
enable_shared_with_static_runtimes=no
export_dynamic_flag_spec=
export_symbols_cmds='$NM $libobjs $convenience | $global_symbol_pipe
| $SED '\''s/.* //'\'' | sort | uniq > $export_symbols'
hardcode_automatic=no
hardcode_direct=no
hardcode_direct_absolute=no
hardcode_libdir_flag_spec=
hardcode_libdir_separator=
hardcode_minus_L=no
hardcode_shlibpath_var=unsupported
inherit_rpath=no
link_all_deplibs=unknown
module_cmds=
module_expsym_cmds=
old_archive_from_new_cmds=
old_archive_from_expsyms_cmds=
thread_safe_flag_spec=
whole_archive_flag_spec=

```



```

# include_expsyms should be a list of space-separated symbols to be
*always*
# included in the symbol list
include_expsyms=
# exclude_expsyms can be an extended regexp of symbols to exclude
# it will be wrapped by ` (' and `)'$', so one must not match
beginning or
# end of line. Example: `a|bc|.*d.*' will exclude the symbols `a'
and `bc',
# as well as any symbol that contains `d'.
exclude_expsyms='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'
# Although _GLOBAL_OFFSET_TABLE_ is a valid symbol C name, most
a.out
# platforms (ab)use it in PIC code, but their linkers get confused
if
# the symbol is explicitly referenced. Since portable code cannot
# rely on this symbol name, it's probably fine to never include it
in
# preloaded symbol tables.
# Exclude shared library initialization/finalization symbols.
extract_expsyms_cmds=

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
# FIXME: the MSVC++ port hasn't been tested in a loooong time
# When not using gcc, we currently assume that we are using
# Microsoft Visual C++.
if test "$GCC" != yes; then
with_gnu_ld=no
fi
;;
interix*)
# we just hope/assume this is gcc and not c89 (= MSVC++)
with_gnu_ld=yes
;;
openbsd*)
with_gnu_ld=no
;;
esac

ld_shlibs=yes

# On some targets, GNU ld is compatible enough with the native
linker
# that we're better off using the native interface for both.
lt_use_gnu_ld_interface=no
if test "$with_gnu_ld" = yes; then
case $host_os in
aix*)
# The AIX port of GNU ld has always aspired to compatibility
# with the native linker. However, as the warning in the GNU ld

```

```

    # block says, versions before 2.19.5* couldn't really create
working
    # shared libraries, regardless of the interface used.
    case ` $LD -v 2>&1 ` in
        *\ \ (GNU\ Binutils\)\ 2.19.5* ) ;;
        *\ \ (GNU\ Binutils\)\ 2.[2-9]* ) ;;
        *\ \ (GNU\ Binutils\)\ [3-9]* ) ;;
        *)
            lt_use_gnu_ld_interface=yes
            ;;
    esac
    ;;
    *)
        lt_use_gnu_ld_interface=yes
        ;;
    esac
fi

if test "$lt_use_gnu_ld_interface" = yes; then
    # If archive_cmds runs LD, not CC, wlarc should be empty
    wlarc='${wl}'

    # Set some defaults for GNU ld with shared library support. These
    # are reset later if shared libraries are not supported. Putting
them
    # here allows them to be overridden if necessary.
    runpath_var=LD_RUN_PATH
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    export_dynamic_flag_spec='${wl}--export-dynamic'
    # ancient GNU ld didn't support --whole-archive et. al.
    if $LD --help 2>&1 | $GREP 'no-whole-archive' > /dev/null; then
        whole_archive_flag_spec="$wlarc"--whole-archive$convenience
        "'$wlarc"--no-whole-archive'
    else
        whole_archive_flag_spec=
    fi
    supports_anon_versioning=no
    case ` $LD -v 2>&1 ` in
        *GNU\ gold*) supports_anon_versioning=yes ;;
        *\ [01].* | *\ 2.[0-9].* | *\ 2.10.* ) ;; # catch versions < 2.11
        *\ 2.11.93.0.2\ *) supports_anon_versioning=yes ;; # RH7.3 ...
        *\ 2.11.92.0.12\ *) supports_anon_versioning=yes ;; # Mandrake
8.2 ...
        *\ 2.11.* ) ;; # other 2.11 versions
        *) supports_anon_versioning=yes ;;
    esac

    # See if GNU ld supports shared libraries.
    case $host_os in
    aix[3-9]*)
        # On AIX/PPC, the GNU linker is very broken
        if test "$host_cpu" != ia64; then

```

```

    ld_shlibs=no
    cat <<_LT_EOF 1>&2

*** Warning: the GNU linker, at least up to release 2.19, is reported
*** to be unable to reliably create shared libraries on AIX.
*** Therefore, libtool is disabling shared libraries support.  If you
*** really care for shared libraries, you may want to install binutils
*** 2.20 or above, or modify your PATH so that a non-GNU linker is
found.
*** You will then need to restart the configuration process.

_LT_EOF
    fi
    ;;

    amigaos*)
        case $host_cpu in
            powerpc)
                # see comment about AmigaOS4 .so support
                archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
                archive_expsym_cmds=''
                ;;
            m68k)
                archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
                hardcode_libdir_flag_spec='-L$libdir'
                hardcode_minus_L=yes
                ;;
        esac
    ;;

    beos*)
        if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
            allow_undefined_flag=unsupported
            # Joseph Beckenbach <jrb3@best.com> says some releases of gcc
            # support --undefined.  This deserves some investigation.  FIXME
            archive_cmds='$CC -nostart $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
            else
                ld_shlibs=no
            fi
        ;;

    cygwin* | mingw* | pw32* | cegcc*)

```

```

# _LT_TAGVAR(hardcode_libdir_flag_spec, ) is actually
meaningless,
# as there is no search path for DLLs.
hardcode_libdir_flag_spec='-L$libdir'
export_dynamic_flag_spec='${wl}--export-all-symbols'
allow_undefined_flag=unsupported
always_export_symbols=no
enable_shared_with_static_runtimes=yes
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\ ]*\)/\1
DATA/;s/^\.*[ ]__nm__\([^\ ]*\)[ ]^\.*[ ]*/\1 DATA/;/^I[ ]/d;/^[AITW][
]/s/.* //'\' | sort | uniq > $export_symbols'

exclude_expsyms='[_]+GLOBAL_OFFSET_TABLE_|[_]+GLOBAL__[FID]_.*|[_]+hea
d_[A-Za-z0-9]+'_dll|[A-Za-z0-9]+'_dll_iname'

if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then
  archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
  # If the export-symbols file already is a .def file (1st line
  # is EXPORTS), use it as is; otherwise, prepend...
  archive_expsym_cmds='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
  cp $export_symbols $output_objdir/$soname.def;
else
  echo EXPORTS > $output_objdir/$soname.def;
  cat $export_symbols >> $output_objdir/$soname.def;
fi~
$CC -shared $output_objdir/$soname.def $libobjs $deplibs
$compiler_flags -o $output_objdir/$soname ${wl}--enable-auto-image-
base -Xlinker --out-implib -Xlinker $lib'
else
  ld_shlibs=no
fi
;;

haiku*)
  archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
  link_all_deplibs=yes
  ;;

interix[3-9]*)
  hardcode_direct=no
  hardcode_shlibpath_var=no
  hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
  export_dynamic_flag_spec='${wl}-E'
  # Hack: On Interix 3.x, we cannot compile PIC because of a
  broken gcc.
  # Instead, shared libraries are loaded at an image base
  (0x10000000 by

```

```

# default) and relocated if they conflict, which is a slow very
memory
# consuming and fragmenting process. To avoid this, we pick a
random,
# 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000
at link
# time. Moving up from 0x10000000 also allows more sbrk(2)
space.
archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,\`expr ${RANDOM-$$} %
4096 / 2 \ $\backslash$ * 262144 + 1342177280\ $\backslash$  -o $lib'
archive_expsym_cmds='sed "s,^,_, " $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,\`expr ${RANDOM-
$$} % 4096 / 2 \ $\backslash$ * 262144 + 1342177280\ $\backslash$  -o $lib'
;;

gnu* | linux* | tpf* | k*bsd*-gnu | kopensolaris*-gnu)
tmp_diet=no
if test "$host_os" = linux-dietlibc; then
case $cc_basename in
diet\ *) tmp_diet=yes;; # linux-dietlibc with static linking
(!diet-dyn)
esac
fi
if $LD --help 2>&1 | $EGREP ': supported targets:.* elf' >
/dev/null \
&& test "$tmp_diet" = no
then
tmp_addflag=' $pic_flag'
tmp_sharedflag='-shared'
case $cc_basename,$host_cpu in
pgcc*) # Portland Group C compiler
whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'
tmp_addflag=' $pic_flag'
;;
pgf77* | pgf90* | pgf95* | pgfortran*)
# Portland Group f77 and f90 compilers
whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'
tmp_addflag=' $pic_flag -Mnomain' ;;
ecc*,ia64* | icc*,ia64*) # Intel C compiler on ia64
tmp_addflag=' -i_dynamic' ;;
efc*,ia64* | ifort*,ia64*) # Intel Fortran compiler on ia64
tmp_addflag=' -i_dynamic -nofor_main' ;;
ifc* | ifort*) # Intel Fortran compiler

```

```

    tmp_addflag=' -nofor_main' ;;
lf95*)
    # Lahey Fortran 8.1
    whole_archive_flag_spec=
    tmp_sharedflag='--shared' ;;
xl[cC]* | bgxl[cC]* | mpixl[cC]*) # IBM XL C 8.0 on PPC (deal
with xlf below)
    tmp_sharedflag='-qmkshrojb'
    tmp_addflag= ;;
nvcc*)
    # Cuda Compiler Driver 2.2
    whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`\`; do test -n \`${conv}\` &&
new_convenience=\`${new_convenience},${conv}\`; done; func_echo_all
\`${new_convenience}\` \`${wl}--no-whole-archive'
    compiler_needs_object=yes
    ;;
esac
case ` $CC -V 2>&1 | sed 5q` in
*Sun\ C*)
    # Sun C 5.9
    whole_archive_flag_spec='${wl}--whole-archive`new_convenience=;
for conv in $convenience\`\`; do test -z \`${conv}\` ||
new_convenience=\`${new_convenience},${conv}\`; done; func_echo_all
\`${new_convenience}\` \`${wl}--no-whole-archive'
    compiler_needs_object=yes
    tmp_sharedflag='-G' ;;
*Sun\ F*)
    # Sun Fortran 8.3
    tmp_sharedflag='-G' ;;
esac
archive_cmds='$CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname -o $lib'

    if test "x$supports_anon_versioning" = xyes; then
        archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
cat $export_symbols | sed -e "s/(.*)/\1;/ " >>
$output_objdir/$libname.ver~
echo "local: *; };" >> $output_objdir/$libname.ver~
$CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-version-script
${wl}$output_objdir/$libname.ver -o $lib'
    fi

case $cc_basename in
xlf* | bgf* | bgxlf* | mpixlf*)
    # IBM XL Fortran 10.1 on PPC cannot create shared libs itself
    whole_archive_flag_spec='--whole-archive$convenience --no-
whole-archive'
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    archive_cmds='$LD -shared $libobjs $deplibs $linker_flags -
soname $soname -o $lib'
    if test "x$supports_anon_versioning" = xyes; then
        archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~

```

```

        cat $export_symbols | sed -e "s/\(.*\)/\1;/> >>
$output_objdir/$libname.ver~
        echo "local: *; };" >> $output_objdir/$libname.ver~
        $LD -shared $libobjs $deplibs $linker_flags -soname $soname
-version-script $output_objdir/$libname.ver -o $lib'
    fi
    ;;
esac
else
    ld_shlibs=no
fi
;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable $libobjs $deplibs $linker_flags -o
$lib'
        wlarc=
    else
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    fi
    ;;

solaris*)
    if $LD -v 2>&1 | $GREP 'BFD 2\.8' > /dev/null; then
        ld_shlibs=no
        cat <<_LT_EOF 1>&2

*** Warning: The releases 2.8.* of the GNU linker cannot reliably
*** create shared libraries on Solaris systems.  Therefore, libtool
*** is disabling shared libraries support.  We urge you to upgrade GNU
*** binutils to release 2.9.1 or newer.  Another option is to modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

_LT_EOF
        elif $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
            archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
        else
            ld_shlibs=no
        fi
    ;;

```

```

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX*)
  case ` $LD -v 2>&1 ` in
    *\ [01].* | *\ 2.[0-9].* | *\ 2.1[0-5].*)
      ld_shlibs=no
    cat <<_LT_EOF 1>&2

```

*** Warning: Releases of the GNU linker prior to 2.16.91.0.3 can not
 *** reliably create shared libraries on SCO systems. Therefore,
 libtool
 *** is disabling shared libraries support. We urge you to upgrade GNU
 *** binutils to release 2.16.91.0.3 or newer. Another option is to
 modify
 *** your PATH or compiler configuration so that the native linker is
 *** used, and then restart.

```

_LT_EOF
  ;;
  *)
    # For security reasons, it is highly recommended that you
  always
    # use absolute paths for naming shared libraries, and exclude
  the
    # DT_RUNPATH tag from executables and libraries. But doing so
    # requires that you compile everything twice, which is a pain.
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
      hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
      archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
      archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    else
      ld_shlibs=no
    fi
  ;;
  esac
  ;;

  sunos4*)
    archive_cmds='$LD -assert pure-text -Bshareable -o $lib $libobjs
$deplibs $linker_flags'
    wlarc=
    hardcode_direct=yes
    hardcode_shlibpath_var=no
  ;;

  *)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
      archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'

```



```

        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
        else
        ld_shlibs=no
        fi
        ;;
    esac

    if test "$ld_shlibs" = no; then
        runpath_var=
        hardcode_libdir_flag_spec=
        export_dynamic_flag_spec=
        whole_archive_flag_spec=
    fi
else
    # PORTME fill in a description of your system's linker (not GNU
ld)
    case $host_os in
    aix3*)
        allow_undefined_flag=unsupported
        always_export_symbols=yes
        archive_expsym_cmds='$LD -o $output_objdir/$soname $libobjs
$deplibs $linker_flags -bE:$export_symbols -T512 -H512 -bM:SRE~$AR
$AR_FLAGS $lib $output_objdir/$soname'
        # Note: this linker hardcodes the directories in LIBPATH if
there
        # are no directories specified by -L.
        hardcode_minus_L=yes
        if test "$GCC" = yes && test -z "$lt_prog_compiler_static"; then
            # Neither direct hardcoding nor static linking is supported with
a
            # broken collect2.
            hardcode_direct=unsupported
            fi
            ;;
    aix[4-9]*)
        if test "$host_cpu" = ia64; then
            # On IA64, the linker does run time linking by default, so we
don't
            # have to do anything special.
            aix_use_runtimelinking=no
            exp_sym_flag='-Bexport'
            no_entry_flag=""
        else
            # If we're using GNU nm, then we don't want the "-C" option.
            # -C means demangle to AIX nm, but means don't demangle with GNU
nm
            # Also, AIX nm treats weak defined symbols like other global
            # defined symbols, whereas GNU nm marks them as "W".
            if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then

```

```

        export_symbols_cmds='$NM -Bpg $libobjs $convenience | awk '\''{
if ((\($ 2 == "T") || (\$ 2 == "D") || (\$ 2 == "B") || (\$ 2 == "W"))
&& (substr(\$ 3,1,1) != ".")) { print \$ 3 } }'\'' | sort -u >
$export_symbols'
    else
        export_symbols_cmds='$NM -BCpg $libobjs $convenience | awk
'\''{ if (((\$ 2 == "T") || (\$ 2 == "D") || (\$ 2 == "B")) &&
(substr(\$ 3,1,1) != ".")) { print \$ 3 } }'\'' | sort -u >
$export_symbols'
    fi
    aix_use_runtimelinking=no

# Test if we are trying to use run time linking or normal
# AIX style linking. If -brtl is somewhere in LDFLAGS, we
# need to do runtime linking.
case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)
    for ld_flag in $LDFLAGS; do
        if (test $ld_flag = "-brtl" || test $ld_flag = "-Wl,-brtl");
then
            aix_use_runtimelinking=yes
            break
        fi
    done
    ;;
esac

exp_sym_flag='-bexport'
no_entry_flag='-bnoentry'
fi

# When large executables or shared objects are built, AIX ld can
# have problems creating the table of contents. If linking a
library
# or program results in "error TOC overflow" add -mminimal-toc
to
# CXXFLAGS/CFLAGS for g++/gcc. In the cases where that is not
# enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

archive_cmds=''
hardcode_direct=yes
hardcode_direct_absolute=yes
hardcode_libdir_separator=':'
link_all_deplibs=yes
file_list_spec='${wl}-f,'

if test "$GCC" = yes; then
case $host_os in aix4.[012]|aix4.[012].*)
# We only want to do this on AIX 4.2 and lower, the check
# below for broken collect2 doesn't work under 4.3+
collect2name=`${CC} -print-prog-name=collect2`
if test -f "$collect2name" &&
strings "$collect2name" | $GREP resolve_lib_name >/dev/null

```

```

then
# We have reworked collect2
:
else
# We have old collect2
hardcode_direct=unsupported
# It fails to find uninstalled libraries when the uninstalled
# path is not listed in the libpath.  Setting hardcode_minus_L
# to unsupported forces relinking
hardcode_minus_L=yes
hardcode_libdir_flag_spec='-L$libdir'
hardcode_libdir_separator=
fi
;;
esac
shared_flag='-shared'
if test "$aix_use_runtimelinking" = yes; then
  shared_flag="$shared_flag "${wl}-G'
fi
else
# not using gcc
if test "$host_cpu" = ia64; then
# VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3 Release
# chokes on -Wl,-G. The following line is correct:
  shared_flag='-G'
else
  if test "$aix_use_runtimelinking" = yes; then
    shared_flag='${wl}-G'
  else
    shared_flag='${wl}-bM:SRE'
  fi
fi
fi

export_dynamic_flag_spec='${wl}-bexpall'
# It seems that -bexpall does not export symbols beginning with
# underscore (_), so it is better to generate a list of symbols
to export.
always_export_symbols=yes
if test "$aix_use_runtimelinking" = yes; then
# Warning - without using the other runtime loading flags (-
brtl),
# -berok will link without error, but may produce a broken
library.
  allow_undefined_flag='-berok'
  # Determine the default libpath from the value encoded in an
  # empty executable.
  if test "${lt_cv_aix_libpath+set}" = set; then
aix_libpath=$lt_cv_aix_libpath
else
if ${lt_cv_aix_libpath_+set} false; then :
$as_echo_n "(cached) " >&6

```

```

else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

  lt_aix_libpath_sed='
    /Import File Strings/,/^$/ {
      /^0/ {
        s/^0  *\([^ ]*\) *$/\1/
        p
      }
    }'

  lt_cv_aix_libpath_=`dump -H conftest$ac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
  # Check for a 64-bit object if we didn't find anything.
  if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_=`dump -HX64 conftest$ac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
  fi
fi

rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
if test -z "$lt_cv_aix_libpath_"; then
  lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_
fi

  hardcode_libdir_flag_spec='${wl}-
blibpath:$libdir:'"$aix_libpath"
  archive_expsym_cmds='$CC -o $output_objdir/$soname $libobjs
$deplibs '"\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else :; fi`
'"\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
  else
    if test "$host_cpu" = ia64; then
      hardcode_libdir_flag_spec='${wl}-R $libdir:/usr/lib:/lib'
      allow_undefined_flag="-z nodefs"

```

```

        archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs '"\${wl}$no_entry_flag"
$compiler_flags ${wl}${allow_undefined_flag}
'\${wl}$exp_sym_flag:\$export_symbols"
    else
        # Determine the default libpath from the value encoded in an
        # empty executable.
        if test "${lt_cv_aix_libpath+set}" = set; then
            aix_libpath=$lt_cv_aix_libpath
        else
            if ${lt_cv_aix_libpath+set} false; then :
                $as_echo_n "(cached) " >&6
            else
                cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0 *\[^\ ]*\) */\1/
                p
            }
        }'
    lt_cv_aix_libpath_=`dump -H conftest$ac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$ac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

    aix_libpath=$lt_cv_aix_libpath_
fi

```

```

        hardcode_libdir_flag_spec='${wl}-
bldirpath:$libdir:""$aix_libpath"
        # Warning - without using the other run time loading flags,
        # -berok will link without error, but may produce a broken
library.
        no_undefined_flag=' ${wl}-bernotok'
        allow_undefined_flag=' ${wl}-berok'
        if test "$with_gnu_ld" = yes; then
            # We only use this code for GNU lds that support --whole-
archive.
            whole_archive_flag_spec='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
        else
            # Exported symbols can be pulled into shared objects from
archives
            whole_archive_flag_spec='$convenience'
        fi
        archive_cmds_need_lc=yes
        # This is similar to how AIX traditionally builds its shared
libraries.
        archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
        fi
        fi
        ;;

amigaos*)
        case $host_cpu in
        powerpc)
            # see comment about AmigaOS4 .so support
            archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds=''
            ;;
        m68k)
            archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
            hardcode_libdir_flag_spec='-L$libdir'
            hardcode_minus_L=yes
            ;;
        esac
        ;;
    ;;

bsd[45]*)
        export_dynamic_flag_spec=-rdynamic

```

```

;;

cygwin* | mingw* | pw32* | cegcc*)
# When not using gcc, we currently assume that we are using
# Microsoft Visual C++.
# hardcode_libdir_flag_spec is actually meaningless, as there is
# no search path for DLLs.
case $cc_basename in
cl*)
# Native MSVC
hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
always_export_symbols=yes
file_list_spec='@'
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
archive_expsym_cmds='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
    sed -n -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' -
e '1\\\\\\\\!p' < $export_symbols > $output_objdir/$soname.exp;
else
    sed -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
$export_symbols > $output_objdir/$soname.exp;
fi~
$CC -o $tool_output_objdir$soname $libobjs $compiler_flags
$deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
IMPLIB:"$tool_output_objdir$libname.dll.lib"~
linknames='
# The linker will not automatically build a static lib if we
build a DLL.
# _LT_TAGVAR(old_archive_from_new_cmds, )='true'
enable_shared_with_static_runtimes=yes
exclude_expsyms='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_*'
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\
]*\)/\1,DATA/'\'' | $SED -e '\''/^([AITW])[ ]/s/.*[ ]//'\'' | sort |
uniq > $export_symbols'
# Don't use ranlib
old_postinstall_cmds='chmod 644 $oldlib'
postlink_cmds='lt_outputfile="@OUTPUT@"~
lt_tool_outputfile="@TOOL_OUTPUT@"~
case $lt_outputfile in
*.exe|*.EXE) ;;
*)
    lt_outputfile="$lt_outputfile.exe"
    lt_tool_outputfile="$lt_tool_outputfile.exe"
;;

```

```

        esac~
        if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
            $MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
            $RM "$lt_outputfile.manifest";
        fi'
;;
*)
# Assume MSVC wrapper
hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $lib $libobjs $compiler_flags `func_echo_all
"$deplibs" | $SED '\''s/ -lc$//'\`` -link -dll~linknames='
# The linker will automatically build a .lib file if we build a
DLL.
old_archive_from_new_cmds='true'
# FIXME: Should let the user specify the lib program.
old_archive_cmds='lib -OUT:$oldlib$oldobjs$old_deplibs'
enable_shared_with_static_runtimes=yes
;;
esac
;;

darwin* | rhapsody*)

```

```

archive_cmds_need_lc=no
hardcode_direct=no
hardcode_automatic=yes
hardcode_shlibpath_var=unsupported
if test "$lt_cv_ld_force_load" = "yes"; then
    whole_archive_flag_spec='`for conv in $convenience\`; do test -
n \"$conv\" && new_convenience=\"$new_convenience ${wl}-
force_load,$conv\"; done; func_echo_all \"$new_convenience\"`'
else
    whole_archive_flag_spec=''
fi
link_all_deplibs=yes
allow_undefined_flag="$lt_dar_allow_undefined"
case $cc_basename in
    ifort*) _lt_dar_can_shared=yes ;;
    *) _lt_dar_can_shared=$GCC ;;
esac
if test "$lt_dar_can_shared" = "yes"; then
    output_verbose_link_cmd=func_echo_all

```



```

        archive_cmds="\$CC -dynamiclib \$allow_undefined_flag -o \$lib
\$libobjs \$deplibs \$compiler_flags -install_name \$rpath/\$soname
\$verstring \$_lt_dar_single_mod${_lt_dsymutil}"
        module_cmds="\$CC \$allow_undefined_flag -o \$lib -bundle
\$libobjs \$deplibs \$compiler_flags${_lt_dsymutil}"
        archive_expsym_cmds="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -dynamiclib
\$allow_undefined_flag -o \$lib \$libobjs \$deplibs \$compiler_flags -
install_name \$rpath/\$soname \$verstring
${_lt_dar_single_mod}${_lt_dar_export_syms}${_lt_dsymutil}"
        module_expsym_cmds="sed -e 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC \$allow_undefined_flag
-o \$lib -bundle \$libobjs \$deplibs
\$compiler_flags${_lt_dar_export_syms}${_lt_dsymutil}"

else
ld_shlibs=no
fi

;;

dgux*)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_shlibpath_var=no
        ;;

# FreeBSD 2.2.[012] allows us to include c++rt0.o to get C++
constructor
# support.  Future versions do this automatically, but an explicit
c++rt0.o
# does not break anything, and helps significantly (at the cost of
a little
# extra space).
freebsd2.2*)
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags /usr/lib/c++rt0.o'
        hardcode_libdir_flag_spec='-R$libdir'
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        ;;

# Unfortunately, older versions of FreeBSD 2 do not have this
feature.
freebsd2.*)
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=yes
        hardcode_minus_L=yes
        hardcode_shlibpath_var=no
        ;;

```

```

# FreeBSD 3 and greater uses gcc -shared to do shared libraries.
freebsd* | dragonfly*)
    archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

hpux9*)
    if test "$GCC" = yes; then
        archive_cmds='$RM $output_objdir/$soname~$CC -shared $pic_flag
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $libobjs
$deplibs $compiler_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
    else
        archive_cmds='$RM $output_objdir/$soname~$LD -b +b
$install_libdir -o $output_objdir/$soname $libobjs $deplibs
$linker_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
    fi
    hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_direct=yes

    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
    export_dynamic_flag_spec='${wl}-E'
    ;;

hpux10*)
    if test "$GCC" = yes && test "$with_gnu_ld" = no; then
        archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
    else
        archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
    fi
    if test "$with_gnu_ld" = no; then
        hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
        hardcode_libdir_separator=:
        hardcode_direct=yes
        hardcode_direct_absolute=yes
        export_dynamic_flag_spec='${wl}-E'
        # hardcode_minus_L: Not really in the search PATH,
        # but as the default location of the library.
        hardcode_minus_L=yes
    fi
    ;;

```

```

hpux11*)
    if test "$GCC" = yes && test "$with_gnu_ld" = no; then
        case $host_cpu in
            hppa*64*)
                archive_cmds='$CC -shared ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
                ;;
            ia64*)
                archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $libobjs $deplibs $compiler_flags'
                ;;
            *)
                archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+b ${wl}$install_libdir -o $lib $libobjs $deplibs
$compiler_flags'
                ;;
        esac
    else
        case $host_cpu in
            hppa*64*)
                archive_cmds='$CC -b ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
                ;;
            ia64*)
                archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+nodefaulttrpath
-o $lib $libobjs $deplibs $compiler_flags'
                ;;
            *)
                # Older versions of the 11.00 compiler do not understand -b yet
                # (HP92453-01 A.11.01.20 doesn't, HP92453-01 B.11.X.35175-
                35176.GP does)
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $CC
understands -b" >&5
$as_echo_n "checking if $CC understands -b... " >&6; }
if ${lt_cv_prog_compiler_b+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_b=no
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -b"
    echo "$lt_simple_link_test_code" > conftest.$ac_ext
    if (eval $ac_link 2>conftest.err) && test -s conftest.$ac_exeext;
then
        # The linker can only warn and ignore the option if not
        recognized
        # So say no if there are warnings
        if test -s conftest.err; then
            # Append any errors to the config.log.
            cat conftest.err 1>&5
            $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
            $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2

```

```

        if diff conftest.exp conftest.er2 >/dev/null; then
            lt_cv_prog_compiler__b=yes
        fi
    else
        lt_cv_prog_compiler__b=yes
    fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:"
$lt_cv_prog_compiler__b" >&5
$as_echo "$lt_cv_prog_compiler__b" >&6; }

if test x"$lt_cv_prog_compiler__b" = xyes; then
    archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
else
    archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
fi

;;
esac
fi
if test "$with_gnu_ld" = no; then
hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
hardcode_libdir_separator=:

case $host_cpu in
hppa*64*|ia64*)
    hardcode_direct=no
    hardcode_shlibpath_var=no
    ;;
*)
    hardcode_direct=yes
    hardcode_direct_absolute=yes
    export_dynamic_flag_spec='${wl}-E'

    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
    ;;
esac
fi
;;

irix5* | irix6* | nonstopux*)
    if test "$GCC" = yes; then
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&

```

```

func_echo_all "${wl}-set_version ${wl}$verstring" ` ${wl}-
update_registry ${wl}${output_objdir}/so_locations -o $lib'
    # Try to use the -exported_symbol ld option, if it does not
    # work, assume that -exports_file does not work either and
    # implicitly export all symbols.
    # This should be the same for all languages, so no per-tag cache
variable.
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$host_os linker accepts -exported_symbol" >&5
$as_echo_n "checking whether the $host_os linker accepts -
exported_symbol... " >&6; }
if ${lt_cv_iris_exported_symbol+:} false; then :
    $as_echo_n "(cached) " >&6
else
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -shared ${wl}-exported_symbol ${wl}foo
${wl}-update_registry ${wl}/dev/null"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
int foo (void) { return 0; }
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    lt_cv_iris_exported_symbol=yes
else
    lt_cv_iris_exported_symbol=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS="$save_LDFLAGS"
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_iris_exported_symbol" >&5
$as_echo "$lt_cv_iris_exported_symbol" >&6; }
    if test "$lt_cv_iris_exported_symbol" = yes; then
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring" ` ${wl}-
update_registry ${wl}${output_objdir}/so_locations ${wl}-exports_file
${wl}$export_symbols -o $lib'
    fi
    else
        archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -
soname $soname `test -n "$verstring" && func_echo_all "-set_version
$verstring" ` -update_registry ${output_objdir}/so_locations -o $lib'
        archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags -soname $soname `test -n "$verstring" && func_echo_all
"-set_version $verstring" ` -update_registry
${output_objdir}/so_locations -exports_file $export_symbols -o $lib'
    fi
    archive_cmds_need_lc='no'
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:

```

```

inherit_rpath=yes
link_all_deplibs=yes
;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags' # a.out
    else
        archive_cmds='$LD -shared -o $lib $libobjs $deplibs
$linker_flags' # ELF
    fi
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

newsos6)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_direct=yes
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_shlibpath_var=no
    ;;

*nto* | *qnx*)
    ;;

openbsd*)
    if test -f /usr/libexec/ld.so; then
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        hardcode_direct_absolute=yes
        if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
            archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
            archive_expsym_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags ${wl}-retain-symbols-file,$export_symbols'
            hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
            export_dynamic_flag_spec='${wl}-E'
        else
            case $host_os in
                openbsd[01].* | openbsd2.[0-7] | openbsd2.[0-7].*)
                    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
                    hardcode_libdir_flag_spec='-R$libdir'
                ;;
            *)
                archive_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags'
            ;;
        esac
    fi

```

```

        hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
        ;;
    esac
fi
else
ld_shlibs=no
fi
;;

os2*)
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_minus_L=yes
    allow_undefined_flag=unsupported
    archive_cmds='$ECHO "LIBRARY $libname INITINSTANCE" >
$output_objdir/$libname.def~$ECHO "DESCRIPTION \"$libname\"" >>
$output_objdir/$libname.def~echo DATA >>
$output_objdir/$libname.def~echo " SINGLE NONSHARED" >>
$output_objdir/$libname.def~echo EXPORTS >>
$output_objdir/$libname.def~emxexp $libobjs >>
$output_objdir/$libname.def~$CC -Zdll -Zcrtdll -o $lib $libobjs
$deplibs $compiler_flags $output_objdir/$libname.def'
    old_archive_from_new_cmds='emximp -o $output_objdir/$libname.a
$output_objdir/$libname.def'
    ;;

osf3*)
    if test "$GCC" = yes; then
        allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$sverstring" && func_echo_all "${wl}-set_version ${wl}$sverstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
    else
        allow_undefined_flag=' -expect_unresolved \*'
        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -soname $soname `test -n "$sverstring" &&
func_echo_all "-set_version $sverstring"` -update_registry
${output_objdir}/so_locations -o $lib'
    fi
    archive_cmds_need_lc='no'
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    ;;

osf4* | osf5*)    # as osf3* with the addition of -msym flag
    if test "$GCC" = yes; then
        allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
        archive_cmds='$CC -shared${allow_undefined_flag} $pic_flag
$libobjs $deplibs $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$sverstring" && func_echo_all "${wl}-set_version
${wl}$sverstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'

```

```

hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
else
  allow_undefined_flag=' -expect_unresolved \*'
  archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -msym -soname $soname `test -n "$verstring"
&& func_echo_all "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
  archive_expsym_cmds='for i in `cat $export_symbols`; do printf
"%s %s\n" -exported_symbol "\$i" >> $lib.exp; done; printf "%s\n" "-
hidden">> $lib.exp~
  $CC -shared${allow_undefined_flag} ${wl}-input ${wl}$lib.exp
$compiler_flags $libobjs $deplibs -soname $soname `test -n
"$verstring" && $ECHO "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib~$RM $lib.exp'

# Both c and cxx compiler support -rpath directly
hardcode_libdir_flag_spec='-rpath $libdir'
fi
archive_cmds_need_lc='no'
hardcode_libdir_separator=:
;;

solaris*)
  no_undefined_flag=' -z defs'
  if test "$GCC" = yes; then
    wlarc='${wl}'
    archive_cmds='$CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-h
${wl}$soname -o $lib $libobjs $deplibs $compiler_flags'
    archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
  $CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-M ${wl}$lib.exp
${wl}-h ${wl}$soname -o $lib $libobjs $deplibs $compiler_flags~$RM
$lib.exp'
  else
    case ` $CC -V 2>&1` in
      *"Compilers 5.0"*)
        wlarc=''
        archive_cmds='$LD -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $linker_flags'
        archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
  $LD -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $linker_flags~$RM $lib.exp'
        ;;
      *)
        wlarc='${wl}'
        archive_cmds='$CC -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $compiler_flags'

```



```

        archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;\/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
        $CC -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $compiler_flags~$RM $lib.exp'
        ;;
    esac
    fi
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_shlibpath_var=no
    case $host_os in
    solaris2.[0-5] | solaris2.[0-5].*) ;;
    *)
        # The compiler driver will combine and reorder linker options,
        # but understands '-z linker_flag'. GCC discards it without
        ` $wl',
        # but is careful enough not to reorder.
        # Supported since Solaris 2.6 (maybe 2.5.1?)
        if test "$GCC" = yes; then
            whole_archive_flag_spec='${wl}-z ${wl}allextract$convenience
${wl}-z ${wl}defaultextract'
        else
            whole_archive_flag_spec='-z allextract$convenience -z
defaultextract'
        fi
        ;;
    esac
    link_all_deplibs=yes
    ;;

sunos4*)
    if test "x$host_vendor" = xsequent; then
        # Use $CC to link under sequent, because it throws in some extra
        .o
        # files that make .init and .fini sections work.
        archive_cmds='$CC -G ${wl}-h $soname -o $lib $libobjs $deplibs
$compiler_flags'
        else
            archive_cmds='$LD -assert pure-text -Bstatic -o $lib $libobjs
$deplibs $linker_flags'
        fi
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_direct=yes
        hardcode_minus_L=yes
        hardcode_shlibpath_var=no
        ;;
    sysv4)
        case $host_vendor in
        sni)
            archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'

```

```

        hardcode_direct=yes # is this really true???
;;
siemens)
    ## LD is ld it makes a PLAMLIB
    ## CC just makes a GrossModule.
    archive_cmds='$LD -G -o $lib $libobjs $deplibs $linker_flags'
    reload_cmds='$CC -r -o $output$reload_objs'
    hardcode_direct=no
    ;;
motorola)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_direct=no #Motorola manual says yes, but my tests say
they lie
    ;;
esac
runpath_var='LD_RUN_PATH'
hardcode_shlibpath_var=no
;;

sysv4.3*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_shlibpath_var=no
    export_dynamic_flag_spec='-Bexport'
    ;;

sysv4*MP*)
    if test -d /usr/nec; then
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_shlibpath_var=no
        runpath_var=LD_RUN_PATH
        hardcode_runpath_var=yes
        ld_shlibs=yes
    fi
    ;;

sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
    no_undefined_flag='${wl}-z,text'
    archive_cmds_need_lc=no
    hardcode_shlibpath_var=no
    runpath_var='LD_RUN_PATH'

    if test "$GCC" = yes; then
        archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
        archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    else

```

```

        archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
        archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
        fi
        ;;

sysv5* | sco3.2v5* | sco5v6*)
# Note: We can NOT use -z defs as we might desire, because we do
not
# link with -lc, and that would cause any symbols used from libc
to
# always be unresolved, which means just about no library would
# ever link correctly.  If we're not using GNU ld we use -z text
# though, which does catch some bad symbols but isn't as heavy-
handed
# as -z defs.
no_undefined_flag='${wl}-z,text'
allow_undefined_flag='${wl}-z,nodefs'
archive_cmds_need_lc=no
hardcode_shlibpath_var=no
hardcode_libdir_flag_spec='${wl}-R,$libdir'
hardcode_libdir_separator=':'
link_all_deplibs=yes
export_dynamic_flag_spec='${wl}-Bexport'
runpath_var='LD_RUN_PATH'

if test "$GCC" = yes; then
        archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
        archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
        else
        archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
        archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
        fi
        ;;

uts4*)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_shlibpath_var=no
        ;;

*)
        ld_shlibs=no
        ;;
esac

```

```

if test x$host_vendor = xsni; then
  case $host in
    sysv4 | sysv4.2uw2* | sysv4.3* | sysv5*)
      export_dynamic_flag_spec='${wl}-Blargedynsym'
      ;;
    esac
  fi
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs" >&5
$as_echo "$ld_shlibs" >&6; }
test "$ld_shlibs" = no && can_build_shared=no

with_gnu_ld=$with_gnu_ld

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc" in
x|xyes)
  # Assume -lc should be added
  archive_cmds_need_lc=yes

  if test "$enable_shared" = yes && test "$GCC" = yes; then
    case $archive_cmds in
    *'~'*)
      # FIXME: we may have to deal with multi-command sequences.
      ;;
    '$CC '* )
      # Test whether the compiler implicitly links with -lc since on
some
      # systems, -lgcc has to come before -lc. If gcc already passes -
lc
      # to ld, don't add -lc before -lgcc.
      { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$as_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }

```

```

if ${lt_cv_archive_cmds_need_lc+:} false; then :
  $as_echo_n "(cached) " >&6
else
  $RM conftest*
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext

  if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
    test $ac_status = 0; } 2>conftest.err; then
    soname=conftest
    lib=conftest
    libobjs=conftest.$ac_objext
    deplibs=
    wl=$lt_prog_compiler_wl
    pic_flag=$lt_prog_compiler_pic
    compiler_flags=-v
    linker_flags=-v
    verstring=
    output_objdir=.
    libname=conftest
    lt_save_allow_undefined_flag=$allow_undefined_flag
    allow_undefined_flag=
    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$archive_cmds 2\>\&1 \\\ $GREP \" -lc \" \>/dev/null 2\>\&1\""; } >&5
      (eval $archive_cmds 2\>\&1 \\\ $GREP \" -lc \" \>/dev/null 2\>\&1)
    2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
    test $ac_status = 0; }
      then
        lt_cv_archive_cmds_need_lc=no
      else
        lt_cv_archive_cmds_need_lc=yes
      fi
    allow_undefined_flag=$lt_save_allow_undefined_flag
  else
    cat conftest.err 1>&5
  fi
  $RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc" >&5
$as_echo "$lt_cv_archive_cmds_need_lc" >&6; }
  archive_cmds_need_lc=$lt_cv_archive_cmds_need_lc
  ;;
esac
fi
;;

```

esac


```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }
```



```

if test "$GCC" = yes; then
  case $host_os in
    darwin*) lt_awk_arg="/^libraries:/,/LR/" ;;
    *) lt_awk_arg="/^libraries:/" ;;
  esac
  case $host_os in
    mingw* | cegcc*) lt_sed_strip_eq="s,=\([A-Za-z]:\) ,\1,g" ;;
    *) lt_sed_strip_eq="s,=/,/,g" ;;
  esac
  lt_search_path_spec=`$CC -print-search-dirs | awk $lt_awk_arg | $SED
-e "s/^libraries:/" -e $lt_sed_strip_eq`
  case $lt_search_path_spec in
    *\;*)
      # if the path contains ";" then we assume it to be the separator
      # otherwise default to the standard path separator (i.e. ":") - it
is
      # assumed that no part of a normal pathname contains ";" but that
should
      # okay in the real world where ";" in dirpaths is itself
problematic.
      lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED 's;/;/
/g'`
      ;;
    *)
      lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED
"s/$PATH_SEPARATOR/ /g'`
      ;;
  esac
  # Ok, now we have the path, separated by spaces, we can step through
it
  # and add multilib dir if necessary.
  lt_tmp_lt_search_path_spec=
  lt_multi_os_dir=`$CC $CPPFLAGS $CFLAGS $LDFLAGS -print-multi-os-
directory 2>/dev/null`
  for lt_sys_path in $lt_search_path_spec; do
    if test -d "$lt_sys_path/$lt_multi_os_dir"; then
      lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path/$lt_multi_os_dir"
    else
      test -d "$lt_sys_path" && \
        lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path"
    fi
  done
  lt_search_path_spec=`$ECHO "$lt_tmp_lt_search_path_spec" | awk '
BEGIN {RS=" "; FS="|\n";} {
  lt_foo="";
  lt_count=0;
  for (lt_i = NF; lt_i > 0; lt_i--) {
    if ($lt_i != "" && $lt_i != ".") {
      if ($lt_i == "..") {

```

```

        lt_count++;
    } else {
        if (lt_count == 0) {
            lt_foo="/" $lt_i lt_foo;
        } else {
            lt_count--;
        }
    }
}
}
if (lt_foo != "") { lt_freq[lt_foo]++; }
if (lt_freq[lt_foo] == 1) { print lt_foo; }
}'`
# AWK program above erroneously prepends '/' to C:/dos/paths
# for these hosts.
case $host_os in
    mingw* | cegcc*) lt_search_path_spec=`$ECHO "$lt_search_path_spec"
|\
        $SED 's,/\/\([A-Za-z]:\),\1,g'` ;;
    esac
    sys_lib_search_path_spec=`$ECHO "$lt_search_path_spec" | $lt_NL2SP`
else
    sys_lib_search_path_spec="/lib /usr/lib /usr/local/lib"
fi
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
finish_eval=
shlibpath_var=
shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
    aix3*)
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
        shlibpath_var=LIBPATH

```

```

# AIX 3 has no versioning support, so we append a major version to
the name.
soname_spec='${libname}${release}${shared_ext}$major'
;;

aix[4-9]*)
  version_type=linux # correct to gnu/linux during the next big
refactor
  need_lib_prefix=no
  need_version=no
  hardcode_into_libs=yes
  if test "$host_cpu" = ia64; then
    # AIX 5 supports IA64
    library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
  else
    # With GCC up to 2.95.x, collect2 would create an import file
    # for dependence libraries. The import file would start with
    # the line `#! .'. This would cause the generated library to
    # depend on `.', always an invalid library. This was fixed in
    # development snapshots of GCC prior to 3.0.
    case $host_os in
      aix4 | aix4.[01] | aix4.[01].*)
        if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)'
          echo ' yes '
          echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
          :
        else
          can_build_shared=no
        fi
      ;;
    esac
    # AIX (on Power*) has no versioning support, so currently we can
not hardcode correct
    # soname into executable. Probably we can add versioning support
to
    # collect2, so additional links can be useful in future.
    if test "$aix_use_runtimelinking" = yes; then
      # If using run time linking (on AIX 4.2 or later) use
lib<name>.so
      # instead of lib<name>.a to let people know that these are not
      # typical AIX shared libraries.
      library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    else
      # We preserve .a as extension for shared libraries through
AIX4.2
      # and later when we are not doing run time linking.
      library_names_spec='${libname}${release}.a $libname.a'

```

```

        soname_spec='${libname}${release}${shared_ext}$major'
    fi
    shlibpath_var=LIBPATH
fi
;;

amigaos*)
    case $host_cpu in
        powerpc)
            # Since July 2007 AmigaOS4 officially supports .so libraries.
            # When compiling the executable, add -use-dynld -Lsojbs: to the
            compileline.
            library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
            ;;
        m68k)
            library_names_spec='$libname.ixlibrary $libname.a'
            # Create ${libname}_ixlibrary.a entries in /sys/libs.
            finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
\'\'s%^\./\([^/]*\)\.ixlibrary$%\1%\'\'`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
            ;;
    esac
;;

beos*)
    library_names_spec='${libname}${shared_ext}'
    dynamic_linker="$host_os ld.so"
    shlibpath_var=LIBRARY_PATH
;;

bsdi[45]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="$PATH:/sbin" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
    sys_lib_dlsearch_path_spec="/shlib /usr/lib /usr/local/lib"
    # the default ld.so.conf also contains /usr/contrib/lib and
    # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
    # libtool to hard-code these into programs
;;

```

```

cygwin* | mingw* | pw32* | cegcc*)
    version_type=windows
    shrext_cmds=".dll"
    need_version=no
    need_lib_prefix=no

    case $GCC,$cc_basename in
    yes,*)
        # gcc
        library_names_spec='$libname.dll.a'
        # DLL is installed to $(libdir)/../bin by postinstall_cmds
        postinstall_cmds='base_file=`basename \${file}`~
            dlpath=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\'''; echo
\${dlname}'\''`~
            dldir=$destdir/`dirname \${dlpath}`~
            test -d \${dldir} || mkdir -p \${dldir}~
            $install_prog $dir/\${dlname} \${dldir}/\${dlname}~
            chmod a+x \${dldir}/\${dlname}~
            if test -n '\''$striplib'\'' && test -n '\''$striplib'\''; then
                eval '\''$striplib \${dldir}/\${dlname}'\'' || exit \${?};
            fi'
        postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\''`~
            dlpath=$dir/\${dldll}~
            $RM \${dlpath}'
        shlibpath_overrides_runpath=yes

    case $host_os in
    cygwin*)
        # Cygwin DLLs use 'cyg' prefix rather than 'lib'
        soname_spec=`echo \${libname} | sed -e 's/^lib/cyg/'``echo
\${release} | $SED -e 's/[.]/-/g'`\${versuffix}\${shared_ext}'

        sys_lib_search_path_spec="$sys_lib_search_path_spec
/usr/lib/w32api"
        ;;
    mingw* | cegcc*)
        # MinGW DLLs use traditional 'lib' prefix
        soname_spec='\${libname}`echo \${release} | $SED -e 's/[.]/-
/g'`\${versuffix}\${shared_ext}'
        ;;
    pw32*)
        # pw32 DLLs use 'pw' prefix rather than 'lib'
        library_names_spec=`echo \${libname} | sed -e 's/^lib/pw/'``echo
\${release} | $SED -e 's/[.]/-/g'`\${versuffix}\${shared_ext}'
        ;;
    esac
    dynamic_linker='Win32 ld.exe'
    ;;

*,cl*)
    # Native MSVC

```

```

libname_spec='$name'
soname_spec='${libname}`echo ${release} | $SED -e 's/[.]\/-
/g'`${versuffix}${shared_ext}'
library_names_spec='${libname}.dll.lib'

case $build_os in
mingw*)
  sys_lib_search_path_spec=
  lt_save_ifs=$IFS
  IFS=';'
  for lt_path in $LIB
  do
    IFS=$lt_save_ifs
    # Let DOS variable expansion print the short 8.3 style file
name.
    lt_path=`cd "$lt_path" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si"`
    sys_lib_search_path_spec="$sys_lib_search_path_spec $lt_path"
  done
  IFS=$lt_save_ifs
  # Convert to MSYS style.
  sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\|/|g' -e 's| \\\([a-zA-Z]\\|):| /\\1|g' -e 's|^|/|'`
  ;;
cygwin*)
  # Convert to unix form, then to dos form, then back to unix form
  # but this time dos style (no spaces!) so that the unix form
looks
  # like /cygdrive/c/PROGRA~1:/cygdr...
  sys_lib_search_path_spec=`cygpath --path --unix "$LIB"`
  sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null`
  sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g"`
  ;;
*)
  sys_lib_search_path_spec="$LIB"
  if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zA-Z]:/'
>/dev/null; then
    # It is most probably a Windows format PATH.
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's/;/ /g'`
  else
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g"`
  fi
  # FIXME: find the short name or the path components, as spaces
are
  # common. (e.g. "Program Files" -> "PROGRA~1")
  ;;
esac

```

```

# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
  dlpath=`$SHELL 2>&1 -c '\``. $dir/\``'\${base_file}'\``i; echo
\${dlname}'\``~
  dldir=$destdir/`dirname \${dlpath}`~
  test -d \${dldir} || mkdir -p \${dldir}~
  $install_prog $dir/\${dlname} \${dldir}/\${dlname}'
postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\``. $file; echo
\${dlname}'\``~
  dlpath=$dir/\${dldll}~
  $RM \${dlpath}'
shlibpath_overrides_runpath=yes
dynamic_linker='Win32 link.exe'
;;

*)
# Assume MSVC wrapper
library_names_spec='${libname}`echo \${release} | $SED -e 's/[.]'/-
/g'`${versuffix}${shared_ext} $libname.lib'
dynamic_linker='Win32 ld.exe'
;;
esac
# FIXME: first we should search . and the directory the executable
is in
shlibpath_var=PATH
;;

darwin* | rhapsody*)
dynamic_linker="$host_os dyld"
version_type=darwin
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${major}${shared_ext}
\${libname}${shared_ext}'
soname_spec='${libname}${release}${major}${shared_ext}'
shlibpath_overrides_runpath=yes
shlibpath_var=DYLD_LIBRARY_PATH
shrext_cmds='`test .$module = .yes && echo .so || echo .dylib`'

sys_lib_search_path_spec="$sys_lib_search_path_spec /usr/local/lib"
sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
;;

dgux*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}${versuffix}
\${libname}${release}${shared_ext}${major} $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}${major}'
shlibpath_var=LD_LIBRARY_PATH

```

```

;;

freebsd* | dragonfly*)
# DragonFly does not have aout.  When/if they implement a new
# versioning mechanism, adjust this.
if test -x /usr/bin/objformat; then
    objformat=`/usr/bin/objformat`
else
    case $host_os in
        freebsd[23].*) objformat=aout ;;
        *) objformat=elf ;;
    esac
fi
version_type=freebsd-$objformat
case $version_type in
    freebsd-elf*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
        need_version=no
        need_lib_prefix=no
        ;;
    freebsd-*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname${shared_ext}$versuffix'
        need_version=yes
        ;;
    esac
shlibpath_var=LD_LIBRARY_PATH
case $host_os in
    freebsd2.*)
        shlibpath_overrides_runpath=yes
        ;;
    freebsd3.[01]* | freebsdelf3.[01]*)
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
    freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
    freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
        shlibpath_overrides_runpath=no
        hardcode_into_libs=yes
        ;;
    *) # from 4.6 on, and DragonFly
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
    esac
;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no

```



```

    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

haiku*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
    ;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in
    ia64*)
        shrext_cmds='.so'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.so"
        shlibpath_var=LD_LIBRARY_PATH
        shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        if test "X$HPUX_IA64_MODE" = X32; then
            sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
        else
            sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
        fi
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
    ;;
    hppa*64*)
        shrext_cmds='.sl'

```

```

hardcode_into_libs=yes
dynamic_linker="$host_os dld.sl"
shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
*)
shrext_cmds='.sl'
dynamic_linker="$host_os dld.sl"
shlibpath_var=SHLIB_PATH
shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=no
hardcode_into_libs=yes
;;

irix5* | irix6* | nonstopux*)
case $host_os in
nonstopux*) version_type=nonstopux ;;
*)
if test "$lt_cv_prog_gnu_ld" = yes; then
version_type=linux # correct to gnu/linux during the next
big refactor
else
version_type=irix
fi ;;

```

```

esac
need_lib_prefix=no
need_version=no
soname_spec='${libname}${release}${shared_ext}$major'
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext} $libname${shared_ext}'
case $host_os in
  irix5* | nonstopux*)
    libsuff= shlibsuff=
    ;;
*)
  case $LD in # libtool.m4 will add one of these switches to LD
    *-32|*" -32 " | *-melf32bsmip|*" -melf32bsmip ")
      libsuff= shlibsuff= libmagic=32-bit;;
    *-n32|*" -n32 " | *-melf32bmipn32|*" -melf32bmipn32 ")
      libsuff=32 shlibsuff=N32 libmagic=N32;;
    *-64|*" -64 " | *-melf64bmip|*" -melf64bmip ")
      libsuff=64 shlibsuff=64 libmagic=64-bit;;
    *) libsuff= shlibsuff= libmagic=never-match;;
  esac
  ;;
esac
shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
shlibpath_overrides_runpath=no
sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
/usr/local/lib${libsuff}"
sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
hardcode_into_libs=yes
;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)
  dynamic_linker=no
  ;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
  version_type=linux # correct to gnu/linux during the next big
  refactor
  need_lib_prefix=no
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
  shlibpath_var=LD_LIBRARY_PATH
  shlibpath_overrides_runpath=no

  # Some binutils ld are patched to set DT_RUNPATH
  if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  lt_cv_shlibpath_overrides_runpath=no
  save_LDFLAGS=$LDFLAGS
  save_libdir=$libdir
  eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl\"; \
    LDFLAGS=\"\$LDFLAGS $hardcode_libdir_flag_spec\""
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  if ($OBJDUMP -p conftest$ac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
    lt_cv_shlibpath_overrides_runpath=yes
  fi
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  LDFLAGS=$save_LDFLAGS
  libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.
# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
  lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \$2)); skip = 1; } { if (!skip) print \$0; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ ]*hwcap[ ]/d;s/[: , ]/
/g;s/[^=]*$//;s/[^= ]* / /g;s/"//g;/^$/d' | tr '\n' ' '`
  sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker. Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.

```

```

dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)
version_type=sunos
need_lib_prefix=no
need_version=no
if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
    dynamic_linker='NetBSD (a.out) ld.so'
else
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='NetBSD ld.elf_so'
fi
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
;;

newsos6)
version_type=linux # correct to gnu/linux during the next big
refactor
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
;;

*nto* | *qnx*)
version_type=qnx
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=no
hardcode_into_libs=yes
dynamic_linker='ldqnx.so'
;;

openbsd*)
version_type=sunos
sys_lib_dlsearch_path_spec="/usr/lib"
need_lib_prefix=no
# Some older versions of OpenBSD (3.3 at least) *do* need versioned
libs.
case $host_os in

```

```

        openbsd3.3 | openbsd3.3.*)    need_version=yes ;;
    *)                                need_version=no  ;;
esac
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
finish_cmds='PATH="$PATH:/sbin" ldconfig -m $libdir'
shlibpath_var=LD_LIBRARY_PATH
if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
    case $host_os in
        openbsd2.[89] | openbsd2.[89].*)
            shlibpath_overrides_runpath=no
            ;;
        *)
            shlibpath_overrides_runpath=yes
            ;;
    esac
else
    shlibpath_overrides_runpath=yes
fi
;;

os2*)
    libname_spec='$name'
    shrext_cmds=".dll"
    need_lib_prefix=no
    library_names_spec='$libname${shared_ext} $libname.a'
    dynamic_linker='OS/2 ld.exe'
    shlibpath_var=LIBPATH
    ;;

osf3* | osf4* | osf5*)
    version_type=osf
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
    sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
    ;;

rdos*)
    dynamic_linker=no
    ;;

solaris*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no

```

```

    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    # ldd complains unless libraries are executable
    postinstall_cmds='chmod +x $lib'
    ;;

sunos4*)
    version_type=sunos
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
    ;;

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)
            shlibpath_overrides_runpath=no
            need_lib_prefix=no
            runpath_var=LD_RUN_PATH
            ;;
        siemens)
            need_lib_prefix=no
            ;;
        motorola)
            need_lib_prefix=no
            need_version=no
            shlibpath_overrides_runpath=no
            sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
            ;;
    esac
    ;;

sysv4*MP*)
    if test -d /usr/nec ;then

```

```

    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='$libname${shared_ext}.$versuffix
$libname${shared_ext}.$major $libname${shared_ext}'
    soname_spec='$libname${shared_ext}.$major'
    shlibpath_var=LD_LIBRARY_PATH
fi
;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
            ;;
        esac
    fi
    sys_lib_dlsearch_path_spec='/usr/lib'
;;

tpf*)
    # TPF is a cross-target only. Preferred cross-host = GNU/Linux.
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
;;

uts4*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'

```



```
shlibpath_var=LD_LIBRARY_PATH
;;

*)
dynamic_linker=no
;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then
  variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec+set}" = set; then
  sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec+set}" = set; then
  sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi
```



```

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to hardcode
library paths into programs" >&5
$sas_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action=
if test -n "$hardcode_libdir_flag_spec" ||
    test -n "$runpath_var" ||
    test "X$hardcode_automatic" = "Xyes" ; then

    # We can hardcode non-existent directories.
    if test "$hardcode_direct" != no &&
        # If the only mechanism to avoid hardcoding is shlibpath_var, we
        # have to relink, otherwise we might link with an installed
library
        # when we should be linking with a yet-to-be-installed one
        ## test "$_LT_TAGVAR(hardcode_shlibpath_var, )" != no &&
        test "$hardcode_minus_L" != no; then
        # Linking always hardcodes the temporary library directory.
        hardcode_action=relink
    else
        # We can link without hardcoding, and we can hardcode nonexisting
dirs.
        hardcode_action=immediate
    fi
else
    # We cannot hardcode anything, or else we can only hardcode existing
# directories.
    hardcode_action=unsupported
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $hardcode_action" >&5
$sas_echo "$hardcode_action" >&6; }

if test "$hardcode_action" = relink ||
    test "$inherit_rpath" = yes; then
    # Fast installation is not supported
    enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
    test "$enable_shared" = no; then
    # Fast installation is not necessary
    enable_fast_install=needless
fi

```

```

    if test "x$enable_dlopen" != xyes; then
        enable_dlopen=unknown
        enable_dlopen_self=unknown
        enable_dlopen_self_static=unknown
    else
        lt_cv_dlopen=no
        lt_cv_dlopen_libs=

        case $host_os in
            beos*)
                lt_cv_dlopen="load_add_on"
                lt_cv_dlopen_libs=
                lt_cv_dlopen_self=yes
                ;;

            mingw* | pw32* | cegcc*)
                lt_cv_dlopen="LoadLibrary"
                lt_cv_dlopen_libs=
                ;;

            cygwin*)
                lt_cv_dlopen="dlopen"
                lt_cv_dlopen_libs=
                ;;

            darwin*)
                # if libdl is installed we need to link against it
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int

```

```

main ()
{
return dlopen ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_dl_dlopen=yes
else
ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else

lt_cv_dlopen="dyld"
lt_cv_dlopen_libs=
lt_cv_dlopen_self=yes

fi

;;

*)
ac_fn_c_check_func "$LINENO" "shl_load" "ac_cv_func_shl_load"
if test "x$ac_cv_func_shl_load" = xyes; then :
lt_cv_dlopen="shl_load"
else
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for shl_load in -
ldld" >&5
$as_echo_n "checking for shl_load in -ldld... " >&6; }
if ${ac_cv_lib_dld_shl_load+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"

```

```

#endif
char shl_load ();
int
main ()
{
return shl_load ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_dld_shl_load=yes
else
ac_cv_lib_dld_shl_load=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_shl_load" >&5
$as_echo "$ac_cv_lib_dld_shl_load" >&6; }
if test "x$ac_cv_lib_dld_shl_load" = xyes; then :
lt_cv_dlopen="shl_load" lt_cv_dlopen_libs="-ldld"
else
ac_fn_c_check_func "$LINENO" "dlopen" "ac_cv_func_dlopen"
if test "x$ac_cv_func_dlopen" = xyes; then :
lt_cv_dlopen="dlopen"
else
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
lsvld" >&5
$as_echo_n "checking for dlopen in -lsvld... " >&6; }
if ${ac_cv_lib_svld_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lsvld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_svld_dlopen=yes
else
    ac_cv_lib_svld_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS

```

```

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_svld_dlopen" >&5
$sas_echo "$ac_cv_lib_svld_dlopen" >&6; }
if test "x$ac_cv_lib_svld_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-lsvld"
else
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for dld_link in -
ldld" >&5
$sas_echo_n "checking for dld_link in -ldld... " >&6; }
if ${ac_cv_lib_dld_dld_link+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dld_link ();
int
main ()
{
return dld_link ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_dld_dld_link=yes
else
  ac_cv_lib_dld_dld_link=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_dld_link" >&5
$sas_echo "$ac_cv_lib_dld_dld_link" >&6; }
if test "x$ac_cv_lib_dld_dld_link" = xyes; then :
  lt_cv_dlopen="dld_link" lt_cv_dlopen_libs="-ldld"
fi
fi

```



```
fi
```

```
fi
```

```
fi
```

```
fi
```

```
;;  
esac
```

```
if test "x$lt_cv_dlopen" != xno; then  
  enable_dlopen=yes  
else  
  enable_dlopen=no  
fi
```

```
case $lt_cv_dlopen in  
dlopen)  
  save_CPPFLAGS="$CPPFLAGS"  
  test "x$ac_cv_header_dlfcn_h" = xyes && CPPFLAGS="$CPPFLAGS -  
DHAVE_DLFCN_H"
```

```
  save_LDFLAGS="$LDFLAGS"  
  wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS  
$export_dynamic_flag_spec`"
```

```
  save_LIBS="$LIBS"  
  LIBS="$lt_cv_dlopen_libs $LIBS"
```

```
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a  
program can dlopen itself" >&5  
$as_echo_n "checking whether a program can dlopen itself... " >&6; }
```

```
if ${lt_cv_dlopen_self+:} false; then :
```

```
  $as_echo_n "(cached) " >&6
```

```
else
```

```
  if test "$cross_compiling" = yes; then :
```

```
    lt_cv_dlopen_self=cross
```

```
else
```

```
  lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
```

```
  lt_status=$lt_dlunknown
```

```
  cat > conftest.$ac_ext <<_LT_EOF
```

```
#line $LINENO "configure"
```

```
#include "confdefs.h"
```

```
#if HAVE_DLFCN_H
```

```
#include <dlfcn.h>
```

```
#endif
```

```

#include <stdio.h>

#ifdef RTLD_GLOBAL
# define LT_DLGLOBAL      RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL      DL_GLOBAL
# else
#   define LT_DLGLOBAL      0
# endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
# ifdef RTLD_LAZY
#   define LT_DLLAZY_OR_NOW      RTLD_LAZY
# else
#   ifdef DL_LAZY
#     define LT_DLLAZY_OR_NOW      DL_LAZY
#   else
#     ifdef RTLD_NOW
#       define LT_DLLAZY_OR_NOW RTLD_NOW
#     else
#       ifdef DL_NOW
#         define LT_DLLAZY_OR_NOW      DL_NOW
#       else
#         define LT_DLLAZY_OR_NOW      0
#       endif
#     endif
#   endif
# endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#ifdef __GNUC__ && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else

```

```

        {
            if (dlsym( self, "_fnord")) status = $lt_dlneed_uscore;
            else puts (dlerror ());
        }
        /* dlclose (self); */
    }
else
    puts (dlerror ());

return status;
}
_LT_EOF
if { { eval echo "\$as_me\":"${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self=no ;;
    esac
else :
    # compilation failed
    lt_cv_dlopen_self=no
fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_dlopen_self"
>&5
$as_echo "$lt_cv_dlopen_self" >&6; }

if test "x$lt_cv_dlopen_self" = xyes; then
    wl=$lt_prog_compiler_wl eval LDFLAGS="\$LDFLAGS
$lt_prog_compiler_static\"
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
statically linked program can dlopen itself" >&5
$as_echo_n "checking whether a statically linked program can dlopen
itself... " >&6; }
if ${lt_cv_dlopen_self_static+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test "$cross_compiling" = yes; then :
        lt_cv_dlopen_self_static=cross
    else

```

```

    lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
    lt_status=$lt_dlunknown
    cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

#ifdef RTLD_GLOBAL
# define LT_DLGLOBAL      RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL    DL_GLOBAL
# else
#   define LT_DLGLOBAL    0
# endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
# ifdef RTLD_LAZY
#   define LT_DLLAZY_OR_NOW      RTLD_LAZY
# else
#   ifdef DL_LAZY
#     define LT_DLLAZY_OR_NOW    DL_LAZY
#   else
#     ifdef RTLD_NOW
#       define LT_DLLAZY_OR_NOW RTLD_NOW
#     else
#       ifdef DL_NOW
#         define LT_DLLAZY_OR_NOW    DL_NOW
#       else
#         define LT_DLLAZY_OR_NOW    0
#       endif
#     endif
#   endif
# endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#if defined(__GNUC__) && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }

```

```

int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
  {
    if (dlsym (self,"fnord"))          status = $lt_dlno_uscore;
    else
    {
      if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
      else puts (dlerror ());
    }
    /* dlclose (self); */
  }
  else
    puts (dlerror ());

  return status;
}
_LT_EOF
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
  (./conftest; exit; ) >&5 2>/dev/null
  lt_status=$?
  case x$lt_status in
    x$lt_dlno_uscore) lt_cv_dlopen_self_static=yes ;;
    x$lt_dlneed_uscore) lt_cv_dlopen_self_static=yes ;;
    x$lt_dlunknown|x*) lt_cv_dlopen_self_static=no ;;
  esac
  else :
    # compilation failed
    lt_cv_dlopen_self_static=no
  fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_dlopen_self_static" >&5
$as_echo "$lt_cv_dlopen_self_static" >&6; }
fi

CPPFLAGS="$save_CPPFLAGS"
LDFLAGS="$save_LDFLAGS"
LIBS="$save_LIBS"

```

```

    ;;
esac

case $lt_cv_dlopen_self in
yes|no) enable_dlopen_self=$lt_cv_dlopen_self ;;
*) enable_dlopen_self=unknown ;;
esac

case $lt_cv_dlopen_self_static in
yes|no) enable_dlopen_self_static=$lt_cv_dlopen_self_static ;;
*) enable_dlopen_self_static=unknown ;;
esac
fi

striplib=
old_striplib=
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether stripping
libraries is possible" >&5
$as_echo_n "checking whether stripping libraries is possible... " >&6;
}
if test -n "$STRIP" && $STRIP -V 2>&1 | $GREP "GNU strip" >/dev/null;
then
  test -z "$old_striplib" && old_striplib="$STRIP --strip-debug"
  test -z "$striplib" && striplib="$STRIP --strip-unneeded"
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
# FIXME - insert some real tests, host_os isn't really good enough
case $host_os in
darwin*)
  if test -n "$STRIP" ; then
    striplib="$STRIP -x"
    old_striplib="$STRIP -S"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
  else

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    fi
    ;;
*)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    ;;
esac
fi

```

```

# Report which library types will actually be built
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if libtool
supports shared libraries" >&5
$as_echo_n "checking if libtool supports shared libraries... " >&6; }
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $scan_build_shared"
>&5
$as_echo "$scan_build_shared" >&6; }

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
shared libraries" >&5
$as_echo_n "checking whether to build shared libraries... " >&6; }
test "$scan_build_shared" = "no" && enable_shared=no

```

```

# On AIX, shared libraries and static libraries use the same
namespace, and

```

```

# are all built from PIC.

```

```

case $host_os in

```

```

aix3*)

```

```

    test "$enable_shared" = yes && enable_static=no

```

```

    if test -n "$RANLIB"; then

```

```

        archive_cmds="$archive_cmds~\${RANLIB} \$lib"

```

```

        postinstall_cmds='${RANLIB} \$lib'

```

```

    fi

```

```

    ;;

```

```

aix[4-9]*)

```

```

    if test "$host_cpu" != ia64 && test "$aix_use_runtimelinking" = no
; then

```

```

        test "$enable_shared" = yes && enable_static=no

```

```

    fi

```

```

    ;;
  esac
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_shared" >&5
$as_echo "$enable_shared" >&6; }

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
static libraries" >&5
$as_echo_n "checking whether to build static libraries... " >&6; }
  # Make sure either enable_shared or enable_static is yes.
  test "$enable_shared" = yes || enable_static=yes
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_static" >&5
$as_echo "$enable_static" >&6; }

fi
ac_ext=c
ac_cpp='$CXX $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

CC="$lt_save_CC"

  if test -n "$CXX" && ( test "X$CXX" != "Xno" &&
( (test "X$CXX" = "Xg++" && `g++ -v >/dev/null 2>&1` ) ||
(test "X$CXX" != "Xg++"))) ; then
  ac_ext=cxx
ac_cpp='$CXXCPP $CPPFLAGS'
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to run the C++
preprocessor" >&5
$as_echo_n "checking how to run the C++ preprocessor... " >&6; }
if test -z "$CXXCPP"; then
  if ${ac_cv_prog_CXXCPP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    # Double quotes because CXXCPP needs to be expanded
    for CXXCPP in "$CXX -E" "/lib/cpp"
    do
      ac_preproc_ok=false
      for ac_cxx_preproc_warn_flag in ' yes
do
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
  # <limits.h> exists even on freestanding compilers.

```



```

    # On the NeXT, cc -E runs the code through the compiler's parser,
    # not just through cpp. "Syntax error" is here to catch this case.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
                Syntax error

_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :

else
    # Broken: fails on valid input.
    continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext

    # OK, works on sane cases.  Now check whether nonexistent headers
    # can be detected and how.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :
    # Broken: success on invalid input.
    continue
else
    # Passes both tests.
    ac_preproc_ok=:
    break
fi
rm -f conftest.err conftest.i conftest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f conftest.i conftest.err conftest.$ac_ext
if $ac_preproc_ok; then :
    break
fi

    done
    ac_cv_prog_CXXCPP=$CXXCPP

fi
CXXCPP=$ac_cv_prog_CXXCPP
else
    ac_cv_prog_CXXCPP=$CXXCPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CXXCPP" >&5
$as_echo "$CXXCPP" >&6; }

```

```

ac_preproc_ok=false
for ac_cxx_preproc_warn_flag in ' yes
do
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
  # <limits.h> exists even on freestanding compilers.
  # On the NeXT, cc -E runs the code through the compiler's parser,
  # not just through cpp. "Syntax error" is here to catch this case.
  cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
          Syntax error
  _ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :

else
  # Broken: fails on valid input.
  continue
fi
rm -f confptest.err confptest.i confptest.$ac_ext

  # OK, works on sane cases. Now check whether nonexistent headers
  # can be detected and how.
  cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
@%:@include <ac_nonexistent.h>
  _ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :
  # Broken: success on invalid input.
  continue
else
  # Passes both tests.
  ac_preproc_ok=:
  break
fi
rm -f confptest.err confptest.i confptest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :

else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`${ac_pwd}':"
>&5
$as_echo "$as_me: error: in \`${ac_pwd}':" >&2;}
as_fn_error $? "C++ preprocessor \`${CXXCPP}` fails sanity check

```

```
See `config.log' for more details" "$LINENO" 5; }  
fi
```

```
ac_ext=c  
ac_cpp='$CPP $CPPFLAGS'  
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'  
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS  
conftest.$ac_ext $LIBS >&5'  
ac_compiler_gnu=$ac_cv_c_compiler_gnu
```

```
else  
  _lt_caught_CXX_error=yes  
fi
```

```
ac_ext=cpp  
ac_cpp='$CXXCPP $CPPFLAGS'  
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'  
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS  
conftest.$ac_ext $LIBS >&5'  
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu
```

```
archive_cmds_need_lc_CXX=no  
allow_undefined_flag_CXX=  
always_export_symbols_CXX=no  
archive_expsym_cmds_CXX=  
compiler_needs_object_CXX=no  
export_dynamic_flag_spec_CXX=  
hardcode_direct_CXX=no  
hardcode_direct_absolute_CXX=no  
hardcode_libdir_flag_spec_CXX=  
hardcode_libdir_separator_CXX=  
hardcode_minus_L_CXX=no  
hardcode_shlibpath_var_CXX=unsupported  
hardcode_automatic_CXX=no  
inherit_rpath_CXX=no  
module_cmds_CXX=  
module_expsym_cmds_CXX=  
link_all_deplibs_CXX=unknown  
old_archive_cmds_CXX=$old_archive_cmds  
reload_flag_CXX=$reload_flag  
reload_cmds_CXX=$reload_cmds  
no_undefined_flag_CXX=  
whole_archive_flag_spec_CXX=  
enable_shared_with_static_runtimes_CXX=no
```

```
# Source file extension for C++ test sources.  
ac_ext=cpp
```

```
# Object file extension for compiled C++ test sources.  
objext=o  
objext_CXX=$objext
```

```
# No sense in running all these tests if we already determined that
# the CXX compiler isn't working. Some variables (like enable_shared)
# are currently assumed to apply to all compilers on this platform,
# and will be corrupted by setting them based on a non-working
compiler.
```

```
if test "$lt_caught_CXX_error" != yes; then
  # Code to be used in simple compile tests
  lt_simple_compile_test_code="int some_variable = 0;"
```

```
  # Code to be used in simple link tests
  lt_simple_link_test_code='int main(int, char *[]) { return(0); }'
```

```
  # ltmain only uses $CC for tagged configurations so make sure $CC is
  set.
```

```
# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}
```

```
# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}
```

```
# Allow CC to be a program name with arguments.
compiler=$CC
```

```
  # save warnings/boilerplate of simple test code
  ac_outfile=confptest.$ac_objext
  echo "$lt_simple_compile_test_code" >confptest.$ac_ext
  eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
  >confptest.err
  _lt_compiler_boilerplate=`cat confptest.err`
  $RM confptest*
```

```
  ac_outfile=confptest.$ac_objext
  echo "$lt_simple_link_test_code" >confptest.$ac_ext
  eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >confptest.err
  _lt_linker_boilerplate=`cat confptest.err`
  $RM -r confptest*
```

```
# Allow CC to be a program name with arguments.
lt_save_CC=$CC
lt_save_CFLAGS=$CFLAGS
lt_save_LD=$LD
lt_save_GCC=$GCC
GCC=$GXX
lt_save_with_gnu_ld=$with_gnu_ld
```

```

lt_save_path_LD=$lt_cv_path_LD
if test -n "${lt_cv_prog_gnu_ldcxx+set}"; then
  lt_cv_prog_gnu_ld=$lt_cv_prog_gnu_ldcxx
else
  $as_unset lt_cv_prog_gnu_ld
fi
if test -n "${lt_cv_path_LDCXX+set}"; then
  lt_cv_path_LD=$lt_cv_path_LDCXX
else
  $as_unset lt_cv_path_LD
fi
test -z "${LDCXX+set}" || LD=$LDCXX
CC=${CXX-"c++"}
CFLAGS=$CXXFLAGS
compiler=$CC
compiler_CXX=$CC
for cc_temp in $compiler""; do
case $cc_temp in
  compile | *[\//]compile | ccache | *[\//]ccache ) ;;
  distcc | *[\//]distcc | purify | *[\//]purify ) ;;
  \-*) ;;
  *) break;;
esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^\$host_alias-%%"`

if test -n "$compiler"; then
  # We don't want -fno-exception when compiling C++ code, so set the
  # no_builtin_flag separately
  if test "$GXX" = yes; then
    lt_prog_compiler_no_builtin_flag_CXX=' -fno-builtin'
  else
    lt_prog_compiler_no_builtin_flag_CXX=
  fi

  if test "$GXX" = yes; then
    # Set up default GNU C++ configuration

```

@%:@ Check whether --with-gnu-ld was given.

```

if test "${with_gnu_ld+set}" = set; then :
  withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes
else
  with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
$CC" >&5
$as_echo_n "checking for ld used by $CC... " >&6; }
  case $host in
  *-*-mingw*)
    # gcc leaves a trailing carriage return which upsets mingw
    ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
  *)
    ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
  esac
  case $ac_prog in
  # Accept absolute paths.
  [\\/* | ?:[\\/*]*)
    re_direlt='/[^/][^/]*/\.\./'
    # Canonicalize the pathname of ld
    ac_prog=`$ECHO "$ac_prog"| $SED 's%\\\\\%/g'`
    while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
      ac_prog=`$ECHO $ac_prog| $SED "s%$re_direlt%/"`
    done
    test -z "$LD" && LD="$ac_prog"
    ;;
  "")
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
  *)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
  esac
elif test "$with_gnu_ld" = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.

```

```

        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
        *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break
            ;;
        *)
            test "$with_gnu_ld" != yes && break
            ;;
        esac
    fi
done
IFS="$lt_save_ifs"
else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5
$as_echo "$LD" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \$PATH"
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
    $as_echo_n "(cached) " >&6
else
    # I'd rather use --version here, but apparently some GNU lds only
    accept -v.
    case ` $LD -v 2>&1 </dev/null` in
    *GNU* | *'with BFD'*)
        lt_cv_prog_gnu_ld=yes
        ;;
    *)
        lt_cv_prog_gnu_ld=no
        ;;
    esac
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5
$as_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld

```

```

# Check if GNU C++ uses GNU ld as the underlying linker, since
the
# archiving commands below assume that GNU ld is being used.
if test "$with_gnu_ld" = yes; then
    archive_cmds_CXX='$CC $pic_flag -shared -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds_CXX='$CC $pic_flag -shared -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $wl$soname ${wl}-retain-symbols-file $wl$export_symbols -
o $lib'

    hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
    export_dynamic_flag_spec_CXX='${wl}--export-dynamic'

# If archive_cmds runs LD, not CC, wlarc should be empty
# XXX I think wlarc can be eliminated in ltcf-cxx, but I need
to
#     investigate it a little bit more. (MM)
wlarc='${wl}'

# ancient GNU ld didn't support --whole-archive et. al.
if eval "`$CC -print-prog-name=ld` --help 2>&1" |
$GREP 'no-whole-archive' > /dev/null; then
    whole_archive_flag_spec_CXX="$wlarc"--whole-
archive$convenience "'$wlarc"--no-whole-archive'
    else
        whole_archive_flag_spec_CXX=
    fi
else
    with_gnu_ld=no
    wlarc=

# A generic and very simple default shared library creation
# command for GNU C++ for the case where it uses the native
# linker, instead of GNU ld.  If possible, this setting should
# be overridden to take advantage of the native linker features
on
# the platform it is being used on.
archive_cmds_CXX='$CC -shared -nostdlib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o $lib'
fi

# Commands to make compiler produce verbose output that lists
# what "hidden" libraries, object files and flags are used when
# linking a shared library.
output_verbose_link_cmd='$CC -shared $CFLAGS -v conftest.$objext
2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'

```



```

else
    GXX=no
    with_gnu_ld=no
    wlarc=
fi

# PORTME: fill in a description of your system's C++ link
characteristics
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }
ld_shlibs_CXX=yes
case $host_os in
aix3*)
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
aix[4-9]*)
    if test "$host_cpu" = ia64; then
        # On IA64, the linker does run time linking by default, so
we don't
        # have to do anything special.
        aix_use_runtimelinking=no
        exp_sym_flag='-Bexport'
        no_entry_flag=""
    else
        aix_use_runtimelinking=no

        # Test if we are trying to use run time linking or normal
        # AIX style linking. If -brtl is somewhere in LDFLAGS, we
        # need to do runtime linking.
        case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)
for ld_flag in $LDFLAGS; do
    case $ld_flag in
        *-brtl*)
            aix_use_runtimelinking=yes
            break
            ;;
        esac
done
        ;;
    esac
        exp_sym_flag='-bexport'
        no_entry_flag='-bnoentry'
    fi

    # When large executables or shared objects are built, AIX ld
can
    # have problems creating the table of contents. If linking a
library

```

```

to      # or program results in "error TOC overflow" add -mminimal-toc

# CXXFLAGS/CFLAGS for g++/gcc. In the cases where that is not
# enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

archive_cmds_CXX=''
hardcode_direct_CXX=yes
hardcode_direct_absolute_CXX=yes
hardcode_libdir_separator_CXX=':'
link_all_deplibs_CXX=yes
file_list_spec_CXX='${wl}-f,'

if test "$GXX" = yes; then
    case $host_os in aix4.[012]|aix4.[012].*)
        # We only want to do this on AIX 4.2 and lower, the check
        # below for broken collect2 doesn't work under 4.3+
        collect2name=`${CC} -print-prog-name=collect2`
        if test -f "$collect2name" &&
            strings "$collect2name" | $GREP resolve_lib_name >/dev/null
        then
            # We have reworked collect2
            :
        else
            # We have old collect2
            hardcode_direct_CXX=unsupported
            # It fails to find uninstalled libraries when the uninstalled
            # path is not listed in the libpath. Setting
hardcode_minus_L
            # to unsupported forces relinking
            hardcode_minus_L_CXX=yes
            hardcode_libdir_flag_spec_CXX='-L$libdir'
            hardcode_libdir_separator_CXX=
        fi
    esac
    shared_flag='-shared'
    if test "$aix_use_runtimelinking" = yes; then
        shared_flag="$shared_flag "'${wl}-G'
    fi
    else
        # not using gcc
        if test "$host_cpu" = ia64; then
            # VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3
Release
            # chokes on -Wl,-G. The following line is correct:
            shared_flag='-G'
        else
            if test "$aix_use_runtimelinking" = yes; then
                shared_flag='${wl}-G'
            else
                shared_flag='${wl}-bM:SRE'
            fi
        fi
    fi

```

```

        fi

        export_dynamic_flag_spec_CXX='${wl}-bexpall'
        # It seems that -bexpall does not export symbols beginning
with
        # underscore (_), so it is better to generate a list of
symbols to
        # export.
        always_export_symbols_CXX=yes
        if test "$aix_use_runtimelinking" = yes; then
            # Warning - without using the other runtime loading flags (-
brtl),
            # -berok will link without error, but may produce a broken
library.
            allow_undefined_flag_CXX='-berok'
            # Determine the default libpath from the value encoded in an
empty
            # executable.
            if test "${lt_cv_aix_libpath+set}" = set; then
                aix_libpath=$lt_cv_aix_libpath
            else
                if ${lt_cv_aix_libpath__CXX+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0 *\[^\ ]*\)/ */\1/
                p
            }
        }'
    lt_cv_aix_libpath__CXX=`dump -H conftest$ac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath__CXX"; then
        lt_cv_aix_libpath__CXX=`dump -HX64 conftest$ac_exeext 2>/dev/null
| $SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
fi

```

```

rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
if test -z "$lt_cv_aix_libpath_CXX"; then
    lt_cv_aix_libpath_CXX="/usr/lib:/lib"
fi

fi

    aix_libpath=$lt_cv_aix_libpath_CXX
fi

    hardcode_libdir_flag_spec_CXX='${wl}-
bllibpath:$libdir:"$aix_libpath"

    archive_expsym_cmds_CXX='$CC -o $output_objdir/$soname
$libobjs $deplibs "'\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else ;; fi`
"'\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
    else
        if test "$host_cpu" = ia64; then
            hardcode_libdir_flag_spec_CXX='${wl}-R $libdir:/usr/lib:/lib'
            allow_undefined_flag_CXX="-z nodefs"
            archive_expsym_cmds_CXX="'$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs "'\${wl}$no_entry_flag"'
$compiler_flags ${wl}${allow_undefined_flag}
"'\${wl}$exp_sym_flag:\$export_symbols"
        else
            # Determine the default libpath from the value encoded in an
            # empty executable.
            if test "${lt_cv_aix_libpath+set}" = set; then
                aix_libpath=$lt_cv_aix_libpath
            else
                if ${lt_cv_aix_libpath_CXX+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
/Import File Strings/,/^$/ {
    /^0/ {

```

```

        s/^0 *\([^ ]*\) *$/\1/
    p
}
}'
lt_cv_aix_libpath_CXX=`dump -H conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
# Check for a 64-bit object if we didn't find anything.
if test -z "$lt_cv_aix_libpath_CXX"; then
    lt_cv_aix_libpath_CXX=`dump -HX64 conftest$sac_exeext 2>/dev/null
| $SED -n -e "$lt_aix_libpath_sed"`
fi
fi
rm -f core conftest.err conftest.$sac_objext \
conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_CXX"; then
    lt_cv_aix_libpath_CXX="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_CXX
fi

hardcode_libdir_flag_spec_CXX='${wl}-
blibpath:$libdir:"$aix_libpath"
# Warning - without using the other run time loading flags,
# -berok will link without error, but may produce a broken
library.
no_undefined_flag_CXX=' ${wl}-bernotok'
allow_undefined_flag_CXX=' ${wl}-berok'
if test "$with_gnu_ld" = yes; then
    # We only use this code for GNU lds that support --whole-
archive.
    whole_archive_flag_spec_CXX='${wl}--whole-
archive$convenience ${wl}--no-whole-archive'
else
    # Exported symbols can be pulled into shared objects from
archives
    whole_archive_flag_spec_CXX='$convenience'
fi
archive_cmds_need_lc_CXX=yes
# This is similar to how AIX traditionally builds its shared
# libraries.
archive_expsym_cmds_CXX="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
fi
fi
;;

beos*)

```

```

        if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
        allow_undefined_flag_CXX=unsupported
        # Joseph Beckenbach <jrb3@best.com> says some releases of gcc
        # support --undefined. This deserves some investigation.
FIXME
        archive_cmds_CXX='$CC -nostart $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        else
        ld_shlibs_CXX=no
        fi
        ;;

        chorus*)
        case $cc_basename in
                *)
                # FIXME: insert proper C++ library support
                ld_shlibs_CXX=no
                ;;
                esac
                ;;

        cygwin* | mingw* | pw32* | cegcc*)
        case $GXX,$cc_basename in
        ,cl* | no,cl*)
                # Native MSVC
                # hardcode_libdir_flag_spec is actually meaningless, as there
is
                # no search path for DLLs.
                hardcode_libdir_flag_spec_CXX=' '
                allow_undefined_flag_CXX=unsupported
                always_export_symbols_CXX=yes
                file_list_spec_CXX='@'
                # Tell ltmain to make .lib files, not .a files.
                libext=lib
                # Tell ltmain to make .dll files, not .so files.
                shrext_cmds=".dll"
                # FIXME: Setting linknames here is a bad hack.
                archive_cmds_CXX='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
                archive_expsym_cmds_CXX='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
                        $SED -n -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -
EXPORT:\\\\\\\\\\\\\\\\1/' -e '1\\\\\\\\!p' < $export_symbols >
                $output_objdir/$soname.exp;
                else
                        $SED -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
                $export_symbols > $output_objdir/$soname.exp;
                fi~
                $CC -o $tool_output_objdir$soname $libobjs $compiler_flags
                $deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
                IMPLIB:"$tool_output_objdir$libname.dll.lib"~

```

```

    linknames='
# The linker will not automatically build a static lib if we
build a DLL.
# _LT_TAGVAR(old_archive_from_new_cmds, CXX)='true'
enable_shared_with_static_runtimes_CXX=yes
# Don't use ranlib
old_postinstall_cmds_CXX='chmod 644 $oldlib'
postlink_cmds_CXX='lt_outputfile="@OUTPUT@"~
lt_tool_outputfile="@TOOL_OUTPUT@"~
case $lt_outputfile in
*.exe|*.EXE) ;;
*)
lt_outputfile="$lt_outputfile.exe"
lt_tool_outputfile="$lt_tool_outputfile.exe"
;;
esac~
func_to_tool_file "$lt_outputfile"~
if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
$MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
$RM "$lt_outputfile.manifest";
fi'
;;
*)
# g++
# _LT_TAGVAR(hardcode_libdir_flag_spec, CXX) is actually
meaningless,
# as there is no search path for DLLs.
hardcode_libdir_flag_spec_CXX='-L$libdir'
export_dynamic_flag_spec_CXX='${wl}--export-all-symbols'
allow_undefined_flag_CXX=unsupported
always_export_symbols_CXX=no
enable_shared_with_static_runtimes_CXX=yes

if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then
archive_cmds_CXX='$CC -shared -nostdlib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
# If the export-symbols file already is a .def file (1st line
# is EXPORTS), use it as is; otherwise, prepend...
archive_expsym_cmds_CXX='if test "x`$SED 1q $export_symbols`"
= xEXPORTS; then
cp $export_symbols $output_objdir/$soname.def;
else
echo EXPORTS > $output_objdir/$soname.def;
cat $export_symbols >> $output_objdir/$soname.def;
fi~
$CC -shared -nostdlib $output_objdir/$soname.def
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags -o

```

```

$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
    else
        ld_shlibs_CXX=no
    fi
    ;;
esac
;;
darwin* | rhapsody*)

archive_cmds_need_lc_CXX=no
hardcode_direct_CXX=no
hardcode_automatic_CXX=yes
hardcode_shlibpath_var_CXX=unsupported
if test "$lt_cv_ld_force_load" = "yes"; then
    whole_archive_flag_spec_CXX='`for conv in $convenience\`\`; do
test -n "\${conv}\`" && new_convenience="\${new_convenience} ${wl}-
force_load,\${conv}\`; done; func_echo_all "\${new_convenience}\`'`'
else
    whole_archive_flag_spec_CXX=''
fi
link_all_deplibs_CXX=yes
allow_undefined_flag_CXX="$lt_dar_allow_undefined"
case $cc_basename in
    ifort*) _lt_dar_can_shared=yes ;;
    *) _lt_dar_can_shared=$GCC ;;
esac
if test "$lt_dar_can_shared" = "yes"; then
    output_verbose_link_cmd=func_echo_all
    archive_cmds_CXX="\${CC} -dynamiclib \${allow_undefined_flag} -o \${lib}
\${libobjs} \${deplibs} \${compiler_flags} -install_name \${rpath}/\${soname}
\${verstring} \${lt_dar_single_mod}${_lt_dsymutil}"
    module_cmds_CXX="\${CC} \${allow_undefined_flag} -o \${lib} -bundle
\${libobjs} \${deplibs} \${compiler_flags}${_lt_dsymutil}"
    archive_expsym_cmds_CXX="sed 's,^,_, ' < \${export_symbols} >
\${output_objdir}/\${libname}-symbols.expsym~\${CC} -dynamiclib
\${allow_undefined_flag} -o \${lib} \${libobjs} \${deplibs} \${compiler_flags} -
install_name \${rpath}/\${soname} \${verstring}
\${_lt_dar_single_mod}${_lt_dar_export_syms}${_lt_dsymutil}"
    module_expsym_cmds_CXX="sed -e 's,^,_, ' < \${export_symbols} >
\${output_objdir}/\${libname}-symbols.expsym~\${CC} \${allow_undefined_flag}
-o \${lib} -bundle \${libobjs} \${deplibs}
\${compiler_flags}${_lt_dar_export_syms}${_lt_dsymutil}"
    if test "$lt_cv_apple_cc_single_mod" != "yes"; then
        archive_cmds_CXX="\${CC} -r -keep_private_externs -nostdlib -o
\${lib}-master.o \${libobjs}~\${CC} -dynamiclib \${allow_undefined_flag} -o
\${lib} \${lib}-master.o \${deplibs} \${compiler_flags} -install_name
\${rpath}/\${soname} \${verstring}${_lt_dsymutil}"
        archive_expsym_cmds_CXX="sed 's,^,_, ' < \${export_symbols} >
\${output_objdir}/\${libname}-symbols.expsym~\${CC} -r -

```



```

keep_private_externs -nostdlib -o \${lib}-master.o \${libobjs}~\${CC} -
dynamiclib \${allow_undefined_flag} -o \${lib} \${lib}-master.o \${deplibs}
\${compiler_flags} -install_name \${rpath}/\${soname}
\${verstring}\${_lt_dar_export_syms}\${_lt_dsymutil}"
    fi

else
ld_shlibs_CXX=no
fi

;;

dgux*)
    case $cc_basename in
        ec+*)
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
            ;;
        ghcx*)
            # Green Hills C++ Compiler
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
            ;;
        *)
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
            ;;
    esac
;;

freebsd2.*)
    # C++ shared libraries reported to be fairly broken before
# switch to ELF
    ld_shlibs_CXX=no
    ;;

freebsd-elf*)
    archive_cmds_need_lc_CXX=no
    ;;

freebsd* | dragonfly*)
    # FreeBSD 3 and later use GNU C++ and GNU ld with standard ELF
# conventions
    ld_shlibs_CXX=yes
    ;;

gnu*)
    ;;

haiku*)
    archive_cmds_CXX='${CC} -shared \${libobjs} \${deplibs}
\${compiler_flags} \${wl}-soname \${wl}\${soname} -o \${lib}'

```

```

link_all_deplibs_CXX=yes
;;

hpux9*)
hardcode_libdir_flag_spec_CXX='${wl}+b ${wl}$libdir'
hardcode_libdir_separator_CXX=:
export_dynamic_flag_spec_CXX='${wl}-E'
hardcode_direct_CXX=yes
hardcode_minus_L_CXX=yes # Not in the search PATH,
                        # but as the default
                        # location of the library.

case $cc_basename in
CC*)
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
;;
aCC*)
archive_cmds_CXX='$RM $output_objdir/$soname~$CC -b
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags~test
$output_objdir/$soname = $lib || mv $output_objdir/$soname $lib'
# Commands to make compiler produce verbose output that
lists
# what "hidden" libraries, object files and flags are used
when
# linking a shared library.
#
# There doesn't appear to be a way to prevent this
compiler from
# explicitly linking system object files so we need to
strip them
# from the output so that they don't get included in the
library
# dependencies.
output_verbose_link_cmd='templist=`($CC -b $CFLAGS -v
conftest.$objext 2>&1) | $EGREP "\-L\`"; list=""; for z in $templist;
do case $z in conftest.$objext) list="$list $z";; *.$objext);; *)
list="$list $z";; esac; done; func_echo_all "$list"'
;;
*)
if test "$GXX" = yes; then
archive_cmds_CXX='$RM $output_objdir/$soname~$CC -shared
-nostdlib $pic_flag ${wl}+b ${wl}$install_libdir -o
$output_objdir/$soname $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags~test $output_objdir/$soname = $lib ||
mv $output_objdir/$soname $lib'
else
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
fi
;;

```

```

esac
;;

hpux10*|hpux11*)
  if test $with_gnu_ld = no; then
    hardcode_libdir_flag_spec_CXX='${wl}+b ${wl}$libdir'
    hardcode_libdir_separator_CXX=:

    case $host_cpu in
      hppa*64*|ia64*)
        ;;
      *)
        export_dynamic_flag_spec_CXX='${wl}-E'
        ;;
    esac
  fi
  case $host_cpu in
    hppa*64*|ia64*)
      hardcode_direct_CXX=no
      hardcode_shlibpath_var_CXX=no
      ;;
    *)
      hardcode_direct_CXX=yes
      hardcode_direct_absolute_CXX=yes
      hardcode_minus_L_CXX=yes # Not in the search PATH,
                               # but as the default
                               # location of the library.
      ;;
  esac

  case $cc_basename in
    CC*)
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
    aCC*)
      case $host_cpu in
        hppa*64*)
          archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname -o $lib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags'
          ;;
        ia64*)
          archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
          ;;
        *)
          archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
          ;;
      esac
  esac

```

```

# Commands to make compiler produce verbose output that lists
# what "hidden" libraries, object files and flags are used
when
# linking a shared library.
#
# There doesn't appear to be a way to prevent this compiler
from
# explicitly linking system object files so we need to strip
them
# from the output so that they don't get included in the
library
# dependencies.
output_verbose_link_cmd='templist=`($CC -b $CFLAGS -v
conftest.$objext 2>&1) | $GREP "\-L" `; list=""; for z in $templist; do
case $z in conftest.$objext) list="$list $z";; *.$objext);; *)
list="$list $z";; esac; done; func_echo_all "$list"
;;
*)
if test "$GXX" = yes; then
if test $with_gnu_ld = no; then
case $host_cpu in
hppa*64*)
archive_cmds_CXX='$CC -shared -nostdlib -fPIC ${wl}+h
${wl}$soname -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
;;
ia64*)
archive_cmds_CXX='$CC -shared -nostdlib $pic_flag
${wl}+h ${wl}$soname ${wl}+nodefaulttrpath -o $lib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags'
;;
*)
archive_cmds_CXX='$CC -shared -nostdlib $pic_flag
${wl}+h ${wl}$soname ${wl}+b ${wl}$install_libdir -o $lib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags'
;;
esac
fi
else
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
fi
;;
esac
;;

interix[3-9]*)
hardcode_direct_CXX=no
hardcode_shlibpath_var_CXX=no
hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
export_dynamic_flag_spec_CXX='${wl}-E'

```

```

# Hack: On Interix 3.x, we cannot compile PIC because of a broken
gcc.
# Instead, shared libraries are loaded at an image base
(0x10000000 by
# default) and relocated if they conflict, which is a slow very
memory
# consuming and fragmenting process. To avoid this, we pick a
random,
# 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000 at
link
# time. Moving up from 0x10000000 also allows more sbrk(2)
space.
archive_cmds_CXX='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,`expr ${RANDOM-$$} %
4096 / 2 \* 262144 + 1342177280` -o $lib'
archive_expsym_cmds_CXX='sed "s,^,_, " $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,`expr ${RANDOM-
$$} % 4096 / 2 \* 262144 + 1342177280` -o $lib'
;;
irix5* | irix6*)
case $cc_basename in
CC*)
# SGI C++
archive_cmds_CXX='$CC -shared -all -multigot $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -soname $soname
`test -n "$verstring" && func_echo_all "-set_version $verstring"` -
update_registry ${output_objdir}/so_locations -o $lib'

# Archives containing C++ object files must be created using
# "CC -ar", where "CC" is the IRIX C++ compiler. This is
# necessary to make sure instantiated templates are included
# in the archive.
old_archive_cmds_CXX='$CC -ar -WR,-u -o $oldlib $oldobjs'
;;
*)
if test "$GXX" = yes; then
if test "$with_gnu_ld" = no; then
archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname `test -n "$verstring" && func_echo_all
"${wl}-set_version ${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
else
archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname `test -n "$verstring" && func_echo_all
"${wl}-set_version ${wl}$verstring"` -o $lib'
fi
fi
link_all_deplibs_CXX=yes

```

```

;;
esac
hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
hardcode_libdir_separator_CXX=:
inherit_rpath_CXX=yes
;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
case $cc_basename in
KCC*)
# Kuck and Associates, Inc. (KAI) C++ Compiler

# KCC will only create a shared library if the output file
# ends with ".so" (or ".sl" for HP-UX), so rename the library
# to its proper name (with version) after linking.
archive_cmds_CXX='tempext=`echo $shared_ext | $SED -e
'\''s/\([^\()0-9A-Za-z{}]\)/\\\\\\1/g'\''`; templib=`echo $lib | $SED -e
"s/\${tempext}\..*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib}; mv
\${templib} $lib'

archive_expsym_cmds_CXX='tempext=`echo $shared_ext | $SED -e
'\''s/\([^\()0-9A-Za-z{}]\)/\\\\\\1/g'\''`; templib=`echo $lib | $SED -e
"s/\${tempext}\..*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib} ${wl}-
retain-symbols-file,$export_symbols; mv \${templib} $lib'
# Commands to make compiler produce verbose output that lists
# what "hidden" libraries, object files and flags are used
when
# linking a shared library.
#
# There doesn't appear to be a way to prevent this compiler
from
# explicitly linking system object files so we need to strip
them
# from the output so that they don't get included in the
library
# dependencies.
output_verbose_link_cmd='templist=`$CC $CFLAGS -v
conftest.$objext -o libconftest$shared_ext 2>&1 | $GREP "ld"`; rm -f
libconftest$shared_ext; list=""; for z in $templist; do case $z in
conftest.$objext) list="$list $z";; *.objext);; *) list="$list
$z";; esac; done; func_echo_all "$list"'

hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
export_dynamic_flag_spec_CXX='${wl}--export-dynamic'

# Archives containing C++ object files must be created using
# "CC -Bstatic", where "CC" is the KAI C++ compiler.
old_archive_cmds_CXX='$CC -Bstatic -o $oldlib $oldobjs'
;;
icpc* | ecpc* )
# Intel C++

```

```

with_gnu_ld=yes
# version 8.0 and above of icpc choke on multiply defined
symbols
# if we add $predep_objects and $postdep_objects, however 7.1
and
# earlier do not add the objects themselves.
case ` $CC -V 2>&1 ` in
    *"Version 7."*)
        archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib'
        archive_expsym_cmds_CXX='$CC -shared $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags ${wl}-soname
$wl$soname ${wl}-retain-symbols-file $wl$export_symbols -o $lib'
        ;;
    *) # Version 8.0 or newer
        tmp_idyn=
        case $host_cpu in
            ia64*) tmp_idyn=' -i_dynamic';;
        esac
        archive_cmds_CXX='$CC -shared"$tmp_idyn"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds_CXX='$CC -shared"$tmp_idyn"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-
file $wl$export_symbols -o $lib'
        ;;
    ;;
esac
archive_cmds_need_lc_CXX=no
hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
whole_archive_flag_spec_CXX='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
;;
pgCC* | pgcpp*)
    # Portland Group C++ compiler
    case ` $CC -V ` in
        *pgCC\ [1-5].* | *pgcpp\ [1-5].*)
            prelink_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir $objs
$libobjs $compile_deplibs~
compile_command="$compile_command `find $tpldir -name \*.o
| sort | $NL2SP`"'
            old_archive_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir
$oldobjs$old_deplibs~
$AR $AR_FLAGS $oldlib$oldobjs$old_deplibs `find $tpldir -
name \*.o | sort | $NL2SP`~
$RANLIB $oldlib'
            archive_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~

```

```

        $CC --prelink_objects --instantiation_dir $tpldir
$predep_objects $libobjs $deplibs $convenience $postdep_objects~
        $CC -shared $pic_flag $predep_objects $libobjs $deplibs
`find $tpldir -name \*.o | sort | $NL2SP` $postdep_objects
$compiler_flags ${wl}-soname ${wl}$soname -o $lib'
        archive_expsym_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
        $CC --prelink_objects --instantiation_dir $tpldir
$predep_objects $libobjs $deplibs $convenience $postdep_objects~
        $CC -shared $pic_flag $predep_objects $libobjs $deplibs
`find $tpldir -name \*.o | sort | $NL2SP` $postdep_objects
$compiler_flags ${wl}-soname ${wl}$soname ${wl}-retain-symbols-file
${wl}$export_symbols -o $lib'
        ;;
*) # Version 6 and above use weak symbols
        archive_cmds_CXX='$CC -shared $pic_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags ${wl}-soname
${wl}$soname -o $lib'
        archive_expsym_cmds_CXX='$CC -shared $pic_flag
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname ${wl}-retain-symbols-file
${wl}$export_symbols -o $lib'
        ;;
esac

        hardcode_libdir_flag_spec_CXX='${wl}--rpath ${wl}$libdir'
        export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
        whole_archive_flag_spec_CXX='${wl}--whole-archive`for conv in
$convenience\`\`; do test -n \\"$conv\" &&
new_convenience=\\\"$new_convenience,$conv\\\"; done; func_echo_all
\\\"$new_convenience\`\` ${wl}--no-whole-archive'
        ;;
cxx*)
        # Compaq C++
        archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib'
        archive_expsym_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib ${wl}-retain-symbols-file $wl$export_symbols'

        runpath_var=LD_RUN_PATH
        hardcode_libdir_flag_spec_CXX='-rpath $libdir'
        hardcode_libdir_separator_CXX=:

        # Commands to make compiler produce verbose output that lists
        # what "hidden" libraries, object files and flags are used
when
        # linking a shared library.
        #
        # There doesn't appear to be a way to prevent this compiler
from

```



```

        # explicitly linking system object files so we need to strip
them
        # from the output so that they don't get included in the
library
        # dependencies.
        output_verbose_link_cmd='templist=`$CC -shared $CFLAGS -v
confptest.$objext 2>&1 | $GREP "ld"`; templist=`func_echo_all
"$templist" | $SED "s/\(^.*ld.*\)\( .*ld .*$\)/\1/"`; list=""; for z
in $templist; do case $z in confptest.$objext) list="$list $z";;
*.$objext);; *) list="$list $z";;esac; done; func_echo_all "X$list" |
$Xsed'
;;
xl* | mpixl* | bgxl*)
# IBM XL 8.0 on PPC, with GNU ld
hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
archive_cmds_CXX='$CC -qmkshrobj $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
if test "x$supports_anon_versioning" = xyes; then
    archive_expsym_cmds_CXX='echo "{ global:" >
$output_objdir/$libname.ver~
cat $export_symbols | sed -e "s/(.*)/\1;/" >>
$output_objdir/$libname.ver~
echo "local: *; };" >> $output_objdir/$libname.ver~
$CC -qmkshrobj $libobjs $deplibs $compiler_flags ${wl}-
soname $wl$soname ${wl}-version-script
${wl}$output_objdir/$libname.ver -o $lib'
fi
;;
*)
case ` $CC -V 2>&1 | sed 5q` in
*Sun\ C*)
    # Sun C++ 5.9
    no_undefined_flag_CXX=' -zdefs'
    archive_cmds_CXX='$CC -G${allow_undefined_flag} -h$soname -
o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags'
    archive_expsym_cmds_CXX='$CC -G${allow_undefined_flag} -
h$soname -o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags ${wl}-retain-symbols-file ${wl}$export_symbols'
    hardcode_libdir_flag_spec_CXX='-R$libdir'
    whole_archive_flag_spec_CXX='${wl}--whole-
archive`new_convenience=; for conv in $convenience\`; do test -z
\`${conv}\` || new_convenience=\`${new_convenience,$conv}\`; done;
func_echo_all \`${new_convenience}\` ${wl}--no-whole-archive'
    compiler_needs_object_CXX=yes

    # Not sure whether something based on
    # $CC $CFLAGS -v confptest.$objext -o libconfptest$shared_ext
2>&1

    # would be better.
    output_verbose_link_cmd='func_echo_all'

```

```

using          # Archives containing C++ object files must be created
              # "CC -xar", where "CC" is the Sun C++ compiler.  This is
              # necessary to make sure instantiated templates are
included      # in the archive.
              old_archive_cmds_CXX='$CC -xar -o $oldlib $oldobjs'
              ;;
            esac
          ;;
        esac
      ;;

lynxos*)
  # FIXME: insert proper C++ library support
  ld_shlibs_CXX=no
  ;;

m88k*)
  # FIXME: insert proper C++ library support
  ld_shlibs_CXX=no
  ;;

mvs*)
  case $cc_basename in
    cxx*)
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
    *)
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
  esac
  ;;

netbsd*)
  if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
    archive_cmds_CXX='$LD -Bshareable -o $lib $predep_objects
$libobjs $deplibs $postdep_objects $linker_flags'
    wlarc=
    hardcode_libdir_flag_spec_CXX='-R$libdir'
    hardcode_direct_CXX=yes
    hardcode_shlibpath_var_CXX=no
  fi
  # Workaround some broken pre-1.5 toolchains
  output_verbose_link_cmd='$CC -shared $CFLAGS -v conftest.$objext
2>&1 | $GREP conftest.$objext | $SED -e "s:-lgcc -lc -lgcc::"'
  ;;

*nto* | *qnx*)

```

```

    ld_shlibs_CXX=yes
;;

openbsd2*)
    # C++ shared libraries are fairly broken
ld_shlibs_CXX=no
;;

openbsd*)
if test -f /usr/libexec/ld.so; then
    hardcode_direct_CXX=yes
    hardcode_shlibpath_var_CXX=no
    hardcode_direct_absolute_CXX=yes
    archive_cmds_CXX='$CC -shared $pic_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o $lib'
    hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
    if test -z "`echo __ELF__ | $CC -E - | grep __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        archive_expsym_cmds_CXX='$CC -shared $pic_flag
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-retain-symbols-file,$export_symbols -o $lib'
        export_dynamic_flag_spec_CXX='${wl}-E'
        whole_archive_flag_spec_CXX="$wlarc" '--whole-
archive$convenience "'$wlarc"' --no-whole-archive'
    fi
    output_verbose_link_cmd=func_echo_all
else
    ld_shlibs_CXX=no
fi
;;

osf3* | osf4* | osf5*)
    case $cc_basename in
        KCC*)
            # Kuck and Associates, Inc. (KAI) C++ Compiler

            # KCC will only create a shared library if the output file
            # ends with ".so" (or ".sl" for HP-UX), so rename the library
            # to its proper name (with version) after linking.
            archive_cmds_CXX='tempext=`echo $shared_ext | $SED -e
'\''s/\([^\(\)0-9A-Za-z{}]\)/\\\\\1/g'\''`; templib=`echo "$lib" | $SED
-e "s/\${tempext}\.*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib}; mv
\${templib} $lib'

            hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
            hardcode_libdir_separator_CXX=:

            # Archives containing C++ object files must be created using
            # the KAI C++ compiler.
            case $host in

```

```

        osf3*) old_archive_cmds_CXX='$CC -Bstatic -o $oldlib
$oldobjs' ;;
        *) old_archive_cmds_CXX='$CC -o $oldlib $oldobjs' ;;
    esac
    ;;
    RCC*)
    # Rational C++ 2.4.1
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
    cxx*)
    case $host in
        osf3*)
            allow_undefined_flag_CXX=' ${wl}-expect_unresolved
${wl}\*'
            archive_cmds_CXX='$CC -shared${allow_undefined_flag}
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $soname `test -n "$verstring" && func_echo_all "${wl}-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
            hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
            ;;
        *)
            allow_undefined_flag_CXX=' -expect_unresolved \*'
            archive_cmds_CXX='$CC -shared${allow_undefined_flag}
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags -
msym -soname $soname `test -n "$verstring" && func_echo_all "-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
            archive_expsym_cmds_CXX='for i in `cat $export_symbols`;
do printf "%s %s\n" -exported_symbol "\$i" >> $lib.exp; done~
            echo "-hidden">> $lib.exp~
            $CC -shared$allow_undefined_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -msym -soname
$soname ${wl}-input ${wl}$lib.exp `test -n "$verstring" && $ECHO "-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib~
            $RM $lib.exp'
            hardcode_libdir_flag_spec_CXX='--rpath $libdir'
            ;;
    esac

    hardcode_libdir_separator_CXX=:

    # Commands to make compiler produce verbose output that lists
    # what "hidden" libraries, object files and flags are used
when
    # linking a shared library.
    #
    # There doesn't appear to be a way to prevent this compiler
from

```

```

        # explicitly linking system object files so we need to strip
them
        # from the output so that they don't get included in the
library
        # dependencies.
        output_verbose_link_cmd='templist=`$CC -shared $CFLAGS -v
confptest.$objext 2>&1 | $GREP "ld" | $GREP -v "ld:"`;
templist=`func_echo_all "$templist" | $SED "s/\(^.*ld.*\)\(
.*ld.*$\)/\1/"`; list=""; for z in $templist; do case $z in
confptest.$objext) list="$list $z";; *.objext);; *) list="$list
$z";;esac; done; func_echo_all "$list"
        ;;
*)
    if test "$GXX" = yes && test "$with_gnu_ld" = no; then
        allow_undefined_flag_CXX=' ${wl}-expect_unresolved ${wl}\'*
        case $host in
            osf3*)
                archive_cmds_CXX='$CC -shared -nostdlib
${allow_undefined_flag} $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$verstring" && func_echo_all "${wl}-set_version ${wl}$verstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
                ;;
            *)
                archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
${allow_undefined_flag} $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$verstring" && func_echo_all "${wl}-set_version
${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
                ;;
        esac

        hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
        hardcode_libdir_separator_CXX=:

        # Commands to make compiler produce verbose output that
lists
        # what "hidden" libraries, object files and flags are used
when
        # linking a shared library.
        output_verbose_link_cmd='$CC -shared $CFLAGS -v
confptest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'

    else
        # FIXME: insert proper C++ library support
        ld_shlibs_CXX=no
    fi
    ;;
esac
;;

```

```

psos*)
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;

sunos4*)
    case $cc_basename in
        CC*)
            # Sun C++ 4.x
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
            ;;
        lcc*)
            # Lucid
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
            ;;
        *)
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
            ;;
    esac
    ;;

solaris*)
    case $cc_basename in
        CC* | sunCC*)
            # Sun C++ 4.2, 5.x and Centerline C++
            archive_cmds_need_lc_CXX=yes
            no_undefined_flag_CXX=' -zdefs'
            archive_cmds_CXX='$CC -G${allow_undefined_flag} -h$soname -o
$lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags'
            archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -G${allow_undefined_flag} ${wl}-M ${wl}$lib.exp -
h$soname -o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags~$RM $lib.exp'

            hardcode_libdir_flag_spec_CXX='-R$libdir'
            hardcode_shlibpath_var_CXX=no
            case $host_os in
                solaris2.[0-5] | solaris2.[0-5].*) ;;
                *)
                    # The compiler driver will combine and reorder linker
options,
                    # but understands '-z linker_flag'.
                    # Supported since Solaris 2.6 (maybe 2.5.1?)
                    whole_archive_flag_spec_CXX='-z alleextract$convenience -z
defaultextract'
            ;;
    esac
    ;;

```

```

esac
link_all_deplibs_CXX=yes

output_verbose_link_cmd='func_echo_all'

# Archives containing C++ object files must be created using
# "CC -xar", where "CC" is the Sun C++ compiler. This is
# necessary to make sure instantiated templates are included
# in the archive.
old_archive_cmds_CXX='$CC -xar -o $oldlib $oldobjs'
;;
gcx*)
# Green Hills C++ Compiler
archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-h $wl$soname -o $lib'

# The C++ compiler must be used to create the archive.
old_archive_cmds_CXX='$CC $LDFLAGS -archive -o $oldlib
$oldobjs'
;;
*)
# GNU C++ compiler with Solaris linker
if test "$GXX" = yes && test "$with_gnu_ld" = no; then
    no_undefined_flag_CXX=' ${wl}-z ${wl}defs'
    if $CC --version | $GREP -v '^2\.7' > /dev/null; then
        archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$LDFLAGS $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags ${wl}-h $wl$soname -o $lib'
        archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/"/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -shared $pic_flag -nostdlib ${wl}-M $wl$lib.exp -o
$lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags~$RM $lib.exp'
    else
        # Commands to make compiler produce verbose output that
        lists
        # what "hidden" libraries, object files and flags are
        used when
        # linking a shared library.
        output_verbose_link_cmd='$CC -shared $CFLAGS -v
conftest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'
    else
        # g++ 2.7 appears to require '-G' NOT '-shared' on this
        # platform.
        archive_cmds_CXX='$CC -G -nostdlib $LDFLAGS
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-h $wl$soname -o $lib'
        archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/"/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~

```

```

        $CC -G -nostdlib ${wl}-M $wl$lib.exp -o $lib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags~$RM
$lib.exp'

        # Commands to make compiler produce verbose output that
lists
        # what "hidden" libraries, object files and flags are
used when
        # linking a shared library.
        output_verbose_link_cmd='$CC -G $CFLAGS -v
conftest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'
        fi

        hardcode_libdir_flag_spec_CXX='${wl}-R $wl$libdir'
        case $host_os in
solaris2.[0-5] | solaris2.[0-5].*) ;;
*)
        whole_archive_flag_spec_CXX='${wl}-z
${wl}allextract$convenience ${wl}-z ${wl}defaultextract'
        ;;
        esac
        fi
        ;;
        esac
        ;;

        sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
        no_undefined_flag_CXX='${wl}-z,text'
        archive_cmds_need_lc_CXX=no
        hardcode_shlibpath_var_CXX=no
        runpath_var='LD_RUN_PATH'

        case $cc_basename in
        CC*)
            archive_cmds_CXX='$CC -G ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
            archive_expsym_cmds_CXX='$CC -G ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
            ;;
        *)
            archive_cmds_CXX='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
            archive_expsym_cmds_CXX='$CC -shared ${wl}-
Bexport:$export_symbols ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
            ;;
        esac
        ;;

        sysv5* | sco3.2v5* | sco5v6*)

```



```

# Note: We can NOT use -z defs as we might desire, because we do
not
# link with -lc, and that would cause any symbols used from libc
to
# always be unresolved, which means just about no library would
# ever link correctly.  If we're not using GNU ld we use -z text
# though, which does catch some bad symbols but isn't as heavy-
handed
# as -z defs.
no_undefined_flag_CXX='${wl}-z,text'
allow_undefined_flag_CXX='${wl}-z,nodefs'
archive_cmds_need_lc_CXX=no
hardcode_shlibpath_var_CXX=no
hardcode_libdir_flag_spec_CXX='${wl}-R,$libdir'
hardcode_libdir_separator_CXX=':'
link_all_deplibs_CXX=yes
export_dynamic_flag_spec_CXX='${wl}-Bexport'
runpath_var='LD_RUN_PATH'

case $cc_basename in
  CC*)
    archive_cmds_CXX='$CC -G ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
    archive_expsym_cmds_CXX='$CC -G ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    old_archive_cmds_CXX='$CC -Tprelink_objects $oldobjs~
'"$old_archive_cmds_CXX"
    reload_cmds_CXX='$CC -Tprelink_objects $reload_objs~
'"$reload_cmds_CXX"
    ;;
  *)
    archive_cmds_CXX='$CC -shared ${wl}-h,$soname -o $lib
$libobjs $deplibs $compiler_flags'
    archive_expsym_cmds_CXX='$CC -shared ${wl}-
Bexport:$export_symbols ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
    ;;
esac
;;

tandem*)
  case $cc_basename in
    NCC*)
      # NonStop-UX NCC 3.20
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
    *)
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
  esac

```

```

        ;;

vxworks*)
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;

*)
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs_CXX"
>&5
$as_echo "$ld_shlibs_CXX" >&6; }
test "$ld_shlibs_CXX" = no && can_build_shared=no

GCC_CXX="$GXX"
LD_CXX="$LD"

## CAVEAT EMPTOR:
## There is no encapsulation within the following macros, do not
change
## the running order or otherwise move them around unless you know
exactly
## what you are doing...
# Dependencies to place before and after the object being linked:
predep_objects_CXX=
postdep_objects_CXX=
predeps_CXX=
postdeps_CXX=
compiler_lib_search_path_CXX=

cat > conftest.$ac_ext <<_LT_EOF
class Foo
{
public:
    Foo (void) { a = 0; }
private:
    int a;
};
_LT_EOF

_lt_libdeps_save_CFLAGS=$CFLAGS
case "$CC $CFLAGS " in #(
*\ -flto*\ *) CFLAGS="$CFLAGS -fno-lto" ;;
*\ -fwhopr*\ *) CFLAGS="$CFLAGS -fno-whopr" ;;
*\ -fuse-linker-plugin*\ *) CFLAGS="$CFLAGS -fno-use-linker-plugin" ;;
esac

```

```

if { { eval echo "\"\$as_me\"":${as_lineno-$LINENO}: \"$ac_compile\"";
} >&5
  (eval $ac_compile) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; then
# Parse the compiler output and extract the necessary
# objects, libraries and library flags.

# Sentinel used to keep track of whether or not we are before
# the conftest object file.
pre_test_object_deps_done=no

for p in `eval "$output_verbose_link_cmd"`; do
  case ${prev}${p} in

    -L* | -R* | -l*)
      # Some compilers place space between "-{L,R}" and the path.
      # Remove the space.
      if test $p = "-L" ||
         test $p = "-R"; then
        prev=$p
        continue
      fi

      # Expand the sysroot to ease extracting the directories later.
      if test -z "$prev"; then
        case $p in
          -L*) func_stripname_cnf '-L' '' "$p"; prev=-L;
p=$func_stripname_result ;;
          -R*) func_stripname_cnf '-R' '' "$p"; prev=-R;
p=$func_stripname_result ;;
          -l*) func_stripname_cnf '-l' '' "$p"; prev=-l;
p=$func_stripname_result ;;
          esac
        fi
        case $p in
          =*) func_stripname_cnf '=' '' "$p";
p=$lt_sysroot$func_stripname_result ;;
          esac
        if test "$pre_test_object_deps_done" = no; then
          case ${prev} in
            -L | -R)
              # Internal compiler library paths should come after those
              # provided the user. The postdeps already come after the
              # user supplied libs so there is no need to process them.
              if test -z "$compiler_lib_search_path_CXX"; then
                compiler_lib_search_path_CXX="${prev}${p}"
              else
                compiler_lib_search_path_CXX="${compiler_lib_search_path_CXX}
${prev}${p}"
              fi
            fi
          fi
        fi
      fi
    fi
  done

```

```

        fi
        ;;
# The "-l" case would never come before the object being
# linked, so don't bother handling this case.
esac
else
if test -z "$postdeps_CXX"; then
    postdeps_CXX="${prev}${p}"
else
    postdeps_CXX="${postdeps_CXX} ${prev}${p}"
fi
fi
prev=
;;

*.lto.$objext) ;; # Ignore GCC LTO objects
*.$objext)
    # This assumes that the test object file only shows up
    # once in the compiler output.
    if test "$p" = "confest.$objext"; then
pre_test_object_deps_done=yes
continue
fi

    if test "$pre_test_object_deps_done" = no; then
if test -z "$predep_objects_CXX"; then
    predep_objects_CXX="$p"
else
    predep_objects_CXX="$predep_objects_CXX $p"
fi
else
if test -z "$postdep_objects_CXX"; then
    postdep_objects_CXX="$p"
else
    postdep_objects_CXX="$postdep_objects_CXX $p"
fi
fi
;;

*) ;; # Ignore the rest.

esac
done

# Clean up.
rm -f a.out a.exe
else
echo "libtool.m4: error: problem compiling CXX test program"
fi

$RM -f confest.$objext
CFLAGS=$_lt_libdeps_save_CFLAGS

```

```

# PORTME: override above test on systems where it is broken
case $host_os in
interix[3-9]*)
    # Interix 3.5 installs completely hosed .la files for C++, so rather
    than
    # hack all around it, let's just trust "g++" to DTRT.
    predep_objects_CXX=
    postdep_objects_CXX=
    postdeps_CXX=
    ;;

linux*)
case ` $CC -V 2>&1 | sed 5q ` in
*Sun\ C*)
    # Sun C++ 5.9

    # The more standards-conforming stlport4 library is
    # incompatible with the Cstd library. Avoid specifying
    # it if it's in CXXFLAGS. Ignore libCrun as
    # -library=stlport4 depends on it.
    case " $CXX $CXXFLAGS " in
    *" -library=stlport4 ")
        solaris_use_stlport4=yes
        ;;
    esac

    if test "$solaris_use_stlport4" != yes; then
        postdeps_CXX='-library=Cstd -library=Crun'
    fi
    ;;
esac
;;

solaris*)
case $cc_basename in
CC* | sunCC*)
    # The more standards-conforming stlport4 library is
    # incompatible with the Cstd library. Avoid specifying
    # it if it's in CXXFLAGS. Ignore libCrun as
    # -library=stlport4 depends on it.
    case " $CXX $CXXFLAGS " in
    *" -library=stlport4 ")
        solaris_use_stlport4=yes
        ;;
    esac

    # Adding this requires a known-good setup of shared libraries for
    # Sun compiler versions before 5.6, else PIC objects from an old
    # archive will be linked into the output, leading to subtle bugs.
    if test "$solaris_use_stlport4" != yes; then
        postdeps_CXX='-library=Cstd -library=Crun'

```

```
    fi
    ;;
  esac
  ;;
esac

case " $postdeps_CXX " in
*" -lc "*) archive_cmds_need_lc_CXX=no ;;
esac
  compiler_lib_search_dirs_CXX=
  if test -n "${compiler_lib_search_path_CXX}"; then
    compiler_lib_search_dirs_CXX=`echo " ${compiler_lib_search_path_CXX}"
| ${SED} -e 's! -L! !g' -e 's!^ !!'`
  fi
fi
```

```
  lt_prog_compiler_wl_CXX=
  lt_prog_compiler_pic_CXX=
  lt_prog_compiler_static_CXX=
```

```
# C++ specific cases for pic, static, wl, etc.
```

```

if test "$GXX" = yes; then
  lt_prog_compiler_wl_CXX='-Wl,'
  lt_prog_compiler_static_CXX='-static'

case $host_os in
aix*)
  # All AIX code is PIC.
  if test "$host_cpu" = ia64; then
    # AIX 5 now supports IA64 processor
    lt_prog_compiler_static_CXX='-Bstatic'
  fi
  ;;

amigaos*)
  case $host_cpu in
powerpc)
    # see comment about AmigaOS4 .so support
    lt_prog_compiler_pic_CXX='-fPIC'
    ;;
m68k)
    # FIXME: we need at least 68020 code to build shared
libraries, but
    # adding the '-m68020' flag to GCC prevents building
anything better,
    # like '-m68040'.
    lt_prog_compiler_pic_CXX='-m68020 -resident32 -malways-
restore-a4'
    ;;
  esac
  ;;

beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)
  # PIC is the default for these OSes.
  ;;

mingw* | cygwin* | os2* | pw32* | cegcc*)
  # This hack is so that the source file can tell whether it is
being
  # built for inclusion in a dll (and should export symbols for
example).
  # Although the cygwin gcc ignores -fPIC, still need this for
old-style
  # (--disable-auto-import) libraries
  lt_prog_compiler_pic_CXX='-DDLL_EXPORT'
  ;;

darwin* | rhapsody*)
  # PIC is the default on this platform
  # Common symbols not allowed in MH_DYLIB files
  lt_prog_compiler_pic_CXX='-fno-common'
  ;;

*djgpp*)
  # DJGPP does not support shared libraries at all
  lt_prog_compiler_pic_CXX=

```

```

;;
haiku*)
# PIC is the default for Haiku.
# The "-static" flag exists, but is broken.
lt_prog_compiler_static_CXX=
;;
interix[3-9]*)
# Interix 3.x gcc -fpic/-fPIC options generate broken code.
# Instead, we relocate shared libraries at runtime.
;;
sysv4*MP*)
if test -d /usr/nec; then
lt_prog_compiler_pic_CXX=-Kconform_pic
fi
;;
hpux*)
# PIC is the default for 64-bit PA HP-UX, but not for 32-bit
# PA HP-UX. On IA64 HP-UX, PIC is the default but the pic flag
# sets the default TLS model and affects inlining.
case $host_cpu in
hppa*64*)
;;
*)
lt_prog_compiler_pic_CXX='-fPIC'
;;
esac
;;
*qnx* | *nto*)
# QNX uses GNU C++, but need to define -shared option too,
otherwise
# it will coredump.
lt_prog_compiler_pic_CXX='-fPIC -shared'
;;
*)
lt_prog_compiler_pic_CXX='-fPIC'
;;
esac
else
case $host_os in
aix[4-9]*)
# All AIX code is PIC.
if test "$host_cpu" = ia64; then
# AIX 5 now supports IA64 processor
lt_prog_compiler_static_CXX='-Bstatic'
else
lt_prog_compiler_static_CXX='-bnso -bI:/lib/syscalls.exp'
fi
;;
chorus*)
case $cc_basename in
cxch68*)
# Green Hills C++ Compiler

```



```

        # _LT_TAGVAR(lt_prog_compiler_static, CXX)="--
no_auto_instantiation -u __main -u __premain -u _abort -r
$COOL_DIR/lib/libOrb.a $MVME_DIR/lib/CC/libC.a
$MVME_DIR/lib/classix/libcx.s.a"
        ;;
    esac
    ;;
    mingw* | cygwin* | os2* | pw32* | cegcc*)
    # This hack is so that the source file can tell whether it is
being
    # built for inclusion in a dll (and should export symbols for
example).
    lt_prog_compiler_pic_CXX='-DLL_EXPORT'
    ;;
    dgux*)
    case $cc_basename in
    ec++)
        lt_prog_compiler_pic_CXX='-KPIC'
        ;;
    ghcx*)
        # Green Hills C++ Compiler
        lt_prog_compiler_pic_CXX='-pic'
        ;;
    *)
        ;;
    esac
    ;;
    freebsd* | dragonfly*)
    # FreeBSD uses GNU C++
    ;;
    hpux9* | hpux10* | hpux11*)
    case $cc_basename in
    CC*)
        lt_prog_compiler_wl_CXX='-Wl,'
        lt_prog_compiler_static_CXX='${wl}-a ${wl}archive'
        if test "$host_cpu" != ia64; then
            lt_prog_compiler_pic_CXX='+Z'
        fi
        ;;
    aCC*)
        lt_prog_compiler_wl_CXX='-Wl,'
        lt_prog_compiler_static_CXX='${wl}-a ${wl}archive'
        case $host_cpu in
        hppa*64*|ia64*)
            # +Z the default
            ;;
        *)
            lt_prog_compiler_pic_CXX='+Z'
            ;;
        esac
        ;;
    *)
        ;;
    esac
    ;;
    *)

```

```

        ;;
    esac
    ;;
    interix*)
    # This is c89, which is MS Visual C++ (no shared libs)
    # Anyone wants to do a port?
    ;;
    irix5* | irix6* | nonstopux*)
    case $cc_basename in
        CC*)
            lt_prog_compiler_wl_CXX='-Wl,'
            lt_prog_compiler_static_CXX='-non_shared'
            # CC pic flag -KPIC is the default.
            ;;
        *)
            ;;
    esac
    ;;
    linux* | k*bsd*-gnu | kopensolaris*-gnu)
    case $cc_basename in
        KCC*)
            # KAI C++ Compiler
            lt_prog_compiler_wl_CXX='--backend -Wl,'
            lt_prog_compiler_pic_CXX='-fPIC'
            ;;
        ecpc* )
            # old Intel C++ for x86_64 which still supported -KPIC.
            lt_prog_compiler_wl_CXX='-Wl,'
            lt_prog_compiler_pic_CXX='-KPIC'
            lt_prog_compiler_static_CXX='-static'
            ;;
        icpc* )
            # Intel C++, used to be incompatible with GCC.
            # ICC 10 doesn't accept -KPIC any more.
            lt_prog_compiler_wl_CXX='-Wl,'
            lt_prog_compiler_pic_CXX='-fPIC'
            lt_prog_compiler_static_CXX='-static'
            ;;
        pgCC* | pgcpp*)
            # Portland Group C++ compiler
            lt_prog_compiler_wl_CXX='-Wl,'
            lt_prog_compiler_pic_CXX='-fpic'
            lt_prog_compiler_static_CXX='-Bstatic'
            ;;
        cxx*)
            # Compaq C++
            # Make sure the PIC flag is empty.  It appears that all Alpha
            # Linux and Compaq Tru64 Unix objects are PIC.
            lt_prog_compiler_pic_CXX=
            lt_prog_compiler_static_CXX='-non_shared'
            ;;
        xlc* | xlC* | bgxl[cC]* | mpixl[cC]*)

```

```

# IBM XL 8.0, 9.0 on PPC and BlueGene
lt_prog_compiler_wl_CXX='-Wl,'
lt_prog_compiler_pic_CXX='-qpic'
lt_prog_compiler_static_CXX='-qstaticlink'
;;
*)
case ` $CC -V 2>&1 | sed 5q ` in
*Sun\ C*)
    # Sun C++ 5.9
    lt_prog_compiler_pic_CXX='-KPIC'
    lt_prog_compiler_static_CXX='-Bstatic'
    lt_prog_compiler_wl_CXX='-Qoption ld '
    ;;
esac
;;
esac
;;
lynxos*)
;;
m88k*)
;;
mvs*)
case $cc_basename in
cxx*)
    lt_prog_compiler_pic_CXX='-W c,exportall'
    ;;
*)
    ;;
esac
;;
netbsd*)
;;
*qnx* | *nto*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic_CXX='-fPIC -shared'
    ;;
osf3* | osf4* | osf5*)
case $cc_basename in
KCC*)
    lt_prog_compiler_wl_CXX='--backend -Wl,'
    ;;
RCC*)
    # Rational C++ 2.4.1
    lt_prog_compiler_pic_CXX='-pic'
    ;;
cxx*)
    # Digital/Compaq C++
    lt_prog_compiler_wl_CXX='-Wl,'
    # Make sure the PIC flag is empty. It appears that all Alpha
    # Linux and Compaq Tru64 Unix objects are PIC.

```

```

        lt_prog_compiler_pic_CXX=
        lt_prog_compiler_static_CXX='-non_shared'
        ;;
    *)
        ;;
esac
;;
psos*)
;;
solaris*)
case $cc_basename in
    CC* | sunCC*)
        # Sun C++ 4.2, 5.x and Centerline C++
        lt_prog_compiler_pic_CXX='-KPIC'
        lt_prog_compiler_static_CXX='-Bstatic'
        lt_prog_compiler_wl_CXX='-Qoption ld '
        ;;
    gcx*)
        # Green Hills C++ Compiler
        lt_prog_compiler_pic_CXX='-PIC'
        ;;
    *)
        ;;
esac
;;
sunos4*)
case $cc_basename in
    CC*)
        # Sun C++ 4.x
        lt_prog_compiler_pic_CXX='-pic'
        lt_prog_compiler_static_CXX='-Bstatic'
        ;;
    lcc*)
        # Lucid
        lt_prog_compiler_pic_CXX='-pic'
        ;;
    *)
        ;;
esac
;;
sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
case $cc_basename in
    CC*)
        lt_prog_compiler_wl_CXX='-Wl,'
        lt_prog_compiler_pic_CXX='-KPIC'
        lt_prog_compiler_static_CXX='-Bstatic'
        ;;
esac
;;
tandem*)
case $cc_basename in
    NCC*)

```

```

        # NonStop-UX NCC 3.20
        lt_prog_compiler_pic_CXX='-KPIC'
        ;;
    *)
        ;;
    esac
    ;;
    vxworks*)
    ;;
    *)
    lt_prog_compiler_can_build_shared_CXX=no
    ;;
    esac
fi

case $host_os in
# For platforms which do not support PIC, -DPIC is meaningless:
*djgpp*)
    lt_prog_compiler_pic_CXX=
    ;;
*)
    lt_prog_compiler_pic_CXX="$lt_prog_compiler_pic_CXX@&t@ -DPIC"
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_CXX=$lt_prog_compiler_pic_CXX
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_CXX" >&5
$as_echo "$lt_cv_prog_compiler_pic_CXX" >&6; }
lt_prog_compiler_pic_CXX=$lt_cv_prog_compiler_pic_CXX

#
# Check to make sure the PIC flag actually works.
#
if test -n "$lt_prog_compiler_pic_CXX"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic_CXX works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic_CXX
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_works_CXX=no
    ac_outfile=confptest.$ac_objext
    echo "$lt_simple_compile_test_code" > confptest.$ac_ext

```

```

    lt_compiler_flag="$lt_prog_compiler_pic_CXX@&t@ -DPIC"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "conftest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    # The option is referenced via a variable to avoid confusing sed.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
    (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
    (eval "$lt_compile" 2>conftest.err)
    ac_status=$?
    cat conftest.err >&5
    echo "$as_me:$LINENO: \$? = $ac_status" >&5
    if (exit $ac_status) && test -s "$ac_outfile"; then
        # The compiler can only warn and ignore the option if not
recognized
        # So say no if there are warnings other than the usual output.
        $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >conftest.exp
        $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
        if test ! -s conftest.er2 || diff conftest.exp conftest.er2
>/dev/null; then
            lt_cv_prog_compiler_pic_works_CXX=yes
        fi
    fi
    $RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works_CXX" >&5
$as_echo "$lt_cv_prog_compiler_pic_works_CXX" >&6; }

if test x"$lt_cv_prog_compiler_pic_works_CXX" = xyes; then
    case $lt_prog_compiler_pic_CXX in
        "" | " *") ;;
        *) lt_prog_compiler_pic_CXX="$lt_prog_compiler_pic_CXX" ;;
    esac
else
    lt_prog_compiler_pic_CXX=
    lt_prog_compiler_can_build_shared_CXX=no
fi

fi

#

```

```

# Check to make sure the static flag actually works.
#
wl=$lt_prog_compiler_wl_CXX eval
lt_tmp_static_flag="\$lt_prog_compiler_static_CXX\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works_CXX+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_static_works_CXX=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
  # The linker can only warn and ignore the option if not
  recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&5
    $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_static_works_CXX=yes
    fi
  else
    lt_cv_prog_compiler_static_works_CXX=yes
  fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works_CXX" >&5
$as_echo "$lt_cv_prog_compiler_static_works_CXX" >&6; }

if test x"$lt_cv_prog_compiler_static_works_CXX" = xyes; then
  :
else
  lt_prog_compiler_static_CXX=
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5

```

```

$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o_CXX+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o_CXX=no
  $RM -r conftest 2>/dev/null
  mkdir conftest
  cd conftest
  mkdir out
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext

  lt_compiler_flag="-o out/conftest2.$ac_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>out/conftest.err)
  ac_status=$?
  cat out/conftest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s out/conftest2.$ac_objext
  then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/conftest.exp
    $SED '/^$/d; /^ *+/d' out/conftest.err >out/conftest.er2
    if test ! -s out/conftest.er2 || diff out/conftest.exp
out/conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_c_o_CXX=yes
    fi
  fi
  chmod u+w . 2>&5
  $RM conftest*
  # SGI C++ compiler will create directory out/ii_files/ for
# template instantiation
  test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
  $RM out/* && rmdir out
  cd ..
  $RM -r conftest
  $RM conftest*

fi

```



```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o_CXX" >&5
$sas_echo "$lt_cv_prog_compiler_c_o_CXX" >&6; }

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$sas_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o_CXX+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o_CXX=no
  $RM -r confptest 2>/dev/null
  mkdir confptest
  cd confptest
  mkdir out
  echo "$lt_simple_compile_test_code" > confptest.$ac_ext

  lt_compiler_flag="-o out/confptest2.$ac_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "confptest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS)\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$sas_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>out/confptest.err)
  ac_status=$?
  cat out/confptest.err >&5
  echo "$sas_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s out/confptest2.$ac_objext
  then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
    $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
    if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
      lt_cv_prog_compiler_c_o_CXX=yes
    fi
  fi
  chmod u+w . 2>&5
  $RM confptest*
  # SGI C++ compiler will create directory out/ii_files/ for

```

```

# template instantiation
test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r conftest
$RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o_CXX" >&5
$as_echo "$lt_cv_prog_compiler_c_o_CXX" >&6; }

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o_CXX" = no && test "$need_locks" !=
no; then
  # do not overwrite the value of need_locks provided by the user
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
  hard_links=yes
  $RM conftest*
  ln conftest.a conftest.b 2>/dev/null && hard_links=no
  touch conftest.a
  ln conftest.a conftest.b 2>&5 || hard_links=no
  ln conftest.a conftest.b 2>/dev/null && hard_links=no
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }
  if test "$hard_links" = no; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: `\$CC' does not
support \`-c -o', so `make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: `\$CC' does not support \`-c -o', so `make
-j' may be unsafe" >&2;}
    need_locks=warn
  fi
else
  need_locks=no
fi

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }

  export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED '\''s/.* //'\' | sort | uniq >
$export_symbols'
  exclude_expsyms_CXX='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'

```

```

case $host_os in
aix[4-9]*)
    # If we're using GNU nm, then we don't want the "-C" option.
    # -C means demangle to AIX nm, but means don't demangle with GNU
nm
    # Also, AIX nm treats weak defined symbols like other global
defined
    # symbols, whereas GNU nm marks them as "W".
    if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then
        export_symbols_cmds_CXX='$NM -Bpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B") || (\ $ 2 ==
"W")) && (substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
    else
        export_symbols_cmds_CXX='$NM -BCpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B")) &&
(substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
    fi
    ;;
pw32*)
    export_symbols_cmds_CXX="$ltdll_cmds"
    ;;
cygwin* | mingw* | cegcc*)
    case $cc_basename in
cl*)

exclude_expsyms_CXX='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_.*'
        ;;
*)
        export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\ ]*\)/\1
DATA;/s/^\.*[ ]__nm__\([^\ ]*\)/\1 DATA;/^I[ ]/d;/^[AITW][
]/s/.* //' '\'' | sort | uniq > $export_symbols'
    esac
    ;;
*)
    export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED '\''s/.* //' '\'' | sort | uniq >
$export_symbols'
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs_CXX" >&5
$as_echo "$ld_shlibs_CXX" >&6; }
test "$ld_shlibs_CXX" = no && can_build_shared=no

with_gnu_ld_CXX=$with_gnu_ld

```

```

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc_CXX" in
x|xyes)
    # Assume -lc should be added
    archive_cmds_need_lc_CXX=yes

    if test "$enable_shared" = yes && test "$GCC" = yes; then
        case $archive_cmds_CXX in
        *'~'*)
            # FIXME: we may have to deal with multi-command sequences.
            ;;
        '$CC '* )
            # Test whether the compiler implicitly links with -lc since on
some
            # systems, -lgcc has to come before -lc. If gcc already passes -
lc
            # to ld, don't add -lc before -lgcc.
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$as_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }
if ${lt_cv_archive_cmds_need_lc_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    $RM conftest*
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:"
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
test $ac_status = 0; } 2>conftest.err; then
        soname=conftest
        lib=conftest
        libobjs=conftest.$ac_objext
        deplibs=
        wl=$lt_prog_compiler_wl_CXX
        pic_flag=$lt_prog_compiler_pic_CXX
        compiler_flags=-v
        linker_flags=-v
        verstring=
        output_objdir=.
        libname=conftest

```

```

        lt_save_allow_undefined_flag=$allow_undefined_flag_CXX
        allow_undefined_flag_CXX=
        if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$archive_cmds_CXX 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1\""; }
>&5
        (eval $archive_cmds_CXX 2\>\&1 \|| $GREP \" -lc \" \>/dev/null
2\>\&1) 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }
        then
            lt_cv_archive_cmds_need_lc_CXX=no
        else
            lt_cv_archive_cmds_need_lc_CXX=yes
        fi
        allow_undefined_flag_CXX=$lt_save_allow_undefined_flag
    else
        cat conftest.err 1>&5
    fi
    $RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc_CXX" >&5
$as_echo "$lt_cv_archive_cmds_need_lc_CXX" >&6; }
    archive_cmds_need_lc_CXX=$lt_cv_archive_cmds_need_lc_CXX
    ;;
esac
fi
;;
esac

```

```
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }
```

```
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
```

```

finish_eval=
shlibpath_var=
shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
aix3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
    shlibpath_var=LIBPATH

    # AIX 3 has no versioning support, so we append a major version to
the name.
    soname_spec='${libname}${release}${shared_ext}$major'
    ;;

aix[4-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    hardcode_into_libs=yes
    if test "$host_cpu" = ia64; then
        # AIX 5 supports IA64
        library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'
        shlibpath_var=LD_LIBRARY_PATH
    else
        # With GCC up to 2.95.x, collect2 would create an import file
# for dependence libraries. The import file would start with
# the line `#! .'. This would cause the generated library to
# depend on `.', always an invalid library. This was fixed in
# development snapshots of GCC prior to 3.0.
        case $host_os in
aix4 | aix4.[01] | aix4.[01].*)
            if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)'
                echo ' yes '
                echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
:
            else

```

```

        can_build_shared=no
        fi
        ;;
    esac
    # AIX (on Power*) has no versioning support, so currently we can
not hardcode correct
    # soname into executable. Probably we can add versioning support
to
    # collect2, so additional links can be useful in future.
    if test "$aix_use_runtimelinking" = yes; then
        # If using run time linking (on AIX 4.2 or later) use
lib<name>.so
        # instead of lib<name>.a to let people know that these are not
        # typical AIX shared libraries.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    else
        # We preserve .a as extension for shared libraries through
AIX4.2
        # and later when we are not doing run time linking.
        library_names_spec='${libname}${release}.a $libname.a'
        soname_spec='${libname}${release}${shared_ext}$major'
    fi
    shlibpath_var=LIBPATH
fi
;;

amigaos*)
    case $host_cpu in
    powerpc)
        # Since July 2007 AmigaOS4 officially supports .so libraries.
        # When compiling the executable, add -use-dynld -Lsobjs: to the
compileline.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        ;;
    m68k)
        library_names_spec='$libname.ixlibrary $libname.a'
        # Create ${libname}_ixlibrary.a entries in /sys/libs.
        finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
'\''s^.*\/\([^\/]*\)\.ixlibrary$%\1%'\''`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
        ;;
    esac
    ;;
beos*)
    library_names_spec='${libname}${shared_ext}'
    dynamic_linker="$host_os ld.so"

```



```

shlibpath_var=LIBRARY_PATH
;;

bsdi[45]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
    sys_lib_dlsearch_path_spec="/shlib /usr/lib /usr/local/lib"
    # the default ld.so.conf also contains /usr/contrib/lib and
    # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
    # libtool to hard-code these into programs
    ;;

cygwin* | mingw* | pw32* | cegcc*)
    version_type=windows
    shrext_cmds=".dll"
    need_version=no
    need_lib_prefix=no

    case $GCC,$cc_basename in
    yes,*)
        # gcc
        library_names_spec='$libname.dll.a'
        # DLL is installed to $(libdir)/../bin by postinstall_cmds
        postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\''i; echo
\${dlname}'\''`~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dlname} \${dldir}/\${dlname}~
chmod a+x \${dldir}/\${dlname}~
if test -n '\''$striplib'\'' && test -n '\''$striplib'\''; then
    eval '\''$striplib \${dldir}/\${dlname}'\'' || exit \${?};
fi'
        postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\''`~
dlpath=$dir/\${dldll}~
$RM \${dlpath}'
        shlibpath_overrides_runpath=yes

    case $host_os in
    cygwin*)
        # Cygwin DLLs use 'cyg' prefix rather than 'lib'

```

```

    soname_spec=`echo ${libname} | sed -e 's/^lib/cyg/'``echo
${release} | $SED -e 's/[.]/-/g'`${versuffix}${shared_ext}'

    ;;
mingw* | cegcc*)
    # MinGW DLLs use traditional 'lib' prefix
    soname_spec='${libname}`echo ${release} | $SED -e 's/[.]/-
/g'`${versuffix}${shared_ext}'
    ;;
pw32*)
    # pw32 DLLs use 'pw' prefix rather than 'lib'
    library_names_spec=`echo ${libname} | sed -e 's/^lib/pw/'``echo
${release} | $SED -e 's/[.]/-/g'`${versuffix}${shared_ext}'
    ;;
esac
dynamic_linker='Win32 ld.exe'
;;

*,cl*)
# Native MSVC
libname_spec='$name'
soname_spec='${libname}`echo ${release} | $SED -e 's/[.]/-
/g'`${versuffix}${shared_ext}'
library_names_spec='${libname}.dll.lib'

case $build_os in
mingw*)
    sys_lib_search_path_spec=
    lt_save_ifs=$IFS
    IFS=';'
    for lt_path in $LIB
    do
        IFS=$lt_save_ifs
        # Let DOS variable expansion print the short 8.3 style file
name.
        lt_path=`cd "$lt_path" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si"`
        sys_lib_search_path_spec="$sys_lib_search_path_spec $lt_path"
    done
    IFS=$lt_save_ifs
    # Convert to MSYS style.
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\\\\\\\|/|g' -e 's| \\([a-zA-Z]\\\\\):| /\\1|g' -e 's|^|'|`
    ;;
cygwin*)
    # Convert to unix form, then to dos form, then back to unix form
    # but this time dos style (no spaces!) so that the unix form
looks
    # like /cygdrive/c/PROGRA~1:/cygdr...
    sys_lib_search_path_spec=`cygpath --path --unix "$LIB"``
    sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null`

```

```

        sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g"`
        ;;
    *)
        sys_lib_search_path_spec="$LIB"
        if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zC-Z]:/'
>/dev/null; then
            # It is most probably a Windows format PATH.
            sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's/;/ /g'`
            else
                sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g"`
            fi
            # FIXME: find the short name or the path components, as spaces
are
            # common. (e.g. "Program Files" -> "PROGRA~1")
            ;;
        esac

        # DLL is installed to $(libdir)/../bin by postinstall_cmds
        postinstall_cmds='base_file=`basename \${file}`~
        dlpath=`$SHELL 2>&1 -c '\''. $dir/\${base_file}'\''i; echo
\${dlname}'\''`~
        dldir=$destdir/`dirname \${dlpath}`~
        test -d \${dldir} || mkdir -p \${dldir}~
        $install_prog $dir/\${dlname} \${dldir}/\${dlname}'
        postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\''`~
        dlpath=$dir/\${dldll}~
        $RM \${dlpath}'
        shlibpath_overrides_runpath=yes
        dynamic_linker='Win32 link.exe'
        ;;
    *)
        # Assume MSVC wrapper
        library_names_spec='${libname}`echo ${release} | $SED -e 's/[.]'/-
/g'`${versuffix}${shared_ext} $libname.lib'
        dynamic_linker='Win32 ld.exe'
        ;;
    esac
    # FIXME: first we should search . and the directory the executable
is in
    shlibpath_var=PATH
    ;;
darwin* | rhapsody*)
    dynamic_linker="$host_os dyld"
    version_type=darwin
    need_lib_prefix=no
    need_version=no

```

```

    library_names_spec='${libname}${release}${major}$shared_ext
${libname}$shared_ext'
    soname_spec='${libname}${release}${major}$shared_ext'
    shlibpath_overrides_runpath=yes
    shlibpath_var=DYLD_LIBRARY_PATH
    shrext_cmds='`test ".$module" = .yes && echo .so || echo .dylib`'

    sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
    ;;

dgux*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname$shared_ext'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

freebsd* | dragonfly*)
    # DragonFly does not have a.out.  When/if they implement a new
    # versioning mechanism, adjust this.
    if test -x /usr/bin/objformat; then
        objformat=`/usr/bin/objformat`
    else
        case $host_os in
            freebsd[23].*) objformat=aout ;;
            *) objformat=elf ;;
        esac
    fi
    version_type=freebsd-$objformat
    case $version_type in
        freebsd-elf*)
            library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
            need_version=no
            need_lib_prefix=no
            ;;
        freebsd-*)
            library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname${shared_ext}$versuffix'
            need_version=yes
            ;;
    esac
    shlibpath_var=LD_LIBRARY_PATH
    case $host_os in
        freebsd2.*)
            shlibpath_overrides_runpath=yes
            ;;
        freebsd3.[01]* | freebsdelf3.[01]*)

```

```

    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    ;;
freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;
*) # from 4.6 on, and DragonFly
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    ;;
esac
;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

haiku*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
    ;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in

```

```

ia64*)
    shrext_cmds='.so'
    hardcode_into_libs=yes
    dynamic_linker="$host_os dld.so"
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    if test "X$HPUX_IA64_MODE" = X32; then
        sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
    else
        sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
    fi
    sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
hppa*64*)
    shrext_cmds='.sl'
    hardcode_into_libs=yes
    dynamic_linker="$host_os dld.sl"
    shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
    sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
*)
    shrext_cmds='.sl'
    dynamic_linker="$host_os dld.sl"
    shlibpath_var=SHLIB_PATH
    shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
    ${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

irix5* | irix6* | nonstopux*)
    case $host_os in
        nonstopux*) version_type=nonstopux ;;
        *)
            if test "$lt_cv_prog_gnu_ld" = yes; then
                version_type=linux # correct to gnu/linux during the next
big refactor
            else
                version_type=irix
            fi ;;
    esac
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
    ${libname}${release}${shared_ext}$major
    ${libname}${release}${shared_ext} $libname${shared_ext}'
    case $host_os in
        irix5* | nonstopux*)
            libsuff= shlibsuff=
            ;;
        *)
            case $LD in # libtool.m4 will add one of these switches to LD
                *-32|*" -32 " |*-melf32bsmip|*" -melf32bsmip ")
                    libsuff= shlibsuff= libmagic=32-bit;;
                *-n32|*" -n32 " |*-melf32bmipn32|*" -melf32bmipn32 ")
                    libsuff=32 shlibsuff=N32 libmagic=N32;;
                *-64|*" -64 " |*-melf64bmip|*" -melf64bmip ")
                    libsuff=64 shlibsuff=64 libmagic=64-bit;;
                *) libsuff= shlibsuff= libmagic=never-match;;
            esac
            ;;
    esac
    shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
    shlibpath_overrides_runpath=no
    sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
    /usr/local/lib${libsuff}"
    sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
    hardcode_into_libs=yes
    ;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)

```

```

dynamic_linker=no
;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
  version_type=linux # correct to gnu/linux during the next big
  refactor
  need_lib_prefix=no
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
  shlibpath_var=LD_LIBRARY_PATH
  shlibpath_overrides_runpath=no

  # Some binutils ld are patched to set DT_RUNPATH
  if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    lt_cv_shlibpath_overrides_runpath=no
    save_LDFLAGS=$LDFLAGS
    save_libdir=$libdir
    eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl_CXX\"; \
LDFLAGS=\"\${LDFLAGS} \$hardcode_libdir_flag_spec_CXX\""
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :
  if ($OBJDUMP -p conftest$ac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
    lt_cv_shlibpath_overrides_runpath=yes
  fi
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LDFLAGS=$save_LDFLAGS
libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.

```



```

# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
    lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \ $2)); skip = 1; } { if (!skip) print \ $0; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ ]*hwcap[ ]/d;s/[: , ]/
/g;s/=[^=]*$//;s/=[^= ]* / /g;s/"//g;/^$/d' | tr '\n' ' '`
    sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker. Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.
dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
        finish_cmds='PATH="\ $PATH:/sbin" ldconfig -m $libdir'
        dynamic_linker='NetBSD (a.out) ld.so'
    else
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        dynamic_linker='NetBSD ld.elf_so'
    fi
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    ;;

newsos6)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    ;;

*nto* | *qnx*)

```

```

version_type=qnx
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=no
hardcode_into_libs=yes
dynamic_linker='ldqnx.so'
;;

openbsd*)
version_type=sunos
sys_lib_dldsearch_path_spec="/usr/lib"
need_lib_prefix=no
# Some older versions of OpenBSD (3.3 at least) *do* need versioned
libs.
case $host_os in
  openbsd3.3 | openbsd3.3.*) need_version=yes ;;
  *) need_version=no ;;
esac
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
finish_cmds='PATH="$PATH:/sbin" ldconfig -m $libdir'
shlibpath_var=LD_LIBRARY_PATH
if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
  case $host_os in
    openbsd2.[89] | openbsd2.[89].*)
      shlibpath_overrides_runpath=no
      ;;
    *)
      shlibpath_overrides_runpath=yes
      ;;
  esac
else
  shlibpath_overrides_runpath=yes
fi
;;

os2*)
libname_spec='$name'
shrext_cmds=".dll"
need_lib_prefix=no
library_names_spec='$libname${shared_ext} $libname.a'
dynamic_linker='OS/2 ld.exe'
shlibpath_var=LIBPATH
;;

osf3* | osf4* | osf5*)
version_type=osf

```

```

    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
    sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
    ;;

rdos*)
    dynamic_linker=no
    ;;

solaris*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    # ldd complains unless libraries are executable
    postinstall_cmds='chmod +x $lib'
    ;;

sunos4*)
    version_type=sunos
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
    ;;

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)

```

```

        shlibpath_overrides_runpath=no
        need_lib_prefix=no
        runpath_var=LD_RUN_PATH
        ;;
siemens)
        need_lib_prefix=no
        ;;
motorola)
        need_lib_prefix=no
        need_version=no
        shlibpath_overrides_runpath=no
        sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
        ;;
esac
;;

sysv4*MP*)
    if test -d /usr/nec ;then
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='${libname}${shared_ext}.$versuffix
${libname}${shared_ext}.$major ${libname}${shared_ext}'
        soname_spec='${libname}${shared_ext}.$major'
        shlibpath_var=LD_LIBRARY_PATH
    fi
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
                ;;
        esac
    fi
    sys_lib_dlsearch_path_spec='/usr/lib'
    ;;

tpf*)

```

```

# TPF is a cross-target only. Preferred cross-host = GNU/Linux.
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=no
hardcode_into_libs=yes
;;

uts4*)
version_type=linux # correct to gnu/linux during the next big
refactor
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
shlibpath_var=LD_LIBRARY_PATH
;;

*)
dynamic_linker=no
;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then
variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec}" = set; then
sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec}" = set; then
sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking how to hardcode
library paths into programs" >&5
$as_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action_CXX=
if test -n "$hardcode_libdir_flag_spec_CXX" ||
    test -n "$runpath_var_CXX" ||
    test "X$hardcode_automatic_CXX" = "Xyes" ; then

    # We can hardcode non-existent directories.
    if test "$hardcode_direct_CXX" != no &&
        # If the only mechanism to avoid hardcoding is shlibpath_var, we
        # have to relink, otherwise we might link with an installed
library
        # when we should be linking with a yet-to-be-installed one
        ## test "$_LT_TAGVAR(hardcode_shlibpath_var, CXX)" != no &&
        test "$hardcode_minus_L_CXX" != no; then
        # Linking always hardcodes the temporary library directory.
        hardcode_action_CXX=relink
    else
        # We can link without hardcoding, and we can hardcode nonexisting
dirs.
        hardcode_action_CXX=immediate
    fi
else

```

```

# We cannot hardcode anything, or else we can only hardcode existing
# directories.
hardcode_action_CXX=unsupported
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hardcode_action_CXX"
>&5
$as_echo "$hardcode_action_CXX" >&6; }

if test "$hardcode_action_CXX" = relink ||
    test "$inherit_rpath_CXX" = yes; then
    # Fast installation is not supported
    enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
    test "$enable_shared" = no; then
    # Fast installation is not necessary
    enable_fast_install=needless
fi

fi # test -n "$compiler"

CC=$lt_save_CC
CFLAGS=$lt_save_CFLAGS
LDCXX=$LD
LD=$lt_save_LD
GCC=$lt_save_GCC
with_gnu_ld=$lt_save_with_gnu_ld
lt_cv_path_LDCXX=$lt_cv_path_LD
lt_cv_path_LD=$lt_save_path_LD
lt_cv_prog_gnu_ldcxx=$lt_cv_prog_gnu_ld
lt_cv_prog_gnu_ld=$lt_save_with_gnu_ld
fi # test "$lt_caught_CXX_error" != yes

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

```

```

ac_config_commands="$ac_config_commands libtool"

# Only expand once:

@%:@ Check whether --enable-compiler-coverage was given.
if test "${enable_compiler_coverage+set}" = set; then :
  enableval=$enable_compiler_coverage; if test
"x$enable_compiler_coverage" = "xyes"; then
    if test "x$GCC" = "xyes"; then
      CFLAGS="$CFLAGS -fprofile-arcs -ftest-coverage"
    fi
  fi
fi

@%:@ Check whether --enable-compiler-optimisations was given.
if test "${enable_compiler_optimisations+set}" = set; then :
  enableval=$enable_compiler_optimisations; if test
"x$enable_compiler_optimisations" = "xno"; then
    CFLAGS=`echo "$CFLAGS" | sed -e "s/ -O[1-9]*\b/ -O0/g"`
  fi
fi

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
    be a program name with args.
    set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_PKG_CONFIG+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      case $PKG_CONFIG in
        [\\/]*)
          ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
          with a path.
          ;;
        *)

```



```

    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
    ac_pt_PKG_CONFIG=$PKG_CONFIG
    # Extract the first word of "pkg-config", so it can be a program
name with args.
    set dummy pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        case $ac_pt_PKG_CONFIG in
        [\\/] | ?:[\\/]*)
            ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
override the test with a path.
            ;;
        *)
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do

```

```

    if as_fn_executable_p "$sas_dir/$ac_word$sac_exec_ext"; then
        ac_cv_path_ac_pt_PKG_CONFIG="$sas_dir/$ac_word$sac_exec_ext"
        $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$sac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$sas_save_IFS

;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
>&5
$zas_echo "$ac_pt_PKG_CONFIG" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$zas_echo "no" >&6; }
fi

    if test "x$ac_pt_PKG_CONFIG" = x; then
        PKG_CONFIG=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $zas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$zas_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        PKG_CONFIG=$ac_pt_PKG_CONFIG
    fi
else
    PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=0.9.0
    { $zas_echo "$sas_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
$zas_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }
    if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        { $zas_echo "$sas_me:${as_lineno-$LINENO}: result: yes" >&5
$zas_echo "yes" >&6; }
    else

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$zas_echo "no" >&6; }
        PKG_CONFIG=""
    fi

fi

# Initialize libtool

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}windres", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}windres; ac_word=$2
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$zas_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_RC+:} false; then :
        $zas_echo_n "(cached) " >&6
    else
        if test -n "$RC"; then
            ac_cv_prog_RC="$RC" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_RC="$ac_tool_prefix$windres"
                        $zas_echo "$sas_me:${as_lineno-$LINENO}: found
$zas_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

        fi
        fi
        RC=$ac_cv_prog_RC
        if test -n "$RC"; then
            { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $RC" >&5
$zas_echo "$RC" >&6; }
        else
            { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$zas_echo "no" >&6; }
        fi

    fi

fi

if test -z "$ac_cv_prog_RC"; then
    ac_ct_RC=$RC

```

```

# Extract the first word of "windres", so it can be a program name
with args.
set dummy windres; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_RC+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_RC"; then
    ac_cv_prog_ac_ct_RC="$ac_ct_RC" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_RC="windres"
      $as_echo "$sas_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_RC=$ac_cv_prog_ac_ct_RC
if test -n "$ac_ct_RC"; then
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_ct_RC" >&5
$as_echo "$ac_ct_RC" >&6; }
else
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_RC" = x; then
    RC=""
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    RC=$ac_ct_RC
  fi
else

```

```

    RC="$ac_cv_prog_RC"
fi

# Source file extension for RC test sources.
ac_ext=rc

# Object file extension for compiled RC test sources.
objext=o
objext_RC=$objext

# Code to be used in simple compile tests
lt_simple_compile_test_code='sample MENU { MENUITEM "&Soup", 100,
CHECKED }'

# Code to be used in simple link tests
lt_simple_link_test_code="$lt_simple_compile_test_code"

# ltmain only uses $CC for tagged configurations so make sure $CC is
set.

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# save warnings/boilerplate of simple test code
ac_outfile=conftest.$ac_objext
echo "$lt_simple_compile_test_code" >conftest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>conftest.err
_lt_compiler_boilerplate=`cat conftest.err`
$RM conftest*

ac_outfile=conftest.$ac_objext
echo "$lt_simple_link_test_code" >conftest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >conftest.err
_lt_linker_boilerplate=`cat conftest.err`
$RM -r conftest*

```

```

# Allow CC to be a program name with arguments.
lt_save_CC="$CC"
lt_save_CFLAGS=$CFLAGS
lt_save_GCC=$GCC
GCC=
CC=${RC-"windres"}
CFLAGS=
compiler=$CC
compiler_RC=$CC
for cc_temp in $compiler""; do
  case $cc_temp in
    compile | *[\//]compile | ccache | *[\//]ccache ) ;;
    distcc | *[\//]distcc | purify | *[\//]purify ) ;;
    \-*) ;;
    *) break;;
  esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^\$host_alias-%%"`

lt_cv_prog_compiler_c_o_RC=yes

if test -n "$compiler"; then
  :

fi

GCC=$lt_save_GCC
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

CC=$lt_save_CC
CFLAGS=$lt_save_CFLAGS

# Set some internal variables depending on the platform for later use.
dbus_win=no
dbus_cygwin=no
dbus_unix=no
case "${host}" in
  *-mingw32ce*)
    dbus_win=yes
    dbus_wince=yes
    ;;
  *-mingw32*)
    dbus_win=yes

```

```

        ;;
        *-cygwin*)
            dbus_cygwin=yes
            dbus_unix=yes
        ;;
    *)
        dbus_unix=yes
    ;;
esac

# Special defines for certain platforms
if test "$dbus_win" = yes; then

$as_echo "@%:@define DBUS_WIN 1" >>confdefs.h

        BUILD_TIMESTAMP=`date --iso-8601=minutes`

        # Assume DBUS_VERSION is always three numbers
        BUILD_FILEVERSION=`echo "$DBUS_VERSION" | sed -e 's/\./,/g'`,0

        if test -n "$ac_tool_prefix"; then
            # Extract the first word of "${ac_tool_prefix}windres", so it can be
            a program name with args.
            set dummy ${ac_tool_prefix}windres; ac_word=$2
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
            $as_echo_n "checking for $ac_word... " >&6; }
            if ${ac_cv_prog_WINDRES+:} false; then :
                $as_echo_n "(cached) " >&6
            else
                if test -n "$WINDRES"; then
                    ac_cv_prog_WINDRES="$WINDRES" # Let the user override the test.
                else
                    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                    for as_dir in $PATH
                    do
                        IFS=$as_save_IFS
                        test -z "$as_dir" && as_dir=.
                        for ac_exec_ext in '' $ac_executable_extensions; do
                            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                                ac_cv_prog_WINDRES="${ac_tool_prefix}windres"
                                $as_echo "$as_me:${as_lineno-$LINENO}: found
                                $as_dir/$ac_word$ac_exec_ext" >&5
                                break 2
                            fi
                        done
                    done
                    IFS=$as_save_IFS

                fi
                fi
            WINDRES=$ac_cv_prog_WINDRES
            if test -n "$WINDRES"; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $WINDRES" >&5
$as_echo "$WINDRES" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_WINDRES"; then
    ac_ct_WINDRES=$WINDRES
    # Extract the first word of "windres", so it can be a program name
    with args.
    set dummy windres; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_WINDRES+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$ac_ct_WINDRES"; then
            ac_cv_prog_ac_ct_WINDRES="$ac_ct_WINDRES" # Let the user override
            the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_ac_ct_WINDRES="windres"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

            fi
            fi
            ac_ct_WINDRES=$ac_cv_prog_ac_ct_WINDRES
            if test -n "$ac_ct_WINDRES"; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_WINDRES" >&5
$as_echo "$ac_ct_WINDRES" >&6; }
            else
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
            fi

            if test "x$ac_ct_WINDRES" = x; then
                WINDRES="no"
            fi
        fi
    fi

```



```

else
  case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
  WINDRES=$ac_ct_WINDRES
  fi
else
  WINDRES="$ac_cv_prog_WINDRES"
fi

  if test "$WINDRES" = no; then
    as_fn_error $? "*** Could not find an implementation of windres
in your PATH." "$LINENO" 5
  fi
  if test "$dbus_wince" = yes; then

$as_echo "@%:@define DBUS_WINCE 1" >>confdefs.h

$as_echo "@%:@define _WIN32_WCE 0x0502" >>confdefs.h

  fi
else

$as_echo "@%:@define DBUS_UNIX 1" >>confdefs.h

fi
if test "$dbus_cygwin" = yes; then

$as_echo "@%:@define DBUS_CYGWIN 1" >>confdefs.h

fi

  if test "$dbus_win" = yes; then
    DBUS_WIN_TRUE=
    DBUS_WIN_FALSE='#'
  else
    DBUS_WIN_TRUE='#'
    DBUS_WIN_FALSE=
  fi

  if test "$dbus_wince" = yes; then
    DBUS_WINCE_TRUE=
    DBUS_WINCE_FALSE='#'
  else
    DBUS_WINCE_TRUE='#'
    DBUS_WINCE_FALSE=

```

```

fi

if test "$dbus_unix" = yes; then
    DBUS_UNIX_TRUE=
    DBUS_UNIX_FALSE='#'
else
    DBUS_UNIX_TRUE='#'
    DBUS_UNIX_FALSE=
fi

if test "$dbus_cygwin" = yes; then
    DBUS_CYGWIN_TRUE=
    DBUS_CYGWIN_FALSE='#'
else
    DBUS_CYGWIN_TRUE='#'
    DBUS_CYGWIN_FALSE=
fi

# this must come first: other options use this to set their defaults
@%:@ Check whether --enable-developer was given.
if test "${enable_developer+set}" = set; then :
    enableval=$enable_developer;
else
    enable_developer=no
fi

DBUS_STATIC_BUILD_CPPFLAGS=
if test "x$enable_shared" = xno; then
    # On Windows, linking against the static library requires special
    effort
    # to turn off DLL import/export processing. We normally link some
    things
    # against the dynamic library, but if we're not building that,
    we'll
    # have to link everything statically.
    DBUS_STATIC_BUILD_CPPFLAGS=-DDBUS_STATIC_BUILD
fi

@%:@ Check whether --enable-ansi was given.
if test "${enable_ansi+set}" = set; then :
    enableval=$enable_ansi; enable_ansi=$enableval
else
    enable_ansi=no
fi

@%:@ Check whether --enable-verbose-mode was given.
if test "${enable_verbose_mode+set}" = set; then :
    enableval=$enable_verbose_mode; enable_verbose_mode=$enableval
else

```

```
    enable_verbose_mode=$enable_developer
fi

@%:@ Check whether --enable-asserts was given.
if test "${enable_asserts+set}" = set; then :
    enablelevel=$enable_asserts; enable_asserts=$enablelevel
else
    enable_asserts=$enable_developer
fi

@%:@ Check whether --enable-checks was given.
if test "${enable_checks+set}" = set; then :
    enablelevel=$enable_checks; enable_checks=$enablelevel
else
    enable_checks=yes
fi

@%:@ Check whether --enable-xml-docs was given.
if test "${enable_xml_docs+set}" = set; then :
    enablelevel=$enable_xml_docs; enable_xml_docs=$enablelevel
else
    enable_xml_docs=auto
fi

@%:@ Check whether --enable-doxygen-docs was given.
if test "${enable_doxygen_docs+set}" = set; then :
    enablelevel=$enable_doxygen_docs; enable_doxygen_docs=$enablelevel
else
    enable_doxygen_docs=auto
fi

@%:@ Check whether --enable-abstract-sockets was given.
if test "${enable_abstract_sockets+set}" = set; then :
    enablelevel=$enable_abstract_sockets;
enable_abstract_sockets=$enablelevel
else
    enable_abstract_sockets=auto
fi

@%:@ Check whether --enable-selinux was given.
if test "${enable_selinux+set}" = set; then :
    enablelevel=$enable_selinux; enable_selinux=$enablelevel
else
    enable_selinux=auto
fi

@%:@ Check whether --enable-libaudit was given.
if test "${enable_libaudit+set}" = set; then :
    enablelevel=$enable_libaudit; enable_libaudit=$enablelevel
else
    enable_libaudit=auto
fi
```

```
@%:@ Check whether --enable-dnotify was given.
if test "${enable_dnotify+set}" = set; then :
    enableval=$enable_dnotify; enable_dnotify=$enableval
else
    enable_dnotify=auto
fi

@%:@ Check whether --enable-inotify was given.
if test "${enable_inotify+set}" = set; then :
    enableval=$enable_inotify; enable_inotify=$enableval
else
    enable_inotify=auto
fi

@%:@ Check whether --enable-kqueue was given.
if test "${enable_kqueue+set}" = set; then :
    enableval=$enable_kqueue; enable_kqueue=$enableval
else
    enable_kqueue=auto
fi

@%:@ Check whether --enable-console-owner-file was given.
if test "${enable_console_owner_file+set}" = set; then :
    enableval=$enable_console_owner_file;
enable_console_owner_file=$enableval
else
    enable_console_owner_file=auto
fi

@%:@ Check whether --enable-userdb-cache was given.
if test "${enable_userdb_cache+set}" = set; then :
    enableval=$enable_userdb_cache; enable_userdb_cache=$enableval
else
    enable_userdb_cache=yes
fi

@%:@ Check whether --enable-launchd was given.
if test "${enable_launchd+set}" = set; then :
    enableval=$enable_launchd; enable_launchd=$enableval
else
    enable_launchd=auto
fi

@%:@ Check whether --enable-systemd was given.
if test "${enable_systemd+set}" = set; then :
    enableval=$enable_systemd; enable_systemd=$enableval
else
    enable_systemd=auto
fi
```

```
@%:@ Check whether --with-xml was given.
if test "${with_xml+set}" = set; then :
    withval=$with_xml;
fi
```

```
@%:@ Check whether --with-init-scripts was given.
if test "${with_init_scripts+set}" = set; then :
    withval=$with_init_scripts;
fi
```

```
@%:@ Check whether --with-session-socket-dir was given.
if test "${with_session_socket_dir+set}" = set; then :
    withval=$with_session_socket_dir;
fi
```

```
@%:@ Check whether --with-test-socket-dir was given.
if test "${with_test_socket_dir+set}" = set; then :
    withval=$with_test_socket_dir;
fi
```

```
@%:@ Check whether --with-system-pid-file was given.
if test "${with_system_pid_file+set}" = set; then :
    withval=$with_system_pid_file;
fi
```

```
@%:@ Check whether --with-system-socket was given.
if test "${with_system_socket+set}" = set; then :
    withval=$with_system_socket;
fi
```

```
@%:@ Check whether --with-console-auth-dir was given.
if test "${with_console_auth_dir+set}" = set; then :
    withval=$with_console_auth_dir;
fi
```

```
@%:@ Check whether --with-console-owner-file was given.
if test "${with_console_owner_file+set}" = set; then :
    withval=$with_console_owner_file;
fi
```

```
@%:@ Check whether --with-launchd-agent-dir was given.
if test "${with_launchd_agent_dir+set}" = set; then :
    withval=$with_launchd_agent_dir;
```

```
fi
```

```
@%:@ Check whether --with-dbus_user was given.
```

```
if test "${with_dbus_user+set}" = set; then :  
  withval=$with_dbus_user;
```

```
fi
```

```
@%:@ Check whether --with-dbus_daemon_dir was given.
```

```
if test "${with_dbus_daemon_dir+set}" = set; then :  
  withval=$with_dbus_daemon_dir;
```

```
fi
```

```
@%:@ Check whether --with-dbus_session_bus_default_address was given.
```

```
if test "${with_dbus_session_bus_default_address+set}" = set; then :  
  withval=$with_dbus_session_bus_default_address;
```

```
with_dbus_session_bus_default_address=$withval  
else
```

```
  with_dbus_session_bus_default_address=nonce-tcp:  
fi
```

```
@%:@ Check whether --enable-embedded-tests was given.
```

```
if test "${enable_embedded_tests+set}" = set; then :  
  enableval=$enable_embedded_tests;
```

```
else
```

```
  enable_embedded_tests=$enable_developer
```

```
fi
```

```
@%:@ Check whether --enable-modular-tests was given.
```

```
if test "${enable_modular_tests+set}" = set; then :  
  enableval=$enable_modular_tests;
```

```
else
```

```
  enable_modular_tests=auto
```

```
fi
```

```
# --enable-tests overrides both --enable-embedded-tests and
```

```
# --enable-modular-tests
```

```
@%:@ Check whether --enable-tests was given.
```

```
if test "${enable_tests+set}" = set; then :
```

```
  enableval=$enable_tests;
```

```
  if test "x$enableval" = xyес; then
```

```
    { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage was  
requested with --enable-tests=yes" >&5
```

```
$as_echo "$as_me: Full test coverage was requested with --enable-  
tests=yes" >&6;}
```

```
    { $as_echo "$as_me:${as_lineno-$LINENO}: This has many  
dependencies (GLib, dbus-glib, Python)" >&5
```

```
$as_echo "$as_me: This has many dependencies (GLib, dbus-glib,  
Python)" >&6;}
```

```

    fi
    enable_embedded_tests=$enableval
    enable_modular_tests=$enableval

fi

# DBUS_ENABLE_EMBEDDED_TESTS controls unit tests built in to .c files
# and also some stuff in the test/ subdir. DBUS_BUILD_TESTS was an
older
# name for this.
if test "x$enable_embedded_tests" = xyes; then
    DBUS_BUILD_TESTS_TRUE=
    DBUS_BUILD_TESTS_FALSE='#'
else
    DBUS_BUILD_TESTS_TRUE='#'
    DBUS_BUILD_TESTS_FALSE=
fi

if test "x$enable_embedded_tests" = xyes; then
    DBUS_ENABLE_EMBEDDED_TESTS_TRUE=
    DBUS_ENABLE_EMBEDDED_TESTS_FALSE='#'
else
    DBUS_ENABLE_EMBEDDED_TESTS_TRUE='#'
    DBUS_ENABLE_EMBEDDED_TESTS_FALSE=
fi

if test "x$enable_embedded_tests" = xyes; then

$as_echo "@%:@define DBUS_ENABLE_EMBEDDED_TESTS 1" >>confdefs.h

$as_echo "@%:@define DBUS_BUILD_TESTS 1" >>confdefs.h

fi

# DBUS_ENABLE_MODULAR_TESTS controls tests that work based on public
API.
# These use GTest, from GLib, because life's too short. They're
enabled by
# default (unless you don't have GLib), because they don't bloat the
library
# or binaries.

with_glib=yes

if test "x$enable_modular_tests" != xno; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GLIB" >&5
$as_echo_n "checking for GLIB... " >&6; }

```

```

if test -n "$GLIB_CFLAGS"; then
    pkg_cv_GLIB_CFLAGS="$GLIB_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"glib-2.0 >= 2.24, gio-2.0 >= 2.24\""; } >&5
        ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.24, gio-2.0 >=
2.24") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_GLIB_CFLAGS=`$PKG_CONFIG --cflags "glib-2.0 >= 2.24, gio-2.0
>= 2.24" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
if test -n "$GLIB_LIBS"; then
    pkg_cv_GLIB_LIBS="$GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"glib-2.0 >= 2.24, gio-2.0 >= 2.24\""; } >&5
        ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.24, gio-2.0 >=
2.24") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_GLIB_LIBS=`$PKG_CONFIG --libs "glib-2.0 >= 2.24, gio-2.0 >=
2.24" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi

    if test $_pkg_short_errors_supported = yes; then
        GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "glib-2.0 >= 2.24, gio-2.0 >= 2.24" 2>&1`
    else

```



```

                GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors "glib-2.0 >=
2.24, gio-2.0 >= 2.24" 2>&1`
            fi
            # Put the nasty error message in config.log where it belongs
            echo "$GLIB_PKG_ERRORS" >&5

            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
                if test "x$enable_modular_tests" = xyes; then
                    { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires GLib" >&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires GLib" >&6;}
                    as_fn_error $? "$GLIB_ERRORS" "$LINENO" 5
                else # assumed to be "auto"
                    with_glib=no
                fi
            elif test $pkg_failed = untried; then
                if test "x$enable_modular_tests" = xyes; then
                    { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires GLib" >&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires GLib" >&6;}
                    as_fn_error $? "$GLIB_ERRORS" "$LINENO" 5
                else # assumed to be "auto"
                    with_glib=no
                fi
            else
                GLIB_CFLAGS=$pkg_cv_GLIB_CFLAGS
                GLIB_LIBS=$pkg_cv_GLIB_LIBS
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
                :
            fi
            # If dbus-gmain.[ch] returned to libdbus then we wouldn't need this

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS_GLIB" >&5
$as_echo_n "checking for DBUS_GLIB... " >&6; }

if test -n "$DBUS_GLIB_CFLAGS"; then
    pkg_cv_DBUS_GLIB_CFLAGS="$DBUS_GLIB_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"dbus-glib-1\""; } >&5
($PKG_CONFIG --exists --print-errors "dbus-glib-1") 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_CFLAGS=`$PKG_CONFIG --cflags "dbus-glib-1"
2>/dev/null`

```

```

else
  pkg_failed=yes
fi
else
  pkg_failed=untried
fi
if test -n "$DBUS_GLIB_LIBS"; then
  pkg_cv_DBUS_GLIB_LIBS="$DBUS_GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
    { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-glib-1\""; } >&5
    ($PKG_CONFIG --exists --print-errors "dbus-glib-1") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_DBUS_GLIB_LIBS=`$PKG_CONFIG --libs "dbus-glib-1" 2>/dev/null`
  else
    pkg_failed=yes
  fi
else
  pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
  _pkg_short_errors_supported=yes
else
  _pkg_short_errors_supported=no
fi
  if test $_pkg_short_errors_supported = yes; then
    DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "dbus-glib-1" 2>&1`
  else
    DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors "dbus-
glib-1" 2>&1`
  fi
  # Put the nasty error message in config.log where it belongs
  echo "$DBUS_GLIB_PKG_ERRORS" >&5

  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    if test "x$enable_modular_tests" = xyes; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib"
>&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires dbus-glib" >&6;}
      as_fn_error $? "$DBUS_GLIB_ERRORS" "$LINENO" 5

```

```

        else # assumed to be "auto"
            with_glib=no
        fi
    elif test $pkg_failed = untried; then
        if test "x$enable_modular_tests" = xyes; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib"
            >&5
            $as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib" >&6;}
            as_fn_error $? "$DBUS_GLIB_ERRORS" "$LINENO" 5
        else # assumed to be "auto"
            with_glib=no
        fi
    else
        DBUS_GLIB_CFLAGS=$pkg_cv_DBUS_GLIB_CFLAGS
        DBUS_GLIB_LIBS=$pkg_cv_DBUS_GLIB_LIBS
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
        $as_echo "yes" >&6; }
        :
    fi
fi
fi
if test "x$enable_modular_tests" != xno; then

$as_echo "@%:@define DBUS_ENABLE_MODULAR_TESTS 1" >>confdefs.h

fi
if test "x$enable_modular_tests" != xno; then
    DBUS_ENABLE_MODULAR_TESTS_TRUE=
    DBUS_ENABLE_MODULAR_TESTS_FALSE='#'
else
    DBUS_ENABLE_MODULAR_TESTS_TRUE='#'
    DBUS_ENABLE_MODULAR_TESTS_FALSE=
fi

if test "x$with_glib" != xno; then

$as_echo "@%:@define DBUS_WITH_GLIB 1" >>confdefs.h

fi
if test "x$with_glib" != xno; then
    DBUS_WITH_GLIB_TRUE=
    DBUS_WITH_GLIB_FALSE='#'
else
    DBUS_WITH_GLIB_TRUE='#'
    DBUS_WITH_GLIB_FALSE=
fi

@%:@ Check whether --enable-installed-tests was given.
if test "${enable_installed_tests+set}" = set; then :

```

```

    enableval=$enable_installed_tests;
else
    enable_installed_tests=no
fi

if test "x$enable_installed_tests" = xyes; then
    DBUS_ENABLE_INSTALLED_TESTS_TRUE=
    DBUS_ENABLE_INSTALLED_TESTS_FALSE='#'
else
    DBUS_ENABLE_INSTALLED_TESTS_TRUE='#'
    DBUS_ENABLE_INSTALLED_TESTS_FALSE=
fi

if test "x$enable_tests" = xyes; then
    # full test coverage is required, Python is a hard dependency
    { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--enable-tests=yes) requires Python, dbus-python, pygobject" >&5
$as_echo "$as_me: Full test coverage (--enable-tests=yes) requires Python, dbus-python, pygobject" >&6;}

        if test -n "$PYTHON"; then
            # If the user set $PYTHON, use it and don't search something
            else.
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $PYTHON version is >= 2.6" >&5
$as_echo_n "checking whether $PYTHON version is >= 2.6... " >&6; }
                prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
                if { echo "$as_me:$LINENO: $PYTHON -c "$prog"" >&5
($PYTHON -c "$prog") >&5 2>&5
                ac_status=$?
                echo "$as_me:$LINENO: \ $? = $ac_status" >&5
                (exit $ac_status); }; then :
                    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
                else
                    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

```

```

                                as_fn_error $? "Python interpreter is too old"
"$LINENO" 5
fi
    am_display_PYTHON=$PYTHON
else
    # Otherwise, try each interpreter until we find one that
satisfies
    # VERSION.
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for a Python
interpreter with version >= 2.6" >&5
$as_echo_n "checking for a Python interpreter with version >= 2.6... "
>&6; }
if ${am_cv_pathless_PYTHON+:} false; then :
    $as_echo_n "(cached) " >&6
else

    for am_cv_pathless_PYTHON in python python2 python3 python3.3
python3.2 python3.1 python3.0 python2.7 python2.6 python2.5 python2.4
python2.3 python2.2 python2.1 python2.0 none; do
        test "$am_cv_pathless_PYTHON" = none && break
        prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
        if { echo "$as_me:$LINENO: $am_cv_pathless_PYTHON -c "$prog"" >&5
($am_cv_pathless_PYTHON -c "$prog") >&5 2>&5
ac_status=$?
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
(exit $ac_status); }; then :
            break
        fi
    done
fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_pathless_PYTHON" >&5
$as_echo "$am_cv_pathless_PYTHON" >&6; }
    # Set $PYTHON to the absolute path of $am_cv_pathless_PYTHON.
    if test "$am_cv_pathless_PYTHON" = none; then
        PYTHON=:
    else
        # Extract the first word of "$am_cv_pathless_PYTHON", so it
can be a program name with args.
set dummy $am_cv_pathless_PYTHON; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_PYTHON+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  case $PYTHON in
    [\\/* | ?:[\\/*]*)
      ac_cv_path_PYTHON="$PYTHON" # Let the user override the test with a
path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_PYTHON="$as_dir/$ac_word$ac_exec_ext"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

  ;;
esac
fi
PYTHON=$ac_cv_path_PYTHON
if test -n "$PYTHON"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PYTHON" >&5
$as_echo "$PYTHON" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  fi
  am_display_PYTHON=$am_cv_pathless_PYTHON
fi

if test "$PYTHON" = :; then
  as_fn_error $? "no suitable Python interpreter found" "$LINENO"
5
else

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON version" >&5
$as_echo_n "checking for $am_display_PYTHON version... " >&6; }
if ${am_cv_python_version+:} false; then :
  $as_echo_n "(cached) " >&6

```

```

else
  am_cv_python_version=`$PYTHON -c "import sys;
sys.stdout.write(sys.version[:3])"`
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_version" >&5
$as_echo "$am_cv_python_version" >&6; }
PYTHON_VERSION=$am_cv_python_version

PYTHON_PREFIX='${prefix}'

PYTHON_LIB_PREFIX='${libdir}'

PYTHON_EXEC_PREFIX='${exec_prefix}'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON platform" >&5
$as_echo_n "checking for $am_display_PYTHON platform... " >&6; }
if ${am_cv_python_platform+:} false; then :
  $as_echo_n "(cached) " >&6
else
  am_cv_python_platform=`$PYTHON -c "import sys;
sys.stdout.write(sys.platform)"`
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_platform" >&5
$as_echo "$am_cv_python_platform" >&6; }
PYTHON_PLATFORM=$am_cv_python_platform

# Just factor out some code duplication.
am_python_setup_sysconfig="\
import sys
# Prefer sysconfig over distutils.sysconfig, for better compatibility
# with python 3.x. See automake bug#10227.
try:
    import sysconfig
except ImportError:
    can_use_sysconfig = 0
else:
    can_use_sysconfig = 1
# Can't use sysconfig in CPython 2.7, since it's broken in
virtualenvs:
# <https://github.com/pypa/virtualenv/issues/118>
try:
    from platform import python_implementation
    if python_implementation() == 'CPython' and sys.version[:3] ==
'2.7':

```

```

        can_use_sysconfig = 0
except ImportError:
    pass"

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON script directory" >&5
$as_echo_n "checking for $am_display_PYTHON script directory... " >&6;
}
if ${am_cv_python_pythondir+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$prefix" = xNONE
  then
    am_py_prefix=$ac_default_prefix
  else
    am_py_prefix=$prefix
  fi
  am_cv_python_pythondir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('purelib',
vars={'base': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(0, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
  case $am_cv_python_pythondir in
  $am_py_prefix*)
    am__strip_prefix=`echo "$am_py_prefix" | sed 's|.|.|g'`
    am_cv_python_pythondir=`echo "$am_cv_python_pythondir" | sed
"s,^$am__strip_prefix,$PYTHON_PREFIX," `
    ;;
  *)
    case $am_py_prefix in
    /usr|/System*) ;;
    *)
am_cv_python_pythondir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
    ;;
  esac
    ;;
  esac
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_pythondir" >&5
$as_echo "$am_cv_python_pythondir" >&6; }
pythondir=$am_cv_python_pythondir

```



```

pkgpythondir=\${pythondir}/$PACKAGE

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON extension module directory" >&5
$as_echo_n "checking for $am_display_PYTHON extension module
directory... " >&6; }
if ${am_cv_python_pyexecdir+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$exec_prefix" = xNONE
  then
    am_py_exec_prefix=$am_py_prefix
  else
    am_py_exec_prefix=$exec_prefix
  fi
  am_cv_python_pyexecdir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('platlib',
vars={'platbase': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(1, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
  case $am_cv_python_pyexecdir in
  $am_py_exec_prefix*)
    am__strip_prefix=`echo "$am_py_exec_prefix" | sed 's|.|.|g'`
    am_cv_python_pyexecdir=`echo "$am_cv_python_pyexecdir" | sed
"s,^$am__strip_prefix,$PYTHON_EXEC_PREFIX,"`
    ;;
  *)
    case $am_py_exec_prefix in
    /usr|/System*) ;;
    *)
am_cv_python_pyexecdir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
    ;;
  esac
    ;;
  esac
  fi
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_pyexecdir" >&5
$as_echo "$am_cv_python_pyexecdir" >&6; }
  pyexecdir=$am_cv_python_pyexecdir

```

```

pkgpyexecdir=\${pyexecdir}/$PACKAGE

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for Python modules
for full test coverage" >&5
$as_echo_n "checking for Python modules for full test coverage... "
>&6; }
if "$PYTHON" -c "import dbus, gobject, dbus.mainloop.glib"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  as_fn_error $? "cannot import dbus, gobject, dbus.mainloop.glib
Python modules" "$LINENO" 5
fi
else
  # --enable-tests not given: do not abort if Python is missing

  if test -n "$PYTHON"; then
    # If the user set $PYTHON, use it and don't search something
    else.
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether
$PYTHON version is >= 2.6" >&5
$as_echo_n "checking whether $PYTHON version is >= 2.6... " >&6; }
    prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
    if { echo "$as_me:$LINENO: $PYTHON -c "$prog"" >&5
($PYTHON -c "$prog") >&5 2>&5
ac_status=$?
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
(exit $ac_status); }; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```

```

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
      as_fn_error $? "Python interpreter is too old"
"$LINENO" 5
fi
    am_display_PYTHON=$PYTHON
    else
      # Otherwise, try each interpreter until we find one that
satisfies
      # VERSION.
      { $as_echo "$as_me:${as_lineno-$LINENO}: checking for a Python
interpreter with version >= 2.6" >&5
$as_echo_n "checking for a Python interpreter with version >= 2.6... "
>&6; }
if ${am_cv_pathless_PYTHON+:} false; then :
  $as_echo_n "(cached) " >&6
else
  for am_cv_pathless_PYTHON in python python2 python3 python3.3
python3.2 python3.1 python3.0 python2.7 python2.6 python2.5 python2.4
python2.3 python2.2 python2.1 python2.0 none; do
    test "$am_cv_pathless_PYTHON" = none && break
    prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
    if { echo "$as_me:$LINENO: $am_cv_pathless_PYTHON -c "$prog"" >&5
($am_cv_pathless_PYTHON -c "$prog") >&5 2>&5
ac_status=$?
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
(exit $ac_status); }; then :
    break
  fi
done
fi
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_pathless_PYTHON" >&5
$as_echo "$am_cv_pathless_PYTHON" >&6; }
    # Set $PYTHON to the absolute path of $am_cv_pathless_PYTHON.
    if test "$am_cv_pathless_PYTHON" = none; then
PYTHON=:
    else
      # Extract the first word of "$am_cv_pathless_PYTHON", so it
can be a program name with args.
set dummy $am_cv_pathless_PYTHON; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5

```

```

$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_PYTHON+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $PYTHON in
    [\\/* | ?:[\\/*]*)
      ac_cv_path_PYTHON="$PYTHON" # Let the user override the test with a
path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_path_PYTHON="$as_dir/$ac_word$ac_exec_ext"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

  ;;
esac
fi
PYTHON=$ac_cv_path_PYTHON
if test -n "$PYTHON"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PYTHON" >&5
$as_echo "$PYTHON" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  fi
  am_display_PYTHON=$am_cv_pathless_PYTHON
fi

if test "$PYTHON" = :; then
:
else

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON version" >&5
$as_echo_n "checking for $am_display_PYTHON version... " >&6; }

```

```

if ${am_cv_python_version+:} false; then :
  $as_echo_n "(cached) " >&6
else
  am_cv_python_version=`$PYTHON -c "import sys;
sys.stdout.write(sys.version[:3])"`
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_version" >&5
$as_echo "$am_cv_python_version" >&6; }
PYTHON_VERSION=$am_cv_python_version

PYTHON_PREFIX='${prefix}'

PYTHON_LIB_PREFIX='${libdir}'

PYTHON_EXEC_PREFIX='${exec_prefix}'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON platform" >&5
$as_echo_n "checking for $am_display_PYTHON platform... " >&6; }
if ${am_cv_python_platform+:} false; then :
  $as_echo_n "(cached) " >&6
else
  am_cv_python_platform=`$PYTHON -c "import sys;
sys.stdout.write(sys.platform)"`
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_platform" >&5
$as_echo "$am_cv_python_platform" >&6; }
PYTHON_PLATFORM=$am_cv_python_platform

# Just factor out some code duplication.
am_python_setup_sysconfig="\
import sys
# Prefer sysconfig over distutils.sysconfig, for better compatibility
# with python 3.x. See automake bug#10227.
try:
    import sysconfig
except ImportError:
    can_use_sysconfig = 0
else:
    can_use_sysconfig = 1
# Can't use sysconfig in CPython 2.7, since it's broken in
virtualenvs:
# <https://github.com/pypa/virtualenv/issues/118>
try:
    from platform import python_implementation

```

```

    if python_implementation() == 'CPython' and sys.version[:3] ==
'2.7':
        can_use_sysconfig = 0
except ImportError:
    pass"

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON script directory" >&5
$sas_echo_n "checking for $am_display_PYTHON script directory... " >&6;
}
if ${am_cv_python_pythondir+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    if test "x$prefix" = xNONE
    then
        am_py_prefix=$ac_default_prefix
    else
        am_py_prefix=$prefix
    fi
    am_cv_python_pythondir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
    sitedir = sysconfig.get_path('purelib',
vars={'base': '$am_py_prefix'})
else:
    from distutils import sysconfig
    sitedir = sysconfig.get_python_lib(0, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
    case $am_cv_python_pythondir in
    $am_py_prefix*)
        am__strip_prefix=`echo "$am_py_prefix" | sed 's|.|.|g'`
        am_cv_python_pythondir=`echo "$am_cv_python_pythondir" | sed
"s,^$am__strip_prefix,$PYTHON_PREFIX," `
        ;;
    *)
        case $am_py_prefix in
        /usr|/System*) ;;
        *)
am_cv_python_pythondir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
        ;;
    esac
        ;;
    esac

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_pythondir" >&5
$sas_echo "$am_cv_python_pythondir" >&6; }

```

```

pythondir=$am_cv_python_pythondir

pkgpythondir=\${pythondir}/$PACKAGE

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON extension module directory" >&5
$as_echo_n "checking for $am_display_PYTHON extension module
directory... " >&6; }
if ${am_cv_python_pyexecdir+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$exec_prefix" = xNONE
  then
    am_py_exec_prefix=$am_py_prefix
  else
    am_py_exec_prefix=$exec_prefix
  fi
  am_cv_python_pyexecdir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('platlib',
vars={'platbase': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(1, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir) " ||
  echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
  case $am_cv_python_pyexecdir in
  $am_py_exec_prefix*)
    am__strip_prefix=`echo "$am_py_exec_prefix" | sed 's|.|.|g'`
    am_cv_python_pyexecdir=`echo "$am_cv_python_pyexecdir" | sed
"s,^$am__strip_prefix,$PYTHON_EXEC_PREFIX,"`
    ;;
  *)
    case $am_py_exec_prefix in
    /usr|/System*) ;;
    *)
am_cv_python_pyexecdir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
        ;;
    esac
        ;;
    esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_pyexecdir" >&5
$as_echo "$am_cv_python_pyexecdir" >&6; }

```

```
pyexecdir=$am_cv_python_pyexecdir

pkgpyexecdir=\${pyexecdir}/$PACKAGE

fi

fi

if test x$enable_verbose_mode = xyes; then
$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h
fi

if test x$enable_asserts = xno; then
$as_echo "@%:@define DBUS_DISABLE_ASSERT 1" >>confdefs.h

    DISABLE_UNUSED_WARNINGS="unused-label"
    R_DYNAMIC_LDFLAG=""
else
    # -rdynamic is needed for glibc's backtrace_symbols to work.
    # No clue how much overhead this adds, but it's useful
    # to do this on any assertion failure,
    # so for now it's enabled anytime asserts are (currently not
    # in production builds).

    # To get -rdynamic you pass -export-dynamic to libtool.
$as_echo "@%:@define DBUS_BUILT_R_DYNAMIC 1" >>confdefs.h

    R_DYNAMIC_LDFLAG=-export-dynamic
fi

if test x$enable_checks = xno; then
$as_echo "@%:@define DBUS_DISABLE_CHECKS 1" >>confdefs.h

$as_echo "@%:@define G_DISABLE_CHECKS 1" >>confdefs.h

    DISABLE_UNUSED_WARNINGS="unused-label"
fi

if test x$enable_userdb_cache = xyes; then
```



```

$as_echo "@%:@define DBUS_ENABLE_USERDB_CACHE 1" >>confdefs.h

fi

if test x$enable_compiler_coverage = xyes; then
    ## so that config.h changes when you toggle gcov support

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_GCOV_ENABLED 1
_ACEOF

fi

# glibc21.m4 serial 3

# Test for the GNU C Library, version 2.1 or newer.
# From Bruno Haible.

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C Library 2.1 or newer" >&5
$as_echo_n "checking whether we are using the GNU C Library 2.1 or
newer... " >&6; }
if ${ac_cv_gnu_library_2_1+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <features.h>
#ifdef __GNU_LIBRARY__
  #if ((__GLIBC__ == 2 && __GLIBC_MINOR__ >= 1) || (__GLIBC__ > 2))
    Lucky GNU user
  #endif
#endif

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "Lucky GNU user" >/dev/null 2>&1; then :
  ac_cv_gnu_library_2_1=yes
else
  ac_cv_gnu_library_2_1=no
fi
rm -f conftest*

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_gnu_library_2_1" >&5
$as_echo "$ac_cv_gnu_library_2_1" >&6; }

#### Integer sizes

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of char" >&5
$as_echo_n "checking size of char... " >&6; }
if ${ac_cv_sizeof_char+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (char))"
"ac_cv_sizeof_char" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_char" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (char)
See `config.log' for more details" "$LINENO" 5; }
    else
      ac_cv_sizeof_char=0
    fi
  fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_char"
>&5
$as_echo "$ac_cv_sizeof_char" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_CHAR $ac_cv_sizeof_char
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of short" >&5
$as_echo_n "checking size of short... " >&6; }
if ${ac_cv_sizeof_short+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (short))"
"ac_cv_sizeof_short" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_short" = yes; then

```

```

        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`${ac_pwd}:"
>&5
$as_echo "$as_me: error: in \`${ac_pwd}:" >&2;}
as_fn_error 77 "cannot compute sizeof (short)
See \`${config.log}' for more details" "$LINENO" 5; }
    else
        ac_cv_sizeof_short=0
    fi
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_short"
>&5
$as_echo "$ac_cv_sizeof_short" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_SHORT $ac_cv_sizeof_short
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of long" >&5
$as_echo_n "checking size of long... " >&6; }
if ${ac_cv_sizeof_long+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (long))"
"ac_cv_sizeof_long" "$ac_includes_default"; then :

else
    if test "$ac_cv_type_long" = yes; then
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`${ac_pwd}:"
>&5
$as_echo "$as_me: error: in \`${ac_pwd}:" >&2;}
as_fn_error 77 "cannot compute sizeof (long)
See \`${config.log}' for more details" "$LINENO" 5; }
        else
            ac_cv_sizeof_long=0
        fi
    fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_long"
>&5
$as_echo "$ac_cv_sizeof_long" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_LONG $ac_cv_sizeof_long
_ACEOF

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of int" >&5
$as_echo_n "checking size of int... " >&6; }
if ${ac_cv_sizeof_int+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (int))"
"ac_cv_sizeof_int" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_int" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
>&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (int)
See \`config.log' for more details" "$LINENO" 5; }
    else
      ac_cv_sizeof_int=0
    fi
  fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_int"
>&5
$as_echo "$ac_cv_sizeof_int" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_INT $ac_cv_sizeof_int
_ACEOF

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of void *" >&5
$as_echo_n "checking size of void *... " >&6; }
if ${ac_cv_sizeof_void_p+:} false; then :
  $as_echo_n "(cached) " >&6
else

```

```

    if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (void *))"
"ac_cv_sizeof_void_p" "$ac_includes_default"; then :

else
    if test "$ac_cv_type_void_p" = yes; then
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (void *)"
See `config.log' for more details" "$LINENO" 5; }
        else
            ac_cv_sizeof_void_p=0
        fi
    fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_void_p"
>&5
$as_echo "$ac_cv_sizeof_void_p" >&6; }

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_VOID_P $ac_cv_sizeof_void_p
_ACEOF

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of long long"
>&5
$as_echo_n "checking size of long long... " >&6; }
if ${ac_cv_sizeof_long_long+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (long long))"
"ac_cv_sizeof_long_long" "$ac_includes_default"; then :

else
    if test "$ac_cv_type_long_long" = yes; then
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (long long)"
See `config.log' for more details" "$LINENO" 5; }
        else
            ac_cv_sizeof_long_long=0
        fi
    fi

fi

```

```

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$ac_cv_sizeof_long_long" >&5
$as_echo "$ac_cv_sizeof_long_long" >&6; }

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_LONG_LONG $ac_cv_sizeof_long_long
_ACEOF

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking size of __int64" >&5
$as_echo_n "checking size of __int64... " >&6; }
if ${ac_cv_sizeof__int64+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (__int64))"
"ac_cv_sizeof__int64" "$ac_includes_default"; then :

else
  if test "$ac_cv_type__int64" = yes; then
    { { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: in \`${ac_pwd}':"
>&5
$as_echo "$sas_me: error: in \`${ac_pwd}':" >&2;}
as_fn_error 77 "cannot compute sizeof (__int64)
See \`${config.log}' for more details" "$LINENO" 5; }
  else
    ac_cv_sizeof__int64=0
  fi
fi

fi

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$ac_cv_sizeof__int64" >&5
$as_echo "$ac_cv_sizeof__int64" >&6; }

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF___INT64 $ac_cv_sizeof__int64
_ACEOF

@%:@ Check whether --with-64-bit was given.
if test "${with_64_bit+set}" = set; then :

```

```

    withval=$with_64_bit;
else
    with_64_bit=yes
fi

### See what our 64 bit type is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 64-bit integer type"
>&5
$as_echo_n "checking 64-bit integer type... " >&6; }

case 8 in
$ac_cv_sizeof_int)
    dbusint64=int
    dbusint64_constant='(val) '
    dbusuint64_constant='(val) '
    dbusint64_printf_modifier='""'
    ;;
$ac_cv_sizeof_long)
    dbusint64=long
    dbusint64_constant='(val##L) '
    dbusuint64_constant='(val##UL) '
    dbusint64_printf_modifier='"l"'
    ;;
$ac_cv_sizeof_long_long)
    dbusint64='long long'
    dbusint64_constant='(val##LL) '
    dbusuint64_constant='(val##ULL) '
    # Ideally we discover what the format is, but this is
    # only used in verbose mode, so eh...
    if test x"$ac_cv_gnu_library_2_1" = xyes; then
        dbusint64_printf_modifier='"ll"'
    fi
    ;;
$ac_cv_sizeof__int64)
    dbusint64=__int64
    dbusint64_constant='(val##i64) '
    dbusuint64_constant='(val##ui64) '
    # See above case
    if test x"$ac_cv_gnu_library_2_1" = xyes; then
        dbusint64_printf_modifier='"ll"'
    fi
    ;;
esac

if test "x$with_64_bit" = xno; then :

    DBUS_INT64_TYPE="no_int64_type_detected"
    DBUS_HAVE_INT64=0
    DBUS_INT64_CONSTANT=
    DBUS_UINT64_CONSTANT=

```

```
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: disabled via
--without-64-bit" >&5
$as_echo "disabled via --without-64-bit" >&6; }
```

```
elif test -z "$dbusint64"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not found" >&5
$as_echo "not found" >&6; }
  as_fn_error $? "Could not find a 64-bit integer type.
```

Please report a bug here with details of your platform and compiler:

http://bugs.freedesktop.org/enter_bug.cgi?product=DBus&component=core

To compile D-Bus with all 64-bit integer types removed (not recommended), use the option "--without-64-bit".

This option is likely to be removed in future, unless you report that your platform needs it." "\$LINENO" 5

else

```
        DBUS_INT64_TYPE="$dbusint64"
        DBUS_HAVE_INT64=1
        DBUS_INT64_CONSTANT="$dbusint64_constant"
        DBUS_UINT64_CONSTANT="$dbusuint64_constant"
        if test x"$dbusint64_printf_modifier" != x; then
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_INT64_PRINTF_MODIFIER $dbusint64_printf_modifier
_ACEOF
```

```
        fi
        { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT64_TYPE" >&5
$as_echo "$DBUS_INT64_TYPE" >&6; }
```

fi

```
### see what 32-bit int is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 32-bit integer type"
>&5
$as_echo_n "checking 32-bit integer type... " >&6; }
```

case 4 in


```

$ac_cv_sizeof_short)
    dbusint32=short
    ;;
$ac_cv_sizeof_int)
    dbusint32=int
    ;;
$ac_cv_sizeof_long)
    dbusint32=long
    ;;
esac

if test -z "$dbusint32" ; then
    DBUS_INT32_TYPE="no_int32_type_detected"
    as_fn_error $? "No 32-bit integer type found" "$LINENO" 5
else
    DBUS_INT32_TYPE="$dbusint32"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT32_TYPE" >&5
$as_echo "$DBUS_INT32_TYPE" >&6; }
fi

### see what 16-bit int is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 16-bit integer type"
>&5
$as_echo_n "checking 16-bit integer type... " >&6; }

case 2 in
$ac_cv_sizeof_short)
    dbusint16=short
    ;;
$ac_cv_sizeof_int)
    dbusint16=int
    ;;
esac

if test -z "$dbusint16" ; then
    DBUS_INT16_TYPE="no_int16_type_detected"
    as_fn_error $? "No 16-bit integer type found" "$LINENO" 5
else
    DBUS_INT16_TYPE="$dbusint16"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT16_TYPE" >&5
$as_echo "$DBUS_INT16_TYPE" >&6; }
fi

## byte order
case $host_os in
    darwin*)

```

```

        # check at compile-time, so that it is possible to build
universal
        # (with multiple architectures at once on the compile line)

        ;;
    *)
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether
byte ordering is bigendian" >&5
$sas_echo_n "checking whether byte ordering is bigendian... " >&6; }
if ${ac_cv_c_bigendian+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    ac_cv_c_bigendian=unknown
    # See if we're dealing with a universal compiler.
    cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#ifdef __APPLE_CC__
    not a universal capable compiler
#endif
    typedef int dummy;

_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :

    # Check for potential -arch flags. It is not universal unless
    # there are at least two -arch flags with different values.
    ac_arch=
    ac_prev=
    for ac_word in $CC $CFLAGS $CPPFLAGS $LDFLAGS; do
        if test -n "$ac_prev"; then
            case $ac_word in
                i?86 | x86_64 | ppc | ppc64)
                    if test -z "$ac_arch" || test "$ac_arch" = "$ac_word";
then
                        ac_arch=$ac_word
                    else
                        ac_cv_c_bigendian=universal
                    break
                fi
            ;;
        esac
        ac_prev=
        elif test "x$ac_word" = "x-arch"; then
            ac_prev=arch
        fi
    done

fi
rm -f core conftest.err conftest.$sas_objext conftest.$sas_ext
if test $ac_cv_c_bigendian = unknown; then
    # See if sys/param.h defines the BYTE_ORDER macro.
    cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */

```

```

#include <sys/types.h>
        #include <sys/param.h>

int
main ()
{
#if ! (defined BYTE_ORDER && defined BIG_ENDIAN \
        && defined LITTLE_ENDIAN && BYTE_ORDER && BIG_ENDIAN \
        && LITTLE_ENDIAN)
        bogus endian macros
#endif

        ;
        return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    # It does; now see whether it defined to BIG_ENDIAN or not.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <sys/types.h>
        #include <sys/param.h>

int
main ()
{
#if BYTE_ORDER != BIG_ENDIAN
        not big endian
#endif

        ;
        return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_c_bigendian=yes
else
    ac_cv_c_bigendian=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
    if test $ac_cv_c_bigendian = unknown; then
        # See if <limits.h> defines _LITTLE_ENDIAN or _BIG_ENDIAN (e.g.,
Solaris).
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <limits.h>

int
main ()

```

```

{
#if ! (defined _LITTLE_ENDIAN || defined _BIG_ENDIAN)
    bogus endian macros
#endif

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    # It does; now see whether it defined to _BIG_ENDIAN or not.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <limits.h>

int
main ()
{
#ifdef _BIG_ENDIAN
    not big endian
#endif

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_c_bigendian=yes
else
    ac_cv_c_bigendian=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
if test $ac_cv_c_bigendian = unknown; then
    # Compile a test program.
    if test "$cross_compiling" = yes; then :
        # Try to guess by grepping values from an object file.
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
short int ascii_mm[] =
    { 0x4249, 0x4765, 0x6E44, 0x6961, 0x6E53, 0x7953, 0 };
short int ascii_ii[] =
    { 0x694C, 0x5454, 0x656C, 0x6E45, 0x6944, 0x6E61, 0 };
int use_ascii (int i) {
    return ascii_mm[i] + ascii_ii[i];
}
short int ebcdic_ii[] =
    { 0x89D3, 0xE3E3, 0x8593, 0x95C5, 0x89C4, 0x9581, 0 };
short int ebcdic_mm[] =
    { 0xC2C9, 0xC785, 0x95C4, 0x8981, 0x95E2, 0xA8E2, 0 };

```

```

        int use_ebcdic (int i) {
            return ebcdic_mm[i] + ebcdic_ii[i];
        }
extern int foo;

int
main ()
{
return use_ascii (foo) == use_ebcdic (foo);
;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    if grep BiGEnDianSyS conftest.$ac_objext >/dev/null; then
        ac_cv_c_bigendian=yes
    fi
    if grep LiTTleEnDian conftest.$ac_objext >/dev/null ; then
        if test "$ac_cv_c_bigendian" = unknown; then
            ac_cv_c_bigendian=no
        else
            # finding both strings is unlikely to happen, but who
knows?
            ac_cv_c_bigendian=unknown
        fi
    fi
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$ac_includes_default
int
main ()
{

        /* Are we little or big endian?  From Harbison&Steele.  */
        union
        {
            long int l;
            char c[sizeof (long int)];
        } u;
        u.l = 1;
        return u.c[sizeof (long int) - 1] == 1;

;
return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    ac_cv_c_bigendian=no
else

```

```

    ac_cv_c_bigendian=yes
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_c_bigendian"
>&5
$as_echo "$ac_cv_c_bigendian" >&6; }
case $ac_cv_c_bigendian in #(
    yes)
    $as_echo "@%:@define WORDS_BIGENDIAN 1" >>confdefs.h
;; #(
    no)
    ;; #(
    universal)

$as_echo "@%:@define AC_APPLE_UNIVERSAL_BUILD 1" >>confdefs.h

    ;; #(
    *)
    as_fn_error $? "unknown endianness
presetting ac_cv_c_bigendian=no (or yes) will help" "$LINENO" 5 ;;
esac

    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for an
implementation of va_copy()" >&5
$as_echo_n "checking for an implementation of va_copy()... " >&6; }
if ${dbus_cv_va_copy+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$sac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdlib.h>
    static void f (int i, ...) {
    va_list args1, args2;
    va_start (args1, i);
    va_copy (args2, args1);
    if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
        exit (1);
    va_end (args1); va_end (args2);
    }
    int main() {
        f (0, 42);
        return 0;

```

```

    }
__ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_cv_va_copy=yes
else
    dbus_cv_va_copy=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv_va_copy" >&5
$as_echo "$dbus_cv_va_copy" >&6; }
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for an
implementation of __va_copy()" >&5
$as_echo_n "checking for an implementation of __va_copy()... " >&6; }
if ${dbus_cv__va_copy+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<__ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdlib.h>
    static void f (int i, ...) {
        va_list args1, args2;
        va_start (args1, i);
        __va_copy (args2, args1);
        if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
            exit (1);
        va_end (args1); va_end (args2);
    }
    int main() {
        f (0, 42);
        return 0;
    }
__ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_cv__va_copy=yes
else
    dbus_cv__va_copy=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv__va_copy"
>&5
$as_echo "$dbus_cv__va_copy" >&6; }

if test "x$dbus_cv_va_copy" = "xyes"; then
    dbus_va_copy_func=va_copy

```

```

else if test "x$dbus_cv___va_copy" = "xyes"; then
    dbus_va_copy_func=___va_copy
fi
fi

if test -n "$dbus_va_copy_func"; then

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_VA_COPY $dbus_va_copy_func
_ACEOF

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether va_lists can
be copied by value" >&5
$as_echo_n "checking whether va_lists can be copied by value... " >&6;
}
if ${dbus_cv_va_val_copy+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test "$cross_compiling" = yes; then :
        dbus_cv_va_val_copy=yes
    else
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

        #include <stdarg.h>
        #include <stdlib.h>

int
main ()
{

    static void f (int i, ...) {
        va_list args1, args2;
        va_start (args1, i);
        args2 = args1;
        if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
            exit (1);
        va_end (args1); va_end (args2);
    }
    int main() {
        f (0, 42);
        return 0;
    }
}

```



```

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    dbus_cv_va_val_copy=yes
else
    dbus_cv_va_val_copy=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv_va_val_copy"
>&5
$as_echo "$dbus_cv_va_val_copy" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$sac_ext >&5'
ac_link='$CC -o conftest$sac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$sac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test "x$dbus_cv_va_val_copy" = "xno"; then

$as_echo "@%:@define DBUS_VA_COPY_AS_ARRAY 1" >>confdefs.h

fi

#### Atomic integers

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC knows
__sync_sub_and_fetch()" >&5
$as_echo_n "checking whether $CC knows __sync_sub_and_fetch()... "
>&6; }
if ${dbus_cv_sync_sub_and_fetch+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$sac_ext
/* end confdefs.h. */

int
main ()
{
int a = 4; int b = __sync_sub_and_fetch(&a, 4); exit(b);
;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_cv_sync_sub_and_fetch=yes
else
    dbus_cv_sync_sub_and_fetch=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_cv_sync_sub_and_fetch" >&5
$as_echo "$dbus_cv_sync_sub_and_fetch" >&6; }

if test "x$dbus_cv_sync_sub_and_fetch" = "xyes" ; then
    have_sync=1
else
    have_sync=0
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_USE_SYNC $have_sync
_ACEOF

#### Various functions
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing socket" >&5
$as_echo_n "checking for library containing socket... " >&6; }
if ${ac_cv_search_socket+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char socket ();
int
main ()
{
return socket ();
;
return 0;

```

```

}
_ACEOF
for ac_lib in ' socket network; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_socket=$ac_res
  fi
  rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
  if ${ac_cv_search_socket+:} false; then :
    break
  fi
done
if ${ac_cv_search_socket+:} false; then :

else
  ac_cv_search_socket=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_search_socket"
>&5
$as_echo "$ac_cv_search_socket" >&6; }
ac_res=$ac_cv_search_socket
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

ac_fn_c_check_func "$LINENO" "gethostbyname"
"ac_cv_func_gethostbyname"
if test "x$ac_cv_func_gethostbyname" = xyes; then :

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for gethostbyname
in -lnsl" >&5
$as_echo_n "checking for gethostbyname in -lnsl... " >&6; }
if ${ac_cv_lib_nsl_gethostbyname+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lnsl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.

```

```

    Use char because int might match the return type of a GCC
    builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();
int
main ()
{
return gethostbyname ();
    ;
    return 0;
}
__ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_nsl_gethostbyname=yes
else
    ac_cv_lib_nsl_gethostbyname=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest.$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_nsl_gethostbyname" >&5
$as_echo "$ac_cv_lib_nsl_gethostbyname" >&6; }
if test "x$ac_cv_lib_nsl_gethostbyname" = xyes; then :
    cat >>confdefs.h <<__ACEOF
@%:@define HAVE_LIBNSL 1
__ACEOF

    LIBS="-lnsl $LIBS"

fi

fi

for ac_func in vsnprintf vasprintf nanosleep usleep setenv clearenv
unsetenv socketpair getgrouplist fpathconf setrlimit poll setlocale
localeconv strtoll strtoull issetugid getresuid
do :
    as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\${$as_ac_var}\" = x\"yes\"; then :
    cat >>confdefs.h <<__ACEOF
@%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1
__ACEOF

fi
done

```

```

for ac_header in syslog.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "syslog.h"
"ac_cv_header_syslog_h" "$ac_includes_default"
if test "x$ac_cv_header_syslog_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYSLOG_H 1
_ACEOF

fi

done

if test "x$ac_cv_header_syslog_h" = "xyes"; then
    ac_fn_c_check_decl "$LINENO" "LOG_PERROR"
"ac_cv_have_decl_LOG_PERROR" "#include <syslog.h>"
"
if test "x$ac_cv_have_decl_LOG_PERROR" = xyes; then :
    ac_have_decl=1
else
    ac_have_decl=0
fi

cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DECL_LOG_PERROR $ac_have_decl
_ACEOF

fi

#### Check for broken poll; taken from Glib's configure

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for broken poll" >&5
$as_echo_n "checking for broken poll... " >&6; }
if test "$cross_compiling" = yes; then :
    broken_poll="no (cross compiling)"
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <stdlib.h>
#include <fcntl.h>
#include <poll.h>
#ifdef HAVE_SYS_POLL_H
#include <sys/poll.h>
#endif
int main(void) {
    struct pollfd fds[1];
    int fd;
    fd = open("/dev/null", 1);
    fds[0].fd = fd;
    fds[0].events = POLLIN;

```

```

        fds[0].revents = 0;
        if (poll(fds, 1, 0) < 0 || (fds[0].revents & POLLNVAL) != 0) {
            exit(1); /* Does not work for devices -- fail */
        }
        exit(0);
    }
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    broken_poll=no
else
    broken_poll=yes

$as_echo "@%:@define BROKEN_POLL 1" >>confdefs.h

fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $broken_poll" >&5
$as_echo "$broken_poll" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for dirfd" >&5
$as_echo_n "checking for dirfd... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$sac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <dirent.h>

int
main ()
{

DIR *dirp;
dirp = opendir(".");
dirfd(dirp);
closedir(dirp);

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_have_dirfd=yes
else
    dbus_have_dirfd=no
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_dirfd" >&5
$as_echo "$dbus_have_dirfd" >&6; }

```

```

if test "$dbus_have_dirfd" = yes; then

$as_echo "@%:@define HAVE_DIRFD 1" >>confdefs.h

else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for DIR *dirp-
>dd_fd" >&5
$as_echo_n "checking for DIR *dirp->dd_fd... " >&6; }
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <dirent.h>

int
main ()
{

DIR *dirp;
int fd;
dirp = opendir(".");
fd = dirp->dd_fd;
closedir(dirp);

;
return 0;
}
ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_have_ddfd=yes
else
    dbus_have_ddfd=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_ddfd"
>&5
$as_echo "$dbus_have_ddfd" >&6; }
    if test "$dbus_have_ddfd" = yes; then

$as_echo "@%:@define HAVE_DDFD 1" >>confdefs.h

    fi
fi

for ac_header in sys/resource.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "sys/resource.h"
"ac_cv_header_sys_resource_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_resource_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_RESOURCE_H 1

```

```

_ACEOF

fi

done

for ac_header in dirent.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "dirent.h"
"ac_cv_header_dirent_h" "$ac_includes_default"
if test "x$ac_cv_header_dirent_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DIRENT_H 1
_ACEOF

fi

done

for ac_header in execinfo.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "execinfo.h"
"ac_cv_header_execinfo_h" "$ac_includes_default"
if test "x$ac_cv_header_execinfo_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXECINFO_H 1
_ACEOF
    for ac_func in backtrace
do :
        ac_fn_c_check_func "$LINENO" "backtrace" "ac_cv_func_backtrace"
if test "x$ac_cv_func_backtrace" = xyes; then :
            cat >>confdefs.h <<_ACEOF
@%:@define HAVE_BACKTRACE 1
_ACEOF

fi
done

fi

done

for ac_header in errno.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "errno.h"
"ac_cv_header_errno_h" "$ac_includes_default"
if test "x$ac_cv_header_errno_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_ERRNO_H 1

```



```
_ACEOF

fi

done

for ac_header in signal.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "signal.h"
    "ac_cv_header_signal_h" "$ac_includes_default"
    if test "x$ac_cv_header_signal_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SIGNAL_H 1
    _ACEOF

fi

done

for ac_header in locale.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "locale.h"
    "ac_cv_header_locale_h" "$ac_includes_default"
    if test "x$ac_cv_header_locale_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_LOCALE_H 1
    _ACEOF

fi

done

for ac_header in byteswap.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "byteswap.h"
    "ac_cv_header_byteswap_h" "$ac_includes_default"
    if test "x$ac_cv_header_byteswap_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_BYTESWAP_H 1
    _ACEOF

fi

done

for ac_header in unistd.h
do :
```

```

    ac_fn_c_check_header_mongrel "$LINENO" "unistd.h"
"ac_cv_header_unistd_h" "$ac_includes_default"
if test "x$ac_cv_header_unistd_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_UNISTD_H 1
_ACEOF

fi

done

for ac_header in ws2tcpip.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "ws2tcpip.h"
"ac_cv_header_ws2tcpip_h" "$ac_includes_default"
if test "x$ac_cv_header_ws2tcpip_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_WS2TCPIP_H 1
_ACEOF

fi

done

for ac_header in wsapi.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "wsapi.h"
"ac_cv_header_wsapi_h" "$ac_includes_default"
if test "x$ac_cv_header_wsapi_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_WSAPI_H 1
_ACEOF

fi

done

# Add -D_POSIX_PTHREAD_SEMANTICS if on Solaris
#
case $host_os in
    solaris*)
        CFLAGS="$CFLAGS -D_POSIX_PTHREAD_SEMANTICS" ;;
esac

# checking for a posix version of getpwnam_r
# if we are cross compiling and can not run the test
# assume getpwnam_r is the posix version
# it is up to the person cross compiling to change
# this behavior if desired

```

```

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for posix
getpwnam_r" >&5
$as_echo_n "checking for posix getpwnam_r... " >&6; }
if ${ac_cv_func_posix_getpwnam_r+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    ac_cv_func_posix_getpwnam_r=yes

else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <errno.h>
#include <pwd.h>

int
main ()
{

  char buffer[10000];
  struct passwd pwd, *pwptr = &pwd;
  int error;
  errno = 0;
  error = getpwnam_r ("", &pwd, buffer,
                    sizeof (buffer), &pwptr);
  return (error < 0 && errno == ENOSYS)
    || error == ENOSYS;

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
  ac_cv_func_posix_getpwnam_r=yes
else
  ac_cv_func_posix_getpwnam_r=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
  conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_func_posix_getpwnam_r" >&5

```

```

$as_echo "$ac_cv_func_posix_getpwnam_r" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test "$ac_cv_func_posix_getpwnam_r" = yes; then

$as_echo "@%:@define HAVE_POSIX_GETPWNAM_R 1" >>confdefs.h

else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for nonposix
getpwnam_r" >&5
$as_echo_n "checking for nonposix getpwnam_r... " >&6; }
if ${ac_cv_func_nonposix_getpwnam_r+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <pwd.h>
int
main ()
{
char buffer[10000];

                                struct passwd pwd;
                                getpwnam_r ("", &pwd, buffer,
                                                sizeof (buffer));

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_func_nonposix_getpwnam_r=yes
else
    ac_cv_func_nonposix_getpwnam_r=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_func_nonposix_getpwnam_r" >&5
$as_echo "$ac_cv_func_nonposix_getpwnam_r" >&6; }
    if test "$ac_cv_func_nonposix_getpwnam_r" = yes; then

$as_echo "@%:@define HAVE_NONPOSIX_GETPWNAM_R 1" >>confdefs.h

    fi
fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether socklen_t is
defined" >&5
$sas_echo_n "checking whether socklen_t is defined... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>

int
main ()
{

socklen_t foo;
foo = 1;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
dbus_have_socklen_t=yes
else
dbus_have_socklen_t=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $dbus_have_socklen_t"
>&5
$sas_echo "$dbus_have_socklen_t" >&6; }

if test "x$dbus_have_socklen_t" = "xyes"; then

$sas_echo "@%:@define HAVE_SOCKLEN_T 1" >>confdefs.h

fi

for ac_header in sys/uio.h
do :
ac_fn_c_check_header_mongrel "$LINENO" "sys/uio.h"
"ac_cv_header_sys_uio_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_uio_h" = xyes; then :
cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_UIO_H 1
_ACEOF
for ac_func in writev
do :
ac_fn_c_check_func "$LINENO" "writev" "ac_cv_func_writev"
if test "x$ac_cv_func_writev" = xyes; then :
cat >>confdefs.h <<_ACEOF
@%:@define HAVE_WRITEV 1
_ACEOF

```

```
fi
done
```

```
fi
```

```
done
```

```
for ac_header in sys/syslimits.h
```

```
do :
```

```
  ac_fn_c_check_header_mongrel "$LINENO" "sys/syslimits.h"
```

```
"ac_cv_header_sys_syslimits_h" "$ac_includes_default"
```

```
if test "x$ac_cv_header_sys_syslimits_h" = xyes; then :
```

```
  cat >>confdefs.h <<_ACEOF
```

```
@%:@define HAVE_SYS_SYSLIMITS_H 1
```

```
_ACEOF
```

```
fi
```

```
done
```

```
ac_fn_c_check_decl "$LINENO" "MSG_NOSIGNAL"
```

```
"ac_cv_have_decl_MSG_NOSIGNAL" " #include <sys/types.h>
```

```
#include <sys/socket.h>
```

```
"
```

```
if test "x$ac_cv_have_decl_MSG_NOSIGNAL" = xyes; then :
```

```
  ac_have_decl=1
```

```
else
```

```
  ac_have_decl=0
```

```
fi
```

```
cat >>confdefs.h <<_ACEOF
```

```
@%:@define HAVE_DECL_MSG_NOSIGNAL $ac_have_decl
```

```
_ACEOF
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for ISO C99 varargs  
macros in C" >&5
```

```
$as_echo_n "checking for ISO C99 varargs macros in C... " >&6; }
```

```
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
```

```
/* end confdefs.h. */
```

```
int
```

```
main ()
```

```
{
```

```
int a(int p1, int p2, int p3);
```

```
#define call_a(...) a(1, __VA_ARGS__)
```

```
call_a(2, 3);
```

```

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    dbus_have_iso_c_varargs=yes
else
    dbus_have_iso_c_varargs=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_iso_c_varargs" >&5
$as_echo "$dbus_have_iso_c_varargs" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNUC varargs
macros" >&5
$as_echo_n "checking for GNUC varargs macros... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

int a(int p1, int p2, int p3);
#define call_a(params...) a(1,params)
call_a(2,3);

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    dbus_have_gnuc_varargs=yes
else
    dbus_have_gnuc_varargs=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_gnuc_varargs" >&5
$as_echo "$dbus_have_gnuc_varargs" >&6; }

if test x$dbus_have_iso_c_varargs = xyes; then

$as_echo "@%:@define HAVE_ISO_VARARGS 1" >>confdefs.h

fi
if test x$dbus_have_gnuc_varargs = xyes; then

$as_echo "@%:@define HAVE_GNUC_VARARGS 1" >>confdefs.h

fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for struct cmsgcred"
>&5
$as_echo_n "checking for struct cmsgcred... " >&6; }
cat confdefs.h - <<_ACEOF >>confdefs.h.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <sys/socket.h>

int
main ()
{

struct cmsgcred cred;

cred.cmcrid_pid = 0;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
dbus_have_struct_cmsgcred=yes
else
dbus_have_struct_cmsgcred=no
fi
rm -f core confdefs.err confdefs.h.$ac_objext confdefs.h.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_struct_cmsgcred" >&5
$as_echo "$dbus_have_struct_cmsgcred" >&6; }

if test x$dbus_have_struct_cmsgcred = xyes; then

$as_echo "%:@define HAVE_CMSGCRED 1" >>confdefs.h

fi

for ac_func in getpeerucred getpeereid
do :
as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\${$as_ac_var}\" = x\"yes\"; then :
cat >>confdefs.h <<_ACEOF
%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1
_ACEOF

fi
done

for ac_func in pipe2 accept4

```



```

do :
  as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\${$as_ac_var}\" = x"yes"; then :
  cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1
_ACEOF

fi
done

#### Abstract sockets

if test x$enable_abstract_sockets = xauto; then
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

warn_on_xcompile=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking abstract socket
namespace" >&5
$as_echo_n "checking abstract socket namespace... " >&6; }
if ${ac_cv_have_abstract_sockets+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :

          ac_cv_have_abstract_sockets=no
          warn_on_xcompile=yes

  else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <stdlib.h>
#include <string.h>
#include <stdio.h>
#include <sys/socket.h>
#include <sys/un.h>
#include <errno.h>

int
main ()
{

  size_t slen;

```

```

int listen_fd;
struct sockaddr_un addr;

listen_fd = socket (PF_UNIX, SOCK_STREAM, 0);

if (listen_fd < 0)
{
    fprintf (stderr, "socket() failed: %s\n", strerror (errno));
    exit (1);
}

memset (&addr, '\0', sizeof (addr));
addr.sun_family = AF_UNIX;
strcpy (addr.sun_path, "X/tmp/dbus-fake-socket-path-used-in-
configure-test");
/* SUN_LEN uses strlen() so need to calculate it before adding \0 at
the
* beginning.
*/
slen = SUN_LEN(&addr);
addr.sun_path[0] = '\0'; /* this is what makes it abstract */

if (bind (listen_fd, (struct sockaddr*) &addr, slen) < 0)
{
    fprintf (stderr, "Abstract socket namespace bind() failed:
%s\n",
            strerror (errno));
    exit (1);
}
else
    exit (0);

;
return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    ac_cv_have_abstract_sockets=yes
else
    ac_cv_have_abstract_sockets=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
    conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_have_abstract_sockets" >&5
$as_echo "$ac_cv_have_abstract_sockets" >&6; }
if test x$warn_on_xcompile = xyes ; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Cannot check for
abstract sockets when cross-compiling, please use --enable-abstract-
sockets" >&5
$as_echo "$as_me: WARNING: Cannot check for abstract sockets when
cross-compiling, please use --enable-abstract-sockets" >&2;}
fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi

if test x$enable_abstract_sockets = xyes; then
    if test x$ac_cv_have_abstract_sockets = xno; then
        as_fn_error $? "Abstract sockets explicitly required, and support
not detected." "$LINENO" 5
    fi
fi

if test x$enable_abstract_sockets = xno; then
    ac_cv_have_abstract_sockets=no;
fi

if test x$ac_cv_have_abstract_sockets = xyes ; then
    DBUS_PATH_OR_ABSTRACT=abstract

$as_echo "@%:@define HAVE_ABSTRACT_SOCKETS 1" >>confdefs.h

else
    DBUS_PATH_OR_ABSTRACT=path
fi

# this is used in addresses to prefer abstract, e.g.
# unix:path=/foo or unix:abstract=/foo

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
        be a program name with args.
        set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_path_PKG_CONFIG+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            case $PKG_CONFIG in

```

```

    [\\/* | ?:[\\/*]*)
    ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
with a path.
    ;;
*)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

    ;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
    ac_pt_PKG_CONFIG=$PKG_CONFIG
    # Extract the first word of "pkg-config", so it can be a program
name with args.
    set dummy pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        case $ac_pt_PKG_CONFIG in
        [\\/* | ?:[\\/*]*)
            ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
override the test with a path.
            ;;
*)
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR

```

```

for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_path_ac_pt_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
>&5
$as_echo "$ac_pt_PKG_CONFIG" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test "x$ac_pt_PKG_CONFIG" = x; then
  PKG_CONFIG=""
else
  case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
  PKG_CONFIG=$ac_pt_PKG_CONFIG
fi
else
  PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
  _pkg_min_version=0.9.0
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
$as_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }

```

```

        if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
        else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        PKG_CONFIG=""
        fi
fi

#### Sort out XML library

# see what we have
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
XML_ParserCreate_MM in -lexpat" >&5
$as_echo_n "checking for XML_ParserCreate_MM in -lexpat... " >&6; }
if ${ac_cv_lib_expat_XML_ParserCreate_MM+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lexpat ` $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char XML_ParserCreate_MM ();
int
main ()
{
return XML_ParserCreate_MM ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_expat_XML_ParserCreate_MM=yes
else
  ac_cv_lib_expat_XML_ParserCreate_MM=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_expat_XML_ParserCreate_MM" >&5

```

```

$as_echo "$ac_cv_lib_expat_XML_ParserCreate_MM" >&6; }
if test "x$ac_cv_lib_expat_XML_ParserCreate_MM" = xyes; then :
  for ac_header in expat.h
do :
  ac_fn_c_check_header_mongrel "$LINENO" "expat.h"
"ac_cv_header_expat_h" "$ac_includes_default"
if test "x$ac_cv_header_expat_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXPAT_H 1
_ACEOF
  have_expat=true
else
  have_expat=false
fi

done

else
  have_expat=false
fi

# see what we want to use
dbus_use_libxml=false
dbus_use_expat=false
if test x$with_xml = xexpat; then
  if ! $have_expat ; then
    as_fn_error $? "Explicitly requested expat but expat not
found" "$LINENO" 5
  fi
  dbus_use_expat=true
elif test x$with_xml = xlibxml; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for LIBXML" >&5
$as_echo_n "checking for LIBXML... " >&6; }

if test -n "$LIBXML_CFLAGS"; then
  pkg_cv_LIBXML_CFLAGS="$LIBXML_CFLAGS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
  { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"libxml-2.0 >= 2.6.0\""; } >&5
($PKG_CONFIG --exists --print-errors "libxml-2.0 >= 2.6.0") 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; }; then
  pkg_cv_LIBXML_CFLAGS=`$PKG_CONFIG --cflags "libxml-2.0 >= 2.6.0"
2>/dev/null`
else
  pkg_failed=yes
fi

```

```

else
    pkg_failed=untried
fi
if test -n "$LIBXML_LIBS"; then
    pkg_cv_LIBXML_LIBS="$LIBXML_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \
        \ $PKG_CONFIG --exists -
-print-errors \"libxml-2.0 >= 2.6.0\""; } >&5
        ($PKG_CONFIG --exists --print-errors "libxml-2.0 >= 2.6.0") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \
        \ $? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_LIBXML_LIBS=`$PKG_CONFIG --libs "libxml-2.0 >= 2.6.0"
2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        LIBXML_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "libxml-2.0 >= 2.6.0" 2>&1`
    else
        LIBXML_PKG_ERRORS=`$PKG_CONFIG --print-errors "libxml-2.0
>= 2.6.0" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$LIBXML_PKG_ERRORS" >&5

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        have_libxml=false
elif test $pkg_failed = untried; then
    have_libxml=false
else
    LIBXML_CFLAGS=$pkg_cv_LIBXML_CFLAGS
    LIBXML_LIBS=$pkg_cv_LIBXML_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    have_libxml=true

```



```

fi
    if ! $have_libxml ; then
        as_fn_error $? "Explicitly requested libxml but libxml not
found" "$LINENO" 5
    fi
    dbus_use_libxml=true
else
    ### expat is the default because libxml can't currently
survive
    ### our brutal OOM-handling unit test setup.
    ### http://bugzilla.gnome.org/show_bug.cgi?id=109368
    if test x$have_expat = xfalse; then
        as_fn_error $? "Could not find expat.h, check
config.log for failed attempts" "$LINENO" 5
    fi
    ### By default, only use Expat since it's tested and known to
work.  If you're a
    ### general-purpose OS vendor, please don't enable libxml.  For
embedded use
    ### if your OS is built around libxml, that's another case.
    dbus_use_expat=true
fi

if $dbus_use_expat; then
    DBUS_USE_EXPAT_TRUE=
    DBUS_USE_EXPAT_FALSE='#'
else
    DBUS_USE_EXPAT_TRUE='#'
    DBUS_USE_EXPAT_FALSE=
fi

if $dbus_use_libxml; then
    DBUS_USE_LIBXML_TRUE=
    DBUS_USE_LIBXML_FALSE='#'
else
    DBUS_USE_LIBXML_TRUE='#'
    DBUS_USE_LIBXML_FALSE=
fi

if $dbus_use_expat; then
    XML_LIBS=-lexpat
    XML_CFLAGS=
fi
if $dbus_use_libxml; then
    XML_LIBS=$LIBXML_LIBS
    XML_CFLAGS=$LIBXML_CFLAGS
fi

# Thread lib detection

```

```

ac_fn_c_check_func "$LINENO" "pthread_cond_timedwait"
"ac_cv_func_pthread_cond_timedwait"
if test "x$sac_cv_func_pthread_cond_timedwait" = xyes; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
pthread_cond_timedwait in -lpthread" >&5
$as_echo_n "checking for pthread_cond_timedwait in -lpthread... " >&6;
}
if ${ac_cv_lib_pthread_pthread_cond_timedwait+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lpthread $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char pthread_cond_timedwait ();
int
main ()
{
return pthread_cond_timedwait ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_pthread_pthread_cond_timedwait=yes
else
  ac_cv_lib_pthread_pthread_cond_timedwait=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$sac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$sac_cv_lib_pthread_pthread_cond_timedwait" >&5
$as_echo "$sac_cv_lib_pthread_pthread_cond_timedwait" >&6; }
if test "x$sac_cv_lib_pthread_pthread_cond_timedwait" = xyes; then :
  THREAD_LIBS="-lpthread"
fi

fi

save_libs="$LIBS"
LIBS="$LIBS $THREAD_LIBS"
ac_fn_c_check_func "$LINENO" "pthread_condattr_setclock"
"ac_cv_func_pthread_condattr_setclock"

```

```

if test "x${ac_cv_func_pthread_condattr_setclock}" = xyes; then :
  have_pthread_condattr_setclock=true
else
  have_pthread_condattr_setclock=false
fi

if test x$have_pthread_condattr_setclock = xtrue; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing clock_getres" >&5
$as_echo_n "checking for library containing clock_getres... " >&6; }
if ${ac_cv_search_clock_getres+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char clock_getres ();
int
main ()
{
return clock_getres ();
;
return 0;
}
_ACEOF
for ac_lib in ' rt; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_clock_getres=$ac_res
  fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext
  if ${ac_cv_search_clock_getres+:} false; then :
    break
  fi
done
if ${ac_cv_search_clock_getres+:} false; then :

else
  ac_cv_search_clock_getres=no

```

```

fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_clock_getres" >&5
$as_echo "$ac_cv_search_clock_getres" >&6; }
ac_res=$ac_cv_search_clock_getres
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"
  THREAD_LIBS="$THREAD_LIBS -lrt"
fi

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
CLOCK_MONOTONIC" >&5
$as_echo_n "checking for CLOCK_MONOTONIC... " >&6; }
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <time.h>
#include <pthread.h>

int
main ()
{

struct timespec monotonic_timer;
pthread_condattr_t attr;
pthread_condattr_init (&attr);
pthread_condattr_setclock (&attr, CLOCK_MONOTONIC);
clock_getres (CLOCK_MONOTONIC,&monotonic_timer);

;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  have_clock_monotonic=true
else
  have_clock_monotonic=false
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
if test x$have_clock_monotonic = xtrue; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: found" >&5
$as_echo "found" >&6; }

$as_echo "@%:@define HAVE_MONOTONIC_CLOCK 1" >>confdefs.h

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not found" >&5
$as_echo "not found" >&6; }
fi
fi

```

```

LIBS="$save_libs"

# SELinux detection
if test x$enable_selinux = xno ; then
    have_selinux=no;
else
    # See if we have SELinux library
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
is_selinux_enabled in -lselinux" >&5
$as_echo_n "checking for is_selinux_enabled in -lselinux... " >&6; }
if ${ac_cv_lib_selinux_is_selinux_enabled+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lselinux $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char is_selinux_enabled ();
int
main ()
{
return is_selinux_enabled ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_selinux_is_selinux_enabled=yes
else
    ac_cv_lib_selinux_is_selinux_enabled=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_selinux_is_selinux_enabled" >&5
$as_echo "$ac_cv_lib_selinux_is_selinux_enabled" >&6; }
if test "x$ac_cv_lib_selinux_is_selinux_enabled" = xyes; then :
    have_selinux=yes
else
    have_selinux=no
fi

```

```

# see if we have the SELinux header with the new D-Bus stuff in it
if test x$have_selinux = xyes ; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS
Flask permissions in selinux/av_permissions.h" >&5
$as_echo_n "checking for DBUS Flask permissions in
selinux/av_permissions.h... " >&6; }
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <selinux/av_permissions.h>
int
main ()
{
#ifdef DBUS__ACQUIRE_SVC return 0;
    #else
    #error DBUS__ACQUIRE_SVC not defined
    #endif

;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    have_selinux=yes
else
    have_selinux=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $have_selinux"
>&5
$as_echo "$have_selinux" >&6; }
fi

    if test x$enable_selinux = xauto ; then
        if test x$have_selinux = xno ; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING:
Sufficiently new SELinux library not found" >&5
$as_echo "$as_me: WARNING: Sufficiently new SELinux library not found"
>&2;}
            fi
        else
            if test x$have_selinux = xno ; then
                as_fn_error $? "SELinux explicitly required, and
SELinux library not found" "$LINENO" 5
            fi
        fi
    fi

if test x$have_selinux = xyes; then
    HAVE_SELINUX_TRUE=
    HAVE_SELINUX_FALSE='#'
else

```

```

HAVE_SELINUX_TRUE='#'
HAVE_SELINUX_FALSE=
fi

if test x$have_selinux = xyes ; then
    # the selinux code creates threads
    # which requires libpthread even on linux
    ac_fn_c_check_func "$LINENO" "pthread_create"
"ac_cv_func_pthread_create"
if test "x$ac_cv_func_pthread_create" = xyes; then :

else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for pthread_create
in -lpthread" >&5
$as_echo_n "checking for pthread_create in -lpthread... " >&6; }
if ${ac_cv_lib_pthread_pthread_create+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lpthread $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char pthread_create ();
int
main ()
{
return pthread_create ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_pthread_pthread_create=yes
else
    ac_cv_lib_pthread_pthread_create=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_pthread_pthread_create" >&5
$as_echo "$ac_cv_lib_pthread_pthread_create" >&6; }
if test "x$ac_cv_lib_pthread_pthread_create" = xyes; then :

```

```

    SELINUX_THREAD_LIBS="-lpthread"
fi

fi

    SELINUX_LIBS="-lselinux $SELINUX_THREAD_LIBS"

$as_echo "@%:@define HAVE_SELINUX 1" >>confdefs.h

else
    SELINUX_LIBS=
fi

# inotify checks
if test x$enable_inotify = xno ; then
    have_inotify=no;
else
    for ac_header in sys/inotify.h
    do :
        ac_fn_c_check_header_mongrel "$LINENO" "sys/inotify.h"
"ac_cv_header_sys_inotify_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_inotify_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_INOTIFY_H 1
_ACEOF
    have_inotify=yes
else
    have_inotify=no
fi
done

fi

if test x$have_inotify = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_INOTIFY 1" >>confdefs.h

    for ac_func in inotify_init1
    do :
        ac_fn_c_check_func "$LINENO" "inotify_init1"
"ac_cv_func_inotify_init1"
if test "x$ac_cv_func_inotify_init1" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_INOTIFY_INIT1 1
_ACEOF

fi
done

fi

```



```

if test x$have_inotify = xyes; then
    DBUS_BUS_ENABLE_INOTIFY_TRUE=
    DBUS_BUS_ENABLE_INOTIFY_FALSE='#'
else
    DBUS_BUS_ENABLE_INOTIFY_TRUE='#'
    DBUS_BUS_ENABLE_INOTIFY_FALSE=
fi

# dnotify checks
if test x$enable_dnotify = xno ; then
    have_dnotify=no;
else
    if test x$have_inotify = xno -a x$host_os = xlinux-gnu -o
x$host_os = xlinux; then
        have_dnotify=yes;
    else
        have_dnotify=no;
    fi
fi

if test x$have_dnotify = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX 1" >>confdefs.h

fi

if test x$have_dnotify = xyes; then
    DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE=
    DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE='#'
else
    DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE='#'
    DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE=
fi

# For simplicity, we require the userland API for epoll_create1 at
# compile-time (glibc 2.9), but we'll run on kernels that turn out
# not to have it at runtime.
@%:@ Check whether --enable-epoll was given.
if test "${enable_epoll+set}" = set; then :
    enableval=$enable_epoll; enable_epoll=$enableval
else
    enable_epoll=auto
fi

if test x$enable_epoll = xno; then
    have_linux_epoll=no
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for Linux
epoll(4)" >&5

```

```

$as_echo_n "checking for Linux epoll(4)... " >&6; }
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

    #ifndef __linux__
    #error This is not Linux
    #endif
    #include <sys/epoll.h>

int
main ()
{
    epoll_create1 (EPOLL_CLOEXEC);
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    have_linux_epoll=yes
else
    have_linux_epoll=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$have_linux_epoll" >&5
$as_echo "$have_linux_epoll" >&6; }
fi
if test x$enable_epoll,$have_linux_epoll = xyes,no; then
    as_fn_error $? "epoll support explicitly enabled but not
available" "$LINENO" 5
fi
if test x$have_linux_epoll = xyes; then

$as_echo "@%:@define DBUS_HAVE_LINUX_EPOLL 1" >>confdefs.h

fi
    if test x$have_linux_epoll = xyes; then
        HAVE_LINUX_EPOLL_TRUE=
        HAVE_LINUX_EPOLL_FALSE='#'
    else
        HAVE_LINUX_EPOLL_TRUE='#'
        HAVE_LINUX_EPOLL_FALSE=
    fi
fi

# kqueue checks
if test x$enable_kqueue = xno ; then
    have_kqueue=no
else
    have_kqueue=yes

```

```

        ac_fn_c_check_header_mongrel "$LINENO" "sys/event.h"
"ac_cv_header_sys_event_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_event_h" = xyes; then :

else
    have_kqueue=no
fi

        ac_fn_c_check_func "$LINENO" "kqueue" "ac_cv_func_kqueue"
if test "x$ac_cv_func_kqueue" = xyes; then :

else
    have_kqueue=no
fi

        if test x$enable_kqueue = xyes -a x$have_kqueue = xno; then
            as_fn_error $? "kqueue support explicitly enabled but not
available" "$LINENO" 5
        fi
    fi

if test x$have_kqueue = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_KQUEUE 1" >>confdefs.h

fi

    if test x$have_kqueue = xyes; then
        DBUS_BUS_ENABLE_KQUEUE_TRUE=
        DBUS_BUS_ENABLE_KQUEUE_FALSE='#'
    else
        DBUS_BUS_ENABLE_KQUEUE_TRUE='#'
        DBUS_BUS_ENABLE_KQUEUE_FALSE=
    fi

# launchd checks
if test x$enable_launchd = xno ; then
    have_launchd=no
else
    have_launchd=yes
    ac_fn_c_check_header_mongrel "$LINENO" "launch.h"
"ac_cv_header_launch_h" "$ac_includes_default"
if test "x$ac_cv_header_launch_h" = xyes; then :

else
    have_launchd=no
fi

```

```

    # Extract the first word of "launchctl", so it can be a program
name with args.
set dummy launchctl; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$sas_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_LAUNCHCTL+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    case $LAUNCHCTL in
    [\\/* | ?:[\\/*]*)
    ac_cv_path_LAUNCHCTL="$LAUNCHCTL" # Let the user override the test
with a path.
    ;;
    *)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_LAUNCHCTL="$as_dir/$ac_word$ac_exec_ext"
        $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

    ;;
esac
fi
LAUNCHCTL=$ac_cv_path_LAUNCHCTL
if test -n "$LAUNCHCTL"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $LAUNCHCTL" >&5
$sas_echo "$LAUNCHCTL" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$sas_echo "no" >&6; }
fi

    if test "x$LAUNCHCTL" = "x"; then
        have_launchd=no
    fi

    if test x$enable_launchd = xyes && test x$have_launchd = xno ;
then
        as_fn_error $? "launchd support explicitly enabled but not
available" "$LINENO" 5
    fi

```

```

fi

if test x$have_launchd = xyes; then

$as_echo "@%:@define DBUS_ENABLE_LAUNCHD 1" >>confdefs.h

fi

    if test x$have_launchd = xyes; then
        DBUS_ENABLE_LAUNCHD_TRUE=
        DBUS_ENABLE_LAUNCHD_FALSE='#'
    else
        DBUS_ENABLE_LAUNCHD_TRUE='#'
        DBUS_ENABLE_LAUNCHD_FALSE=
    fi

#### Directory to place launchd agent file
if test "x$with_launchd_agent_dir" = "x"; then
    LAUNCHD_AGENT_DIR="/Library/LaunchAgents"
else
    LAUNCHD_AGENT_DIR="$with_launchd_agent_dir"
fi

if test x$enable_console_owner_file = xno ; then
    have_console_owner_file=no;
else
    case $host_os in
        solaris*)
            have_console_owner_file=yes;

$as_echo "@%:@define HAVE_CONSOLE_OWNER_FILE 1" >>confdefs.h

        ;;
    *)
        have_console_owner_file=no;;
    esac
fi

    if test x$have_console_owner_file = xyes; then
        HAVE_CONSOLE_OWNER_FILE_TRUE=
        HAVE_CONSOLE_OWNER_FILE_FALSE='#'
    else
        HAVE_CONSOLE_OWNER_FILE_TRUE='#'
        HAVE_CONSOLE_OWNER_FILE_FALSE=
    fi

if test x$enable_systemd = xno ; then
    have_systemd=no;

```

```

else

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for SYSTEMD" >&5
$as_echo_n "checking for SYSTEMD... " >&6; }

if test -n "$SYSTEMD_CFLAGS"; then
    pkg_cv_SYSTEMD_CFLAGS="$SYSTEMD_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"libsystemd-login >= 32, libsystemd-daemon >= 32\""; }
>&5
        ($PKG_CONFIG --exists --print-errors "libsystemd-login >= 32,
libsystemd-daemon >= 32") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_SYSTEMD_CFLAGS=`$PKG_CONFIG --cflags "libsystemd-login >= 32,
libsystemd-daemon >= 32" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
if test -n "$SYSTEMD_LIBS"; then
    pkg_cv_SYSTEMD_LIBS="$SYSTEMD_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"libsystemd-login >= 32, libsystemd-daemon >= 32\""; }
>&5
        ($PKG_CONFIG --exists --print-errors "libsystemd-login >= 32,
libsystemd-daemon >= 32") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_SYSTEMD_LIBS=`$PKG_CONFIG --libs "libsystemd-login >= 32,
libsystemd-daemon >= 32" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then

```

```

        _pkg_short_errors_supported=yes
else
        _pkg_short_errors_supported=no
fi
        if test $_pkg_short_errors_supported = yes; then
                SYSTEMD_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "libsystemd-login >= 32, libsystemd-daemon >= 32" 2>&1`
        else
                SYSTEMD_PKG_ERRORS=`$PKG_CONFIG --print-errors
"libsystemd-login >= 32, libsystemd-daemon >= 32" 2>&1`
        fi
        # Put the nasty error message in config.log where it belongs
        echo "$SYSTEMD_PKG_ERRORS" >&5

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
                have_systemd=no
elif test $pkg_failed = untried; then
        have_systemd=no
else
        SYSTEMD_CFLAGS=$pkg_cv_SYSTEMD_CFLAGS
        SYSTEMD_LIBS=$pkg_cv_SYSTEMD_LIBS
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
        have_systemd=yes
fi
fi

if test x$have_systemd = xyes; then

$as_echo "@%:@define HAVE_SYSTEMD 1" >>confdefs.h

fi

if test x$enable_systemd = xyes -a x$have_systemd != xyes ; then
        as_fn_error $? "Explicitly requested systemd support, but systemd
not found" "$LINENO" 5
fi

# libaudit detection
if test x$enable_libaudit = xno ; then
        have_libaudit=no;
else
        # See if we have audit daemon & capabilities library
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
audit_log_user_avc_message in -laudit" >&5
$as_echo_n "checking for audit_log_user_avc_message in -laudit... "
>&6; }
        if ${ac_cv_lib_audit_audit_log_user_avc_message+:} false; then :
                $as_echo_n "(cached) " >&6
        else
                ac_check_lib_save_LIBS=$LIBS

```

```

LIBS="-laudit $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char audit_log_user_avc_message ();
int
main ()
{
return audit_log_user_avc_message ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_audit_audit_log_user_avc_message=yes
else
ac_cv_lib_audit_audit_log_user_avc_message=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_audit_audit_log_user_avc_message" >&5
$as_echo "$ac_cv_lib_audit_audit_log_user_avc_message" >&6; }
if test "x$ac_cv_lib_audit_audit_log_user_avc_message" = xyes; then :
have_libaudit=yes
else
have_libaudit=no
fi

if test x$have_libaudit = xyes ; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
capng_clear in -lcap-ng" >&5
$as_echo_n "checking for capng_clear in -lcap-ng... " >&6; }
if ${ac_cv_lib_capng_capng_clear+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-lcap-ng $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */

```



```

#ifdef __cplusplus
extern "C"
#endif
char capng_clear ();
int
main ()
{
return capng_clear ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_cap_ng_capng_clear=yes
else
ac_cv_lib_cap_ng_capng_clear=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_cap_ng_capng_clear" >&5
$as_echo "$ac_cv_lib_cap_ng_capng_clear" >&6; }
if test "x$ac_cv_lib_cap_ng_capng_clear" = xyes; then :
have_libaudit=yes
else
have_libaudit=no
fi

fi

if test x$have_libaudit = xyes; then
HAVE_LIBAUDIT_TRUE=
HAVE_LIBAUDIT_FALSE='#'
else
HAVE_LIBAUDIT_TRUE='#'
HAVE_LIBAUDIT_FALSE=
fi

if test x$have_libaudit = xyes ; then
SELINUX_LIBS="$SELINUX_LIBS -laudit -lcap-ng"

$as_echo "@%:@define HAVE_LIBAUDIT 1" >>confdefs.h

fi

# Check for ADT API (Solaris Basic Security Mode auditing)

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for ADT API" >&5
$sas_echo_n "checking for ADT API... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <bsm/adt.h>
adt_user_context = ADT_USER;

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    check_adt_audit=yes
else
    check_adt_audit=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test ${check_adt_audit} = yes
then

$sas_echo "@%:@define HAVE_ADT /**/" >>confdefs.h

    ADT_LIBS="-lbsm"
    LIBS="-lbsm $LIBS"
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: yes" >&5
$sas_echo "yes" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$sas_echo "no" >&6; }
fi

# Check for SCM_RIGHTS
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for SCM_RIGHTS" >&5
$sas_echo_n "checking for SCM_RIGHTS... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <sys/socket.h>
#include <sys/un.h>
static int x = SCM_RIGHTS;

int
main ()
{

```

```

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: supported" >&5
$as_echo "supported" >&6; }

$as_echo "@%:@define HAVE_UNIX_FD_PASSING 1" >>confdefs.h

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not supported" >&5
$as_echo "not supported" >&6; }
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

NETWORK_libs=
if test x$dbus_win = xyes ; then
  if test x$dbus_wince = xyes ; then
    NETWORK_libs="-lws2"
  else
    NETWORK_libs="-lws2_32"
  fi
fi
fi

@%:@ Check whether --with-valgrind was given.
if test "${with_valgrind+set}" = set; then :
  withval=$with_valgrind;
else
  with_valgrind=no
fi

if test x$with_valgrind != xno; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for VALGRIND" >&5
$as_echo_n "checking for VALGRIND... " >&6; }

if test -n "$VALGRIND_CFLAGS"; then
  pkg_cv_VALGRIND_CFLAGS="$VALGRIND_CFLAGS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
  { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"valgrind >= 3.6\""; } >&5
($PKG_CONFIG --exists --print-errors "valgrind >= 3.6") 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5

```

```

    test $ac_status = 0; }; then
    pkg_cv_VALGRIND_CFLAGS=`$PKG_CONFIG --cflags "valgrind >= 3.6"
2>/dev/null`
else
    pkg_failed=yes
fi
else
    pkg_failed=untried
fi
if test -n "$VALGRIND_LIBS"; then
    pkg_cv_VALGRIND_LIBS="$VALGRIND_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \
$PKG_CONFIG --exists -
-print-errors \"valgrind >= 3.6\""; } >&5
        ($PKG_CONFIG --exists --print-errors "valgrind >= 3.6") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \
$? = $ac_status" >&5
        test $ac_status = 0; }; then
    pkg_cv_VALGRIND_LIBS=`$PKG_CONFIG --libs "valgrind >= 3.6"
2>/dev/null`
else
    pkg_failed=yes
fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        VALGRIND_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "valgrind >= 3.6" 2>&1`
    else
        VALGRIND_PKG_ERRORS=`$PKG_CONFIG --print-errors "valgrind
>= 3.6" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$VALGRIND_PKG_ERRORS" >&5

    as_fn_error $? "Package requirements (valgrind >= 3.6) were not
met:

$VALGRIND_PKG_ERRORS

```

Consider adjusting the `PKG_CONFIG_PATH` environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables `VALGRIND_CFLAGS` and `VALGRIND_LIBS` to avoid the need to call `pkg-config`. See the `pkg-config` man page for more details.

```
" "$LINENO" 5
elif test $pkg_failed = untried; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
    >&5
    $as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
    as_fn_error $? "The pkg-config script could not be found or is too
    old. Make sure it
    is in your PATH or set the PKG_CONFIG environment variable to the full
    path to pkg-config.
```

Alternatively, you may set the environment variables `VALGRIND_CFLAGS` and `VALGRIND_LIBS` to avoid the need to call `pkg-config`. See the `pkg-config` man page for more details.

To get `pkg-config`, see <http://pkg-config.freedesktop.org/>. See ``config.log'` for more details" "\$LINENO" 5; }

```
else
    VALGRIND_CFLAGS=$pkg_cv_VALGRIND_CFLAGS
    VALGRIND_LIBS=$pkg_cv_VALGRIND_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
    $as_echo "yes" >&6; }
    :
fi
```

```
$as_echo "@%:@define WITH_VALGRIND 1" >>confdefs.h
```

```
fi
```

```
#### Set up final flags
LIBDBUS_LIBS="$THREAD_LIBS $NETWORK_libs"
```

```
### X11 detection
DBUS_X_LIBS=
DBUS_X_CFLAGS=
```

```
@%:@ Check whether --enable-x11-autolaunch was given.
if test "${enable_x11_autolaunch+set}" = set; then :
    enableval=$enable_x11_autolaunch;
else
    enable_x11_autolaunch=auto
fi
```

```
if test "x$dbus_win" = xyes; then
    if test "x$enable_x11_autolaunch" = xyes; then
```

```

        as_fn_error $? "X11 auto-launch is not supported on Windows"
"$LINENO" 5
    fi

    enable_x11_autolaunch=no
    have_x11=no
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for X" >&5
$as_echo_n "checking for X... " >&6; }

@%:@ Check whether --with-x was given.
if test "${with_x+set}" = set; then :
    withval=$with_x;
fi

# $have_x is `yes', `no', `disabled', or empty when we do not yet
know.
if test "x$with_x" = xno; then
    # The user explicitly disabled X.
    have_x=disabled
else
    case $x_includes,$x_libraries in #(
        *\'*) as_fn_error $? "cannot use X directory names containing '"
"$LINENO" 5;; #(
        *,NONE | NONE,*) if ${ac_cv_have_x+:} false; then :
    $as_echo_n "(cached) " >&6
else
    # One or both of the vars are not set, and there is no cached value.
ac_x_includes=no ac_x_libraries=no
# Standard set of common directories for X headers.
# Check X11 before X11Rn because it is often a symlink to the current
release.
ac_x_header_dirs=''

if test "$ac_x_includes" = no; then
    # Guess where to find include files, by looking for Xlib.h.
    # First, try using that file with no special directory specified.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <X11/Xlib.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
    # We can compile using X headers with no special include directory.
ac_x_includes=
else
    for ac_dir in $ac_x_header_dirs; do
        if test -r "$ac_dir/X11/Xlib.h"; then
            ac_x_includes=$ac_dir
            break
        fi
    done

```

```

fi
rm -f confptest.err confptest.i confptest.$ac_ext
fi # $ac_x_includes = no

if test "$ac_x_libraries" = no; then
  # Check for the libraries.
  # See if we find them without any special options.
  # Don't add to $LIBS permanently.
  ac_save_LIBS=$LIBS
  LIBS="-lX11 $LIBS"
  cat confdefs.h - << _ACEOF >>confptest.$ac_ext
/* end confdefs.h. */
@%:@include <X11/Xlib.h>
int
main ()
{
XrmInitialize ()
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  LIBS=$ac_save_LIBS
# We can link X programs with no special library path.
ac_x_libraries=
else
  LIBS=$ac_save_LIBS
for ac_dir in `$as_echo "$ac_x_includes $ac_x_header_dirs" | sed
s/include/lib/g`
do
  # Don't even attempt the hair of trying to link an X program!
  for ac_extension in a so sl dylib la dll; do
    if test -r "$ac_dir/libX11.$ac_extension"; then
      ac_x_libraries=$ac_dir
      break 2
    fi
  done
done
fi
rm -f core confptest.err confptest.$ac_objext \
confptest.$ac_exeext confptest.$ac_ext
fi # $ac_x_libraries = no

case $ac_x_includes,$ac_x_libraries in #(
no,* | *,no | *\')
  # Didn't find X, or a directory has "" in its name.
  ac_cv_have_x="have_x=no";; #(
*)
  # Record where we found X for the cache.
  ac_cv_have_x="have_x=yes\
  ac_x_includes='$ac_x_includes'\
  ac_x_libraries='$ac_x_libraries'"

```

```

esac
fi
;; #(
    *) have_x=yes;;
    esac
    eval "$ac_cv_have_x"
fi # $with_x != no

if test "$have_x" != yes; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $have_x" >&5
$as_echo "$have_x" >&6; }
no_x=yes
else
# If each of the values was on the command line, it overrides each
guess.
test "x$x_includes" = xNONE && x_includes=$ac_x_includes
test "x$x_libraries" = xNONE && x_libraries=$ac_x_libraries
# Update the cache value to reflect the command line values.
ac_cv_have_x="have_x=yes\
    ac_x_includes='$x_includes'\
    ac_x_libraries='$x_libraries'"
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: libraries
$x_libraries, headers $x_includes" >&5
$as_echo "libraries $x_libraries, headers $x_includes" >&6; }
fi

if test "$no_x" = yes; then
# Not all programs may use this symbol, but it does not hurt to
define it.

$as_echo "@%:@define X_DISPLAY_MISSING 1" >>confdefs.h

X_CFLAGS= X_PRE_LIBS= X_LIBS= X_EXTRA_LIBS=
else
if test -n "$x_includes"; then
X_CFLAGS="$X_CFLAGS -I$x_includes"
fi

# It would also be nice to do this for all -L options, not just this
one.
if test -n "$x_libraries"; then
X_LIBS="$X_LIBS -L$x_libraries"
# For Solaris; some versions of Sun CC require a space after -R
and
# others require no space. Words are not sufficient . . . .
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -R must
be followed by a space" >&5
$as_echo_n "checking whether -R must be followed by a space... " >&6;
}
ac_xsave_LIBS=$LIBS; LIBS="$LIBS -R$x_libraries"
ac_xsave_c_werror_flag=$ac_c_werror_flag
ac_c_werror_flag=yes

```



```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    X_LIBS="$X_LIBS -R$x_libraries"
else
    LIBS="$ac_xsave_LIBS -R $x_libraries"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    X_LIBS="$X_LIBS -R $x_libraries"
else
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: neither works" >&5
$as_echo "neither works" >&6; }
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    ac_c_werror_flag=$ac_xsave_c_werror_flag
    LIBS=$ac_xsave_LIBS
fi

# Check for system-dependent libraries X programs must link with.
# Do this before checking for the system-independent R6 libraries
# (-lICE), since we may need -lsocket or whatever for X linking.

if test "$ISC" = yes; then
    X_EXTRA_LIBS="$X_EXTRA_LIBS -lnsl_s -linet"
else

```

```

    # Martyn Johnson says this is needed for Ultrix, if the X
    # libraries were built with DECnet support.  And Karl Berry says
    # the Alpha needs dnet_stub (dnet does not exist).
    ac_xsave_LIBS="$LIBS"; LIBS="$LIBS $X_LIBS -lX11"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char XOpenDisplay ();
int
main ()
{
return XOpenDisplay ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dnet_ntoa in -
ldnet" >&5
$as_echo_n "checking for dnet_ntoa in -ldnet... " >&6; }
if ${ac_cv_lib_dnet_dnet_ntoa+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldnet $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char dnet_ntoa ();
int
main ()
{
return dnet_ntoa ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

```

```

    ac_cv_lib_dnet_dnet_ntoa=yes
else
    ac_cv_lib_dnet_dnet_ntoa=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dnet_dnet_ntoa" >&5
$as_echo "$ac_cv_lib_dnet_dnet_ntoa" >&6; }
if test "x$ac_cv_lib_dnet_dnet_ntoa" = xyes; then :
    X_EXTRA_LIBS="$X_EXTRA_LIBS -ldnet"
fi

    if test $ac_cv_lib_dnet_dnet_ntoa = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dnet_ntoa
in -ldnet_stub" >&5
$as_echo_n "checking for dnet_ntoa in -ldnet_stub... " >&6; }
if ${ac_cv_lib_dnet_stub_dnet_ntoa+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldnet_stub $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dnet_ntoa ();
int
main ()
{
return dnet_ntoa ();
    ;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dnet_stub_dnet_ntoa=yes
else
    ac_cv_lib_dnet_stub_dnet_ntoa=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dnet_stub_dnet_ntoa" >&5
$as_echo "$ac_cv_lib_dnet_stub_dnet_ntoa" >&6; }
if test "x$ac_cv_lib_dnet_stub_dnet_ntoa" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -ldnet_stub"
fi

  fi

fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS="$ac_xsave_LIBS"

# msh@cis.ufl.edu says -lnsl (and -lsocket) are needed for his
386/AT,
# to get the SysV transport functions.
# Chad R. Larson says the Pyramis MIS-ES running DC/OSx (SVR4)
# needs -lnsl.
# The nsl library prevents programs from opening the X display
# on Irix 5.2, according to T.E. Dickey.
# The functions gethostbyname, getservbyname, and inet_addr are
# in -lbsd on LynxOS 3.0.1/i386, according to Lars Hecking.
ac_fn_c_check_func "$LINENO" "gethostbyname"
"ac_cv_func_gethostbyname"
if test "x$ac_cv_func_gethostbyname" = xyes; then :

fi

  if test $ac_cv_func_gethostbyname = no; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
gethostbyname in -lnsl" >&5
$as_echo_n "checking for gethostbyname in -lnsl... " >&6; }
if ${ac_cv_lib_nsl_gethostbyname+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lnsl $LIBS"
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();
int
main ()
{
return gethostbyname ();
;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_nsl_gethostbyname=yes
else
    ac_cv_lib_nsl_gethostbyname=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_nsl_gethostbyname" >&5
$as_echo "$ac_cv_lib_nsl_gethostbyname" >&6; }
if test "x$ac_cv_lib_nsl_gethostbyname" = xyes; then :
    X_EXTRA_LIBS="$X_EXTRA_LIBS -lnsl"
fi

    if test $ac_cv_lib_nsl_gethostbyname = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
gethostbyname in -lbsd" >&5
$as_echo_n "checking for gethostbyname in -lbsd... " >&6; }
if ${ac_cv_lib_bsd_gethostbyname+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lbsd $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();
int
main ()
{
return gethostbyname ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_bsd_gethostbyname=yes
else
    ac_cv_lib_bsd_gethostbyname=no
fi
rm -f core conftest.err conftest.$ac_objext \

```

```

        conftest$sac_exeext conftest.$sac_ext
LIBS=$sac_check_lib_save_LIBS
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$sac_cv_lib_bsd_gethostbyname" >&5
$sas_echo "$sac_cv_lib_bsd_gethostbyname" >&6; }
if test "x$sac_cv_lib_bsd_gethostbyname" = xyes; then :
    X_EXTRA_LIBS="$X_EXTRA_LIBS -lbsd"
fi

    fi
fi

# lieder@skyler.mavd.honeywell.com says without -lsocket,
# socket/setsockopt and other routines are undefined under SCO ODT
# 2.0. But -lsocket is broken on IRIX 5.2 (and is not necessary
# on later versions), says Simon Leinen: it contains gethostby*
# variants that don't use the name server (or something). -
lsocket
# must be given before -lnsl if both are needed. We assume that
# if connect needs -lnsl, so does gethostbyname.
ac_fn_c_check_func "$LINENO" "connect" "ac_cv_func_connect"
if test "x$sac_cv_func_connect" = xyes; then :

fi

    if test $sac_cv_func_connect = no; then
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for connect in
-lsocket" >&5
$sas_echo_n "checking for connect in -lsocket... " >&6; }
if ${ac_cv_lib_socket_connect+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lsocket $X_EXTRA_LIBS $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$sac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char connect ();
int
main ()
{
return connect ();
;
return 0;
}

```

```

_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_socket_connect=yes
else
  ac_cv_lib_socket_connect=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_socket_connect" >&5
$as_echo "$ac_cv_lib_socket_connect" >&6; }
if test "x$ac_cv_lib_socket_connect" = xyes; then :
  X_EXTRA_LIBS="-lsocket $X_EXTRA_LIBS"
fi

fi

# Guillermo Gomez says -lposix is necessary on A/UX.
ac_fn_c_check_func "$LINENO" "remove" "ac_cv_func_remove"
if test "x$ac_cv_func_remove" = xyes; then :

fi

if test $ac_cv_func_remove = no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for remove in
-lposix" >&5
$as_echo_n "checking for remove in -lposix... " >&6; }
if ${ac_cv_lib_posix_remove+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lposix $LIBS"
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char remove ();
int
main ()
{
return remove ();
;
return 0;
}
_ACEOF

```

```

if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_posix_remove=yes
else
  ac_cv_lib_posix_remove=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_posix_remove" >&5
$as_echo "$ac_cv_lib_posix_remove" >&6; }
if test "x$ac_cv_lib_posix_remove" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lposix"
fi

fi

# BSDI BSD/OS 2.1 needs -lipc for XOpenDisplay.
ac_fn_c_check_func "$LINENO" "shmat" "ac_cv_func_shmat"
if test "x$ac_cv_func_shmat" = xyes; then :

fi

  if test $ac_cv_func_shmat = no; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for shmat in -
lipc" >&5
$as_echo_n "checking for shmat in -lipc... " >&6; }
if ${ac_cv_lib_ipc_shmat+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lipc $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char shmat ();
int
main ()
{
return shmat ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

```



```

    ac_cv_lib_ipc_shmat=yes
else
    ac_cv_lib_ipc_shmat=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_ipc_shmat"
>&5
$as_echo "$ac_cv_lib_ipc_shmat" >&6; }
if test "x$ac_cv_lib_ipc_shmat" = xyes; then :
    X_EXTRA_LIBS="$X_EXTRA_LIBS -lipc"
fi

    fi
fi

# Check for libraries that X11R6 Xt/Xaw programs need.
ac_save_LDFLAGS=$LDFLAGS
test -n "$x_libraries" && LDFLAGS="$LDFLAGS -L$x_libraries"
# SM needs ICE to (dynamically) link under SunOS 4.x (so we have to
# check for ICE first), but we must link in the order -lSM -lICE or
# we get undefined symbols. So assume we have SM if we have ICE.
# These have to be linked with before -lX11, unlike the other
# libraries we check for below, so use a different variable.
# John Interrante, Karl Berry
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
IceConnectionNumber in -lICE" >&5
$as_echo_n "checking for IceConnectionNumber in -lICE... " >&6; }
if ${ac_cv_lib_ICE_IceConnectionNumber+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lICE $X_EXTRA_LIBS $LIBS"
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char IceConnectionNumber ();
int
main ()
{
return IceConnectionNumber ();
;
return 0;
}

```

```

ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_ICE_IceConnectionNumber=yes
else
  ac_cv_lib_ICE_IceConnectionNumber=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_ICE_IceConnectionNumber" >&5
$as_echo "$ac_cv_lib_ICE_IceConnectionNumber" >&6; }
if test "x$ac_cv_lib_ICE_IceConnectionNumber" = xyes; then :
  X_PRE_LIBS="$X_PRE_LIBS -lSM -lICE"
fi

LDFLAGS=$ac_save_LDFLAGS

fi

if test "x$no_x" = xyes; then
  have_x11=no
else
  have_x11=yes
  DBUS_X_LIBS="$X_LIBS $X_PRE_LIBS -lX11 $X_EXTRA_LIBS"
  DBUS_X_CFLAGS="$X_CFLAGS"
fi
fi

if test "x$enable_x11_autolaunch,$have_x11" = xyes,no; then
  as_fn_error $? "X11 auto-launch requires X headers/libraries"
"$LINENO" 5
else
  # move from "auto" to "yes" or "no" if necessary
  if test "x$enable_x11_autolaunch" != xno; then
    enable_x11_autolaunch="$have_x11"
  fi
fi

if test "x$have_x11" = xyes ; then

$as_echo "@%:@define DBUS_BUILD_X11 1" >>confdefs.h

fi

if test "x$enable_x11_autolaunch" = xyes ; then

$as_echo "@%:@define DBUS_ENABLE_X11_AUTOLAUNCH 1" >>confdefs.h

fi

```

```

#### gcc warning flags

cc_supports_flag() {
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC
supports \"$*\" " >&5
$as_echo_n "checking whether $CC supports \"$*\"... " >&6; }
  save_CFLAGS="$CFLAGS"
  CFLAGS="$*"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  rc=yes
else
  rc=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  CFLAGS="$save_CFLAGS"
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $rc" >&5
$as_echo "$rc" >&6; }
  test "x$rc" = xyes
}

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands " >&5
$as_echo_n "checking to see if compiler understands ... " >&6; }

  save_CFLAGS="$CFLAGS"
  save_CXXFLAGS="$CXXFLAGS"
  CFLAGS="$CFLAGS "
  CXXFLAGS="$CXXFLAGS "

  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

```

```

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then

    true
else

    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

tp_warnings=""
for tp_flag in    all \
    extra \
    char-subscripts \
    missing-declarations \
    missing-prototypes \
    nested-externs \
    pointer-arith \
    cast-align \
    no-address \
    float-equal \
    declaration-after-statement \
; do

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -W$tp_flag" >&5
$as_echo_n "checking to see if compiler understands -W$tp_flag... "
>&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -W$tp_flag"
    CXXFLAGS="$CXXFLAGS -W$tp_flag"

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

```

```

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    tp_warnings="$tp_warnings -W$tp_flag"
    true
else

    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

done

tp_error_flags="-Werror"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Werror" >&5
$as_echo_n "checking to see if compiler understands -Werror... " >&6;
}

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -Werror"
CXXFLAGS="$CXXFLAGS -Werror"

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}

```

```

_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    tp_werror=yes
    true
else
    tp_werror=no
    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

for tp_flag in
missing-field-initializers \
unused-parameter \
sign-compare \
pointer-sign \
type-limits \
; do
    $DISABLE_UNUSED_WARNINGS \

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Wno-$tp_flag" >&5
$as_echo_n "checking to see if compiler understands -Wno-$tp_flag... "
>&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -Wno-$tp_flag"
    CXXFLAGS="$CXXFLAGS -Wno-$tp_flag"

    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes

```

```

else
  flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
  tp_warnings="$tp_warnings -Wno-$tp_flag"
  true
else

  true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Wno-error=$tp_flag" >&5
$as_echo_n "checking to see if compiler understands -Wno-
error=$tp_flag... " >&6; }

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -Wno-error=$tp_flag"
CXXFLAGS="$CXXFLAGS -Wno-error=$tp_flag"

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  flag_ok=yes
else
  flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
  tp_error_flags="$tp_error_flags -Wno-error=$tp_flag"
  true
else

```

```

        tp_werror=no
        true
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

done

@%:@ Check whether --enable-Werror was given.
if test "${enable_Werror+set}" = set; then :
    enableval=$enable_Werror; tp_werror=$enableval
else
    :
fi

    if test "x$tp_werror" = xyes &&          test x$dbus_win != xyes -a
x$dbus_cygwin != xyes -a x$enable_developer = xyes; then
        WARNING_CFLAGS="$tp_error_flags $tp_warnings"
    else
        WARNING_CFLAGS="$tp_warnings"
    fi

if test "x$GCC" = "xyes"; then
    # We're treating -fno-common like a warning: it makes the linker
more
    # strict, because on some systems the linker is *always* this strict

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -fno-common" >&5
$as_echo_n "checking to see if compiler understands -fno-common... "
>&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -fno-common"
    CXXFLAGS="$CXXFLAGS -fno-common"

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF

```



```

if ac_fn_c_try_compile "$LINENO"; then :
  flag_ok=yes
else
  flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
  WARNING_CFLAGS="$WARNING_CFLAGS -fno-common"
  true
else

  true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

# http://bugs.freedesktop.org/show_bug.cgi?id=10599

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -fno-strict-aliasing" >&5
$as_echo_n "checking to see if compiler understands -fno-strict-
aliasing... " >&6; }

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -fno-strict-aliasing"
CXXFLAGS="$CXXFLAGS -fno-strict-aliasing"

cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  flag_ok=yes
else
  flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"

```

```

CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    WARNING_CFLAGS="$WARNING_CFLAGS -fno-strict-aliasing"
    true
else
    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

if test "x$enable_ansi" = "xyes"; then

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -pedantic"
>&5
$as_echo_n "checking to see if compiler understands -ansi -
D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -pedantic... " >&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -
pedantic"
    CXXFLAGS="$CXXFLAGS -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -
pedantic"

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then

```

```

        WARNING_CFLAGS="$WARNING_CFLAGS -ansi -D_POSIX_C_SOURCE=199309L -
D_BSD_SOURCE -pedantic"
        true
    else

        true
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

    fi
fi

CFLAGS="$WARNING_CFLAGS $CFLAGS"

case $host_os in
    solaris*)
        # Solaris' C library apparently needs these runes to be
        threadsafe...
        CFLAGS="$CFLAGS -D_POSIX_PTHREAD_SEMANTICS -D_REENTRANT"
        # ... this opt-in to get sockaddr_in6 and sockaddr_storage...
        CFLAGS="$CFLAGS -D__EXTENSIONS__"
        # ... and this opt-in to get file descriptor passing support
        CFLAGS="$CFLAGS -D_XOPEN_SOURCE=500"
        ;;
esac

### Doxygen Documentation

# Extract the first word of "doxygen", so it can be a program name
with args.
set dummy doxygen; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_DOXYGEN+:} false; then :
    $as_echo_n "(cached) " >&6
else
    case $DOXYGEN in
        [\\/] * | ?:[\\/] *)
            ac_cv_path_DOXYGEN="$DOXYGEN" # Let the user override the test with
a path.
            ;;
        *)
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_path_DOXYGEN="$as_dir/$ac_word$ac_exec_ext"
                    fi
                done
            done
        ;;
    esac
fi

```

```

    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
fi
done
done
IFS=$as_save_IFS

    test -z "$ac_cv_path_DOXYGEN" && ac_cv_path_DOXYGEN="no"
    ;;
esac
fi
DOXYGEN=$ac_cv_path_DOXYGEN
if test -n "$DOXYGEN"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DOXYGEN" >&5
$as_echo "$DOXYGEN" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
Doxygen documentation" >&5
$as_echo_n "checking whether to build Doxygen documentation... " >&6;
}

if test x$DOXYGEN = xno ; then
    have_doxygen=no
else
    have_doxygen=yes
fi

if test x$enable_doxygen_docs = xauto ; then
    if test x$have_doxygen = xno ; then
        enable_doxygen_docs=no
    else
        enable_doxygen_docs=yes
    fi
fi

if test x$enable_doxygen_docs = xyes; then
    if test x$have_doxygen = xno; then
        as_fn_error $? "Building Doxygen docs explicitly required, but
Doxygen not found" "$LINENO" 5
    fi
fi

if test x$enable_doxygen_docs = xyes; then
    DBUS_DOXYGEN_DOCS_ENABLED_TRUE=
    DBUS_DOXYGEN_DOCS_ENABLED_FALSE='#'

```

```

else
    DBUS_DOXYGEN_DOCS_ENABLED_TRUE='#'
    DBUS_DOXYGEN_DOCS_ENABLED_FALSE=
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_doxygen_docs"
>&5
$as_echo "$enable_doxygen_docs" >&6; }

for ac_prog in xsltproc
do
    # Extract the first word of "$ac_prog", so it can be a program name
    with args.
    set dummy $ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_XSLTPROC+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$XSLTPROC"; then
            ac_cv_prog_XSLTPROC="$XSLTPROC" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '$ac_executable_extensions'; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_XSLTPROC="$ac_prog"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

            fi
            fi
            XSLTPROC=$ac_cv_prog_XSLTPROC
            if test -n "$XSLTPROC"; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: $XSLTPROC" >&5
                $as_echo "$XSLTPROC" >&6; }
            else
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
                $as_echo "no" >&6; }
            fi

            test -n "$XSLTPROC" && break
        done

```

```

if test "x$XSLTPROC" != "x"; then
    DBUS_HAVE_XSLTPROC_TRUE=
    DBUS_HAVE_XSLTPROC_FALSE='#'
else
    DBUS_HAVE_XSLTPROC_TRUE='#'
    DBUS_HAVE_XSLTPROC_FALSE=
fi

### XML Documentation

# Extract the first word of "xmlto", so it can be a program name with
args.
set dummy xmlto; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_XMLTO+:} false; then :
    $as_echo_n "(cached) " >&6
else
    case $XMLTO in
    [\\/* | ?:[\\/*]*)
    ac_cv_path_XMLTO="$XMLTO" # Let the user override the test with a
path.
    ;;
    *)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_XMLTO="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

    test -z "$ac_cv_path_XMLTO" && ac_cv_path_XMLTO="no"
    ;;
esac
fi
XMLTO=$ac_cv_path_XMLTO
if test -n "$XMLTO"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $XMLTO" >&5
$as_echo "$XMLTO" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build XML
documentation" >&5
$as_echo_n "checking whether to build XML documentation... " >&6; }

if test x$XMLTO = xno ; then
    have_xmlto=no
else
    have_xmlto=yes
fi

if test x$enable_xml_docs = xauto ; then
    if test x$have_xmlto = xno ; then
        enable_xml_docs=no
    else
        enable_xml_docs=yes
    fi
fi

if test x$enable_xml_docs = xyes; then
    if test x$have_xmlto = xno; then
        as_fn_error $? "Building XML docs explicitly required, but xmlto
not found" "$LINENO" 5
    fi
fi

    if test x$enable_xml_docs = xyes; then
        DBUS_XML_DOCS_ENABLED_TRUE=
        DBUS_XML_DOCS_ENABLED_FALSE='#'
    else
        DBUS_XML_DOCS_ENABLED_TRUE='#'
        DBUS_XML_DOCS_ENABLED_FALSE=
    fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_xml_docs" >&5
$as_echo "$enable_xml_docs" >&6; }

# Extract the first word of "man2html", so it can be a program name
with args.
set dummy man2html; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_MAN2HTML+:} false; then :
    $as_echo_n "(cached) " >&6
else
    case $MAN2HTML in
    [\\/] * | ?:[\\/] *)

```

```

    ac_cv_path_MAN2HTML="$MAN2HTML" # Let the user override the test
with a path.
    ;;
*)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_MAN2HTML="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

    ;;
esac
fi
MAN2HTML=$ac_cv_path_MAN2HTML
if test -n "$MAN2HTML"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAN2HTML" >&5
$as_echo "$MAN2HTML" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test x$MAN2HTML != x; then
    DBUS_HAVE_MAN2HTML_TRUE=
    DBUS_HAVE_MAN2HTML_FALSE='#'
else
    DBUS_HAVE_MAN2HTML_TRUE='#'
    DBUS_HAVE_MAN2HTML_FALSE=
fi

if test x$enable_doxygen_docs = xyes -a x$enable_xml_docs = xyes -a \
    x$MAN2HTML != x; then
    DBUS_CAN_UPLOAD_DOCS_TRUE=
    DBUS_CAN_UPLOAD_DOCS_FALSE='#'
else
    DBUS_CAN_UPLOAD_DOCS_TRUE='#'
    DBUS_CAN_UPLOAD_DOCS_FALSE=
fi

```



```

#### Have to go $localstatedir->$prefix/var->/usr/local/var

#### find the actual value for $prefix that we'll end up with
## (I know this is broken and should be done in the Makefile, but
## that's a major pain and almost nobody actually seems to care)

EXP_VAR=EXPANDED_PREFIX
FROM_VAR="$prefix"

prefix_save=$prefix
exec_prefix_save=$exec_prefix

if test "x$prefix" = "xNONE"; then
prefix="$ac_default_prefix"
fi
if test "x$exec_prefix" = "xNONE"; then
exec_prefix=$prefix
fi

full_var="$FROM_VAR"
while true; do
new_full_var="`eval echo $full_var`"
if test "x$new_full_var" = "x$full_var"; then break; fi
full_var=$new_full_var
done

full_var=$new_full_var
EXPANDED_PREFIX="$full_var"

prefix=$prefix_save
exec_prefix=$exec_prefix_save

EXP_VAR=EXPANDED_LOCALSTATEDIR
FROM_VAR="$localstatedir"

prefix_save=$prefix
exec_prefix_save=$exec_prefix

if test "x$prefix" = "xNONE"; then
prefix="$ac_default_prefix"
fi
if test "x$exec_prefix" = "xNONE"; then
exec_prefix=$prefix
fi

full_var="$FROM_VAR"
while true; do
new_full_var="`eval echo $full_var`"
if test "x$new_full_var" = "x$full_var"; then break; fi

```

```

    full_var=$new_full_var
done

    full_var=$new_full_var
EXPANDED_LOCALSTATEDIR="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

EXP_VAR=EXPANDED_SYSCONFDIR
FROM_VAR="$sysconfdir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
        prefix="$ac_default_prefix"
    fi
    if test "x$exec_prefix" = "xNONE"; then
        exec_prefix=$prefix
    fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

    full_var=$new_full_var
EXPANDED_SYSCONFDIR="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

EXP_VAR=EXPANDED_BINDIR
FROM_VAR="$bindir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
        prefix="$ac_default_prefix"
    fi
    if test "x$exec_prefix" = "xNONE"; then
        exec_prefix=$prefix
    fi
fi

```

```
full_var="$FROM_VAR"
while true; do
  new_full_var="`eval echo $full_var`"
  if test "x$new_full_var" = "x$full_var"; then break; fi
  full_var=$new_full_var
done
```

```
full_var=$new_full_var
EXPANDED_BINDIR="$full_var"
```

```
prefix=$prefix_save
exec_prefix=$exec_prefix_save
```

```
EXP_VAR=EXPANDED_LIBDIR
FROM_VAR="$libdir"
```

```
prefix_save=$prefix
exec_prefix_save=$exec_prefix
```

```
if test "x$prefix" = "xNONE"; then
  prefix="$ac_default_prefix"
fi
if test "x$exec_prefix" = "xNONE"; then
  exec_prefix=$prefix
fi
```

```
full_var="$FROM_VAR"
while true; do
  new_full_var="`eval echo $full_var`"
  if test "x$new_full_var" = "x$full_var"; then break; fi
  full_var=$new_full_var
done
```

```
full_var=$new_full_var
EXPANDED_LIBDIR="$full_var"
```

```
prefix=$prefix_save
exec_prefix=$exec_prefix_save
```

```
EXP_VAR=EXPANDED_LIBEXECDIR
FROM_VAR="$libexecdir"
```

```
prefix_save=$prefix
exec_prefix_save=$exec_prefix
```

```
if test "x$prefix" = "xNONE"; then
  prefix="$ac_default_prefix"
fi
```

```

    if test "x$exec_prefix" = "xNONE"; then
    exec_prefix=$prefix
fi

full_var="$FROM_VAR"
while true; do
    new_full_var="`eval echo $full_var`"
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

    full_var=$new_full_var
EXPANDED_LIBEXECDIR="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

EXP_VAR=EXPANDED_DATADIR
FROM_VAR="$datadir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
    prefix="$ac_default_prefix"
fi
    if test "x$exec_prefix" = "xNONE"; then
    exec_prefix=$prefix
fi

full_var="$FROM_VAR"
while true; do
    new_full_var="`eval echo $full_var`"
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

    full_var=$new_full_var
EXPANDED_DATADIR="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

#### Check our operating system
operating_system=unknown
if test -f /etc/redhat-release || test -f $EXPANDED_SYSCONFDIR/redhat-
release ; then
    operating_system=redhat

```

```

fi

if test -f /etc/slackware-version || test -f
$EXPANDED_SYSCONFDIR/slackware-version ; then
    operating_system=slackware
fi

if test -f /usr/bin/cygwin1.dll || test -f
$EXPANDED_BINDIR/cygwin1.dll ; then
    operating_system=cygwin
fi

#### Sort out init scripts

if test x$with_init_scripts = x; then
    case x$operating_system in
        xredhat) with_init_scripts=redhat ;;
        xslackware) with_init_scripts=slackware ;;
        xcygwin) with_init_scripts=cygwin ;;
        *) with_init_scripts=none ;;
    esac
fi

if test x$with_init_scripts = xredhat; then
    DBUS_INIT_SCRIPTS_RED_HAT_TRUE=
    DBUS_INIT_SCRIPTS_RED_HAT_FALSE='#'
else
    DBUS_INIT_SCRIPTS_RED_HAT_TRUE='#'
    DBUS_INIT_SCRIPTS_RED_HAT_FALSE=
fi

if test x$with_init_scripts = xslackware; then
    DBUS_INIT_SCRIPTS_SLACKWARE_TRUE=
    DBUS_INIT_SCRIPTS_SLACKWARE_FALSE='#'
else
    DBUS_INIT_SCRIPTS_SLACKWARE_TRUE='#'
    DBUS_INIT_SCRIPTS_SLACKWARE_FALSE=
fi

if test x$with_init_scripts = xcygwin; then
    DBUS_INIT_SCRIPTS_CYGWIN_TRUE=
    DBUS_INIT_SCRIPTS_CYGWIN_FALSE='#'
else
    DBUS_INIT_SCRIPTS_CYGWIN_TRUE='#'
    DBUS_INIT_SCRIPTS_CYGWIN_FALSE=
fi

#### systemd unit files

@%:@ Check whether --with-systemdsystemunitdir was given.
if test "${with_systemdsystemunitdir+set}" = set; then :

```

```

    withval=$with_systemdsystemunitdir;
else

    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG --exists -
-print-errors \"systemd\""; } >&5
        ($PKG_CONFIG --exists --print-errors "systemd") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${? = $ac_status" >&5
        test $ac_status = 0; }; then
        with_systemdsystemunitdir=${($PKG_CONFIG --
variable=systemdsystemunitdir systemd)
    else
        with_systemdsystemunitdir=no
    fi

fi

if test "x$with_systemdsystemunitdir" != xno; then
    systemdsystemunitdir=$with_systemdsystemunitdir

fi
    if test -n "$with_systemdsystemunitdir" -a
"x$with_systemdsystemunitdir" != xno ; then
        HAVE_SYSTEMD_TRUE=
        HAVE_SYSTEMD_FALSE='#'
    else
        HAVE_SYSTEMD_TRUE='#'
        HAVE_SYSTEMD_FALSE=
    fi

##### Set up location for system bus socket
if ! test -z "$with_system_socket"; then
    DBUS_SYSTEM_SOCKET=$with_system_socket
else

DBUS_SYSTEM_SOCKET=${EXPANDED_LOCALSTATEDIR}/run/dbus/system_bus_socke
t
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SYSTEM_SOCKET "$DBUS_SYSTEM_SOCKET"
_ACEOF

## system bus only listens on local domain sockets, and never
## on an abstract socket (so only root can create the socket)
DBUS_SYSTEM_BUS_DEFAULT_ADDRESS="unix:path=$DBUS_SYSTEM_SOCKET"

```

```

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SYSTEM_BUS_DEFAULT_ADDRESS
"$DBUS_SYSTEM_BUS_DEFAULT_ADDRESS"
_ACEOF

#### Set up the pid file
if ! test -z "$with_system_pid_file"; then
    DBUS_SYSTEM_PID_FILE=$with_system_pid_file
elif test x$with_init_scripts = xredhat ; then
    DBUS_SYSTEM_PID_FILE=${EXPANDED_LOCALSTATEDIR}/run/messagebus.pid
else
    DBUS_SYSTEM_PID_FILE=${EXPANDED_LOCALSTATEDIR}/run/dbus/pid
fi

#### Directory to check for console ownership
if ! test -z "$with_console_auth_dir"; then
    DBUS_CONSOLE_AUTH_DIR=$with_console_auth_dir
else
    DBUS_CONSOLE_AUTH_DIR=/var/run/console/
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_CONSOLE_AUTH_DIR "$DBUS_CONSOLE_AUTH_DIR"
_ACEOF

#### File to check for console ownership
if test x$have_console_owner_file = xyes; then
    if ! test -z "$with_console_owner_file"; then
        DBUS_CONSOLE_OWNER_FILE=$with_console_owner_file
    else
        DBUS_CONSOLE_OWNER_FILE=/dev/console
    fi
else
    DBUS_CONSOLE_OWNER_FILE=
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_CONSOLE_OWNER_FILE "$DBUS_CONSOLE_OWNER_FILE"
_ACEOF

#### User to start the system bus as
if test -z "$with_dbus_user" ; then

```

```
        DBUS_USER=messagebus
else
        DBUS_USER=$with_dbus_user
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_USER "$DBUS_USER"
_ACEOF
```

```
#### Prefix to install into
DBUS_PREFIX=$EXPANDED_PREFIX
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_PREFIX "$DBUS_PREFIX"
_ACEOF
```

```
#### Directory to install data files into
DBUS_DATADIR=$EXPANDED_DATADIR
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DATADIR "$DBUS_DATADIR"
_ACEOF
```

```
#### Directory to install dbus-daemon
if test -z "$with_dbus_daemon_dir" ; then
        DBUS_DAEMONDIR=$EXPANDED_BINDIR
else
        DBUS_DAEMONDIR=$with_dbus_daemon_dir
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DAEMONDIR "$DBUS_DAEMONDIR"
_ACEOF
```

```
#### Directory to install the other binaries
DBUS_BINDIR="$EXPANDED_BINDIR"
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_BINDIR "$DBUS_BINDIR"
_ACEOF
```

```
#### Directory to install the libexec binaries
```



```
DBUS_LIBEXECDIR="$EXPANDED_LIBEXECDIR"
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_LIBEXECDIR "$DBUS_LIBEXECDIR"
_ACEOF
```

```
#### Tell tests where to find certain stuff in builddir
```

```
DBUS_PWD=`pwd`
# Useful in a cross-compilation environment, where the tests are run
on the host system.
```

```
@%:@ Check whether --with-dbus-test-dir was given.
if test "${with_dbus_test_dir+set}" = set; then :
  withval=$with_dbus_test_dir; DBUS_PWD=$withval
fi
```

```
DBUS_TEST_EXEC="$DBUS_PWD/test"
DBUS_TEST_DATA="$DBUS_PWD/test/data"
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_EXEC "$DBUS_TEST_EXEC"
_ACEOF
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_EXEEXT "$EXEEXT"
_ACEOF
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_BUS_BINARY "$DBUS_PWD/bus/dbus-daemon$EXEEXT"
_ACEOF
```

```
## Export the non-setuid external helper
TEST_LAUNCH_HELPER_BINARY="$DBUS_PWD/bus/dbus-daemon-launch-helper-
test$EXEEXT"
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_LAUNCH_HELPER_BINARY "$TEST_LAUNCH_HELPER_BINARY"
_ACEOF
```

```

DEFAULT_SOCKET_DIR=/tmp

DEFAULT_SOCKET_DIR=`echo $DEFAULT_SOCKET_DIR | sed 's/+/ %2B/g'`

if ! test -z "$with_test_socket_dir" ; then
    TEST_SOCKET_DIR="$with_test_socket_dir"
else
    TEST_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_SOCKET_DIR "$TEST_SOCKET_DIR"
_ACEOF

if test "x$dbus_unix" = xyes; then
    TEST_LISTEN="unix:tmpdir=$TEST_SOCKET_DIR"
else
    TEST_LISTEN="tcp:host=localhost"
fi

cat >>confdefs.h <<_ACEOF
@%:@define TEST_LISTEN "$TEST_LISTEN"
_ACEOF

if ! test -z "$with_session_socket_dir" ; then
    DBUS_SESSION_SOCKET_DIR="$with_session_socket_dir"
else
    DBUS_SESSION_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SESSION_SOCKET_DIR "$DBUS_SESSION_SOCKET_DIR"
_ACEOF

if test x$dbus_win = xyes; then

DBUS_SESSION_BUS_DEFAULT_ADDRESS="$with_dbus_session_bus_default_address"
elif test x$have_launchd = xyes; then

DBUS_SESSION_BUS_DEFAULT_ADDRESS="launchd:env=DBUS_LAUNCHD_SESSION_BUS_SOCKET"
else

```

```

DBUS_SESSION_BUS_DEFAULT_ADDRESS="unix:tmpdir=$DBUS_SESSION_SOCKET_DIR
"
fi

# darwin needs this to initialize the environment
for ac_header in crt_extrns.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "crt_extrns.h"
"ac_cv_header_crt_extrns_h" "$ac_includes_default"
if test "x$ac_cv_header_crt_extrns_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_CRT_EXTRNS_H 1
_ACEOF

fi

done

ac_fn_c_check_func "$LINENO" "_NSGetEnviron"
"ac_cv_func__NSGetEnviron"
if test "x$ac_cv_func__NSGetEnviron" = xyes; then :

$as_echo "@%:@define HAVE_NSGETENVIRON 1" >>confdefs.h

fi

@%:@ Check whether --enable-stats was given.
if test "${enable_stats+set}" = set; then :
    enableval=$enable_stats;
else
    enable_stats=no
fi

if test "x$enable_stats" = xyes; then

$as_echo "@%:@define DBUS_ENABLE_STATS 1" >>confdefs.h

fi

ac_config_files="$ac_config_files Doxyfile dbus/versioninfo.rc
dbus/dbus-arch-deps.h bus/system.conf bus/session.conf bus/messagebus
bus/messagebus-config bus/org.freedesktop.dbus-session.plist
bus/rc.messagebus bus/dbus.service bus/dbus.socket Makefile
dbus/Makefile bus/Makefile tools/Makefile test/Makefile test/name-
test/Makefile doc/Makefile doc/dbus-daemon.1 dbus-1.pc dbus-1-
uninstalled.pc test/data/valid-config-files/debug-allow-all.conf
test/data/valid-config-files/debug-allow-all-sha1.conf
test/data/valid-config-files-system/debug-allow-all-pass.conf

```

```
test/data/valid-config-files-system/debug-allow-all-fail.conf
test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service test/data/invalid-
service-files-system/org.freedesktop.DBus.TestSuiteNoUser.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service"
```

```
cat >confcache <<\_ACEOF
# This file is a shell script that caches the results of configure
# tests run on this system so they can be shared between configure
# scripts and configure runs, see configure's option --config-cache.
# It is not useful on other systems.  If it contains results you don't
# want to keep, you may remove or edit it.
#
# config.status only pays attention to the cache file if you give it
# the --recheck option to rerun configure.
#
# `ac_cv_env_foo' variables (set or unset) will be overridden when
# loading this file, other *unset* `ac_cv_foo' will be assigned the
# following values.
```

```
_ACEOF
```

```
# The following way of writing the cache mishandles newlines in
values,
# but we know of no workaround that is simple, portable, and
efficient.
# So, we kill variables containing newlines.
# Ultrix sh set writes to stderr and can't be redirected directly,
# and sets the high bit in the cache file unless we assign to the
vars.
(
```

```

    for ac_var in `(set) 2>&1 | sed -n 's/^\([a-zA-Z_][a-zA-Z0-9_]*\)=.*\/\1/p'`; do
        eval ac_val=\${$ac_var}
        case $ac_val in #(
            *${as_nl}*)
                case $ac_var in #(
                    *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5
$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
                esac
                case $ac_var in #(
                    _ | IFS | as_nl) ;; #(
                    BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
                    *) { eval $ac_var=; unset $ac_var;} ;;
                esac ;;
            esac
        done

        (set) 2>&1 |
        case $as_nl `(ac_space=' '; set) 2>&1` in #(
            *${as_nl}ac_space=\ *)
                # `set' does not quote correctly, so add quotes: double-quote
                # substitution turns \\ \\ into \\, and sed turns \\ into \.
                sed -n \
                "s/'/'\\\\"'/g;

s/^\([_$_as_cr_alnum]*_cv_[_$_as_cr_alnum]*\)=\(.*\)\)/\1='\2'/p"
                ;; #(
            *)
                # `set' quotes correctly as required by POSIX, so do not add
                quotes.
                sed -n "/^[_$_as_cr_alnum]*_cv_[_$_as_cr_alnum]*=/p"
                ;;
            esac |
            sort
        ) |
        sed '
/^ac_cv_env_/b end
t clear
:clear
s/^\([^\=]*\)=\(.*\)[{}].*\)$ /test "${\1+set}" = set || &/
t end
s/^\([^\=]*\)=\(.*\)$ / \1=${\1=\2}/
:end' >>confcache
if diff "$cache_file" confcache >/dev/null 2>&1; then ;; else
if test -w "$cache_file"; then
if test "x$cache_file" != "x/dev/null"; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: updating cache
$cache_file" >&5
$as_echo "$as_me: updating cache $cache_file" >&6;}
if test ! -f "$cache_file" || test -h "$cache_file"; then

```

```

    cat confcache >"$cache_file"
    else
        case $cache_file in #(
            */* | ?:*)
            mv -f confcache "$cache_file"$$ &&
            mv -f "$cache_file"$$ "$cache_file" ;; #(
            *)
            mv -f confcache "$cache_file" ;;
        esac
    fi
fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: not updating unwritable
cache $cache_file" >&5
$as_echo "$as_me: not updating unwritable cache $cache_file" >&6;}
fi
fi
rm -f confcache

test "x$prefix" = xNONE && prefix=$ac_default_prefix
# Let make expand exec_prefix.
test "x$exec_prefix" = xNONE && exec_prefix='${prefix}'

DEFS=-DHAVE_CONFIG_H

ac_libobjs=
ac_ltlibobjs=
U=
for ac_i in : $LIB@&t@OBSJS; do test "x$ac_i" = x: && continue
# 1. Remove the extension, and $U if already installed.
ac_script='s/\$U\././;s/\.o$//;s/\.obj$//'
ac_i=`$as_echo "$ac_i" | sed "$ac_script"`
# 2. Prepend LIBOBJDIR.  When used with automake>=1.10 LIBOBJDIR
# will be set to the directory where LIBOBSJS objects are built.
as_fn_append ac_libobjs " \${LIBOBJDIR}$ac_i\$U.$ac_objext"
as_fn_append ac_ltlibobjs " \${LIBOBJDIR}$ac_i'"$U.lo'
done
LIB@&t@OBSJS=$ac_libobjs

LTLIBOBSJS=$ac_ltlibobjs

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking that generated files
are newer than configure" >&5
$as_echo_n "checking that generated files are newer than configure..."
" >&6; }
if test -n "$am_sleep_pid"; then
    # Hide warnings about reused PIDs.
    wait $am_sleep_pid 2>/dev/null
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: done" >&5
$as_echo "done" >&6; }

```

```

if test -n "$EXEEXT"; then
  am__EXEEXT_TRUE=
  am__EXEEXT_FALSE='#'
else
  am__EXEEXT_TRUE='#'
  am__EXEEXT_FALSE=
fi

if test -z "${MAINTAINER_MODE_TRUE}" && test -z
"${MAINTAINER_MODE_FALSE}"; then
  as_fn_error $? "conditional \"MAINTAINER_MODE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${AMDEP_TRUE}" && test -z "${AMDEP_FALSE}"; then
  as_fn_error $? "conditional \"AMDEP\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCC_TRUE}" && test -z
"${am__fastdepCC_FALSE}"; then
  as_fn_error $? "conditional \"am__fastdepCC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCXX_TRUE}" && test -z
"${am__fastdepCXX_FALSE}"; then
  as_fn_error $? "conditional \"am__fastdepCXX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WIN_TRUE}" && test -z "${DBUS_WIN_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_WIN\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WINCE_TRUE}" && test -z "${DBUS_WINCE_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_WINCE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_UNIX_TRUE}" && test -z "${DBUS_UNIX_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_UNIX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_CYGWIN_TRUE}" && test -z "${DBUS_CYGWIN_FALSE}";
then
  as_fn_error $? "conditional \"DBUS_CYGWIN\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

```

```

if test -z "${DBUS_BUILD_TESTS_TRUE}" && test -z
"${DBUS_BUILD_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUILD_TESTS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_EMBEDDED_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_EMBEDDED_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_EMBEDDED_TESTS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_MODULAR_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_MODULAR_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_MODULAR_TESTS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WITH_GLIB_TRUE}" && test -z
"${DBUS_WITH_GLIB_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_WITH_GLIB\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_INSTALLED_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_INSTALLED_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_INSTALLED_TESTS\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

if test -z "${DBUS_USE_EXPAT_TRUE}" && test -z
"${DBUS_USE_EXPAT_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_USE_EXPAT\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_USE_LIBXML_TRUE}" && test -z
"${DBUS_USE_LIBXML_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_USE_LIBXML\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_SELINUX_TRUE}" && test -z "${HAVE_SELINUX_FALSE}";
then
    as_fn_error $? "conditional \"HAVE_SELINUX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

```



```
if test -z "${DBUS_BUS_ENABLE_INOTIFY_TRUE}" && test -z
"${DBUS_BUS_ENABLE_INOTIFY_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_BUS_ENABLE_INOTIFY\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE}" && test -z
"${DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_LINUX_EPOLL_TRUE}" && test -z
"${HAVE_LINUX_EPOLL_FALSE}"; then
  as_fn_error $? "conditional \"HAVE_LINUX_EPOLL\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUS_ENABLE_KQUEUE_TRUE}" && test -z
"${DBUS_BUS_ENABLE_KQUEUE_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_BUS_ENABLE_KQUEUE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_LAUNCHD_TRUE}" && test -z
"${DBUS_ENABLE_LAUNCHD_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_ENABLE_LAUNCHD\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_CONSOLE_OWNER_FILE_TRUE}" && test -z
"${HAVE_CONSOLE_OWNER_FILE_FALSE}"; then
  as_fn_error $? "conditional \"HAVE_CONSOLE_OWNER_FILE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_LIBAUDIT_TRUE}" && test -z
"${HAVE_LIBAUDIT_FALSE}"; then
  as_fn_error $? "conditional \"HAVE_LIBAUDIT\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_DOXYGEN_DOCS_ENABLED_TRUE}" && test -z
"${DBUS_DOXYGEN_DOCS_ENABLED_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_DOXYGEN_DOCS_ENABLED\" was never
defined.
```

```
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_HAVE_XSLTPROC_TRUE}" && test -z
"${DBUS_HAVE_XSLTPROC_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_HAVE_XSLTPROC\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_XML_DOCS_ENABLED_TRUE}" && test -z
"${DBUS_XML_DOCS_ENABLED_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_XML_DOCS_ENABLED\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_HAVE_MAN2HTML_TRUE}" && test -z
"${DBUS_HAVE_MAN2HTML_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_HAVE_MAN2HTML\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_CAN_UPLOAD_DOCS_TRUE}" && test -z
"${DBUS_CAN_UPLOAD_DOCS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_CAN_UPLOAD_DOCS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_RED_HAT_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_RED_HAT_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_RED_HAT\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_SLACKWARE_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_SLACKWARE_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_SLACKWARE\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_CYGWIN_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_CYGWIN_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_CYGWIN\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
```

```

if test -z "${HAVE_SYSTEMD_TRUE}" && test -z "${HAVE_SYSTEMD_FALSE}";
then
  as_fn_error $? "conditional \"HAVE_SYSTEMD\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

: "${CONFIG_STATUS=./config.status}"
ac_write_fail=0
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files $CONFIG_STATUS"
{ $as_echo "$as_me:${as_lineno-$LINENO}: creating $CONFIG_STATUS" >&5
$as_echo "$as_me: creating $CONFIG_STATUS" >&6;}
as_write_fail=0
cat >$CONFIG_STATUS <<_ASEOF || as_write_fail=1
#! $SHELL
# Generated by $as_me.
# Run this file to recreate the current configuration.
# Compiler output produced by configure, useful for debugging
# configure, is in config.log if it exists.

debug=false
ac_cs_recheck=false
ac_cs_silent=false

SHELL=${CONFIG_SHELL-$SHELL}
export SHELL
_ASEOF
cat >>$CONFIG_STATUS <<\_ASEOF || as_write_fail=1
## ----- ##
## M4sh Initialization. ##
## ----- ##

# Be more Bourne compatible
DUALCASE=1; export DUALCASE # for MKS sh
if test -n "${ZSH_VERSION+set}" && (emulate sh) >/dev/null 2>&1; then
:
  emulate sh
  NULLCMD=:
  # Pre-4.2 versions of Zsh do word splitting on ${1+"$@"}, which
  # is contrary to our usage.  Disable this feature.
  alias -g '${1+"$@"}'='"$@"'
  setopt NO_GLOB_SUBST
else
  case `(set -o) 2>/dev/null` in @%:@(
*posix*) :
    set -o posix ;; @%:@(
*) :
    ;;
esac
fi

```



```

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " "$as_nl"

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
  *[\ \/]* ) as_myself=$0 ;;
  *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

  ;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
  as_myself=$0
fi
if test ! -f "$as_myself"; then
  $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
  exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh). But do not cause bugs in bash 2.01; the "|| exit
1"
# suppresses any "Segmentation fault" message there. '(' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
  && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C

```

```

export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
    as_status=$1; test $as_status -eq 0 && as_status=1
    if test "$4"; then
        as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
        $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
    fi
    $as_echo "$as_me: error: $2" >&2
    as_fn_exit $as_status
} @%:@ as_fn_error

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @S|@? to STATUS, without forking.
as_fn_set_status ()
{
    return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS
@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{

```

```

    { eval $1=; unset $1;}
}
as_unset=as_fn_unset
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\${as_var} = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
    {
        eval $1+=\${2}
    }'
else
    as_fn_append ()
    {
        eval $1=\${$1}\${2}
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \${(( 1 + 1 ))} = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
    {
        as_val=\${(( $* ))}
    }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

if expr a : '\(a\)' >/dev/null 2>&1 &&
    test "X`expr 00001 : '.*\(...\)'`" = X001; then
    as_expr=expr
else
    as_expr=false
fi

```

```

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
    as_basename=basename
else
    as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
    as_dirname=dirname
else
    as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]*\)/*$' \| \| \
X"$0" : 'X\(/\/\) '$' \| \| \
X"$0" : 'X\(/\/\)' \| \| . 2>/dev/null ||
$as_echo X/"$0" |
    sed '/^.*\/\([^\/]*\)\/*$/{
        s//\1/
        q
    }
/^X\/\(/\/\/\) $/{
        s//\1/
        q
    }
/^X\/\(/\/\) .*/{
        s//\1/
        q
    }
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxyz'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*))
    case `echo 'xy\c'` in
    *c*) ECHO_T=' ';; # ECHO_T is single tab character.
    xy) ECHO_C='\c';;
    *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
        ECHO_T=' ';;
    esac;;
*)
    ECHO_N='-n';;
esac

```



```

rm -f conf$$ conf$$$.exe conf$$$.file
if test -d conf$$$.dir; then
  rm -f conf$$$.dir/conf$$$.file
else
  rm -f conf$$$.dir
  mkdir conf$$$.dir 2>/dev/null
fi
if (echo >conf$$$.file) 2>/dev/null; then
  if ln -s conf$$$.file conf$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$$.file conf$$$.dir 2>/dev/null && test ! -f conf$$$.exe
  ||
    as_ln_s='cp -pR'
  elif ln conf$$$.file conf$$ 2>/dev/null; then
    as_ln_s=ln
  else
    as_ln_s='cp -pR'
  fi
else
  as_ln_s='cp -pR'
fi
rm -f conf$$ conf$$$.exe conf$$$.dir/conf$$$.file conf$$$.file
rmdir conf$$$.dir 2>/dev/null

```

```

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "$S|$as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{
  case $as_dir in #(
  -*) as_dir=./$as_dir;;
  esac
  test -d "$as_dir" || eval $as_mkdir_p || {
    as_dirs=
    while ;; do
      case $as_dir in #(
      *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\'/g"`;;
    #'(
      *) as_qdir=$as_dir;;
    esac
    as_dirs="'$as_qdir' $as_dirs"
    as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\[.*/\]\|/*\[^\][^\]*/*$' \| \

```

```

X"$sas_dir" : 'X\(//\) [^/]' \| \
X"$sas_dir" : 'X\(//\) $' \| \
X"$sas_dir" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$sas_dir" |
sed '/^X\(.*[^/]\)\|\/\|*[^/][^/]*\|*$/ {
    s//\1/
    q
}
/^X\(\|\/\|)\ [^/].*/ {
    s//\1/
    q
}
/^X\(\|\/\|)\ $/ {
    s//\1/
    q
}
/^X\(\|\/\|)\ .*/ {
    s//\1/
    q
}
s/.*\/./; q`
test -d "$sas_dir" && break
done
test -z "$sas_dirs" || eval "mkdir $sas_dirs"
} || test -d "$sas_dir" || as_fn_error $? "cannot create directory
$sas_dir"

} @%:@ as_fn_mkdir_p
if mkdir -p . 2>/dev/null; then
    as_mkdir_p='mkdir -p "$sas_dir"'
else
    test -d ./-p && rmdir ./-p
    as_mkdir_p=false
fi

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$sas_cr_letters%P$sas_cr_LETTERS%;s%[^_ $sas_cr_alnum]%%g'"

# Sed expression to map a string onto a valid variable name.

```

```

as_tr_sh="eval sed 'y%*+%pp%;s%[^_\$as_cr_alnum]%%_g'"

exec 6>&1
## ----- ##
## Main body of $CONFIG_STATUS script. ##
## ----- ##
_ACEOF
test $as_write_fail = 0 && chmod +x $CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# Save the log message, to keep $0 and so on meaningful, and to
# report actual input values of CONFIG_FILES etc. instead of their
# values after options handling.
ac_log="
This file was extended by dbus $as_me 1.6.8, which was
generated by GNU Autoconf 2.69.  Invocation command line was

    CONFIG_FILES    = $CONFIG_FILES
    CONFIG_HEADERS  = $CONFIG_HEADERS
    CONFIG_LINKS    = $CONFIG_LINKS
    CONFIG_COMMANDS = $CONFIG_COMMANDS
$ $0 $@

on `(hostname || uname -n) 2>/dev/null | sed 1q`
"

_ACEOF

case $ac_config_files in *)
set x $ac_config_files; shift; ac_config_files=$*;
esac

case $ac_config_headers in *)
set x $ac_config_headers; shift; ac_config_headers=$*;
esac

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# Files that config.status was made for.
config_files="$ac_config_files"
config_headers="$ac_config_headers"
config_commands="$ac_config_commands"

_ACEOF

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
ac_cs_usage="\
`$as_me' instantiates files and other configuration actions
from templates according to the current configuration.  Unless the
files
and actions are specified as TAGs, all are instantiated by default.

```

Usage: \$0 [OPTION]... [TAG]...

-h, --help print this help, then exit
-V, --version print version number and configuration settings,
then exit
--config print configuration, then exit
-q, --quiet, --silent do not print progress messages
-d, --debug don't remove temporary files
--recheck update \$as_me by reconfiguring in the same
conditions
--file=FILE[:TEMPLATE] instantiate the configuration file FILE
--header=FILE[:TEMPLATE] instantiate the configuration header FILE

Configuration files:

\$config_files

Configuration headers:

\$config_headers

Configuration commands:

\$config_commands

Report bugs to

<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus>."

_ACEOF

```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_cs_config="\`$as_echo "$ac_configure_args" | sed 's/^ //;
s/[\\\"\"\\`\\$]/\\\\\\\\&/g'\`"
ac_cs_version="\`
dbus config.status 1.6.8
configured by $0, generated by GNU Autoconf 2.69,
with options \\"`$ac_cs_config`\`"
```

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Foundation

gives unlimited permission to copy, distribute and modify it."

```
ac_pwd='$ac_pwd'
srcdir='$srcdir'
INSTALL='$INSTALL'
MKDIR_P='$MKDIR_P'
AWK='$AWK'
test -n "\`$AWK" || AWK=awk
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
```

```

# The default lists apply if the user does not specify any file.
ac_need_defaults=:
while test $# != 0
do
  case $1 in
    --*=?*)
      ac_option=`expr "X$1" : 'X\[^\]=]*\)=\'`
      ac_optarg=`expr "X$1" : 'X\[^\]=]*=\(.*\)\)'`
      ac_shift=:
      ;;
    --*=)
      ac_option=`expr "X$1" : 'X\[^\]=]*\)=\'`
      ac_optarg=
      ac_shift=:
      ;;
    *)
      ac_option=$1
      ac_optarg=$2
      ac_shift=shift
      ;;
  esac

  case $ac_option in
    # Handling of the options.
    -recheck | --recheck | --rehec | --reche | --rech | --rec | --re |
    --r)
      ac_cs_recheck=: ;;
    --version | --versio | --versi | --vers | --ver | --ve | --v | -V )
      $as_echo "$ac_cs_version"; exit ;;
    --config | --confi | --conf | --con | --co | --c )
      $as_echo "$ac_cs_config"; exit ;;
    --debug | --debu | --deb | --de | --d | -d )
      debug=: ;;
    --file | --fil | --fi | --f )
      $ac_shift
      case $ac_optarg in
        *\'*) ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
      ;;
        *) as_fn_error $? "missing file argument" ;;
      esac
      as_fn_append CONFIG_FILES " '$ac_optarg'"
      ac_need_defaults=false;;
    --header | --heade | --head | --hea )
      $ac_shift
      case $ac_optarg in
        *\'*) ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
      ;;
        *) as_fn_error $? "missing header argument" ;;
      esac
      as_fn_append CONFIG_HEADERS " '$ac_optarg'"
      ac_need_defaults=false;;
    --he | --h)
      # Conflict between --help and --header
  
```

```

    as_fn_error $? "ambiguous option: \`$1'
Try \`$0 --help' for more information.";;
    --help | --hel | -h )
        $as_echo "$ac_cs_usage"; exit ;;
    -q | -quiet | --quiet | --quie | --qui | --qu | --q \
    | -silent | --silent | --silen | --sile | --sil | --si | --s)
        ac_cs_silent=: ;;

    # This is an error.
    -*) as_fn_error $? "unrecognized option: \`$1'
Try \`$0 --help' for more information." ;;

    *) as_fn_append ac_config_targets " $1"
        ac_need_defaults=false ;;

esac
shift
done

ac_configure_extra_args=

if $ac_cs_silent; then
    exec 6>/dev/null
    ac_configure_extra_args="$ac_configure_extra_args --silent"
fi

__ACEOF
cat >>$CONFIG_STATUS <<__ACEOF || ac_write_fail=1
if \$ac_cs_recheck; then
    set X $SHELL '$0' $ac_configure_args \$ac_configure_extra_args --no-
create --no-recursion
    shift
    \$as_echo "running CONFIG_SHELL=$SHELL \$*" >&6
    CONFIG_SHELL='$SHELL'
    export CONFIG_SHELL
    exec "\$@"
fi

__ACEOF
cat >>$CONFIG_STATUS <<\__ACEOF || ac_write_fail=1
exec 5>>config.log
{
    echo
    sed 'h;s/./-/g;s/^\.../@@%:@ /;s/...\$/ @%:@@%:@/;p;x;p;x' <<_ASBOX
    @%:@@%:@ Running $as_me. @%:@@%:@
    _ASBOX
    $as_echo "$ac_log"
} >&5

__ACEOF
cat >>$CONFIG_STATUS <<__ACEOF || ac_write_fail=1
#

```

```

# INIT-COMMANDS
#
AMDEP_TRUE="$AMDEP_TRUE" ac_aux_dir="$ac_aux_dir"

# The HP-UX ksh and POSIX shell print the target directory to stdout
# if CDPATH is set.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

sed_quote_subst='`$sed_quote_subst`'
double_quote_subst='`$double_quote_subst`'
delay_variable_subst='`$delay_variable_subst`'
macro_version='`$ECHO "$macro_version" | $SED
"$delay_single_quote_subst"`'
macro_revision='`$ECHO "$macro_revision" | $SED
"$delay_single_quote_subst"`'
enable_shared='`$ECHO "$enable_shared" | $SED
"$delay_single_quote_subst"`'
enable_static='`$ECHO "$enable_static" | $SED
"$delay_single_quote_subst"`'
pic_mode='`$ECHO "$pic_mode" | $SED "$delay_single_quote_subst"`'
enable_fast_install='`$ECHO "$enable_fast_install" | $SED
"$delay_single_quote_subst"`'
SHELL='`$ECHO "$SHELL" | $SED "$delay_single_quote_subst"`'
ECHO='`$ECHO "$ECHO" | $SED "$delay_single_quote_subst"`'
PATH_SEPARATOR='`$ECHO "$PATH_SEPARATOR" | $SED
"$delay_single_quote_subst"`'
host_alias='`$ECHO "$host_alias" | $SED "$delay_single_quote_subst"`'
host='`$ECHO "$host" | $SED "$delay_single_quote_subst"`'
host_os='`$ECHO "$host_os" | $SED "$delay_single_quote_subst"`'
build_alias='`$ECHO "$build_alias" | $SED
"$delay_single_quote_subst"`'
build='`$ECHO "$build" | $SED "$delay_single_quote_subst"`'
build_os='`$ECHO "$build_os" | $SED "$delay_single_quote_subst"`'
SED='`$ECHO "$SED" | $SED "$delay_single_quote_subst"`'
Xsed='`$ECHO "$Xsed" | $SED "$delay_single_quote_subst"`'
GREP='`$ECHO "$GREP" | $SED "$delay_single_quote_subst"`'
EGREP='`$ECHO "$EGREP" | $SED "$delay_single_quote_subst"`'
FGREP='`$ECHO "$FGREP" | $SED "$delay_single_quote_subst"`'
LD='`$ECHO "$LD" | $SED "$delay_single_quote_subst"`'
NM='`$ECHO "$NM" | $SED "$delay_single_quote_subst"`'
LN_S='`$ECHO "$LN_S" | $SED "$delay_single_quote_subst"`'
max_cmd_len='`$ECHO "$max_cmd_len" | $SED
"$delay_single_quote_subst"`'
ac_objext='`$ECHO "$ac_objext" | $SED "$delay_single_quote_subst"`'
exeext='`$ECHO "$exeext" | $SED "$delay_single_quote_subst"`'
lt_unset='`$ECHO "$lt_unset" | $SED "$delay_single_quote_subst"`'
lt_SP2NL='`$ECHO "$lt_SP2NL" | $SED "$delay_single_quote_subst"`'
lt_NL2SP='`$ECHO "$lt_NL2SP" | $SED "$delay_single_quote_subst"`'
lt_cv_to_host_file_cmd='`$ECHO "$lt_cv_to_host_file_cmd" | $SED
"$delay_single_quote_subst"`'

```

```
lt_cv_to_tool_file_cmd='`$ECHO "$lt_cv_to_tool_file_cmd" | $SED
"$delay_single_quote_subst"`'
reload_flag='`$ECHO "$reload_flag" | $SED
"$delay_single_quote_subst"`'
reload_cmds='`$ECHO "$reload_cmds" | $SED
"$delay_single_quote_subst"`'
OBJDUMP='`$ECHO "$OBJDUMP" | $SED "$delay_single_quote_subst"`'
deplibs_check_method='`$ECHO "$deplibs_check_method" | $SED
"$delay_single_quote_subst"`'
file_magic_cmd='`$ECHO "$file_magic_cmd" | $SED
"$delay_single_quote_subst"`'
file_magic_glob='`$ECHO "$file_magic_glob" | $SED
"$delay_single_quote_subst"`'
want_nocaseglob='`$ECHO "$want_nocaseglob" | $SED
"$delay_single_quote_subst"`'
DLLTOOL='`$ECHO "$DLLTOOL" | $SED "$delay_single_quote_subst"`'
sharedlib_from_linklib_cmd='`$ECHO "$sharedlib_from_linklib_cmd" |
$SED "$delay_single_quote_subst"`'
AR='`$ECHO "$AR" | $SED "$delay_single_quote_subst"`'
AR_FLAGS='`$ECHO "$AR_FLAGS" | $SED "$delay_single_quote_subst"`'
archiver_list_spec='`$ECHO "$archiver_list_spec" | $SED
"$delay_single_quote_subst"`'
STRIP='`$ECHO "$STRIP" | $SED "$delay_single_quote_subst"`'
RANLIB='`$ECHO "$RANLIB" | $SED "$delay_single_quote_subst"`'
old_postinstall_cmds='`$ECHO "$old_postinstall_cmds" | $SED
"$delay_single_quote_subst"`'
old_postuninstall_cmds='`$ECHO "$old_postuninstall_cmds" | $SED
"$delay_single_quote_subst"`'
old_archive_cmds='`$ECHO "$old_archive_cmds" | $SED
"$delay_single_quote_subst"`'
lock_old_archive_extraction='`$ECHO "$lock_old_archive_extraction" |
$SED "$delay_single_quote_subst"`'
CC='`$ECHO "$CC" | $SED "$delay_single_quote_subst"`'
CFLAGS='`$ECHO "$CFLAGS" | $SED "$delay_single_quote_subst"`'
compiler='`$ECHO "$compiler" | $SED "$delay_single_quote_subst"`'
GCC='`$ECHO "$GCC" | $SED "$delay_single_quote_subst"`'
lt_cv_sys_global_symbol_pipe='`$ECHO "$lt_cv_sys_global_symbol_pipe" |
$SED "$delay_single_quote_subst"`'
lt_cv_sys_global_symbol_to_cdecl='`$ECHO
"$lt_cv_sys_global_symbol_to_cdecl" | $SED
"$delay_single_quote_subst"`'
lt_cv_sys_global_symbol_to_c_name_address='`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address" | $SED
"$delay_single_quote_subst"`'
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix='`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address_lib_prefix" | $SED
"$delay_single_quote_subst"`'
nm_file_list_spec='`$ECHO "$nm_file_list_spec" | $SED
"$delay_single_quote_subst"`'
lt_sysroot='`$ECHO "$lt_sysroot" | $SED "$delay_single_quote_subst"`'
objdir='`$ECHO "$objdir" | $SED "$delay_single_quote_subst"`'
MAGIC_CMD='`$ECHO "$MAGIC_CMD" | $SED "$delay_single_quote_subst"`'
```



```
lt_prog_compiler_no_builtin_flag=`$ECHO
"$lt_prog_compiler_no_builtin_flag" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_pic=`$ECHO "$lt_prog_compiler_pic" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_wl=`$ECHO "$lt_prog_compiler_wl" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_static=`$ECHO "$lt_prog_compiler_static" | $SED
"$delay_single_quote_subst"`
lt_cv_prog_compiler_c_o=`$ECHO "$lt_cv_prog_compiler_c_o" | $SED
"$delay_single_quote_subst"`
need_locks=`$ECHO "$need_locks" | $SED "$delay_single_quote_subst"`
MANIFEST_TOOL=`$ECHO "$MANIFEST_TOOL" | $SED
"$delay_single_quote_subst"`
DSYMUTIL=`$ECHO "$DSYMUTIL" | $SED "$delay_single_quote_subst"`
NMEDIT=`$ECHO "$NMEDIT" | $SED "$delay_single_quote_subst"`
LIPO=`$ECHO "$LIPO" | $SED "$delay_single_quote_subst"`
OTOOL=`$ECHO "$OTOOL" | $SED "$delay_single_quote_subst"`
OTOOL64=`$ECHO "$OTOOL64" | $SED "$delay_single_quote_subst"`
libext=`$ECHO "$libext" | $SED "$delay_single_quote_subst"`
shrext_cmds=`$ECHO "$shrext_cmds" | $SED
"$delay_single_quote_subst"`
extract_expsyms_cmds=`$ECHO "$extract_expsyms_cmds" | $SED
"$delay_single_quote_subst"`
archive_cmds_need_lc=`$ECHO "$archive_cmds_need_lc" | $SED
"$delay_single_quote_subst"`
enable_shared_with_static_runtimes=`$ECHO
"$enable_shared_with_static_runtimes" | $SED
"$delay_single_quote_subst"`
export_dynamic_flag_spec=`$ECHO "$export_dynamic_flag_spec" | $SED
"$delay_single_quote_subst"`
whole_archive_flag_spec=`$ECHO "$whole_archive_flag_spec" | $SED
"$delay_single_quote_subst"`
compiler_needs_object=`$ECHO "$compiler_needs_object" | $SED
"$delay_single_quote_subst"`
old_archive_from_new_cmds=`$ECHO "$old_archive_from_new_cmds" | $SED
"$delay_single_quote_subst"`
old_archive_from_expsyms_cmds=`$ECHO "$old_archive_from_expsyms_cmds"
| $SED "$delay_single_quote_subst"`
archive_cmds=`$ECHO "$archive_cmds" | $SED
"$delay_single_quote_subst"`
archive_expsym_cmds=`$ECHO "$archive_expsym_cmds" | $SED
"$delay_single_quote_subst"`
module_cmds=`$ECHO "$module_cmds" | $SED
"$delay_single_quote_subst"`
module_expsym_cmds=`$ECHO "$module_expsym_cmds" | $SED
"$delay_single_quote_subst"`
with_gnu_ld=`$ECHO "$with_gnu_ld" | $SED
"$delay_single_quote_subst"`
allow_undefined_flag=`$ECHO "$allow_undefined_flag" | $SED
"$delay_single_quote_subst"`
```

```
no_undefined_flag='`$ECHO "$no_undefined_flag" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_flag_spec='`$ECHO "$hardcode_libdir_flag_spec" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_separator='`$ECHO "$hardcode_libdir_separator" | $SED
"$delay_single_quote_subst"`'
hardcode_direct='`$ECHO "$hardcode_direct" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_absolute='`$ECHO "$hardcode_direct_absolute" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L='`$ECHO "$hardcode_minus_L" | $SED
"$delay_single_quote_subst"`'
hardcode_shlibpath_var='`$ECHO "$hardcode_shlibpath_var" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic='`$ECHO "$hardcode_automatic" | $SED
"$delay_single_quote_subst"`'
inherit_rpath='`$ECHO "$inherit_rpath" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs='`$ECHO "$link_all_deplibs" | $SED
"$delay_single_quote_subst"`'
always_export_symbols='`$ECHO "$always_export_symbols" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds='`$ECHO "$export_symbols_cmds" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms='`$ECHO "$exclude_expsyms" | $SED
"$delay_single_quote_subst"`'
include_expsyms='`$ECHO "$include_expsyms" | $SED
"$delay_single_quote_subst"`'
prelink_cmds='`$ECHO "$prelink_cmds" | $SED
"$delay_single_quote_subst"`'
postlink_cmds='`$ECHO "$postlink_cmds" | $SED
"$delay_single_quote_subst"`'
file_list_spec='`$ECHO "$file_list_spec" | $SED
"$delay_single_quote_subst"`'
variables_saved_for_relink='`$ECHO "$variables_saved_for_relink" |
$SED "$delay_single_quote_subst"`'
need_lib_prefix='`$ECHO "$need_lib_prefix" | $SED
"$delay_single_quote_subst"`'
need_version='`$ECHO "$need_version" | $SED
"$delay_single_quote_subst"`'
version_type='`$ECHO "$version_type" | $SED
"$delay_single_quote_subst"`'
runpath_var='`$ECHO "$runpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_var='`$ECHO "$shlibpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_overrides_runpath='`$ECHO "$shlibpath_overrides_runpath" |
$SED "$delay_single_quote_subst"`'
libname_spec='`$ECHO "$libname_spec" | $SED
"$delay_single_quote_subst"`'
library_names_spec='`$ECHO "$library_names_spec" | $SED
"$delay_single_quote_subst"`'
```

```
soname_spec='`$ECHO "$soname_spec" | $SED
"$delay_single_quote_subst"``'
install_override_mode='`$ECHO "$install_override_mode" | $SED
"$delay_single_quote_subst"``'
postinstall_cmds='`$ECHO "$postinstall_cmds" | $SED
"$delay_single_quote_subst"``'
postuninstall_cmds='`$ECHO "$postuninstall_cmds" | $SED
"$delay_single_quote_subst"``'
finish_cmds='`$ECHO "$finish_cmds" | $SED
"$delay_single_quote_subst"``'
finish_eval='`$ECHO "$finish_eval" | $SED
"$delay_single_quote_subst"``'
hardcode_into_libs='`$ECHO "$hardcode_into_libs" | $SED
"$delay_single_quote_subst"``'
sys_lib_search_path_spec='`$ECHO "$sys_lib_search_path_spec" | $SED
"$delay_single_quote_subst"``'
sys_lib_dlsearch_path_spec='`$ECHO "$sys_lib_dlsearch_path_spec" |
$SED "$delay_single_quote_subst"``'
hardcode_action='`$ECHO "$hardcode_action" | $SED
"$delay_single_quote_subst"``'
enable_dlopen='`$ECHO "$enable_dlopen" | $SED
"$delay_single_quote_subst"``'
enable_dlopen_self='`$ECHO "$enable_dlopen_self" | $SED
"$delay_single_quote_subst"``'
enable_dlopen_self_static='`$ECHO "$enable_dlopen_self_static" | $SED
"$delay_single_quote_subst"``'
old_striplib='`$ECHO "$old_striplib" | $SED
"$delay_single_quote_subst"``'
striplib='`$ECHO "$striplib" | $SED "$delay_single_quote_subst"``'
compiler_lib_search_dirs='`$ECHO "$compiler_lib_search_dirs" | $SED
"$delay_single_quote_subst"``'
predep_objects='`$ECHO "$predep_objects" | $SED
"$delay_single_quote_subst"``'
postdep_objects='`$ECHO "$postdep_objects" | $SED
"$delay_single_quote_subst"``'
predeps='`$ECHO "$predeps" | $SED "$delay_single_quote_subst"``'
postdeps='`$ECHO "$postdeps" | $SED "$delay_single_quote_subst"``'
compiler_lib_search_path='`$ECHO "$compiler_lib_search_path" | $SED
"$delay_single_quote_subst"``'
LD_CXX='`$ECHO "$LD_CXX" | $SED "$delay_single_quote_subst"``'
LD_RC='`$ECHO "$LD_RC" | $SED "$delay_single_quote_subst"``'
reload_flag_CXX='`$ECHO "$reload_flag_CXX" | $SED
"$delay_single_quote_subst"``'
reload_flag_RC='`$ECHO "$reload_flag_RC" | $SED
"$delay_single_quote_subst"``'
reload_cmds_CXX='`$ECHO "$reload_cmds_CXX" | $SED
"$delay_single_quote_subst"``'
reload_cmds_RC='`$ECHO "$reload_cmds_RC" | $SED
"$delay_single_quote_subst"``'
old_archive_cmds_CXX='`$ECHO "$old_archive_cmds_CXX" | $SED
"$delay_single_quote_subst"``'
```

```
old_archive_cmds_RC='`$ECHO "$old_archive_cmds_RC" | $SED
"$delay_single_quote_subst"`'
compiler_CXX='`$ECHO "$compiler_CXX" | $SED
"$delay_single_quote_subst"`'
compiler_RC='`$ECHO "$compiler_RC" | $SED
"$delay_single_quote_subst"`'
GCC_CXX='`$ECHO "$GCC_CXX" | $SED "$delay_single_quote_subst"`'
GCC_RC='`$ECHO "$GCC_RC" | $SED "$delay_single_quote_subst"`'
lt_prog_compiler_no_builtin_flag_CXX='`$ECHO
"$lt_prog_compiler_no_builtin_flag_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_no_builtin_flag_RC='`$ECHO
"$lt_prog_compiler_no_builtin_flag_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_pic_CXX='`$ECHO "$lt_prog_compiler_pic_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_pic_RC='`$ECHO "$lt_prog_compiler_pic_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_wl_CXX='`$ECHO "$lt_prog_compiler_wl_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_wl_RC='`$ECHO "$lt_prog_compiler_wl_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_static_CXX='`$ECHO "$lt_prog_compiler_static_CXX" |
$SED "$delay_single_quote_subst"`'
lt_prog_compiler_static_RC='`$ECHO "$lt_prog_compiler_static_RC" |
$SED "$delay_single_quote_subst"`'
lt_cv_prog_compiler_c_o_CXX='`$ECHO "$lt_cv_prog_compiler_c_o_CXX" |
$SED "$delay_single_quote_subst"`'
lt_cv_prog_compiler_c_o_RC='`$ECHO "$lt_cv_prog_compiler_c_o_RC" |
$SED "$delay_single_quote_subst"`'
archive_cmds_need_lc_CXX='`$ECHO "$archive_cmds_need_lc_CXX" | $SED
"$delay_single_quote_subst"`'
archive_cmds_need_lc_RC='`$ECHO "$archive_cmds_need_lc_RC" | $SED
"$delay_single_quote_subst"`'
enable_shared_with_static_runtimes_CXX='`$ECHO
"$enable_shared_with_static_runtimes_CXX" | $SED
"$delay_single_quote_subst"`'
enable_shared_with_static_runtimes_RC='`$ECHO
"$enable_shared_with_static_runtimes_RC" | $SED
"$delay_single_quote_subst"`'
export_dynamic_flag_spec_CXX='`$ECHO "$export_dynamic_flag_spec_CXX" |
$SED "$delay_single_quote_subst"`'
export_dynamic_flag_spec_RC='`$ECHO "$export_dynamic_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
whole_archive_flag_spec_CXX='`$ECHO "$whole_archive_flag_spec_CXX" |
$SED "$delay_single_quote_subst"`'
whole_archive_flag_spec_RC='`$ECHO "$whole_archive_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
compiler_needs_object_CXX='`$ECHO "$compiler_needs_object_CXX" | $SED
"$delay_single_quote_subst"`'
compiler_needs_object_RC='`$ECHO "$compiler_needs_object_RC" | $SED
"$delay_single_quote_subst"`'
```

```
old_archive_from_new_cmds_CXX='`$ECHO "$old_archive_from_new_cmds_CXX"
| $SED "$delay_single_quote_subst"`'
old_archive_from_new_cmds_RC='`$ECHO "$old_archive_from_new_cmds_RC" |
$SED "$delay_single_quote_subst"`'
old_archive_from_expsyms_cmds_CXX='`$ECHO
"$old_archive_from_expsyms_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
old_archive_from_expsyms_cmds_RC='`$ECHO
"$old_archive_from_expsyms_cmds_RC" | $SED
"$delay_single_quote_subst"`'
archive_cmds_CXX='`$ECHO "$archive_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
archive_cmds_RC='`$ECHO "$archive_cmds_RC" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds_CXX='`$ECHO "$archive_expsym_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds_RC='`$ECHO "$archive_expsym_cmds_RC" | $SED
"$delay_single_quote_subst"`'
module_cmds_CXX='`$ECHO "$module_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
module_cmds_RC='`$ECHO "$module_cmds_RC" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds_CXX='`$ECHO "$module_expsym_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds_RC='`$ECHO "$module_expsym_cmds_RC" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld_CXX='`$ECHO "$with_gnu_ld_CXX" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld_RC='`$ECHO "$with_gnu_ld_RC" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag_CXX='`$ECHO "$allow_undefined_flag_CXX" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag_RC='`$ECHO "$allow_undefined_flag_RC" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag_CXX='`$ECHO "$no_undefined_flag_CXX" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag_RC='`$ECHO "$no_undefined_flag_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_flag_spec_CXX='`$ECHO "$hardcode_libdir_flag_spec_CXX"
| $SED "$delay_single_quote_subst"`'
hardcode_libdir_flag_spec_RC='`$ECHO "$hardcode_libdir_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_libdir_separator_CXX='`$ECHO "$hardcode_libdir_separator_CXX"
| $SED "$delay_single_quote_subst"`'
hardcode_libdir_separator_RC='`$ECHO "$hardcode_libdir_separator_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_direct_CXX='`$ECHO "$hardcode_direct_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_RC='`$ECHO "$hardcode_direct_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_absolute_CXX='`$ECHO "$hardcode_direct_absolute_CXX" |
$SED "$delay_single_quote_subst"`'
```

```
hardcode_direct_absolute_RC='`$ECHO "$hardcode_direct_absolute_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_minus_L_CXX='`$ECHO "$hardcode_minus_L_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L_RC='`$ECHO "$hardcode_minus_L_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_shlibpath_var_CXX='`$ECHO "$hardcode_shlibpath_var_CXX" |
$SED "$delay_single_quote_subst"`'
hardcode_shlibpath_var_RC='`$ECHO "$hardcode_shlibpath_var_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic_CXX='`$ECHO "$hardcode_automatic_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic_RC='`$ECHO "$hardcode_automatic_RC" | $SED
"$delay_single_quote_subst"`'
inherit_rpath_CXX='`$ECHO "$inherit_rpath_CXX" | $SED
"$delay_single_quote_subst"`'
inherit_rpath_RC='`$ECHO "$inherit_rpath_RC" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs_CXX='`$ECHO "$link_all_deplibs_CXX" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs_RC='`$ECHO "$link_all_deplibs_RC" | $SED
"$delay_single_quote_subst"`'
always_export_symbols_CXX='`$ECHO "$always_export_symbols_CXX" | $SED
"$delay_single_quote_subst"`'
always_export_symbols_RC='`$ECHO "$always_export_symbols_RC" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds_CXX='`$ECHO "$export_symbols_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds_RC='`$ECHO "$export_symbols_cmds_RC" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms_CXX='`$ECHO "$exclude_expsyms_CXX" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms_RC='`$ECHO "$exclude_expsyms_RC" | $SED
"$delay_single_quote_subst"`'
include_expsyms_CXX='`$ECHO "$include_expsyms_CXX" | $SED
"$delay_single_quote_subst"`'
include_expsyms_RC='`$ECHO "$include_expsyms_RC" | $SED
"$delay_single_quote_subst"`'
prelink_cmds_CXX='`$ECHO "$prelink_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
prelink_cmds_RC='`$ECHO "$prelink_cmds_RC" | $SED
"$delay_single_quote_subst"`'
postlink_cmds_CXX='`$ECHO "$postlink_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
postlink_cmds_RC='`$ECHO "$postlink_cmds_RC" | $SED
"$delay_single_quote_subst"`'
file_list_spec_CXX='`$ECHO "$file_list_spec_CXX" | $SED
"$delay_single_quote_subst"`'
file_list_spec_RC='`$ECHO "$file_list_spec_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_action_CXX='`$ECHO "$hardcode_action_CXX" | $SED
"$delay_single_quote_subst"`'
```

```

hardcode_action_RC='`$ECHO "$hardcode_action_RC" | $SED
"$delay_single_quote_subst"`'
compiler_lib_search_dirs_CXX='`$ECHO "$compiler_lib_search_dirs_CXX" |
$SED "$delay_single_quote_subst"`'
compiler_lib_search_dirs_RC='`$ECHO "$compiler_lib_search_dirs_RC" |
$SED "$delay_single_quote_subst"`'
predep_objects_CXX='`$ECHO "$predep_objects_CXX" | $SED
"$delay_single_quote_subst"`'
predep_objects_RC='`$ECHO "$predep_objects_RC" | $SED
"$delay_single_quote_subst"`'
postdep_objects_CXX='`$ECHO "$postdep_objects_CXX" | $SED
"$delay_single_quote_subst"`'
postdep_objects_RC='`$ECHO "$postdep_objects_RC" | $SED
"$delay_single_quote_subst"`'
predeps_CXX='`$ECHO "$predeps_CXX" | $SED
"$delay_single_quote_subst"`'
predeps_RC='`$ECHO "$predeps_RC" | $SED "$delay_single_quote_subst"`'
postdeps_CXX='`$ECHO "$postdeps_CXX" | $SED
"$delay_single_quote_subst"`'
postdeps_RC='`$ECHO "$postdeps_RC" | $SED
"$delay_single_quote_subst"`'
compiler_lib_search_path_CXX='`$ECHO "$compiler_lib_search_path_CXX" |
$SED "$delay_single_quote_subst"`'
compiler_lib_search_path_RC='`$ECHO "$compiler_lib_search_path_RC" |
$SED "$delay_single_quote_subst"`'

```

```

LTCC='$LTCC'
LTCFLAGS='$LTCFLAGS'
compiler='$compiler_DEFAULT'

```

```
# A function that is used when there is no print builtin or printf.
```

```

func_fallback_echo ()
{
    eval 'cat <<_LTECHO_EOF
\${1}
_LTECHO_EOF'
}

```

```
# Quote eevald strings.
```

```

for var in SHELL \
ECHO \
PATH_SEPARATOR \
SED \
GREP \
EGREP \
FGREP \
LD \
NM \
LN_S \
lt_SP2NL \
lt_NL2SP \
reload_flag \

```

OBJDUMP \
deplibs_check_method \
file_magic_cmd \
file_magic_glob \
want_nocaseglob \
DLLTOOL \
sharedlib_from_linklib_cmd \
AR \
AR_FLAGS \
archiver_list_spec \
STRIP \
RANLIB \
CC \
CFLAGS \
compiler \
lt_cv_sys_global_symbol_pipe \
lt_cv_sys_global_symbol_to_cdecl \
lt_cv_sys_global_symbol_to_c_name_address \
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix \
nm_file_list_spec \
lt_prog_compiler_no_builtin_flag \
lt_prog_compiler_pic \
lt_prog_compiler_wl \
lt_prog_compiler_static \
lt_cv_prog_compiler_c_o \
need_locks \
MANIFEST_TOOL \
DSYMUTIL \
NMEDIT \
LIPO \
OTOOL \
OTOOL64 \
shrext_cmds \
export_dynamic_flag_spec \
whole_archive_flag_spec \
compiler_needs_object \
with_gnu_ld \
allow_undefined_flag \
no_undefined_flag \
hardcode_libdir_flag_spec \
hardcode_libdir_separator \
exclude_expsyms \
include_expsyms \
file_list_spec \
variables_saved_for_relink \
libname_spec \
library_names_spec \
soname_spec \
install_override_mode \
finish_eval \
old_striplib \
striplib \


```
compiler_lib_search_dirs \  
predep_objects \  
postdep_objects \  
predeps \  
postdeps \  
compiler_lib_search_path \  
LD_CXX \  
LD_RC \  
reload_flag_CXX \  
reload_flag_RC \  
compiler_CXX \  
compiler_RC \  
lt_prog_compiler_no_builtin_flag_CXX \  
lt_prog_compiler_no_builtin_flag_RC \  
lt_prog_compiler_pic_CXX \  
lt_prog_compiler_pic_RC \  
lt_prog_compiler_wl_CXX \  
lt_prog_compiler_wl_RC \  
lt_prog_compiler_static_CXX \  
lt_prog_compiler_static_RC \  
lt_cv_prog_compiler_c_o_CXX \  
lt_cv_prog_compiler_c_o_RC \  
export_dynamic_flag_spec_CXX \  
export_dynamic_flag_spec_RC \  
whole_archive_flag_spec_CXX \  
whole_archive_flag_spec_RC \  
compiler_needs_object_CXX \  
compiler_needs_object_RC \  
with_gnu_ld_CXX \  
with_gnu_ld_RC \  
allow_undefined_flag_CXX \  
allow_undefined_flag_RC \  
no_undefined_flag_CXX \  
no_undefined_flag_RC \  
hardcode_libdir_flag_spec_CXX \  
hardcode_libdir_flag_spec_RC \  
hardcode_libdir_separator_CXX \  
hardcode_libdir_separator_RC \  
exclude_expsyms_CXX \  
exclude_expsyms_RC \  
include_expsyms_CXX \  
include_expsyms_RC \  
file_list_spec_CXX \  
file_list_spec_RC \  
compiler_lib_search_dirs_CXX \  
compiler_lib_search_dirs_RC \  
predep_objects_CXX \  
predep_objects_RC \  
postdep_objects_CXX \  
postdep_objects_RC \  
predeps_CXX \  
predeps_RC \  

```

```

postdeps_CXX \
postdeps_RC \
compiler_lib_search_path_CXX \
compiler_lib_search_path_RC; do
    case `eval \\\$ECHO \\\$"\$\\$var"\\` in
    *[\$]*)
        eval "lt_\\$var=\\$ECHO \\\$\\$var\\" | \\\$SED
        \\\$sed_quote_subst\\`\\`"
        ;;
    *)
        eval "lt_\\$var=\\$\\$var\\"
        ;;
    esac
done

```

```

# Double-quote double-evaluated strings.
for var in reload_cmds \
old_postinstall_cmds \
old_postuninstall_cmds \
old_archive_cmds \
extract_expsyms_cmds \
old_archive_from_new_cmds \
old_archive_from_expsyms_cmds \
archive_cmds \
archive_expsym_cmds \
module_cmds \
module_expsym_cmds \
export_symbols_cmds \
prelink_cmds \
postlink_cmds \
postinstall_cmds \
postuninstall_cmds \
finish_cmds \
sys_lib_search_path_spec \
sys_lib_dlsearch_path_spec \
reload_cmds_CXX \
reload_cmds_RC \
old_archive_cmds_CXX \
old_archive_cmds_RC \
old_archive_from_new_cmds_CXX \
old_archive_from_new_cmds_RC \
old_archive_from_expsyms_cmds_CXX \
old_archive_from_expsyms_cmds_RC \
archive_cmds_CXX \
archive_cmds_RC \
archive_expsym_cmds_CXX \
archive_expsym_cmds_RC \
module_cmds_CXX \
module_cmds_RC \
module_expsym_cmds_CXX \
module_expsym_cmds_RC \
export_symbols_cmds_CXX \

```

```

export_symbols_cmds_RC \
prelink_cmds_CXX \
prelink_cmds_RC \
postlink_cmds_CXX \
postlink_cmds_RC; do
    case `eval \\\\\\\$ECHO \\\\\\\"\\\\\\$\\$var"\\\\\\"` in
        *[\\\\\\\`\\\\\\"\\\\\\$]*)
            eval "lt_\\$var=\\\\\\\\\\\\\\"\\\\\\`\\\\\\$ECHO \\\\\\\"\\\\\\$\\$var\\\\\\" | \\\\\\\$SED -e
\\\\\\\"\\\\\\$double_quote_subst\\\\\\" -e \\\\\\\"\\\\\\$sed_quote_subst\\\\\\" -e
\\\\\\\"\\\\\\$delay_variable_subst\\\\\\"\\\\\\`\\\\\\\\\\\\\\""
                ;;
        *)
            eval "lt_\\$var=\\\\\\\\\\\\\\"\\\\\\$\\$var\\\\\\\\\\\\\\""
                ;;
    esac
done

```

```

ac_aux_dir='$ac_aux_dir'
xsi_shell='$xsi_shell'
lt_shell_append='$lt_shell_append'

```

```

# See if we are running on zsh, and set the options which allow our
# commands through without removal of \ escapes INIT.
if test -n "\${ZSH_VERSION+set}" ; then
    setopt NO_GLOB_SUBST
fi

```

```

PACKAGE='$PACKAGE'
VERSION='$VERSION'
TIMESTAMP='$TIMESTAMP'
RM='$RM'
ofile='$ofile'

```

_ACEOF

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
```

```

# Handling of arguments.
for ac_config_target in $ac_config_targets
do
    case $ac_config_target in
        "config.h") CONFIG_HEADERS="$CONFIG_HEADERS config.h" ;;
        "depfiles") CONFIG_COMMANDS="$CONFIG_COMMANDS depfiles" ;;
        "libtool") CONFIG_COMMANDS="$CONFIG_COMMANDS libtool" ;;
    )

```

```
"Doxyfile") CONFIG_FILES="$CONFIG_FILES Doxyfile" ;;
"dbus/versioninfo.rc") CONFIG_FILES="$CONFIG_FILES
dbus/versioninfo.rc" ;;
"dbus/dbus-arch-deps.h") CONFIG_FILES="$CONFIG_FILES dbus/dbus-
arch-deps.h" ;;
"bus/system.conf") CONFIG_FILES="$CONFIG_FILES bus/system.conf" ;;
"bus/session.conf") CONFIG_FILES="$CONFIG_FILES bus/session.conf"
;;
"bus/messagebus") CONFIG_FILES="$CONFIG_FILES bus/messagebus" ;;
"bus/messagebus-config") CONFIG_FILES="$CONFIG_FILES
bus/messagebus-config" ;;
"bus/org.freedesktop.dbus-session.plist")
CONFIG_FILES="$CONFIG_FILES bus/org.freedesktop.dbus-session.plist" ;;
"bus/rc.messagebus") CONFIG_FILES="$CONFIG_FILES
bus/rc.messagebus" ;;
"bus/dbus.service") CONFIG_FILES="$CONFIG_FILES bus/dbus.service"
;;
"bus/dbus.socket") CONFIG_FILES="$CONFIG_FILES bus/dbus.socket" ;;
"Makefile") CONFIG_FILES="$CONFIG_FILES Makefile" ;;
"dbus/Makefile") CONFIG_FILES="$CONFIG_FILES dbus/Makefile" ;;
"bus/Makefile") CONFIG_FILES="$CONFIG_FILES bus/Makefile" ;;
"tools/Makefile") CONFIG_FILES="$CONFIG_FILES tools/Makefile" ;;
"test/Makefile") CONFIG_FILES="$CONFIG_FILES test/Makefile" ;;
"test/name-test/Makefile") CONFIG_FILES="$CONFIG_FILES test/name-
test/Makefile" ;;
"doc/Makefile") CONFIG_FILES="$CONFIG_FILES doc/Makefile" ;;
"doc/dbus-daemon.1") CONFIG_FILES="$CONFIG_FILES doc/dbus-
daemon.1" ;;
"dbus-1.pc") CONFIG_FILES="$CONFIG_FILES dbus-1.pc" ;;
"dbus-1-uninstalled.pc") CONFIG_FILES="$CONFIG_FILES dbus-1-
uninstalled.pc" ;;
"test/data/valid-config-files/debug-allow-all.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files/debug-allow-
all.conf" ;;
"test/data/valid-config-files/debug-allow-all-sha1.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files/debug-allow-
all-sha1.conf" ;;
"test/data/valid-config-files-system/debug-allow-all-pass.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files-system/debug-
allow-all-pass.conf" ;;
"test/data/valid-config-files-system/debug-allow-all-fail.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files-system/debug-
allow-all-fail.conf" ;;
"test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service" ;;
"test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service" ;;
```

```

    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service" ;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service" ;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service"
;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service"
;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service" ;;

*) as_fn_error $? "invalid argument: \`${ac_config_target}'" "$LINENO"
5;;
esac
done

```

```

# If the user did not use the arguments to specify the items to
# instantiate,
# then the envvar interface is used.  Set only those that are not.
# We use the long form for the default assignment because of an
# extremely
# bizarre bug on SunOS 4.1.3.
if $ac_need_defaults; then
    test "${CONFIG_FILES+set}" = set || CONFIG_FILES=$config_files
    test "${CONFIG_HEADERS+set}" = set || CONFIG_HEADERS=$config_headers
    test "${CONFIG_COMMANDS+set}" = set ||
CONFIG_COMMANDS=$config_commands
fi

# Have a temporary directory for convenience.  Make it in the build
# tree
# simply because there is no reason against having it here, and in
# addition,
# creating and moving files from /tmp can sometimes cause problems.
# Hook for its removal unless debugging.
# Note that there is a small window in which the directory will not be
# cleaned:
# after its creation but before its name has been assigned to `$tmp'.
$debug ||
{
    tmp= ac_tmp=
    trap 'exit_status=$?'
    : "${ac_tmp:= $tmp}"
    { test ! -d "$ac_tmp" || rm -fr "$ac_tmp"; } && exit $exit_status
' 0
    trap 'as_fn_exit 1' 1 2 13 15
}
# Create a (secure) tmp directory for tmp files.

{
    tmp=`(umask 077 && mktemp -d "./confXXXXXX") 2>/dev/null` &&
    test -d "$tmp"
} ||
{
    tmp=./conf$$-$RANDOM
    (umask 077 && mkdir "$tmp")
} || as_fn_error $? "cannot create a temporary directory in ."
"$LINENO" 5
ac_tmp=$tmp

# Set up the scripts for CONFIG_FILES section.
# No need to generate them if there are no CONFIG_FILES.
# This happens for instance with `./config.status config.h'.
if test -n "$CONFIG_FILES"; then

ac_cr=`echo X | tr X '\015'`

```

```

# On cygwin, bash can eat \r inside `` if the user requested igncr.
# But we know of no other shell where ac_cr would be empty at this
# point, so we can use a bashism as a fallback.
if test "x$ac_cr" = x; then
    eval ac_cr=\$\'\r\'
fi
ac_cs_awk_cr=`$AWK 'BEGIN { print "a\rb" }' </dev/null 2>/dev/null`
if test "$ac_cs_awk_cr" = "a${ac_cr}b"; then
    ac_cs_awk_cr='\r'
else
    ac_cs_awk_cr=$ac_cr
fi

echo 'BEGIN {' >"$ac_tmp/subs1.awk" &&
_ACEOF

{
    echo "cat >conf$$$subs.awk <<_ACEOF" &&
    echo "$ac_subst_vars" | sed 's/.*/&!$&$ac_delim/' &&
    echo "_ACEOF"
} >conf$$$subs.sh ||
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
ac_delim_num=`echo "$ac_subst_vars" | grep -c '^`
ac_delim='%!_!# '
for ac_last_try in false false false false false ;; do
    . ./conf$$$subs.sh ||
        as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5

    ac_delim_n=`sed -n "s/.*$ac_delim\$/X/p" conf$$$subs.awk | grep -c X`
    if test $ac_delim_n = $ac_delim_num; then
        break
    elif $ac_last_try; then
        as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
    else
        ac_delim="$ac_delim!$ac_delim _$ac_delim!! "
    fi
done
rm -f conf$$$subs.sh

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
cat >>"$ac_tmp/subs1.awk" <<`\_ACAWK &&
_ACEOF
sed -n '
h
s/^[^!]*!//
p
g
s/^[^!]*!//
:repl
t repl
s/'"$ac_delim"'$//

```

```

t delim
:nl
h
s/\(.\\{148\\}\)\.*/\1/
t more1
s/["\\]/\\&/g; s/^"/; s/$/\\n"\\//
p
n
b repl
:more1
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/\\.\\{148\\}//
t nl
:delim
h
s/\(.\\{148\\}\)\.*/\1/
t more2
s/["\\]/\\&/g; s/^"/; s/$"/
p
b
:more2
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/\\.\\{148\\}//
t delim
' <conf$$subs.awk | sed '
/^[^""]/{
  N
  s/\n//
}
' >>$CONFIG_STATUS || ac_write_fail=1
rm -f conf$$subs.awk
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
_ACAWK
cat >>"$ac_tmp/subs1.awk" <<_ACAWK &&
  for (key in S) S_is_set[key] = 1
  FS = " "
}
{
  line = $ 0
  nfields = split(line, field, "@")
  substed = 0
  len = length(field[1])
  for (i = 2; i < nfields; i++) {
    key = field[i]
    keylen = length(key)
    if (S_is_set[key]) {
      value = S[key]

```



```

        line = substr(line, 1, len) "" value "" substr(line, len +
keylen + 3)
        len += length(value) + length(field[++i])
        substed = 1
    } else
        len += 1 + keylen
    }

    print line
}

_ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
if sed "s/$ac_cr//" < /dev/null > /dev/null 2>&1; then
    sed "s/$ac_cr\\$//; s/$ac_cr/$ac_cs_awk_cr/g"
else
    cat
fi < "$ac_tmp/subs1.awk" > "$ac_tmp/subs.awk" \
|| as_fn_error $? "could not setup config files machinery" "$LINENO"
5
_ACEOF

# VPATH may cause trouble with some makes, so we remove sole
$(srcdir),
# ${srcdir} and @srcdir@ entries from VPATH if srcdir is ".", strip
leading and
# trailing colons and then remove the whole line if VPATH becomes
empty
# (actually we leave an empty line to preserve line numbers).
if test "x$srcdir" = x.; then
    ac_vpsub='^[ ]*VPATH[ ]*=[ ]*/*{
h
s///
s/^\://
s/[ ]*$\://
s/:\$(srcdir):\://g
s/:\${srcdir):\://g
s/:@srcdir@\://g
s/^\:*//
s/:\:*$//
x
s/\(=[ ]*\)\.*\/\1/
G
s/\n//
s/^[^=]*=[ ]*$//
}'
fi

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
fi # test -n "$CONFIG_FILES"

```

```

# Set up the scripts for CONFIG_HEADERS section.
# No need to generate them if there are no CONFIG_HEADERS.
# This happens for instance with `./config.status Makefile'.
if test -n "$CONFIG_HEADERS"; then
cat >"$ac_tmp/defines.awk" <<\_ACAWK ||
BEGIN {
\_ACEOF

# Transform confdefs.h into an awk script `defines.awk', embedded as
# here-document in config.status, that substitutes the proper values
into
# config.h.in to produce config.h.

# Create a delimiter string that does not exist in confdefs.h, to ease
# handling of long lines.
ac_delim='%!_!# '
for ac_last_try in false false ;; do
  ac_tt=`sed -n "/$ac_delim/p" confdefs.h`
  if test -z "$ac_tt"; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_HEADERS" "$LINENO" 5
  else
    ac_delim="$ac_delim!$ac_delim _$ac_delim!! "
  fi
done

# For the awk script, D is an array of macro values keyed by name,
# likewise P contains macro parameters if any. Preserve backslash
# newline sequences.

ac_word_re=[_$as_cr_Letters][_$as_cr_alnum]*
sed -n '
s/.\{148\}/&'"$ac_delim"'/g
t rset
:rset
s/^[ ]*#[ ]*define[ ]*[ ]*/ /
t def
d
:def
s/\\$//
t bsnl
s/["\\]/\\&/g
s/^\ ("$ac_word_re"\)\(\([^\()]*\)\)[ ]*\(.*\)/P["\1"]="\2"\
D["\1"]=" \3"/p
s/^\ ("$ac_word_re"\)[ ]*\(.*\)/D["\1"]=" \2"/p
d
:bsnl
s/["\\]/\\&/g
s/^\ ("$ac_word_re"\)\(\([^\()]*\)\)[ ]*\(.*\)/P["\1"]="\2"\
D["\1"]=" \3\\n"/p
t cont

```

```

s/^ \("$ac_word_re"\)[      ]*\(.*\)/D["\1"]=" \2\\\\\\n"\\//p
t cont
d
:cont
n
s/.\{148\}/&"$ac_delim"/g
t clear
:clear
s/\\$//
t bsnlc
s/["\\]/\\&/g; s/^"/; s/$"/p
d
:bsnlc
s/["\\]/\\&/g; s/^"/; s/$/\\\\\\n"\\//p
b cont
' <confdefs.h | sed '
s/"$ac_delim"/"\\
"/g' >>$CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
  for (key in D) D_is_set[key] = 1
  FS = " "
}
/^[\\t ]*#[\\t ]*(define|undef)[\\t ]+$ac_word_re([\\t (]|\\$)/ {
  line = \\$ 0
  split(line, arg, " ")
  if (arg[1] == "#") {
    defundef = arg[2]
    mac1 = arg[3]
  } else {
    defundef = substr(arg[1], 2)
    mac1 = arg[2]
  }
  split(mac1, mac2, "(") #)
  macro = mac2[1]
  prefix = substr(line, 1, index(line, defundef) - 1)
  if (D_is_set[macro]) {
    # Preserve the white space surrounding the "#".
    print prefix "define", macro P[macro] D[macro]
    next
  } else {
    # Replace #undef with comments. This is necessary, for example,
    # in the case of _POSIX_SOURCE, which is predefined and required
    # on some systems where configure will not decide to define it.
    if (defundef == "undef") {
      print "/*", prefix defundef, macro, "*/"
      next
    }
  }
}
}
{ print }
_ACAWK

```

```

_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
  as_fn_error $? "could not setup config headers machinery" "$LINENO"
5
fi # test -n "$CONFIG_HEADERS"

eval set X " :F $CONFIG_FILES :H $CONFIG_HEADERS :C
$CONFIG_COMMANDS"
shift
for ac_tag
do
  case $ac_tag in
    :[FHLC]) ac_mode=$ac_tag; continue;;
  esac
  case $ac_mode$ac_tag in
    :[FHL]*:**) ;;
    :L* | :C:**) as_fn_error $? "invalid tag `\$ac_tag'" "$LINENO" 5;;
    :[FH]-) ac_tag=-:-;;
    :[FH]*) ac_tag=$ac_tag:$ac_tag.in;;
  esac
  ac_save_IFS=$IFS
  IFS=:
  set x $ac_tag
  IFS=$ac_save_IFS
  shift
  ac_file=$1
  shift

  case $ac_mode in
    :L) ac_source=$1;;
    :[FH])
      ac_file_inputs=
      for ac_f
      do
        case $ac_f in
          -) ac_f="$ac_tmp/stdin";;
          *) # Look for the file first in the build tree, then in the
source tree
          # (if the path is not absolute). The absolute path cannot be
DOS-style,
          # because $ac_f cannot contain `:`.
          test -f "$ac_f" ||
          case $ac_f in
            [\\/$]*) false;;
            *) test -f "$srcdir/$ac_f" && ac_f="$srcdir/$ac_f";;
          esac ||
          as_fn_error 1 "cannot find input file: `\$ac_f'" "$LINENO" 5;;
        esac
        case $ac_f in *\'*) ac_f=`$as_echo "$ac_f" | sed
"s/'/'\`\\\`\\\`\\\`\\\`/g"`;; esac
        as_fn_append ac_file_inputs " '$ac_f'"

```

```

done

# Let's still pretend it is `configure' which instantiates (i.e.,
don't
# use $as_me), people would be surprised to read:
# /* config.h. Generated by config.status. */
configure_input='Generated from '`
    $as_echo "$*" | sed 's|^[^:]*|/|;s|:[^:]*|/, |g'
    `' by configure.'
if test x"$ac_file" != x-; then
    configure_input="$ac_file. $configure_input"
    { $as_echo "$as_me:${as_lineno-$LINENO}: creating $ac_file" >&5
$as_echo "$as_me: creating $ac_file" >&6;}
    fi
# Neutralize special characters interpreted by sed in replacement
strings.
case $configure_input in #(
*\&* | *|* | *\\* )
    ac_sed_conf_input=`$as_echo "$configure_input" |
    sed 's/[\\&|/\\&/g]'`; # (
*) ac_sed_conf_input=$configure_input;;
esac

case $ac_tag in
*:-:* | *:-) cat >"$ac_tmp/stdin" \
    || as_fn_error $? "could not create $ac_file" "$LINENO" 5 ;;
esac
;;
esac

ac_dir=`$as_dirname -- "$ac_file" ||
$as_expr X"$ac_file" : 'X\([^/]\|/\|*\|*\$' \| \
X"$ac_file" : 'X\(/\/\)[^/]' \| \
X"$ac_file" : 'X\(/\/\)$' \| \
X"$ac_file" : 'X\(/\/)' \| . 2>/dev/null ||
$as_echo X"$ac_file" |
    sed '/^X\([^/]\|/\|*\|*\$/{
        s//\1/
        q
    }
/^X\(/\/\|\/\)[^/].*/{
        s//\1/
        q
    }
/^X\(/\/\|\/\)$/{
        s//\1/
        q
    }
/^X\(/\/\).*/{
        s//\1/
        q
    }
}'

```

```

        s/.*\/./; q'`
as_dir="$ac_dir"; as_fn_mkdir_p
ac_builddir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_builddir_sub=. ac_top_build_prefix= ;;
*)
    ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.([\//]|||)`
    # A ".." for each directory in $ac_dir_suffix.
    ac_top_builddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\\/]*/|/..|g;s|/|||`
    case $ac_top_builddir_sub in
    "") ac_top_builddir_sub=. ac_top_build_prefix= ;;
    *) ac_top_build_prefix=$ac_top_builddir_sub/ ;;
    esac ;;
esac
ac_abs_top_builddir=$ac_pwd
ac_abs_builddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_builddir=$ac_top_build_prefix

case $srcdir in
.) # We are building in place.
    ac_srcdir=.
    ac_top_srcdir=$ac_top_builddir_sub
    ac_abs_top_srcdir=$ac_pwd ;;
[\\/] * | ?:[\\/] * ) # Absolute name.
    ac_srcdir=$srcdir$ac_dir_suffix;
    ac_top_srcdir=$srcdir
    ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
    ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
    ac_top_srcdir=$ac_top_build_prefix$srcdir
    ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

case $ac_mode in
:F)
#
# CONFIG_FILE
#

case $INSTALL in
[\\/$] * | ?:[\\/] * ) ac_INSTALL=$INSTALL ;;
*) ac_INSTALL=$ac_top_build_prefix$INSTALL ;;
esac
ac_MKDIR_P=$MKDIR_P
case $MKDIR_P in
[\\/$] * | ?:[\\/] * ) ;;
*/ *) ac_MKDIR_P=$ac_top_build_prefix$MKDIR_P ;;

```

```

    esac
  _ACEOF

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# If the template does not know about datarootdir, expand it.
# FIXME: This hack should be removed a few years after 2.60.
ac_datarootdir_hack=; ac_datarootdir_seen=
ac_sed_dataroot='
/datarootdir/ {
  p
  q
}
/@datadir@/p
/@docdir@/p
/@infodir@/p
/@localedir@/p
/@mandir@/p'
case `eval "sed -n \"\$ac_sed_dataroot\" \$ac_file_inputs"` in
*datarootdir*) ac_datarootdir_seen=yes;;
*@datadir@*|*@docdir@*|*@infodir@*|*@localedir@*|*@mandir@*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file_inputs
seems to ignore the --datarootdir setting" >&5
$as_echo "$as_me: WARNING: $ac_file_inputs seems to ignore the --
datarootdir setting" >&2;}
  _ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
  ac_datarootdir_hack='
s&@datadir@&${datadir}&g
s&@docdir@&${docdir}&g
s&@infodir@&${infodir}&g
s&@localedir@&${localedir}&g
s&@mandir@&${mandir}&g
s&\\\${datarootdir}&${datarootdir}&g' ;;
esac
  _ACEOF

# Neutralize VPATH when `srcdir' = `.'.
# Shell code in configure.ac might set extrasub.
# FIXME: do we really want to maintain this feature?
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
ac_sed_extra="$ac_vpsub
$extrasub
  _ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
:t
/@[a-zA-Z_][a-zA-Z_0-9]*@/!b
s|@configure_input@|@ac_sed_conf_input@|;t t
s&@top_builddir@&${ac_top_builddir_sub}&;t t
s&@top_build_prefix@&${ac_top_build_prefix}&;t t
s&@srcdir@&${ac_srcdir}&;t t
s&@abs_srcdir@&${ac_abs_srcdir}&;t t
s&@top_srcdir@&${ac_top_srcdir}&;t t

```

```

s&@abs_top_srcdir@&&$ac_abs_top_srcdir&;t t
s&@builddir@&&$ac_builddir&;t t
s&@abs_builddir@&&$ac_abs_builddir&;t t
s&@abs_top_builddir@&&$ac_abs_top_builddir&;t t
s&@INSTALL@&&$ac_INSTALL&;t t
s&@MKDIR_P@&&$ac_MKDIR_P&;t t
$ac_datarootdir_hack
"
eval sed \`\`$ac_sed_extra\`" "$ac_file_inputs" | $AWK -f
"$ac_tmp/subs.awk" \
  >$ac_tmp/out || as_fn_error $? "could not create $ac_file" "$LINENO"
5

test -z "$ac_datarootdir_hack$ac_datarootdir_seen" &&
{ ac_out=`sed -n '/\${datarootdir}/p' "$ac_tmp/out"`; test -n
"$ac_out"; } &&
{ ac_out=`sed -n '/^[ ]*datarootdir[ ]*:*/p' \
  "$ac_tmp/out"`; test -z "$ac_out"; } &&
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file contains
a reference to the variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&5
$as_echo "$as_me: WARNING: $ac_file contains a reference to the
variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&2;}

rm -f "$ac_tmp/stdin"
case $ac_file in
-) cat "$ac_tmp/out" && rm -f "$ac_tmp/out";;
*) rm -f "$ac_file" && mv "$ac_tmp/out" "$ac_file";;
esac \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
;;
:H)
#
# CONFIG_HEADER
#
if test x"$ac_file" != x-; then
{
  $as_echo "/* $configure_input */" \
  && eval '$AWK -f "$ac_tmp/defines.awk"' "$ac_file_inputs"
} >"$ac_tmp/config.h" \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
if diff "$ac_file" "$ac_tmp/config.h" >/dev/null 2>&1; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: $ac_file is unchanged"
>&5
$as_echo "$as_me: $ac_file is unchanged" >&6;}
else
rm -f "$ac_file"
mv "$ac_tmp/config.h" "$ac_file" \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
fi
else

```



```

    $sas_echo "/* $configure_input */" \
    && eval '$AWK -f "$ac_tmp/defines.awk" "$ac_file_inputs" \
    || as_fn_error $? "could not create -" "$LINENO" 5
fi
# Compute "$ac_file"'s index in $config_headers.
_am_arg="$ac_file"
_am_stamp_count=1
for _am_header in $config_headers ;; do
  case $_am_header in
    $_am_arg | $_am_arg:* )
      break ;;
    * )
      _am_stamp_count=`expr $_am_stamp_count + 1` ;;
  esac
done
echo "timestamp for $_am_arg" >`$as_dirname -- "$_am_arg" ||
$as_expr X"$_am_arg" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \|| \
  X"$_am_arg" : 'X\(//\)[^/]' \|| \
  X"$_am_arg" : 'X\(//\)$' \|| \
  X"$_am_arg" : 'X\(/\)' \|| . 2>/dev/null ||
$as_echo X"$_am_arg" |
  sed '/^X\(.*[^/]\)\/*[^/][^/]*/*$/{
    s//\1/
    q
  }
/^X\(\\/\)\)[^/].*${
  s//\1/
  q
}
/^X\(\\/\)\)$/{
  s//\1/
  q
}
/^X\(\\/\).*${
  s//\1/
  q
}
s/.*/./; q'`/stamp-h$_am_stamp_count
;;

:C) { $sas_echo "$as_me:${as_lineno-$LINENO}: executing $ac_file
commands" >&5
$as_echo "$as_me: executing $ac_file commands" >&6;}
;;
esac

case $ac_file$ac_mode in
  "depfiles":C) test x"$SAMDEP_TRUE" != x"" || {
  # Autoconf 2.62 quotes --file arguments for eval, but not when files
  # are listed without --file. Let's play safe and only enable the
  eval

```

```

# if we detect the quoting.
case $CONFIG_FILES in
*\'*) eval set x "$CONFIG_FILES" ;;
*) set x $CONFIG_FILES ;;
esac
shift
for mf
do
# Strip MF so we end up with the name of the file.
mf=`echo "$mf" | sed -e 's/:.*$//'\`
# Check whether this is an Automake generated Makefile or not.
# We used to match only the files named 'Makefile.in', but
# some people rename them; so instead we look at the file content.
# Grep'ing the first line is not enough: some people post-process
# each Makefile.in and add a new line on top of each file to say
so.
# Grep'ing the whole file is not good either: AIX grep has a line
# limit of 2048, but all sed's we know have understand at least
4000.
if sed -n 's,^#.*generated by automake.*,X,p' "$mf" | grep X
>/dev/null 2>&1; then
dirpart=`$as_dirname -- "$mf" ||
$as_expr X"$mf" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
X"$mf" : 'X\(//\)[^/]' \| \
X"$mf" : 'X\(//\)$' \| \
X"$mf" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$mf" |
sed '/^X\(.*[^/]\)\/*[^/][^/]*\/*$/{
s//\1/
q
}
/^X\(\\/\)\)[^/].*/{
s//\1/
q
}
/^X\(\\/\)\)$/{
s//\1/
q
}
/^X\(\\/\).*/{
s//\1/
q
}
s/.*\/./; q'\`
else
continue
fi
# Extract the definition of DEPDIR, am__include, and am__quote
# from the Makefile without running 'make'.
DEPDIR=`sed -n 's/^DEPDIR = //p' < "$mf"`
test -z "$DEPDIR" && continue
am__include=`sed -n 's/^am__include = //p' < "$mf"`

```

```

test -z "am_include" && continue
am_quote=`sed -n 's/^am_quote = //p' < "$mf"`
# Find all dependency output files, they are included files with
# $(DEPDIR) in their names. We invoke sed twice because it is the
# simplest approach to changing $(DEPDIR) to its actual value in
the
# expansion.
for file in `sed -n "
  s/^$am_include $am_quote\(.*(DEPDIR).*\) $am_quote" '$/\1/p'
<"$mf" | \
  sed -e 's/\$(DEPDIR)/"$DEPDIR"/g'; do
  # Make sure the directory exists.
  test -f "$dirpart/$file" && continue
  fdir=`$as_dirname -- "$file" ||
$as_expr X"$file" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$file" : 'X\(//\) [^/]' \| \
  X"$file" : 'X\(//\) $' \| \
  X"$file" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$file" |
  sed '/^X\(.*[^/]\)\/*[^/][^/]*/*$/{
    s//\1/
    q
  }
/^X\(\\/\)\) [^/].*${
  s//\1/
  q
}
/^X\(\\/\)\) ${/
  s//\1/
  q
}
/^X\(\\/\).*${
  s//\1/
  q
}
s/././; q'`
as_dir=$dirpart/$fdir; as_fn_mkdir_p
# echo "creating $dirpart/$file"
echo '# dummy' > "$dirpart/$file"
done
done
}
;;
"libtool":C)

# See if we are running on zsh, and set the options which allow
our
# commands through without removal of \ escapes.
if test -n "${ZSH_VERSION+set}" ; then
  setopt NO_GLOB_SUBST
fi

```

```

cfgfile="${ofile}T"
trap "$RM \"${cfgfile}\"; exit 1" 1 2 15
$RM "${cfgfile}"

cat <<_LT_EOF >> "${cfgfile}"
#! $SHELL

# `ECHO "$ofile" | sed 's%^.*/%%'` - Provide generalized library-
building support services.
# Generated automatically by $as_me ($PACKAGE$TIMESTAMP) $VERSION
# Libtool was configured on host `(hostname || uname -n) 2>/dev/null |
sed lq`:
# NOTE: Changes made to this file will be lost: look at ltmain.sh.
#
# Copyright (C) 1996, 1997, 1998, 1999, 2000, 2001, 2003, 2004,
2005,
#           2006, 2007, 2008, 2009, 2010, 2011 Free Software
#           Foundation, Inc.
# Written by Gordon Matzigkeit, 1996
#
# This file is part of GNU Libtool.
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# can be downloaded from http://www.gnu.org/licenses/gpl.html, or
# obtained by writing to the Free Software Foundation, Inc.,
# 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

# The names of the tagged configurations supported by this script.
available_tags="CXX RC "

# ### BEGIN LIBTOOL CONFIG

# Which release of libtool.m4 was used?
macro_version=$macro_version
macro_revision=$macro_revision

```

```
# Whether or not to build shared libraries.
build_libtool_libs=$enable_shared

# Whether or not to build static libraries.
build_old_libs=$enable_static

# What type of objects to build.
pic_mode=$pic_mode

# Whether or not to optimize for fast installation.
fast_install=$enable_fast_install

# Shell to use when invoking shell scripts.
SHELL=$lt_SHELL

# An echo program that protects backslashes.
ECHO=$lt_ECHO

# The PATH separator for the build system.
PATH_SEPARATOR=$lt_PATH_SEPARATOR

# The host system.
host_alias=$host_alias
host=$host
host_os=$host_os

# The build system.
build_alias=$build_alias
build=$build
build_os=$build_os

# A sed program that does not truncate output.
SED=$lt_SED

# Sed that helps us avoid accidentally triggering echo(1) options like
-n.
Xsed="\$SED -e 1s/^X/"

# A grep program that handles long lines.
GREP=$lt_GREP

# An ERE matcher.
EGREP=$lt_EGREP

# A literal string matcher.
FGREP=$lt_FGREP

# A BSD- or MS-compatible name lister.
NM=$lt_NM

# Whether we need soft or hard links.
```

```
LN_S=$lt_LN_S

# What is the maximum length of a command?
max_cmd_len=$max_cmd_len

# Object file suffix (normally "o").
objext=$ac_objext

# Executable file suffix (normally "").
exeext=$exeext

# whether the shell understands "unset".
lt_unset=$lt_unset

# turn spaces into newlines.
SP2NL=$lt_lt_SP2NL

# turn newlines into spaces.
NL2SP=$lt_lt_NL2SP

# convert \${build} file names to \${host} format.
to_host_file_cmd=$lt_cv_to_host_file_cmd

# convert \${build} files to toolchain format.
to_tool_file_cmd=$lt_cv_to_tool_file_cmd

# An object symbol dumper.
OBJDUMP=$lt_OBJDUMP

# Method to check whether dependent libraries are shared objects.
deplibs_check_method=$lt_deplibs_check_method

# Command to use when deplibs_check_method = "file_magic".
file_magic_cmd=$lt_file_magic_cmd

# How to find potential files when deplibs_check_method =
"file_magic".
file_magic_glob=$lt_file_magic_glob

# Find potential files using nocaseglob when deplibs_check_method =
"file_magic".
want_nocaseglob=$lt_want_nocaseglob

# DLL creation program.
DLLTOOL=$lt_DLLTOOL

# Command to associate shared and link libraries.
sharedlib_from_linklib_cmd=$lt_sharedlib_from_linklib_cmd

# The archiver.
AR=$lt_AR
```

```
# Flags to create an archive.
AR_FLAGS=$lt_AR_FLAGS

# How to feed a file listing to the archiver.
archiver_list_spec=$lt_archiver_list_spec

# A symbol stripping program.
STRIP=$lt_STRIP

# Commands used to install an old-style archive.
RANLIB=$lt_RANLIB
old_postinstall_cmds=$lt_old_postinstall_cmds
old_postuninstall_cmds=$lt_old_postuninstall_cmds

# Whether to use a lock for old archive extraction.
lock_old_archive_extraction=$lock_old_archive_extraction

# A C compiler.
LTCC=$lt_CC

# LTCC compiler flags.
LTCFLAGS=$lt_CFLAGS

# Take the output of nm and produce a listing of raw symbols and C
names.
global_symbol_pipe=$lt_lt_cv_sys_global_symbol_pipe

# Transform the output of nm in a proper C declaration.
global_symbol_to_cdecl=$lt_lt_cv_sys_global_symbol_to_cdecl

# Transform the output of nm in a C name address pair.
global_symbol_to_c_name_address=$lt_lt_cv_sys_global_symbol_to_c_name_
address

# Transform the output of nm in a C name address pair when lib prefix
is needed.
global_symbol_to_c_name_address_lib_prefix=$lt_lt_cv_sys_global_symbol
_to_c_name_address_lib_prefix

# Specify filename containing input files for \ $NM.
nm_file_list_spec=$lt_nm_file_list_spec

# The root where to search for dependent libraries, and in which our
libraries should be installed.
lt_sysroot=$lt_sysroot

# The name of the directory that contains temporary libtool files.
objdir=$objdir

# Used to examine libraries when file_magic_cmd begins with "file".
MAGIC_CMD=$MAGIC_CMD
```

```
# Must we lock files when doing compilation?
need_locks=$lt_need_locks

# Manifest tool.
MANIFEST_TOOL=$lt_MANIFEST_TOOL

# Tool to manipulate archived DWARF debug symbol files on Mac OS X.
DSYMUTIL=$lt_DSYMUTIL

# Tool to change global to local symbols on Mac OS X.
NMEDIT=$lt_NMEDIT

# Tool to manipulate fat objects and archives on Mac OS X.
LIPO=$lt_LIPO

# ldd/readelf like tool for Mach-O binaries on Mac OS X.
OTOOL=$lt_OTOOL

# ldd/readelf like tool for 64 bit Mach-O binaries on Mac OS X 10.4.
OTOOL64=$lt_OTOOL64

# Old archive suffix (normally "a").
libext=$libext

# Shared library suffix (normally ".so").
shrext_cmds=$lt_shrext_cmds

# The commands to extract the exported symbol list from a shared
archive.
extract_expsyms_cmds=$lt_extract_expsyms_cmds

# Variables whose values should be saved in libtool wrapper scripts
and
# restored at link time.
variables_saved_for_relink=$lt_variables_saved_for_relink

# Do we need the "lib" prefix for modules?
need_lib_prefix=$need_lib_prefix

# Do we need a version for libraries?
need_version=$need_version

# Library versioning type.
version_type=$version_type

# Shared library runtime path variable.
runpath_var=$runpath_var

# Shared library path variable.
shlibpath_var=$shlibpath_var

# Is shlibpath searched before the hard-coded library search path?
```



```
shlibpath_overrides_runpath=$shlibpath_overrides_runpath

# Format of library name prefix.
libname_spec=$lt_libname_spec

# List of archive names.  First name is the real one, the rest are
links.
# The last name is the one that the linker finds with -lNAME
library_names_spec=$lt_library_names_spec

# The coded name of the library, if different from the real name.
soname_spec=$lt_soname_spec

# Permission mode override for installation of shared libraries.
install_override_mode=$lt_install_override_mode

# Command to use after installation of a shared archive.
postinstall_cmds=$lt_postinstall_cmds

# Command to use after uninstallation of a shared archive.
postuninstall_cmds=$lt_postuninstall_cmds

# Commands used to finish a libtool library installation in a
directory.
finish_cmds=$lt_finish_cmds

# As "finish_cmds", except a single script fragment to be eval'd but
# not shown.
finish_eval=$lt_finish_eval

# Whether we should hardcode library paths into libraries.
hardcode_into_libs=$hardcode_into_libs

# Compile-time system search path for libraries.
sys_lib_search_path_spec=$lt_sys_lib_search_path_spec

# Run-time system search path for libraries.
sys_lib_dlsearch_path_spec=$lt_sys_lib_dlsearch_path_spec

# Whether dlopen is supported.
dlopen_support=$enable_dlopen

# Whether dlopen of programs is supported.
dlopen_self=$enable_dlopen_self

# Whether dlopen of statically linked programs is supported.
dlopen_self_static=$enable_dlopen_self_static

# Commands to strip libraries.
old_striplib=$lt_old_striplib
striplib=$lt_striplib
```

```
# The linker used to build libraries.
LD=${lt_LD}

# How to create reloadable object files.
reload_flag=${lt_reload_flag}
reload_cmds=${lt_reload_cmds}

# Commands used to build an old-style archive.
old_archive_cmds=${lt_old_archive_cmds}

# A language specific compiler.
CC=${lt_compiler}

# Is the compiler the GNU compiler?
with_gcc=$GCC

# Compiler flag to turn off builtin functions.
no_builtin_flag=${lt_lt_prog_compiler_no_builtin_flag}

# Additional compiler flags for building library objects.
pic_flag=${lt_lt_prog_compiler_pic}

# How to pass a linker flag through the compiler.
wl=${lt_lt_prog_compiler_wl}

# Compiler flag to prevent dynamic linking.
link_static_flag=${lt_lt_prog_compiler_static}

# Does compiler simultaneously support -c and -o options?
compiler_c_o=${lt_lt_cv_prog_compiler_c_o}

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=${archive_cmds_need_lc}

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=${enable_shared_with_static_runtimes}

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=${lt_export_dynamic_flag_spec}

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=${lt_whole_archive_flag_spec}

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=${lt_compiler_needs_object}

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=${lt_old_archive_from_new_cmds}
```

```
# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds
archive_expsym_cmds=$lt_archive_expsym_cmds

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds
module_expsym_cmds=$lt_module_expsym_cmds

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=$lt_hardcode_libdir_separator

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=$hardcode_direct

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=$hardcode_direct_absolute

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=$hardcode_minus_L

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=$hardcode_shlibpath_var
```

```
# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=$hardcode_automatic

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=$inherit_rpath

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=$link_all_deplibs

# Set to "yes" if exported symbols are required.
always_export_symbols=$always_export_symbols

# The commands to list exported symbols.
export_symbols_cmds=$lt_export_symbols_cmds

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=$lt_exclude_expsyms

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects
postdep_objects=$lt_postdep_objects
predeps=$lt_predeps
postdeps=$lt_postdeps

# The library search path used internally by the compiler when linking
# a shared library.
```

```

compiler_lib_search_path=$lt_compiler_lib_search_path

# ### END LIBTOOL CONFIG

_LT_EOF

    case $host_os in
    aix3*)
        cat <<\_LT_EOF >> "$cfgfile"
# AIX sometimes has problems with the GCC collect2 program.  For some
# reason, if we set the COLLECT_NAMES environment variable, the
problems
# vanish in a puff of smoke.
if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
fi
    _LT_EOF
        ;;
    esac

ltmain="$ac_aux_dir/ltmain.sh"

# We use sed instead of cat because bash on DJGPP gets confused if
# if finds mixed CR/LF and LF-only lines.  Since sed operates in
# text mode, it properly converts lines to CR/LF.  This bash problem
# is reportedly fixed, but why not run on old versions too?
sed '$q' "$ltmain" >> "$cfgfile" \
    || (rm -f "$cfgfile"; exit 1)

if test x"$xsi_shell" = xyes; then
    sed -e '/^func_dirname ()$/,/^\^} # func_dirname /c\
func_dirname ()\
{\
\   case ${1} in\
\     */*) func_dirname_result="${1%/*}${2}" ;;\
\     * ) func_dirname_result="${3}" ;;\
\   esac\
} # Extended-shell func_dirname implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_basename ()$/,/^\^} # func_basename /c\
func_basename ()\
{\
\   func_basename_result="${1##*/}"\

```

```

} # Extended-shell func_basename implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_dirname_and_basename ()$/,/^{ } #
func_dirname_and_basename /c\
func_dirname_and_basename ()\
{\
  \
  case ${1} in\
  \
  */*) func_dirname_result="${1%/*}${2}" ;;\
  \
  * ) func_dirname_result="${3}" ;;\
  \
  esac\
  \
  func_basename_result="${1##*/}"\
} # Extended-shell func_dirname_and_basename implementation'
"$cfgfile" > $cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_stripname ()$/,/^{ } # func_stripname /c\
func_stripname ()\
{\
  \
  # pdksh 5.2.14 does not do ${X%$Y} correctly if both X and Y are\
  \
  # positional parameters, so assign one to ordinary parameter
first.\
  \
  func_stripname_result=${3}\
  \
  func_stripname_result=${func_stripname_result#"${1}"}\
  \
  func_stripname_result=${func_stripname_result%"${2}"}\
} # Extended-shell func_stripname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_split_long_opt ()$/,/^{ } # func_split_long_opt /c\
func_split_long_opt ()\
{\
  \
  func_split_long_opt_name=${1%*=*}\
  \
  func_split_long_opt_arg=${1#*=}\
} # Extended-shell func_split_long_opt implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")

```

```
test 0 -eq $? || _lt_function_replace_fail=:
```

```
sed -e '/^func_split_short_opt ()$/,/^{ # func_split_short_opt /c\  
func_split_short_opt ()\  
{\  
\  func_split_short_opt_arg=${1#??}\  
\  func_split_short_opt_name=${1%"$func_split_short_opt_arg"}\  
} # Extended-shell func_split_short_opt implementation' "$cfgfile" >  
$cfgfile.tmp \  
&& mv -f "$cfgfile.tmp" "$cfgfile" \  
|| (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f  
"$cfgfile.tmp")
```

```
test 0 -eq $? || _lt_function_replace_fail=:
```

```
sed -e '/^func_lo2o ()$/,/^{ # func_lo2o /c\  
func_lo2o ()\  
{\  
\  case ${1} in\  
\    *.lo) func_lo2o_result=${1%.lo}.${objext} ;;\  
\    *)    func_lo2o_result=${1} ;;\  
\  esac\  
} # Extended-shell func_lo2o implementation' "$cfgfile" > $cfgfile.tmp \  
&& mv -f "$cfgfile.tmp" "$cfgfile" \  
|| (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f  
"$cfgfile.tmp")
```

```
test 0 -eq $? || _lt_function_replace_fail=:
```

```
sed -e '/^func_xform ()$/,/^{ # func_xform /c\  
func_xform ()\  
{\  
  func_xform_result=${1%.*}.lo\  
} # Extended-shell func_xform implementation' "$cfgfile" >  
$cfgfile.tmp \  
&& mv -f "$cfgfile.tmp" "$cfgfile" \  
|| (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f  
"$cfgfile.tmp")
```

```
test 0 -eq $? || _lt_function_replace_fail=:
```

```
sed -e '/^func_arith ()$/,/^{ # func_arith /c\  
func_arith ()\  
{\  
  func_arith_result=$(( $* ))\  
} # Extended-shell func_arith implementation' "$cfgfile" >  
$cfgfile.tmp \  
&& mv -f "$cfgfile.tmp" "$cfgfile" \  
|| (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f  
"$cfgfile.tmp")
```

```

test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_len ()$/,/^{ # func_len /c\
func_len ()\
{\
    func_len_result=${#1}\
} # Extended-shell func_len implementation' "$cfgfile" > $cfgfile.tmp \
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

fi

if test x"$lt_shell_append" = xyes; then
    sed -e '/^func_append ()$/,/^{ # func_append /c\
func_append ()\
{\
    eval "${1}+=\\${2}"\
} # Extended-shell func_append implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_append_quoted ()$/,/^{ # func_append_quoted /c\
func_append_quoted ()\
{\
\
    func_quote_for_eval "${2}"\
\
    eval "${1}+=\\\ \\\ \\\$func_quote_for_eval_result"\
} # Extended-shell func_append_quoted implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    # Save a `func_append' function call where possible by direct use of
    '+='
    sed -e 's%func_append \([a-zA-Z_] \{1,\} \) "%\1+= "%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
else
    # Save a `func_append' function call even when '+' is not available

```



```

    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1="$\1%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
fi

if test x"$_lt_function_replace_fail" = x:"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Unable to
substitute extended shell functions in $ofile" >&5
$as_echo "$as_me: WARNING: Unable to substitute extended shell
functions in $ofile" >&2;}
fi

    mv -f "$cfgfile" "$ofile" ||
    (rm -f "$ofile" && cp "$cfgfile" "$ofile" && rm -f "$cfgfile")
    chmod +x "$ofile"

    cat <<_LT_EOF >> "$ofile"

# ### BEGIN LIBTOOL TAG CONFIG: CXX

# The linker used to build libraries.
LD=$lt_LD_CXX

# How to create reloadable object files.
reload_flag=$lt_reload_flag_CXX
reload_cmds=$lt_reload_cmds_CXX

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds_CXX

# A language specific compiler.
CC=$lt_compiler_CXX

# Is the compiler the GNU compiler?
with_gcc=$GCC_CXX

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag_CXX

# Additional compiler flags for building library objects.
pic_flag=$lt_lt_prog_compiler_pic_CXX

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl_CXX

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static_CXX

```

```
# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o_CXX

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc_CXX

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_run
times_CXX

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec_CXX

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec_CXX

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object_CXX

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds_CXX

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds_CXX

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds_CXX
archive_expsym_cmds=$lt_archive_expsym_cmds_CXX

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds_CXX
module_expsym_cmds=$lt_module_expsym_cmds_CXX

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld_CXX

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag_CXX

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag_CXX

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec_CXX

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=$lt_hardcode_libdir_separator_CXX
```

```
# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=${hardcode_direct_CXX}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=${hardcode_direct_absolute_CXX}

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=${hardcode_minus_L_CXX}

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=${hardcode_shlibpath_var_CXX}

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=${hardcode_automatic_CXX}

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=${inherit_rpath_CXX}

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=${link_all_deplibs_CXX}

# Set to "yes" if exported symbols are required.
always_export_symbols=${always_export_symbols_CXX}

# The commands to list exported symbols.
export_symbols_cmds=${lt_export_symbols_cmds_CXX}

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=${lt_exclude_expsyms_CXX}

# Symbols that must always be exported.
include_expsyms=${lt_include_expsyms_CXX}

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=${lt_prelink_cmds_CXX}
```

```

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds_CXX

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec_CXX

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action_CXX

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs_CXX

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects_CXX
postdep_objects=$lt_postdep_objects_CXX
predeps=$lt_predeps_CXX
postdeps=$lt_postdeps_CXX

# The library search path used internally by the compiler when linking
# a shared library.
compiler_lib_search_path=$lt_compiler_lib_search_path_CXX

# ### END LIBTOOL TAG CONFIG: CXX
_LT_EOF

    cat <<_LT_EOF >> "$ofile"

# ### BEGIN LIBTOOL TAG CONFIG: RC

# The linker used to build libraries.
LD=$lt_LD_RC

# How to create reloadable object files.
reload_flag=$lt_reload_flag_RC
reload_cmds=$lt_reload_cmds_RC

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds_RC

# A language specific compiler.
CC=$lt_compiler_RC

# Is the compiler the GNU compiler?
with_gcc=$GCC_RC

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag_RC

```

```
# Additional compiler flags for building library objects.
pic_flag=$lt_lt_prog_compiler_pic_RC

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl_RC

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static_RC

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o_RC

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc_RC

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_runtimes_RC

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec_RC

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec_RC

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object_RC

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds_RC

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds_RC

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds_RC
archive_expsym_cmds=$lt_archive_expsym_cmds_RC

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds_RC
module_expsym_cmds=$lt_module_expsym_cmds_RC

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld_RC

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag_RC

# Flag that enforces no undefined symbols.
```

```
no_undefined_flag=$lt_no_undefined_flag_RC

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec_RC

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=$lt_hardcode_libdir_separator_RC

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=$hardcode_direct_RC

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=$hardcode_direct_absolute_RC

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=$hardcode_minus_L_RC

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=$hardcode_shlibpath_var_RC

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=$hardcode_automatic_RC

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=$inherit_rpath_RC

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=$link_all_deplibs_RC

# Set to "yes" if exported symbols are required.
always_export_symbols=$always_export_symbols_RC

# The commands to list exported symbols.
export_symbols_cmds=$lt_export_symbols_cmds_RC

# Symbols that should not be listed in the preloaded symbols.
```

```

exclude_expsyms=$lt_exclude_expsyms_RC

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms_RC

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds_RC

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds_RC

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec_RC

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action_RC

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs_RC

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects_RC
postdep_objects=$lt_postdep_objects_RC
predeps=$lt_predeps_RC
postdeps=$lt_postdeps_RC

# The library search path used internally by the compiler when linking
# a shared library.
compiler_lib_search_path=$lt_compiler_lib_search_path_RC

# ### END LIBTOOL TAG CONFIG: RC
_LT_EOF

;;

esac
done # for ac_tag

as_fn_exit 0
_ACEOF
ac_clean_files=$ac_clean_files_save

test $ac_write_fail = 0 ||
  as_fn_error $? "write failure creating $CONFIG_STATUS" "$LINENO" 5

# configure is writing to config.log, and then calls config.status.
# config.status does its own redirection, appending to config.log.

```

```

# Unfortunately, on DOS this fails, as config.log is still kept open
# by configure, so config.status won't be able to write to it; its
# output is simply discarded.  So we exec the FD to /dev/null,
# effectively closing config.log, so it can be properly (re)opened and
# appended to by config.status.  When coming back to configure, we
# need to make the FD available again.
if test "$no_create" != yes; then
  ac_cs_success=:
  ac_config_status_args=
  test "$silent" = yes &&
    ac_config_status_args="$ac_config_status_args --quiet"
  exec 5>/dev/null
  $SHELL $CONFIG_STATUS $ac_config_status_args || ac_cs_success=false
  exec 5>>config.log
  # Use ||, not &&, to avoid exiting from the if with $? = 1, which
  # would make configure fail if this is the last instruction.
  $ac_cs_success || as_fn_exit 1
fi
if test -n "$ac_unrecognized_opts" && test "$enable_option_checking"
!= no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: unrecognized
options: $ac_unrecognized_opts" >&5
$as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2;}
fi

```

```
echo "
```

```

          D-Bus $VERSION
          =====

```

```

prefix:                ${EXPANDED_PREFIX}
exec_prefix:           ${exec_prefix}
  libdir:                ${EXPANDED_LIBDIR}
  libexecdir:           ${EXPANDED_LIBEXECDIR}
  bindir:                ${EXPANDED_BINDIR}
  sysconfdir:           ${EXPANDED_SYSCONFDIR}
  localstatedir:        ${EXPANDED_LOCALSTATEDIR}
datadir:                ${EXPANDED_DATADIR}
source code location:  ${srcdir}
compiler:               ${CC}
cflags:                 ${CFLAGS}
cppflags:               ${CPPFLAGS}
cxxflags:               ${CXXFLAGS}
64-bit int:             ${DBUS_INT64_TYPE}
32-bit int:             ${DBUS_INT32_TYPE}
16-bit int:             ${DBUS_INT16_TYPE}
  Doxygen:               ${DOXYGEN:-not found}
  xmlto:                  ${XMLTO:-not found}
  man2html:              ${MAN2HTML:-not found}

```

```
echo "
```



```

Rebuilding generated files: ${USE_MAINTAINER_MODE}
gcc coverage profiling:    ${enable_compiler_coverage}
Building embedded tests:  ${enable_embedded_tests}
Building modular tests:   ${enable_modular_tests}
    - with GLib:          ${with_glib}
Building verbose mode:    ${enable_verbose_mode}
Building assertions:      ${enable_asserts}
Building checks:          ${enable_checks}
Building bus stats API:   ${enable_stats}
Building SELinux support: ${have_selinux}
Building inotify support: ${have_inotify}
Building dnotify support: ${have_dnotify}
Building kqueue support:  ${have_kqueue}
Building systemd support: ${have_systemd}
Building X11 code:        ${enable_x11}
Building Doxygen docs:    ${enable_doxygen_docs}
Building XML docs:        ${enable_xml_docs}
Building cache support:   ${enable_userdb_cache}
Building launchd support: ${have_launchd}
Using XML parser:         ${with_xml}
Init scripts style:       ${with_init_scripts}
Abstract socket names:    ${ac_cv_have_abstract_sockets}
System bus socket:        ${DBUS_SYSTEM_SOCKET}
System bus address:       ${DBUS_SYSTEM_BUS_DEFAULT_ADDRESS}
System bus PID file:      ${DBUS_SYSTEM_PID_FILE}
Session bus address:      ${DBUS_SESSION_BUS_DEFAULT_ADDRESS}
Console auth dir:         ${DBUS_CONSOLE_AUTH_DIR}
Console owner file:       ${have_console_owner_file}
Console owner file path:  ${DBUS_CONSOLE_OWNER_FILE}
System bus user:          ${DBUS_USER}
Session bus services dir: ${EXPANDED_DATADIR}/dbus-1/services
    'make check' socket dir: ${TEST_SOCKET_DIR}
"
if test x$have_launchd = xyes; then
    echo "        launchd agent dir:          ${LAUNCHD_AGENT_DIR}"
fi
echo

if test x$enable_embedded_tests = xyes; then
    echo "NOTE: building with unit tests increases the size of the
installed library and renders it insecure."
fi
if test x$enable_embedded_tests = xyes -a x$enable_asserts = xno; then
    echo "NOTE: building with embedded tests but without
assertions means tests may not properly report failures (this
configuration is only useful when doing something like profiling the
tests)"
fi
if test x$enable_compiler_coverage = xyes; then
    echo "NOTE: building with coverage profiling is definitely for
developers only."
fi

```

```

if test x$enable_verbose_mode = xyes; then
    echo "NOTE: building with verbose mode increases library size,
may slightly increase security risk, and decreases performance."
fi
if test x$enable_asserts = xyes; then
    echo "NOTE: building with assertions increases library size
and decreases performance."
fi
if test x$enable_checks = xno; then
    echo "NOTE: building without checks for arguments passed to
public API makes it harder to debug apps using D-Bus, but will
slightly decrease D-Bus library size and _very_ slightly improve
performance."
fi
if test x$dbus_use_libxml = xtrue; then
    echo
    echo "WARNING: You have chosen to use libxml as your xml parser
however this code path is not maintained by the D-Bus developers and
if it breaks you get to keep the pieces.  If you have selected this
option in err please reconfigure with expat (e.g. --with-xml=expat)."
fi

if test "x$DBUS_HAVE_INT64" = x0; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: You have disabled
64-bit integers via --without-64-bit.

```

This removes parts of the standard D-Bus API and ABI (the 't' and 'x' typecodes, the dbus_int64_t and dbus_uint64_t types, etc.) and should only be used if your compiler lacks support for 64-bit integers. Please report a bug with details of your platform and compiler.

This option is likely to be removed in future, unless the D-Bus developers receive reports that it is still needed.

```
" >&5
$as_echo "$as_me: WARNING: You have disabled 64-bit integers via --
without-64-bit.
```

This removes parts of the standard D-Bus API and ABI (the 't' and 'x' typecodes, the dbus_int64_t and dbus_uint64_t types, etc.) and should only be used if your compiler lacks support for 64-bit integers. Please report a bug with details of your platform and compiler.

This option is likely to be removed in future, unless the D-Bus developers receive reports that it is still needed.


```

as_echo=$as_echo$as_echo$as_echo$as_echo$as_echo
as_echo=$as_echo$as_echo$as_echo$as_echo$as_echo$as_echo
# Prefer a ksh shell builtin over an external printf program on
Solaris,
# but without wasting forks for bash or zsh.
if test -z "$BASH_VERSION$ZSH_VERSION" \
    && (test "X`print -r -- $as_echo`" = "X$as_echo") 2>/dev/null;
then
    as_echo='print -r --'
    as_echo_n='print -rn --'
elif (test "X`printf %s $as_echo`" = "X$as_echo") 2>/dev/null; then
    as_echo='printf %s\n'
    as_echo_n='printf %s'
else
    if test "X`(/usr/ucb/echo -n -n $as_echo) 2>/dev/null`" = "X-n
$as_echo"; then
        as_echo_body='eval /usr/ucb/echo -n "$1$as_nl"'
        as_echo_n='/usr/ucb/echo -n'
    else
        as_echo_body='eval expr "X$1" : "X\\(.*\\"'
        as_echo_n_body='eval
            arg=$1;
            case $arg in @%:@(
                *"$as_nl"*)
                    expr "X$arg" : "X\\(.*\\"$as_nl";
                    arg=`expr "X$arg" : ".*$as_nl\\(.*\\"';;
                esac;
                expr "X$arg" : "X\\(.*\\" | tr -d "$as_nl"
            ,
            export as_echo_n_body
            as_echo_n='sh -c $as_echo_n_body as_echo'
        fi
        export as_echo_body
        as_echo='sh -c $as_echo_body as_echo'
    fi
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
    PATH_SEPARATOR=:
    (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
        (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
            PATH_SEPARATOR=';'
    }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)

```

```

IFS=" " $as_nl"

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
  *[\ \/]* ) as_myself=$0 ;;
  *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
  as_myself=$0
fi
if test ! -f "$as_myself"; then
  $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
  exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh). But do not cause bugs in bash 2.01; the "|| exit
1"
# suppresses any "Segmentation fault" message there. '(' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
  && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

```

```

# Use a proper internal environment variable to ensure we don't fall
# into an infinite loop, continuously re-executing ourselves.
if test x"${_as_can_reexec}" != xno && test "x$CONFIG_SHELL" != x;
then
    _as_can_reexec=no; export _as_can_reexec;
    # We cannot yet assume a decent shell, so we have to provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec`.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
as_fn_exit 255
fi
# We don't want this to propagate to other subprocesses.
{ _as_can_reexec=; unset _as_can_reexec;}
if test "x$CONFIG_SHELL" = x; then
    as_bourne_compatible="if test -n \"\${ZSH_VERSION+set}\" && (emulate
sh) >/dev/null 2>&1; then :
    emulate sh
    NULLCMD=:
    # Pre-4.2 versions of Zsh do word splitting on \"\${1+\"$@\"}\", which
# is contrary to our usage. Disable this feature.
    alias -g \"\${1+\"$@\"}\"='\"$@\"'
    setopt NO_GLOB_SUBST
else
    case \"(set -o) 2>/dev/null\" in @%:@(
        *posix*) :
            set -o posix ;; @%:@(
        *) :
            ;;
esac
fi
"
    as_required="as_fn_return () { (exit \"$1"); }
as_fn_success () { as_fn_return 0; }
as_fn_failure () { as_fn_return 1; }
as_fn_ret_success () { return 0; }
as_fn_ret_failure () { return 1; }

exitcode=0
as_fn_success || { exitcode=1; echo as_fn_success failed.; }

```



```

        for as_base in sh bash ksh sh5; do
            # Try only shells that exist, to save several forks.
            as_shell=$as_dir/$as_base
            if { test -f "$as_shell" || test -f "$as_shell.exe"; } &&
                { $as_echo "$as_bourne_compatible"$as_required" |
as_run=a "$as_shell"; } 2>/dev/null; then :
                CONFIG_SHELL=$as_shell as_have_required=yes
                    if { $as_echo "$as_bourne_compatible"$as_suggested" |
as_run=a "$as_shell"; } 2>/dev/null; then :
                        break 2
                    fi
                fi
            done;;
        esac
        as_found=false
done
$as_found || { if { test -f "$SHELL" || test -f "$SHELL.exe"; } &&
                { $as_echo "$as_bourne_compatible"$as_required" | as_run=a
"$SHELL"; } 2>/dev/null; then :
                CONFIG_SHELL=$SHELL as_have_required=yes
fi; }
IFS=$as_save_IFS

        if test "x$CONFIG_SHELL" != x; then :
            export CONFIG_SHELL
                # We cannot yet assume a decent shell, so we have to
provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec`.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
exit 255
fi

        if test x$as_have_required = xno; then :
$as_echo "$0: This script requires a shell more modern than all"
$as_echo "$0: the shells that I found on your system."
if test x${ZSH_VERSION+set} = xset ; then
    $as_echo "$0: In particular, zsh $ZSH_VERSION has bugs and should"

```



```

    $as_echo "$0: be upgraded to zsh 4.3.4 or later."
else
    $as_echo "$0: Please tell bug-autoconf@gnu.org and
$0:
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLib
$0: about your system, including any error possibly output
$0: before this message. Then install a modern shell, or
$0: manually run the script under such a shell if you do
$0: have one."
    fi
    exit 1
fi
fi
fi
SHELL=${CONFIG_SHELL-/bin/sh}
export SHELL
# Unset more variables known to interfere with behavior of common
tools.
CLICOLOR_FORCE= GREP_OPTIONS=
unset CLICOLOR_FORCE GREP_OPTIONS

## ----- ##
## M4sh Shell Functions. ##
## ----- ##
@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @$|@? to STATUS, without forking.
as_fn_set_status ()
{
    return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS
@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

```

```

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "$S|$as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{
    case $as_dir in #(
    -*) as_dir=./$as_dir;;
    esac
    test -d "$as_dir" || eval $as_mkdir_p || {
        as_dirs=
        while ;; do
            case $as_dir in #(
            *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\'/g"`;;
            #\'(
            *) as_qdir=$as_dir;;
            esac
            as_dirs="'$as_qdir' $as_dirs"
            as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\(.*/\)\/*[^/][^/]*/*$' \| \| \
X"$as_dir" : 'X\(/\/\)[^/]' \| \| \
X"$as_dir" : 'X\(/\/\)$' \| \| \
X"$as_dir" : 'X\(/\/)' \| \| . 2>/dev/null ||
$as_echo X"$as_dir" |
sed '/^X\(.*/\)\|\|\/*[^/][^/]*\/*$/{
s//\1/
q
}
/^X\(\|\/\)\)[^/].*/{
s//\1/
q
}
/^X\(\|\/\)\)$/{
s//\1/
q
}
/^X\(\|\/\)'.*/{
s//\1/
q
}
s/././; q'`
            test -d "$as_dir" && break
        done
        test -z "$as_dirs" || eval "mkdir $as_dirs"
    } || test -d "$as_dir" || as_fn_error $? "cannot create directory
$as_dir"

} @%:@ as_fn_mkdir_p

@%:@ as_fn_executable_p FILE

```

```

@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$as_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
    {
        eval $1+=\$2
    }'
else
    as_fn_append ()
    {
        eval $1=\$ $1\$2
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \$(( 1 + 1 )) = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
    {
        as_val=$(( $* ))
    }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are

```

```

@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
    as_status=$1; test $as_status -eq 0 && as_status=1
    if test "$4"; then
        as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
        $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
    fi
    $as_echo "$as_me: error: $2" >&2
    as_fn_exit $as_status
} @%:@ as_fn_error

if expr a : '\(a\)' >/dev/null 2>&1 &&
    test "X`expr 00001 : '.*\(...\)`" = X001; then
    as_expr=expr
else
    as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
    as_basename=basename
else
    as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
    as_dirname=dirname
else
    as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]\*\)\/*$' \| \| \
X"$0" : 'X\(\(\)\)$' \| \| \
X"$0" : 'X\(/)\)' \| . 2>/dev/null ||
$as_echo X/"$0" |
sed '/^\.*\/\([^\/]\*\)\/*$/{
    s//\1/
    q
}
/^X\(\(\)\)$/{
    s//\1/
    q
}
/^X\(\(\)\)\.*/{
    s//\1/
    q
}

```

```

    }
    s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxy'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

as_lineno_1=$LINENO as_lineno_1a=$LINENO
as_lineno_2=$LINENO as_lineno_2a=$LINENO
eval `test "x$as_lineno_1'$as_run'" != "x$as_lineno_2'$as_run'" &&
test "x`expr $as_lineno_1'$as_run' + 1`" = "x$as_lineno_2'$as_run'"`
|| {
# Blame Lee E. McMahon (1931-1989) for sed's syntax.  :-)
sed -n '
    p
    /[$]LINENO/=
    ' <$as_myself |
    sed '
        s/[$]LINENO.*/&-/
        t lineno
        b
        :lineno
        N
        :loop
        s/[$]LINENO\([^'$as_cr_alnum'_].*\n)\)\(.*\)/\2\1\2/
        t loop
        s/-\n.*//
    ' >$as_me.lineno &&
    chmod +x "$as_me.lineno" ||
    { $as_echo "$as_me: error: cannot create $as_me.lineno; rerun with
a POSIX shell" >&2; as_fn_exit 1; }

# If we had to re-execute with $CONFIG_SHELL, we're ensured to have
# already done that, so ensure we don't try to do so again and fall
# in an infinite loop. This has already happened in practice.
as_can_reexec=no; export as_can_reexec
# Don't try to exec as it changes ${0}, causing all sort of problems
# (the dirname of ${0} is not the place where we might find the
# original and so on. Autoconf is especially sensitive to this).
. "$as_me.lineno"
# Exit status is that of the last command.
exit
}

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*))
    case `echo 'xy\c'` in

```

```

*c*) ECHO_T=' ';; # ECHO_T is single tab character.
xy) ECHO_C='\c';;
*) echo `echo ksh88 bug on AIX 6.1` > /dev/null
   ECHO_T=' ';;
esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$ conf$$exe conf$$file
if test -d conf$$dir; then
  rm -f conf$$dir/conf$$file
else
  rm -f conf$$dir
  mkdir conf$$dir 2>/dev/null
fi
if (echo >conf$$file) 2>/dev/null; then
  if ln -s conf$$file conf$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$file conf$$dir 2>/dev/null && test ! -f conf$$exe
  ||
    as_ln_s='cp -pR'
  elif ln conf$$file conf$$ 2>/dev/null; then
    as_ln_s=ln
  else
    as_ln_s='cp -pR'
  fi
else
  as_ln_s='cp -pR'
fi
rm -f conf$$ conf$$exe conf$$dir/conf$$file conf$$file
rmdir conf$$dir 2>/dev/null

if mkdir -p . 2>/dev/null; then
  as_mkdir_p='mkdir -p "$as_dir"'
else
  test -d ./-p && rmdir ./-p
  as_mkdir_p=false
fi

as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

```

```

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+%pp%;s%[^_\$as_cr_alnum]_%g'"

SHELL=${CONFIG_SHELL-/bin/sh}

test -n "$DJDIR" || exec 7<&0 </dev/null
exec 6>&1

# Name of the host.
# hostname on some systems (SVR3.2, old GNU/Linux) returns a bogus
exit status,
# so uname gets run too.
ac_hostname=`(hostname || uname -n) 2>/dev/null | sed 1q`

#
# Initializations.
#
ac_default_prefix=/usr/local
ac_clean_files=
ac_config_libobj_dir=.
LIB@&t@OBS=
cross_compiling=no
subdirs=
MFLAGS=
MAKEFLAGS=

# Identity of this package.
PACKAGE_NAME='dbus-glib'
PACKAGE_TARNAME='dbus-glib'
PACKAGE_VERSION='0.100.2'
PACKAGE_STRING='dbus-glib 0.100.2'
PACKAGE_BUGREPORT='https://bugs.freedesktop.org/enter_bug.cgi?product=
dbus&component=GLib'
PACKAGE_URL=''

# Factoring default headers for most tests.
ac_includes_default="\
#include <stdio.h>
#ifdef HAVE_SYS_TYPES_H
# include <sys/types.h>
#endif
#ifdef HAVE_SYS_STAT_H
# include <sys/stat.h>
#endif
#ifdef STDC_HEADERS
# include <stdlib.h>
# include <stddef.h>
#else
# ifdef HAVE_STDLIB_H
# include <stdlib.h>
# endif
#endif

```

```
#endif
#ifdef HAVE_STRING_H
# if !defined STDC_HEADERS && defined HAVE_MEMORY_H
# include <memory.h>
# endif
# include <string.h>
#endif
#ifdef HAVE_STRINGS_H
# include <strings.h>
#endif
#ifdef HAVE_INTTYPES_H
# include <inttypes.h>
#endif
#ifdef HAVE_STDINT_H
# include <stdint.h>
#endif
#ifdef HAVE_UNISTD_H
# include <unistd.h>
#endif"
```

```
ac_subst_vars='am__EXEEXT_FALSE
am__EXEEXT_TRUE
LTLIBOBJS
LIB@&t@OBS
TEST_SOCKET_DIR
ABSOLUTE_TOP_BUILDDIR
TEST_SLEEP_FOREVER_BINARY
TEST_SEGFAULT_BINARY
TEST_EXIT_BINARY
TEST_INTERFACES_SERVICE_BINARY
TEST_CORE_SERVICE_BINARY
TEST_SHELL_SERVICE_BINARY
TEST_SERVICE_BINARY
TEST_SERVICE_DIR
EXPANDED_DATADIR
EXPANDED_LIBDIR
EXPANDED_BINDIR
EXPANDED_SYSCONFDIR
EXPANDED_LOCALSTATEDIR
GTK_DOC_USE_REBASE_FALSE
GTK_DOC_USE_REBASE_TRUE
GTK_DOC_USE_LIBTOOL_FALSE
GTK_DOC_USE_LIBTOOL_TRUE
GTK_DOC_BUILD_PDF_FALSE
GTK_DOC_BUILD_PDF_TRUE
GTK_DOC_BUILD_HTML_FALSE
GTK_DOC_BUILD_HTML_TRUE
ENABLE_GTK_DOC_FALSE
ENABLE_GTK_DOC_TRUE
GTKDOC_DEPS_LIBS
GTKDOC_DEPS_CFLAGS
HTML_DIR
```


GTKDOC_MKPDF
GTKDOC_REBASE
GTKDOC_CHECK
DBUS_GLIB_TOOL_LIBS
DBUS_GLIB_TOOL_CFLAGS
GLIB_GENMARSHAL
HAVE_GLIB_THREADS_FALSE
HAVE_GLIB_THREADS_TRUE
DBUS_GLIB_THREADS_LIBS
DBUS_GLIB_THREADS_CFLAGS
DBUS_GLIB_LIBS
DBUS_GLIB_CFLAGS
DBUS_LIBS
DBUS_CFLAGS
PKG_CONFIG_LIBDIR
PKG_CONFIG_PATH
PKG_CONFIG
DBUS_PATH_OR_ABSTRACT
OTOOL64
OTOOL
LIPO
NMEDIT
DSYMUTIL
MANIFEST_TOOL
RANLIB
ac_ct_AR
AR
DLLTOOL
OBJDUMP
LN_S
NM
ac_ct_DUMPBIN
DUMPBIN
LD
FGREP
SED
LIBTOOL
DBUS_BUILD_TESTS_FALSE
DBUS_BUILD_TESTS_TRUE
DBUS_BINDING_TOOL
DBUS_BASH_COMPLETION_FALSE
DBUS_BASH_COMPLETION_TRUE
EGREP
GREP
CPP
am__fastdepCC_FALSE
am__fastdepCC_TRUE
CCDEPMODE
am__nodep
AMDEPBACKSLASH
AMDEP_FALSE
AMDEP_TRUE

am__quote
am__include
DEPDIR
OBJEXT
EXEEXT
ac_ct_CC
CPPFLAGS
LDFLAGS
CFLAGS
CC
LT_AGE
LT_REVISION
LT_CURRENT
AM_BACKSLASH
AM_DEFAULT_VERBOSITY
AM_DEFAULT_V
AM_V
MAINT
MAINTAINER_MODE_FALSE
MAINTAINER_MODE_TRUE
am__untar
am__tar
AMTAR
am__leading_dot
SET_MAKE
AWK
mkdir_p
MKDIR_P
INSTALL_STRIP_PROGRAM
STRIP
install_sh
MAKEINFO
AUTOHEADER
AUTOMAKE
AUTOCONF
ACLOCAL
VERSION
PACKAGE
CYGPATH_W
am__isrc
INSTALL_DATA
INSTALL_SCRIPT
INSTALL_PROGRAM
host_os
host_vendor
host_cpu
host
build_os
build_vendor
build_cpu
build
target_alias

host_alias
build_alias
LIBS
ECHO_T
ECHO_N
ECHO_C
DEFS
mandir
localedir
libdir
psdir
pdfdir
dvidir
htmldir
infodir
docdir
oldincludedir
includedir
localstatedir
sharedstatedir
sysconfdir
datadir
datarootdir
libexecdir
sbindir
bindir
program_transform_name
prefix
exec_prefix
PACKAGE_URL
PACKAGE_BUGREPORT
PACKAGE_STRING
PACKAGE_VERSION
PACKAGE_TARNAME
PACKAGE_NAME
PATH_SEPARATOR
SHELL'
ac_subst_files=''
ac_user_opts='
enable_option_checking
enable_maintainer_mode
enable_silent_rules
enable_dependency_tracking
enable_tests
enable_ansi
enable_verbose_mode
enable_asserts
enable_checks
enable_gcov
enable_bash_completion
with_test_socket_dir
with_introspect_xml

```

with_dbus_binding_tool
enable_shared
enable_static
with_pic
enable_fast_install
with_gnu_ld
with_libtool_sysroot
enable_libtool_lock
with_html_dir
enable_gtk_doc
enable_gtk_doc_html
enable_gtk_doc_pdf
'
        ac_precious_vars='build_alias
host_alias
target_alias
CC
CFLAGS
LDFLAGS
LIBS
CPPFLAGS
CPP
PKG_CONFIG
PKG_CONFIG_PATH
PKG_CONFIG_LIBDIR
DBUS_CFLAGS
DBUS_LIBS
DBUS_GLIB_CFLAGS
DBUS_GLIB_LIBS
DBUS_GLIB_THREADS_CFLAGS
DBUS_GLIB_THREADS_LIBS
GTKDOC_DEPS_CFLAGS
GTKDOC_DEPS_LIBS'

# Initialize some variables set by options.
ac_init_help=
ac_init_version=false
ac_unrecognized_opts=
ac_unrecognized_sep=
# The variables have the same names as the options, with
# dashes changed to underlines.
cache_file=/dev/null
exec_prefix=NONE
no_create=
no_recursion=
prefix=NONE
program_prefix=NONE
program_suffix=NONE
program_transform_name=s,x,x,
silent=
site=

```

```

srcdir=
verbose=
x_includes=NONE
x_libraries=NONE

# Installation directory options.
# These are left unexpanded so users can "make install
exec_prefix=/foo"
# and all the variables that are supposed to be based on exec_prefix
# by default will actually change.
# Use braces instead of parens because sh, perl, etc. also accept
them.
# (The list follows the same order as the GNU Coding Standards.)
bindir='${exec_prefix}/bin'
sbindir='${exec_prefix}/sbin'
libexecdir='${exec_prefix}/libexec'
datarootdir='${prefix}/share'
datadir='${datarootdir}'
sysconfdir='${prefix}/etc'
sharedstatedir='${prefix}/com'
localstatedir='${prefix}/var'
includedir='${prefix}/include'
oldincludedir='/usr/include'
docdir='${datarootdir}/doc/${PACKAGE_TARNAME}'
infodir='${datarootdir}/info'
htmldir='${docdir}'
dvidir='${docdir}'
pdfdir='${docdir}'
psdir='${docdir}'
libdir='${exec_prefix}/lib'
localedir='${datarootdir}/locale'
mandir='${datarootdir}/man'

ac_prev=
ac_dashdash=
for ac_option
do
    # If the previous option needs an argument, assign it.
    if test -n "$ac_prev"; then
        eval $ac_prev=\$ac_option
        ac_prev=
        continue
    fi

    case $ac_option in
        *=?*) ac_optarg=`expr "$X$ac_option" : '[^=]*=\.*\)'` ;;
        *)    ac_optarg= ;;
    esac

    # Accept the important Cygnus configure options, so we can diagnose
typos.

```

```

case $ac_dashdash$ac_option in
--)
  ac_dashdash=yes ;;

-bindir | --bindir | --bindi | --bind | --bin | --bi)
  ac_prev=bindir ;;
-bindir=* | --bindir=* | --bindi=* | --bind=* | --bin=* | --bi=*)
  bindir=$ac_optarg ;;

-build | --build | --buil | --bui | --bu)
  ac_prev=build_alias ;;
-build=* | --build=* | --buil=* | --bui=* | --bu=*)
  build_alias=$ac_optarg ;;

-cache-file | --cache-file | --cache-fil | --cache-fi \
| --cache-f | --cache- | --cache | --cach | --cac | --ca | --c)
  ac_prev=cache_file ;;
-cache-file=* | --cache-file=* | --cache-fil=* | --cache-fi=* \
| --cache-f=* | --cache-=* | --cache=* | --cach=* | --cac=* | --ca=*
| --c=*)
  cache_file=$ac_optarg ;;

--config-cache | -C)
  cache_file=config.cache ;;

-datadir | --datadir | --datadi | --datad)
  ac_prev=datadir ;;
-datadir=* | --datadir=* | --datadi=* | --datad=*)
  datadir=$ac_optarg ;;

-datarootdir | --datarootdir | --datarootdi | --datarootd | --
dataroot \
| --dataroo | --dataro | --datar)
  ac_prev=datarootdir ;;
-datarootdir=* | --datarootdir=* | --datarootdi=* | --datarootd=* \
| --dataroot=* | --dataroo=* | --dataro=* | --datar=*)
  datarootdir=$ac_optarg ;;

-disable-* | --disable-*)
  ac_useropt=`expr "x$ac_option" : 'x-*disable-\(.*\)'`
  # Reject names that are not valid shell variable names.
  expr "x$ac_useropt" : ".*[^\+._$as_cr_alnum]" >/dev/null &&
  as_fn_error $? "invalid feature name: $ac_useropt"
  ac_useropt_orig=$ac_useropt
  ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
  case $ac_user_opts in
  *)
"enable_$ac_useropt"
"*) ;;

```

```

    *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
disable-$ac_useropt_orig"
    ac_unrecognized_sep=', ';;
esac
eval enable_$ac_useropt=no ;;

-docdir | --docdir | --docdi | --doc | --do)
    ac_prev=docdir ;;
-docdir=* | --docdir=* | --docdi=* | --doc=* | --do=*)
    docdir=$ac_optarg ;;

-dvidir | --dvidir | --dvidi | --dvid | --dvi | --dv)
    ac_prev=dvidir ;;
-dvidir=* | --dvidir=* | --dvidi=* | --dvid=* | --dvi=* | --dv=*)
    dvidir=$ac_optarg ;;

-enable-* | --enable-*)
    ac_useropt=`expr "x$ac_option" : 'x-*enable-\([^=]*\)'`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
    as_fn_error $? "invalid feature name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *)
"enable_$ac_useropt"
"*) ;;
    *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
enable-$ac_useropt_orig"
    ac_unrecognized_sep=', ';;
esac
eval enable_$ac_useropt=\$ac_optarg ;;

-exec-prefix | --exec_prefix | --exec-prefix | --exec-prefi \
| --exec-pref | --exec-pre | --exec-pr | --exec-p | --exec- \
| --exec | --exe | --ex)
    ac_prev=exec_prefix ;;
-exec-prefix=* | --exec_prefix=* | --exec-prefix=* | --exec-prefi=*
\
| --exec-pref=* | --exec-pre=* | --exec-pr=* | --exec-p=* | --exec-
=* \
| --exec=* | --exe=* | --ex=*)
    exec_prefix=$ac_optarg ;;

-gas | --gas | --ga | --g)
    # Obsolete; use --with-gas.
    with_gas=yes ;;

-help | --help | --hel | --he | -h)
    ac_init_help=long ;;

```

```

-help=r* | --help=r* | --hel=r* | --he=r* | -hr*)
    ac_init_help=recursive ;;
-help=s* | --help=s* | --hel=s* | --he=s* | -hs*)
    ac_init_help=short ;;

-host | --host | --hos | --ho)
    ac_prev=host_alias ;;
-host=* | --host=* | --hos=* | --ho=*)
    host_alias=$ac_optarg ;;

-htmldir | --htmldir | --htmldi | --htmld | --html | --htm | --ht)
    ac_prev=htmldir ;;
-htmldir=* | --htmldir=* | --htmldi=* | --htmld=* | --html=* | --
htm=* \
| --ht=*)
    htmldir=$ac_optarg ;;

-includedir | --includedir | --includedi | --included | --include \
| --includ | --inclu | --incl | --inc)
    ac_prev=includedir ;;
-includedir=* | --includedir=* | --includedi=* | --included=* | --
include=* \
| --includ=* | --inclu=* | --incl=* | --inc=*)
    includedir=$ac_optarg ;;

-infodir | --infodir | --infodi | --infod | --info | --inf)
    ac_prev=infodir ;;
-infodir=* | --infodir=* | --infodi=* | --infod=* | --info=* | --
inf=*)
    infodir=$ac_optarg ;;

-libdir | --libdir | --libdi | --libd)
    ac_prev=libdir ;;
-libdir=* | --libdir=* | --libdi=* | --libd=*)
    libdir=$ac_optarg ;;

-libexecdir | --libexecdir | --libexecdi | --libexecd | --libexec \
| --libexe | --libex | --libe)
    ac_prev=libexecdir ;;
-libexecdir=* | --libexecdir=* | --libexecdi=* | --libexecd=* | --
libexec=* \
| --libexe=* | --libex=* | --libe=*)
    libexecdir=$ac_optarg ;;

-localedir | --localedir | --localedi | --localed | --locale)
    ac_prev=localedir ;;
-localedir=* | --localedir=* | --localedi=* | --localed=* | --
locale=*)
    localedir=$ac_optarg ;;

-localstatedir | --localstatedir | --localstatedi | --localstated \
| --localstate | --localstat | --localsta | --localst | --locals)

```



```

    ac_prev=localstatedir ;;
    -localstatedir=* | --localstatedir=* | --localstatedi=* | --
localstated=* \
    | --localstate=* | --localstat=* | --localsta=* | --localst=* | --
locals=*)
    localstatedir=$ac_optarg ;;

    -mandir | --mandir | --mandi | --mand | --man | --ma | --m)
    ac_prev=mandir ;;
    -mandir=* | --mandir=* | --mandi=* | --mand=* | --man=* | --ma=* | -
-m=*)
    mandir=$ac_optarg ;;

    -nfp | --nfp | --nf)
    # Obsolete; use --without-fp.
    with_fp=no ;;

    -no-create | --no-create | --no-creat | --no-crea | --no-cre \
    | --no-cr | --no-c | -n)
    no_create=yes ;;

    -no-recursion | --no-recursion | --no-recursio | --no-recursi \
    | --no-recurs | --no-recur | --no-recu | --no-rec | --no-re | --no-
r)
    no_recursion=yes ;;

    -oldincludedir | --oldincludedir | --oldincludedi | --oldincluded \
    | --oldinclude | --oldinclud | --oldinclu | --oldincl | --oldinc \
    | --oldin | --oldi | --old | --ol | --o)
    ac_prev=oldincludedir ;;
    -oldincludedir=* | --oldincludedir=* | --oldincludedi=* | --
oldincluded=* \
    | --oldinclude=* | --oldinclud=* | --oldinclu=* | --oldincl=* | --
oldinc=* \
    | --oldin=* | --oldi=* | --old=* | --ol=* | --o=*)
    oldincludedir=$ac_optarg ;;

    -prefix | --prefix | --prefi | --pref | --pre | --pr | --p)
    ac_prev=prefix ;;
    -prefix=* | --prefix=* | --prefi=* | --pref=* | --pre=* | --pr=* | -
-p=*)
    prefix=$ac_optarg ;;

    -program-prefix | --program-prefix | --program-prefi | --program-
pref \
    | --program-pre | --program-pr | --program-p)
    ac_prev=program_prefix ;;
    -program-prefix=* | --program-prefix=* | --program-prefi=* \
    | --program-pref=* | --program-pre=* | --program-pr=* | --program-
p=*)
    program_prefix=$ac_optarg ;;

```

```

-program-suffix | --program-suffix | --program-suffi | --program-
suff \
| --program-suf | --program-su | --program-s)
ac_prev=program_suffix ;;
-program-suffix=* | --program-suffix=* | --program-suffi=* \
| --program-suff=* | --program-suf=* | --program-su=* | --program-
s=*)
program_suffix=$ac_optarg ;;

-program-transform-name | --program-transform-name \
| --program-transform-nam | --program-transform-na \
| --program-transform-n | --program-transform- \
| --program-transform | --program-transfor \
| --program-transfo | --program-transf \
| --program-trans | --program-tran \
| --progr-tra | --program-tr | --program-t)
ac_prev=program_transform_name ;;
-program-transform-name=* | --program-transform-name=* \
| --program-transform-nam=* | --program-transform-na=* \
| --program-transform-n=* | --program-transform-=* \
| --program-transform=* | --program-transfor=* \
| --program-transfo=* | --program-transf=* \
| --program-trans=* | --program-tran=* \
| --progr-tra=* | --program-tr=* | --program-t=*)
program_transform_name=$ac_optarg ;;

-pdfdir | --pdfdir | --pdfdi | --pdfd | --pdf | --pd)
ac_prev=pdfdir ;;
-pdfdir=* | --pdfdir=* | --pdfdi=* | --pdfd=* | --pdf=* | --pd=*)
pdfdir=$ac_optarg ;;

-psdir | --psdir | --psdi | --psd | --ps)
ac_prev=psdir ;;
-psdir=* | --psdir=* | --psdi=* | --psd=* | --ps=*)
psdir=$ac_optarg ;;

-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil)
silent=yes ;;

-sbindir | --sbindir | --sbindi | --sbind | --sbin | --sbi | --sb)
ac_prev=sbindir ;;
-sbindir=* | --sbindir=* | --sbindi=* | --sbind=* | --sbin=* \
| --sbi=* | --sb=*)
sbindir=$ac_optarg ;;

-sharedstatedir | --sharedstatedir | --sharedstatedi \
| --sharedstated | --sharedstate | --sharedstat | --sharedsta \
| --sharedst | --shareds | --shared | --share | --shar \
| --sha | --sh)
ac_prev=sharedstatedir ;;
-sharedstatedir=* | --sharedstatedir=* | --sharedstatedi=* \

```

```

    | --sharedstated=* | --sharedstate=* | --sharedstat=* | --
sharedsta=* \
    | --sharedst=* | --shareds=* | --shared=* | --share=* | --shar=* \
    | --sha=* | --sh=*)
    sharedstatedir=$ac_optarg ;;

-site | --site | --sit)
    ac_prev=site ;;
-site=* | --site=* | --sit=*)
    site=$ac_optarg ;;

-srcdir | --srcdir | --srcdi | --srcd | --src | --sr)
    ac_prev=srcdir ;;
-srcdir=* | --srcdir=* | --srcdi=* | --srcd=* | --src=* | --sr=*)
    srcdir=$ac_optarg ;;

-sysconfdir | --sysconfdir | --sysconfdi | --sysconfd | --sysconf \
| --syscon | --sysco | --sysc | --sys | --sy)
    ac_prev=sysconfdir ;;
-sysconfdir=* | --sysconfdir=* | --sysconfdi=* | --sysconfd=* | --
sysconf=* \
| --syscon=* | --sysco=* | --sysc=* | --sys=* | --sy=*)
    sysconfdir=$ac_optarg ;;

-target | --target | --targe | --targ | --tar | --ta | --t)
    ac_prev=target_alias ;;
-target=* | --target=* | --targe=* | --targ=* | --tar=* | --ta=* | -
-t=*)
    target_alias=$ac_optarg ;;

-v | -verbose | --verbose | --verbos | --verbo | --verb)
    verbose=yes ;;

-version | --version | --versio | --versi | --vers | -V)
    ac_init_version=: ;;

-with-* | --with-*)
    ac_useropt=`expr "x$ac_option" : 'x-*with-\([^=]*\)'`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
    as_fn_error $? "invalid package name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *)
"with_$ac_useropt"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--with-
$ac_useropt_orig"
    ac_unrecognized_sep=', ';;
    esac

```

```

eval with_${ac_useropt}=\${ac_optarg} ;;

-without-* | --without-*)
  ac_useropt=`expr "x${ac_option}" : 'x-*without-\(.*\)'`
  # Reject names that are not valid shell variable names.
  expr "x${ac_useropt}" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
  as_fn_error $? "invalid package name: ${ac_useropt}"
  ac_useropt_orig=${ac_useropt}
  ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
  case $ac_user_opts in
    *)
      "with_${ac_useropt}"
    *) ;;
  *)
ac_unrecognized_opts="$ac_unrecognized_opts${ac_unrecognized_sep}--
without-${ac_useropt_orig}"
  ac_unrecognized_sep=', ';;
  esac
  eval with_${ac_useropt}=no ;;

--x)
  # Obsolete; use --with-x.
  with_x=yes ;;

-x-includes | --x-includes | --x-include | --x-includ | --x-inclu \
| --x-incl | --x-inc | --x-in | --x-i)
  ac_prev=x_includes ;;
-x-includes=* | --x-includes=* | --x-include=* | --x-includ=* | --x-
inclu=* \
| --x-incl=* | --x-inc=* | --x-in=* | --x-i=*)
  x_includes=${ac_optarg} ;;

-x-libraries | --x-libraries | --x-librarie | --x-librari \
| --x-librar | --x-libra | --x-libr | --x-lib | --x-li | --x-l)
  ac_prev=x_libraries ;;
-x-libraries=* | --x-libraries=* | --x-librarie=* | --x-librari=* \
| --x-librar=* | --x-libra=* | --x-libr=* | --x-lib=* | --x-li=* | -
-x-l=*)
  x_libraries=${ac_optarg} ;;

-*) as_fn_error $? "unrecognized option: \`${ac_option}`
Try \`${0} --help' for more information"
  ;;

*=*)
  ac_envvar=`expr "x${ac_option}" : 'x\([^=]*\)='`
  # Reject names that are not valid shell variable names.
  case $ac_envvar in #(
    '' | [0-9]* | *[^!_${as_cr_alnum}]* )
    as_fn_error $? "invalid variable name: \`${ac_envvar}`" ;;
  esac
  eval $ac_envvar=\${ac_optarg}

```

```

export $ac_envvar ;;

*)
# FIXME: should be removed in autoconf 3.0.
$as_echo "$as_me: WARNING: you should use --build, --host, --
target" >&2
expr "x$ac_option" : ".*[^-._$as_cr_alnum]" >/dev/null &&
$as_echo "$as_me: WARNING: invalid host type: $ac_option" >&2
: "${build_alias=$ac_option} ${host_alias=$ac_option}
${target_alias=$ac_option}"
;;

esac
done

if test -n "$ac_prev"; then
ac_option=--`echo $ac_prev | sed 's/_/_/g'`
as_fn_error $? "missing argument to $ac_option"
fi

if test -n "$ac_unrecognized_opts"; then
case $enable_option_checking in
no) ;;
fatal) as_fn_error $? "unrecognized options:
$ac_unrecognized_opts" ;;
*) $as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2 ;;
esac
fi

# Check all directory arguments for consistency.
for ac_var in exec_prefix prefix bindir sbindir libexecdir
datarootdir \
datadir sysconfdir sharedstatedir localstatedir includedir
\
oldincludedir docdir infodir htmdir dvidir pdfdir psdir \
libdir localedir mandir
do
eval ac_val=\$$ac_var
# Remove trailing slashes.
case $ac_val in
*/ )
ac_val=`expr "X$ac_val" : 'X\([^/]\)' \| "X$ac_val" :
'X\(.*\)'`
eval $ac_var=\$ac_val;;
esac
# Be sure to have absolute directory names.
case $ac_val in
[\\/$]* | ?:[\\/$]* ) continue;;
NONE | '' ) case $ac_var in *prefix ) continue;; esac;;
esac

```

```

    as_fn_error $? "expected an absolute directory name for --$ac_var:
$ac_val"
done

# There might be people who depend on the old broken behavior: ` $host '
# used to hold the argument of --host etc.
# FIXME: To remove some day.
build=$build_alias
host=$host_alias
target=$target_alias

# FIXME: To remove some day.
if test "x$host_alias" != x; then
  if test "x$build_alias" = x; then
    cross_compiling=maybe
  elif test "x$build_alias" != "x$host_alias"; then
    cross_compiling=yes
  fi
fi

ac_tool_prefix=
test -n "$host_alias" && ac_tool_prefix=$host_alias-

test "$silent" = yes && exec 6>/dev/null

ac_pwd=`pwd` && test -n "$ac_pwd" &&
ac_ls_di=`ls -di .` &&
ac_pwd_ls_di=`cd "$ac_pwd" && ls -di .` ||
  as_fn_error $? "working directory cannot be determined"
test "X$ac_ls_di" = "X$ac_pwd_ls_di" ||
  as_fn_error $? "pwd does not report name of working directory"

# Find the source files, if location was not specified.
if test -z "$srcdir"; then
  ac_srcdir_defaulted=yes
  # Try the directory containing this script, then the parent
  directory.
  ac_confdir=`$as_dirname -- "$as_myself" ||
$as_expr X"$as_myself" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$as_myself" : 'X\(//\)[^/]' \| \
  X"$as_myself" : 'X\(//\)$' \| \
  X"$as_myself" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$as_myself" |
  sed '/^X\(.*[^/]\)\//\/*[^/][^/]*\/*$/{
    s//\1/
    q
  }
/^X\(\\/\)\)[^/].*${
  s//\1/
  q

```

```

    }
    /^X\(\\\/\\\/)\$/ {
        s//\1/
        q
    }
    /^X\(\\\/)\.*$/ {
        s//\1/
        q
    }
    s/.*\/./; q'`
srcdir=${ac_confdir}
if test ! -r "$srcdir/$ac_unique_file"; then
    srcdir=..
fi
else
    ac_srcdir_defaulted=no
fi
if test ! -r "$srcdir/$ac_unique_file"; then
    test "$ac_srcdir_defaulted" = yes && srcdir="$ac_confdir or .."
    as_fn_error $? "cannot find sources ($ac_unique_file) in $srcdir"
fi
ac_msg="sources are in $srcdir, but `cd $srcdir' does not work"
ac_abs_confdir=`
    cd "$srcdir" && test -r ".$ac_unique_file" || as_fn_error $?
"$ac_msg"
    pwd) `
# When building in place, set srcdir=.
if test "$ac_abs_confdir" = "$ac_pwd"; then
    srcdir=.
fi
# Remove unnecessary trailing slashes from srcdir.
# Double slashes in file names in object file debugging info
# mess up M-x gdb in Emacs.
case $srcdir in
*/) srcdir=`expr "X$srcdir" : 'X\([^\/]\)' \| "X$srcdir" :
'X\(.*\)'`;
esac
for ac_var in $ac_precious_vars; do
    eval ac_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_env_${ac_var}_value=\${${ac_var}_value}
    eval ac_cv_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_cv_env_${ac_var}_value=\${${ac_var}_value}
done

#
# Report the --help message.
#
if test "$ac_init_help" = "long"; then
    # Omit some internal or obsolete options to make the list less
    imposing.
    # This message is too long to be a string in the A/UX 3.1 sh.
    cat <<_ACEOF

```

\`configure' configures dbus-glib 0.100.2 to adapt to many kinds of systems.

Usage: \$0 [OPTION]... [VAR=VALUE]...

To assign environment variables (e.g., CC, CFLAGS...), specify them as VAR=VALUE. See below for descriptions of some of the useful variables.

Defaults for the options are specified in brackets.

Configuration:

-h, --help	display this help and exit
--help=short	display options specific to this package
--help=recursive	display the short help of all the included packages
-V, --version	display version information and exit
-q, --quiet, --silent	do not print '`checking ...' messages
--cache-file=FILE	cache test results in FILE [disabled]
-C, --config-cache	alias for '`--cache-file=config.cache'
-n, --no-create	do not create output files
--srcdir=DIR	find the sources in DIR [configure dir or `..']

Installation directories:

--prefix=PREFIX	install architecture-independent files in PREFIX	@<:@@S @ac_default_prefix@:>@
--exec-prefix=EPREFIX	install architecture-dependent files in EPREFIX	@<:@PREFIX@:>@

By default, '`make install' will install all the files in '`\$ac_default_prefix/bin', '`\$ac_default_prefix/lib' etc. You can specify an installation prefix other than '`\$ac_default_prefix' using '`--prefix', for instance '`--prefix=\$HOME'.

For better control, use the options below.

Fine tuning of the installation directories:

--bindir=DIR	user executables [EPREFIX/bin]
--sbindir=DIR	system admin executables [EPREFIX/sbin]
--libexecdir=DIR	program executables [EPREFIX/libexec]
--sysconfdir=DIR	read-only single-machine data [PREFIX/etc]
--sharedstatedir=DIR	modifiable architecture-independent data [PREFIX/com]
--localstatedir=DIR	modifiable single-machine data [PREFIX/var]
--libdir=DIR	object code libraries [EPREFIX/lib]
--includedir=DIR	C header files [PREFIX/include]
--oldincludedir=DIR	C header files for non-gcc [/usr/include]


```

--datarootdir=DIR          read-only arch.-independent data root
[PREFIX/share]
--datadir=DIR              read-only architecture-independent data
[DATAROOTDIR]
--infodir=DIR              info documentation [DATAROOTDIR/info]
--localedir=DIR           locale-dependent data [DATAROOTDIR/locale]
--mandir=DIR              man documentation [DATAROOTDIR/man]
--docdir=DIR              documentation root @<:@DATAROOTDIR/doc/dbus-
glib@:>@
--htmldir=DIR             html documentation [DOCDIR]
--dvidir=DIR              dvi documentation [DOCDIR]
--pdfdir=DIR              pdf documentation [DOCDIR]
--psdir=DIR               ps documentation [DOCDIR]
_ACEOF

```

```
cat <<\_ACEOF
```

Program names:

```

--program-prefix=PREFIX    prepend PREFIX to installed
program names
--program-suffix=SUFFIX    append SUFFIX to installed
program names
--program-transform-name=PROGRAM run sed PROGRAM on installed
program names

```

System types:

```

--build=BUILD              configure for building on BUILD [guessed]
--host=HOST                cross-compile to build programs to run on HOST
[BUILD]
_ACEOF
fi

```

```

if test -n "$ac_init_help"; then
  case $ac_init_help in
    short | recursive ) echo "Configuration of dbus-glib 0.100.2:>";;
    esac
  cat <<\_ACEOF

```

Optional Features:

```

--disable-option-checking  ignore unrecognized --enable/--with
options
--disable-FEATURE          do not include FEATURE (same as --enable-
FEATURE=no)
--enable-FEATURE[=ARG]    include FEATURE [ARG=yes]
--enable-maintainer-mode  enable make rules and dependencies not
useful (and
                           sometimes confusing) to the casual installer
--enable-silent-rules      less verbose build output (undo: "make V=1")
--disable-silent-rules     verbose build output (undo: "make V=0")
--enable-dependency-tracking
                           do not reject slow dependency extractors

```

```

--disable-dependency-tracking
                                speeds up one-time build
--enable-tests                    enable unit test code
--enable-ansi                    enable -ansi -pedantic gcc flags
--enable-verbose-mode            support verbose debug mode
--enable-asserts                 include assertion checks
--enable-checks                  include sanity checks on public API
--enable-gcov                    compile with coverage profiling
instrumentation (gcc
                                only)
--enable-bash-completion         install bash completion scripts
--enable-shared@<:@=PKGS@:>@    build shared libraries
@<:@default=yes@:>@
--enable-static@<:@=PKGS@:>@    build static libraries
@<:@default=yes@:>@
--enable-fast-install@<:@=PKGS@:>@
                                optimize for fast installation
@<:@default=yes@:>@
--disable-libtool-lock          avoid locking (might break parallel builds)
--enable-gtk-doc                 use gtk-doc to build documentation
@<:@@<:@default=no@:>@@@:>@
--enable-gtk-doc-html           build documentation in html format
@<:@@<:@default=yes@:>@@@:>@
--enable-gtk-doc-pdf            build documentation in pdf format
@<:@@<:@default=no@:>@@@:>@

Optional Packages:
--with-PACKAGE[=ARG]            use PACKAGE [ARG=yes]
--without-PACKAGE               do not use PACKAGE (same as --with-
PACKAGE=no)
--with-test-socket-dir=dirname
                                Where to put sockets for make check
--with-introspect-xml=filename
                                Pass in a pregenerated dbus daemon
introspection xml
                                file (as generated by 'dbus-daemon --
introspect') to
                                use instead of querying the installed dbus
daemon
--with-dbus-binding-tool=filename
                                Use external dbus-binding-tool program
--with-pic@<:@=PKGS@:>@         try to use only PIC/non-PIC objects
@<:@default=use
                                both@:>@
--with-gnu-ld                   assume the C compiler uses GNU ld
@<:@default=no@:>@
--with-libtool-sysroot=DIR      Search for dependent libraries within DIR
                                (or the compiler's sysroot if not specified).
--with-html-dir=PATH           path to installed docs

```

Some influential environment variables:

```

CC          C compiler command
CFLAGS      C compiler flags
LDFLAGS     linker flags, e.g. -L<lib dir> if you have libraries in
a
            nonstandard directory <lib dir>
LIBS        libraries to pass to the linker, e.g. -l<library>
CPPFLAGS    (Objective) C/C++ preprocessor flags, e.g. -I<include
dir> if
            you have headers in a nonstandard directory <include
dir>
CPP         C preprocessor
PKG_CONFIG  path to pkg-config utility
PKG_CONFIG_PATH
            directories to add to pkg-config's search path
PKG_CONFIG_LIBDIR
            path overriding pkg-config's built-in search path
DBUS_CFLAGS C compiler flags for DBUS, overriding pkg-config
DBUS_LIBS   linker flags for DBUS, overriding pkg-config
DBUS_GLIB_CFLAGS
            C compiler flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_LIBS
            linker flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_THREADS_CFLAGS
            C compiler flags for DBUS_GLIB_THREADS, overriding pkg-
config
DBUS_GLIB_THREADS_LIBS
            linker flags for DBUS_GLIB_THREADS, overriding pkg-
config
GTKDOC_DEPS_CFLAGS
            C compiler flags for GTKDOC_DEPS, overriding pkg-config
GTKDOC_DEPS_LIBS
            linker flags for GTKDOC_DEPS, overriding pkg-config

```

Use these variables to override the choices made by `configure' or to help it to find libraries and programs with nonstandard names/locations.

Report bugs to

https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLib.

```
_ACEOF
```

```
ac_status=$?
```

```
fi
```

```
if test "$ac_init_help" = "recursive"; then
```

```
  # If there are subdirs, report their specific --help.
```

```
  for ac_dir in : $ac_subdirs_all; do test "x$ac_dir" = x: && continue
    test -d "$ac_dir" ||
```

```
      { cd "$srcdir" && ac_pwd=`pwd` && srcdir=. && test -d "$ac_dir";
```

```
  } ||
```

```
    continue
```

```
  ac_builddir=.
```

```

case "$ac_dir" in
.) ac_dir_suffix= ac_top_buildddir_sub=. ac_top_build_prefix= ;;
*)
  ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.([\//]||)'`
  # A ".." for each directory in $ac_dir_suffix.
  ac_top_buildddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\//]*|/..|g;s|/||'`
  case $ac_top_buildddir_sub in
  "") ac_top_buildddir_sub=. ac_top_build_prefix= ;;
  *) ac_top_build_prefix=$ac_top_buildddir_sub/ ;;
  esac ;;
esac
ac_abs_top_buildddir=$ac_pwd
ac_abs_buildddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_buildddir=$ac_top_build_prefix

case $srcdir in
.) # We are building in place.
  ac_srcdir=.
  ac_top_srcdir=$ac_top_buildddir_sub
  ac_abs_top_srcdir=$ac_pwd ;;
[\\/] * | ? : [\\/] * ) # Absolute name.
  ac_srcdir=$srcdir$ac_dir_suffix;
  ac_top_srcdir=$srcdir
  ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
  ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
  ac_top_srcdir=$ac_top_build_prefix$srcdir
  ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

cd "$ac_dir" || { ac_status=$?; continue; }
# Check for gusted configure.
if test -f "$ac_srcdir/configure.gnu"; then
  echo &&
  $SHELL "$ac_srcdir/configure.gnu" --help=recursive
elif test -f "$ac_srcdir/configure"; then
  echo &&
  $SHELL "$ac_srcdir/configure" --help=recursive
else
  $as_echo "$as_me: WARNING: no configuration information is in
$ac_dir" >&2
  fi || ac_status=$?
  cd "$ac_pwd" || { ac_status=$?; break; }
done
fi

test -n "$ac_init_help" && exit $ac_status
if $ac_init_version; then

```

```
cat <<\_ACEOF
dbus-glib configure 0.100.2
generated by GNU Autoconf 2.69
```

Copyright (C) 2012 Free Software Foundation, Inc.
This configure script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it.

```
_ACEOF
```

```
_ exit
```

```
fi
```

```
## ----- ##
## Autoconf initialization. ##
## ----- ##
```

```
@%:@ ac_fn_c_try_compile LINENO
```

```
@%:@ -----
```

```
@%:@ Try to compile conftest.@S|@ac_ext, and return whether this  
succeeded.
```

```
ac_fn_c_try_compile ()
```

```
{
```

```
  as_lineno=${as_lineno-"$1"}
```

```
as_lineno_stack=as_lineno_stack=$as_lineno_stack
```

```
  rm -f conftest.$ac_objext
```

```
  if { { ac_try="$ac_compile"
```

```
case "($ac_try" in
```

```
  *\"* | *\\`* | *\\*) ac_try_echo=\\$ac_try;;
```

```
  *) ac_try_echo=$ac_try;;
```

```
esac
```

```
eval ac_try_echo=\"\\\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\\\"\"
```

```
$as_echo \"$ac_try_echo\"; } >&5
```

```
  (eval \"$ac_compile\") 2>conftest.err
```

```
  ac_status=$?
```

```
  if test -s conftest.err; then
```

```
    grep -v '^ *+' conftest.err >conftest.er1
```

```
    cat conftest.er1 >&5
```

```
    mv -f conftest.er1 conftest.err
```

```
  fi
```

```
  $as_echo \"$as_me:${as_lineno-$LINENO}: \\$? = $ac_status\" >&5
```

```
  test $ac_status = 0; } && {
```

```
    test -z \"$ac_c_werror_flag\" ||
```

```
    test ! -s conftest.err
```

```
  } && test -s conftest.$ac_objext; then :
```

```
  ac_retval=0
```

```
else
```

```
  $as_echo \"$as_me: failed program was:\" >&5
```

```
  sed 's/^/| /' conftest.$ac_ext >&5
```

```
  ac_retval=1
```

```
fi
```

```
  eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
```

```
  as_fn_set_status $ac_retval
```

```

} @%:@ ac_fn_c_try_compile

@%:@ ac_fn_c_try_link LINENO
@%:@ -----
@%:@ Try to link confptest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_link ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  rm -f confptest.$ac_objext confptest$ac_exeext
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link" 2>confptest.err
  ac_status=$?
  if test -s confptest.err; then
    grep -v '^ *+' confptest.err >confptest.er1
    cat confptest.er1 >&5
    mv -f confptest.er1 confptest.err
  fi
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } && {
    test -z "$ac_c_werror_flag" ||
    test ! -s confptest.err
  } && test -s confptest$ac_exeext && {
    test "$cross_compiling" = yes ||
    test -x confptest$ac_exeext
  }; then :
    ac_retval=0
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' confptest.$ac_ext >&5

    ac_retval=1
fi
  # Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
  # created by the PGI compiler (confptest_ipa8_confptest.oo), as it
would
  # interfere with the next link command; also delete a directory that
is
  # left behind by Apple's compiler. We do this before executing the
actions.
  rm -rf confptest.dSYM confptest_ipa8_confptest.oo
  eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
  as_fn_set_status $ac_retval

```

```

} @%:@ ac_fn_c_try_link

@%:@ ac_fn_c_try_cpp LINENO
@%:@ -----
@%:@ Try to preprocess conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_cpp ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if { { ac_try="$ac_cpp conftest.$ac_ext"
case "($ac_try" in
    *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_cpp conftest.$ac_ext") 2>conftest.err
    ac_status=$?
    if test -s conftest.err; then
        grep -v '^ *+' conftest.err >conftest.er1
        cat conftest.er1 >&5
        mv -f conftest.er1 conftest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
    test $ac_status = 0; } > conftest.i && {
        test -z "$ac_c_preproc_warn_flag$ac_c_werror_flag" ||
        test ! -s conftest.err
    }; then :
        ac_retval=0
    else
        $as_echo "$as_me: failed program was:" >&5
        sed 's/^/| /' conftest.$ac_ext >&5

        ac_retval=1
    fi
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_cpp

@%:@ ac_fn_c_try_run LINENO
@%:@ -----
@%:@ Try to link conftest.@S|@ac_ext, and return whether this
succeeded. Assumes
@%:@ that executables *can* be run.
ac_fn_c_try_run ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if { { ac_try="$ac_link"

```

```

case "((($ac_try" in
  *\"* | *\\`* | *\\`*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\`\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\`\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
  test $ac_status = 0; } && { ac_try='./confptest$ac_exeext'
  { { case "((($ac_try" in
    *\"* | *\\`* | *\\`*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
  esac
  eval ac_try_echo="\`\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\`\"
  $as_echo "$ac_try_echo"; } >&5
    (eval "$ac_try") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
    test $ac_status = 0; }; }; then :
    ac_retval=0
  else
    $as_echo "$as_me: program exited with status $ac_status" >&5
    $as_echo "$as_me: failed program was:" >&5
  sed 's/^/|/' confptest.$ac_ext >&5

    ac_retval=$ac_status
  fi
  rm -rf confptest.dSYM confptest_ipa8_confptest.o
  eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
  as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_run

@%:@ ac_fn_c_check_header_compile LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists and can be compiled using the include
files in
@%:@ INCLUDES, setting the cache variable VAR accordingly.
ac_fn_c_check_header_compile ()
{
  as_lineno=${as_lineno-"$1"}
  as_lineno_stack=as_lineno_stack=$as_lineno_stack
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
  $as_echo_n "checking for $2... " >&6; }
  if eval \"\${$3+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
$4
@%:@include <$2>

```



```

_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    eval "$3=yes"
else
    eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
eval ac_res=\${$3
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_header_compile

@%:@ ac_fn_c_check_func LINENO FUNC VAR
@%:@ -----
@%:@ Tests whether FUNC exists, setting the cache variable VAR
accordingly
ac_fn_c_check_func ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
    if eval "\${$3+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
/* Define $2 to an innocuous variant, in case <limits.h> declares $2.
   For example, HP-UX 11i <limits.h> declares gettimeofday.  */
#define $2 innocuous_$2

/* System header to define __stub macros and hopefully few prototypes,
   which can conflict with char $2 (); below.
   Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
   <limits.h> exists even on freestanding compilers.  */

#ifdef __STDC__
# include <limits.h>
#else
# include <assert.h>
#endif

#undef $2

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus

```

```

extern "C"
#endif
char $2 ();
/* The GNU C library defines this for functions which it implements
   to always fail with ENOSYS.  Some functions are actually named
   something starting with __ and the normal name is an alias.  */
#if defined __stub_$2 || defined __stub___$2
choke me
#endif

int
main ()
{
return $2 ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
eval "$3=yes"
else
eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
fi
eval ac_res=\$3
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_func

@%:@ ac_fn_c_check_header_mongrel LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists, giving a warning if it cannot be
compiled using
@%:@ the include files in INCLUDES and setting the cache variable VAR
@%:@ accordingly.
ac_fn_c_check_header_mongrel ()
{
as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
if eval \${$3+:} false; then :
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
$as_echo_n "(cached) " >&6
fi
eval ac_res=\$3

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
else
  # Is the header compilable?
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 usability" >&5
$as_echo_n "checking $2 usability... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
@%:@include <$2>
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_header_compiler=yes
else
  ac_header_compiler=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_compiler"
>&5
$as_echo "$ac_header_compiler" >&6; }

# Is the header present?
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 presence" >&5
$as_echo_n "checking $2 presence... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <$2>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
  ac_header_preproc=yes
else
  ac_header_preproc=no
fi
rm -f conftest.err conftest.i conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_preproc"
>&5
$as_echo "$ac_header_preproc" >&6; }

# So? What about this header?
case $ac_header_compiler:$ac_header_preproc:$ac_c_preproc_warn_flag in
#((
  yes:no: )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: accepted by
the compiler, rejected by the preprocessor!" >&5
$as_echo "$as_me: WARNING: $2: accepted by the compiler, rejected by
the preprocessor!" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
    ;;

```

```

no:yes:* )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: present but
cannot be compiled" >&5
$as_echo "$as_me: WARNING: $2: present but cannot be compiled" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      check
for missing prerequisite headers?" >&5
$as_echo "$as_me: WARNING: $2:      check for missing prerequisite
headers?" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: see the
Autoconf documentation" >&5
$as_echo "$as_me: WARNING: $2: see the Autoconf documentation" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      section
\"Present But Cannot Be Compiled\"" >&5
$as_echo "$as_me: WARNING: $2:      section \"Present But Cannot Be
Compiled\"" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
( $as_echo "## -----
----- ##
## Report this to
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=Glib
##
## -----
----- ##"
) | sed "s/^\/$as_me: WARNING:      /" >&2
;;
esac
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
    $as_echo_n "(cached) " >&6
else
    eval "$3=\$ac_header_compiler"
fi
eval ac_res=\$${3}
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
fi
    eval $as_lineno_stack; ${as_lineno_stack+:} unset as_lineno

} @%:@ ac_fn_c_check_header_mongrel
cat >config.log <<_ACEOF
This file contains any messages produced by compilers while
running configure, to aid debugging if configure makes a mistake.

It was created by dbus-glib $as_me 0.100.2, which was
generated by GNU Autoconf 2.69.  Invocation command line was

$ $0 $@

```

```

_ACEOF
exec 5>>config.log
{
cat <<_ASUNAME
## ----- ##
## Platform. ##
## ----- ##

hostname = `(hostname || uname -n) 2>/dev/null | sed 1q`
uname -m = `(uname -m) 2>/dev/null || echo unknown`
uname -r = `(uname -r) 2>/dev/null || echo unknown`
uname -s = `(uname -s) 2>/dev/null || echo unknown`
uname -v = `(uname -v) 2>/dev/null || echo unknown`

/usr/bin/uname -p = `(/usr/bin/uname -p) 2>/dev/null || echo unknown`
/bin/uname -X      = `(/bin/uname -X) 2>/dev/null      || echo unknown`

/bin/arch          = `(/bin/arch) 2>/dev/null          || echo
unknown`
/usr/bin/arch -k   = `(/usr/bin/arch -k) 2>/dev/null   || echo
unknown`
/usr/convex/getsysinfo = `(/usr/convex/getsysinfo) 2>/dev/null || echo
unknown`
/usr/bin/hostinfo  = `(/usr/bin/hostinfo) 2>/dev/null  || echo
unknown`
/bin/machine       = `(/bin/machine) 2>/dev/null       || echo
unknown`
/usr/bin/oslevel   = `(/usr/bin/oslevel) 2>/dev/null   || echo
unknown`
/bin/universe      = `(/bin/universe) 2>/dev/null      || echo
unknown`

_ASUNAME

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
$as_echo "PATH: $as_dir"
done
IFS=$as_save_IFS

} >&5

cat >&5 <<_ACEOF

## ----- ##
## Core tests. ##
## ----- ##

```

_ACEOF

```
# Keep a trace of the command line.
# Strip out --no-create and --no-recursion so they do not pile up.
# Strip out --silent because we don't want to record it for future
runs.
# Also quote any args containing shell meta-characters.
# Make two passes to allow for proper duplicate-argument suppression.
ac_configure_args=
ac_configure_args0=
ac_configure_args1=
ac_must_keep_next=false
for ac_pass in 1 2
do
  for ac_arg
  do
    case $ac_arg in
      -no-create | --no-c* | -n | -no-recursion | --no-r*) continue ;;
      -q | -quiet | --quiet | --quie | --qui | --qu | --q \
      | -silent | --silent | --silen | --sile | --sil)
        continue ;;
      *\`)
        ac_arg=`$as_echo "$ac_arg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"` ;;
    esac
    case $ac_pass in
      1) as_fn_append ac_configure_args0 " '$ac_arg'" ;;
      2)
        as_fn_append ac_configure_args1 " '$ac_arg'"
        if test $ac_must_keep_next = true; then
          ac_must_keep_next=false # Got value, back to normal.
        else
          case $ac_arg in
            *=* | --config-cache | -C | -disable-* | --disable-* \
            | -enable-* | --enable-* | -gas | --g* | -nfp | --nf* \
            | -q | -quiet | --q* | -silent | --sil* | -v | -verb* \
            | -with-* | --with-* | -without-* | --without-* | --x)
              case "$ac_configure_args0 " in
                "$ac_configure_args1"* " '$ac_arg' "*" ) continue ;;
              esac
            ;;
            -* ) ac_must_keep_next=true ;;
          esac
        fi
        as_fn_append ac_configure_args " '$ac_arg'"
      ;;
    esac
  done
done
{ ac_configure_args0=; unset ac_configure_args0;}
{ ac_configure_args1=; unset ac_configure_args1;}
```



```

)
    echo

    $as_echo "## ----- ##"
## Output variables. ##
## ----- ##"
    echo
    for ac_var in $ac_subst_vars
    do
        eval ac_val=\${$ac_var}
        case $ac_val in
            *'\''*) ac_val=`$as_echo "$ac_val" | sed
"s/'\''/'\''\\\'\\\'\\\'\\\'\\\'\\\'\\\'\\\'\\\'\'/g"`;;
            esac
        $as_echo "$ac_var='\'$ac_val\''"
    done | sort
    echo

    if test -n "$ac_subst_files"; then
        $as_echo "## ----- ##"
## File substitutions. ##
## ----- ##"
        echo
        for ac_var in $ac_subst_files
        do
            eval ac_val=\${$ac_var}
            case $ac_val in
                *'\''*) ac_val=`$as_echo "$ac_val" | sed
"s/'\''/'\''\\\'\\\'\\\'\\\'\\\'\\\'\\\'\\\'\\\'\'/g"`;;
            esac
            $as_echo "$ac_var='\'$ac_val\''"
        done | sort
        echo
    fi

    if test -s confdefs.h; then
        $as_echo "## ----- ##"
## confdefs.h. ##
## ----- ##"
        echo
        cat confdefs.h
        echo
    fi
    test "$ac_signal" != 0 &&
        $as_echo "$as_me: caught signal $ac_signal"
        $as_echo "$as_me: exit $exit_status"
} >&5
rm -f core *.core core.confptest.* &&
rm -f -r confptest* confdefs* conf$$* $ac_clean_files &&
exit $exit_status
' 0
for ac_signal in 1 2 13 15; do

```



```

    trap 'ac_signal='$ac_signal'; as_fn_exit 1' $ac_signal
done
ac_signal=0

# confdefs.h avoids OS command line length limits that DEFS can
# exceed.
rm -f -r conftest* confdefs.h

$as_echo "/* confdefs.h */" > confdefs.h

# Predefined preprocessor variables.

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_NAME "$PACKAGE_NAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_TARNAME "$PACKAGE_TARNAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_VERSION "$PACKAGE_VERSION"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_STRING "$PACKAGE_STRING"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_BUGREPORT "$PACKAGE_BUGREPORT"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_URL "$PACKAGE_URL"
_ACEOF

# Let the site file select an alternate cache file if it wants to.
# Prefer an explicitly selected file to automatically selected ones.
ac_site_file1=NONE
if test -n "$CONFIG_SITE"; then
    # We do not want a PATH search for config.site.
    case $CONFIG_SITE in @%:@(
        -*) ac_site_file1=./$CONFIG_SITE;;
        */*) ac_site_file1=$CONFIG_SITE;;
        *) ac_site_file1=./$CONFIG_SITE;;
    esac
fi
for ac_site_file in $ac_site_file1
do
    test "x$ac_site_file" = xNONE && continue

```

```

    if test /dev/null != "$ac_site_file" && test -r "$ac_site_file";
then
    { $as_echo "$as_me:${as_lineno-$LINENO}: loading site script
$ac_site_file" >&5
$as_echo "$as_me: loading site script $ac_site_file" >&6;}
    sed 's/^\| /' "$ac_site_file" >&5
    . "$ac_site_file" \
    || { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "failed to load site script $ac_site_file
See \`config.log' for more details" "$LINENO" 5; }
    fi
done

if test -r "$cache_file"; then
    # Some versions of bash will fail to source /dev/null (special files
    # actually), so we avoid doing that.  DJGPP emulates it as a regular
    file.
    if test /dev/null != "$cache_file" && test -f "$cache_file"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: loading cache
$cache_file" >&5
$as_echo "$as_me: loading cache $cache_file" >&6;}
        case $cache_file in
            [\\\/]* | ?:[\\\/]* ) . "$cache_file";;
            *) . "$cache_file";;
        esac
    fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: creating cache $cache_file"
>&5
$as_echo "$as_me: creating cache $cache_file" >&6;}
    >$cache_file
fi

# Check that the precious variables saved in the cache have kept the
# same
# value.
ac_cache_corrupted=false
for ac_var in $ac_precious_vars; do
    eval ac_old_set=\$ac_cv_env_${ac_var}_set
    eval ac_new_set=\$ac_env_${ac_var}_set
    eval ac_old_val=\$ac_cv_env_${ac_var}_value
    eval ac_new_val=\$ac_env_${ac_var}_value
    case $ac_old_set,$ac_new_set in
        set,)
            { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
set to \`$ac_old_val' in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was set to \`$ac_old_val' in the
previous run" >&2;}
            ac_cache_corrupted=: ;;
        ,set)

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: \`${sas_var}' was
not set in the previous run" >&5
$sas_echo "$sas_me: error: \`${sas_var}' was not set in the previous run"
>&2;}
    ac_cache_corrupted=: ;;
,);;
*)
    if test "x${sas_old_val}" != "x${sas_new_val}"; then
    # differences in whitespace do not lead to failure.
    ac_old_val_w=`echo x ${sas_old_val}`
    ac_new_val_w=`echo x ${sas_new_val}`
    if test "${ac_old_val_w}" != "${ac_new_val_w}"; then
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: \`${sas_var}' has
changed since the previous run:" >&5
$sas_echo "$sas_me: error: \`${sas_var}' has changed since the previous
run:" >&2;}
        ac_cache_corrupted=:
    else
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: warning: ignoring
whitespace changes in \`${sas_var}' since the previous run:" >&5
$sas_echo "$sas_me: warning: ignoring whitespace changes in \`${sas_var}'
since the previous run:" >&2;}
        eval ${sas_var}=${sas_old_val}
    fi
        { $sas_echo "$sas_me:${as_lineno-$LINENO}:    former value:
\`${sas_old_val}'" >&5
$sas_echo "$sas_me:    former value: \`${sas_old_val}'" >&2;}
        { $sas_echo "$sas_me:${as_lineno-$LINENO}:    current value:
\`${sas_new_val}'" >&5
$sas_echo "$sas_me:    current value: \`${sas_new_val}'" >&2;}
    fi;;
esac
# Pass precious variables to config.status.
if test "${sas_new_set}" = set; then
    case ${sas_new_val} in
    *\'*) ac_arg=${sas_var}=`$sas_echo "${sas_new_val}" | sed
"s/'/'\\\\\\\\\\\\\\\\\\\\'/'/g"` ;;
    *) ac_arg=${sas_var}=${sas_new_val} ;;
    esac
    case " ${sas_configure_args} " in
    * " '${sas_arg}' "*) ;; # Avoid dups. Use of quotes ensures
accuracy.
    *) as_fn_append ac_configure_args " '${sas_arg}'" ;;
    esac
fi
done
if ${sas_cache_corrupted}; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: in \`${sas_pwd}':" >&5
$sas_echo "$sas_me: error: in \`${sas_pwd}':" >&2;}
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: error: changes in the
environment can compromise the build" >&5

```

```

$as_echo "$as_me: error: changes in the environment can compromise the
build" >&2;}
  as_fn_error $? "run `make distclean' and/or `rm $cache_file' and
start over" "$LINENO" 5
fi
## ----- ##
## Main body of script. ##
## ----- ##

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

ac_aux_dir=
for ac_dir in "$srcdir" "$srcdir/.." "$srcdir/../../.."; do
  if test -f "$ac_dir/install-sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install-sh -c"
    break
  elif test -f "$ac_dir/install.sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install.sh -c"
    break
  elif test -f "$ac_dir/shtool"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/shtool install -c"
    break
  fi
done
if test -z "$ac_aux_dir"; then
  as_fn_error $? "cannot find install-sh, install.sh, or shtool in
`$srcdir` `"$srcdir/.."` `"$srcdir/../../.."`" "$LINENO" 5
fi

# These three variables are undocumented and unsupported,
# and are intended to be withdrawn in a future Autoconf release.
# They can cause serious problems if a builder's source tree is in a
directory
# whose full name contains unusual characters.
ac_config_guess="$SHELL $ac_aux_dir/config.guess" # Please don't use
this var.
ac_config_sub="$SHELL $ac_aux_dir/config.sub" # Please don't use this
var.
ac_configure="$SHELL $ac_aux_dir/configure" # Please don't use this
var.

```

```

# Make sure we can run config.sub.
$SHELL "$ac_aux_dir/config.sub" sun4 >/dev/null 2>&1 ||
  as_fn_error $? "cannot run $SHELL $ac_aux_dir/config.sub" "$LINENO"
5

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking build system type"
>&5
$as_echo_n "checking build system type... " >&6; }
if ${ac_cv_build+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_build_alias=$build_alias
  test "x$ac_build_alias" = x &&
  ac_build_alias=`$SHELL "$ac_aux_dir/config.guess"`
  test "x$ac_build_alias" = x &&
  as_fn_error $? "cannot guess build type; you must specify one"
"$LINENO" 5
ac_cv_build=`$SHELL "$ac_aux_dir/config.sub" $ac_build_alias` ||
  as_fn_error $? "$SHELL $ac_aux_dir/config.sub $ac_build_alias
failed" "$LINENO" 5

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_build" >&5
$as_echo "$ac_cv_build" >&6; }
case $ac_cv_build in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical build" "$LINENO" 5;;
esac
build=$ac_cv_build
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_build
shift
build_cpu=$1
build_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
build_os=$*
IFS=$ac_save_IFS
case $build_os in *\ *) build_os=`echo "$build_os" | sed 's/ /-/g'`;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking host system type"
>&5
$as_echo_n "checking host system type... " >&6; }
if ${ac_cv_host+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$host_alias" = x; then
    ac_cv_host=$ac_cv_build
  else

```

```
ac_cv_host=`$SHELL "$ac_aux_dir/config.sub" $host_alias` ||
as_fn_error $? "$SHELL $ac_aux_dir/config.sub $host_alias failed"
"$LINENO" 5
fi
```

```
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_host" >&5
$as_echo "$ac_cv_host" >&6; }
case $ac_cv_host in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical host" "$LINENO" 5;;
esac
host=$ac_cv_host
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_host
shift
host_cpu=$1
host_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
host_os=$*
IFS=$ac_save_IFS
case $host_os in *\ *) host_os=`echo "$host_os" | sed 's/ /-/g``;
esac
```

```
am__api_version='1.12'
```

```
# Find a good install program. We prefer a C program (faster),
# so one script is as good as another. But avoid the broken or
# incompatible versions:
# SysV /etc/install, /usr/sbin/install
# SunOS /usr/etc/install
# IRIX /sbin/install
# AIX /bin/install
# AmigaOS /C/install, which installs bootblocks on floppy discs
# AIX 4 /usr/bin/installbsd, which doesn't work without a -g flag
# AFS /usr/afsws/bin/install, which mishandles nonexistent args
# SVR4 /usr/ucb/install, which tries to use the nonexistent group
"staff"
# OS/2's system install, which has a completely different semantic
# ./install, which can be erroneously created by make from
./install.sh.
# Reject install programs that cannot install multiple files.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a BSD-compatible
install" >&5
$as_echo_n "checking for a BSD-compatible install... " >&6; }
if test -z "$INSTALL"; then
if ${ac_cv_path_install+:} false; then :
$as_echo_n "(cached) " >&6
```

```

else
  as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
  for as_dir in $PATH
  do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    # Account for people who put trailing slashes in PATH elements.
  case $as_dir/ in @%:@(
    ./ | ../ | /[cC]/* | \
    /etc/* | /usr/sbin/* | /usr/etc/* | /sbin/* | /usr/afsws/bin/* | \
    ?:[\\/]os2[\\/]install[\\/] * | ?:[\\/]OS2[\\/]INSTALL[\\/] * | \
    /usr/ucb/* ) ;;
    *)
      # OSF1 and SCO ODT 3.0 have their own names for install.
      # Don't use installbsd from OSF since it installs stuff as root
      # by default.
      for ac_prog in ginstall scoinst install; do
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext"; then
            if test $ac_prog = install &&
              grep dspmsg "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
          then
            # AIX install. It has an incompatible calling convention.
            :
          elif test $ac_prog = install &&
              grep pwplus "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
          then
            # program-specific install script used by HP pwplus--don't
            use.
            :
          else
            rm -rf conftest.one conftest.two conftest.dir
            echo one > conftest.one
            echo two > conftest.two
            mkdir conftest.dir
            if "$as_dir/$ac_prog$ac_exec_ext" -c conftest.one
            conftest.two "`pwd`/conftest.dir" &&
              test -s conftest.one && test -s conftest.two &&
              test -s conftest.dir/conftest.one &&
              test -s conftest.dir/conftest.two
            then
              ac_cv_path_install="$as_dir/$ac_prog$ac_exec_ext -c"
              break 3
            fi
          fi
        done
      done
    done
  ;;
esac

done

```

```

IFS=$as_save_IFS

rm -rf conftest.one conftest.two conftest.dir

fi
  if test "${ac_cv_path_install+set}" = set; then
    INSTALL=$ac_cv_path_install
  else
    # As a last resort, use the slow shell script. Don't cache a
    # value for INSTALL within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    INSTALL=$ac_install_sh
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $INSTALL" >&5
$as_echo "$INSTALL" >&6; }

# Use test -z because SunOS4 sh mishandles braces in ${var-val}.
# It thinks the first close brace ends the variable substitution.
test -z "$INSTALL_PROGRAM" && INSTALL_PROGRAM='${INSTALL}'

test -z "$INSTALL_SCRIPT" && INSTALL_SCRIPT='${INSTALL}'

test -z "$INSTALL_DATA" && INSTALL_DATA='${INSTALL} -m 644'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether build
environment is sane" >&5
$as_echo_n "checking whether build environment is sane... " >&6; }
# Reject unsafe characters in $srcdir or the absolute working
directory
# name. Accept space and tab only in the latter.
am_lf='
'
case `pwd` in
  *[\ \#\$\&\'`\"$am_lf]*)
    as_fn_error $? "unsafe absolute working directory name" "$LINENO"
5;;
esac
case $srcdir in
  *[\ \#\$\&\'`\"$am_lf\ \]*)
    as_fn_error $? "unsafe srcdir value: '$srcdir'" "$LINENO" 5;;
esac

# Do 'set' in a subshell so we don't clobber the current shell's
# arguments. Must try -L first in case configure is actually a
# symlink; some systems play weird games with the mod time of symlinks
# (eg FreeBSD returns the mod time of the symlink's containing
# directory).
if (
  am_has_slept=no
  for am_try in 1 2; do

```



```

echo "timestamp, slept: $am_has_slept" > confptest.file
set X `ls -Lt "$srcdir/configure" confptest.file 2> /dev/null`
if test "$*" = "X"; then
  # -L didn't work.
  set X `ls -t "$srcdir/configure" confptest.file`
fi
if test "$*" != "X $srcdir/configure confptest.file" \
  && test "$*" != "X confptest.file $srcdir/configure"; then

  # If neither matched, then we have a broken ls. This can happen
  # if, for instance, CONFIG_SHELL is bash and it inherits a
  # broken ls alias from the environment. This has actually
  # happened. Such a system could not be considered "sane".
  as_fn_error $? "ls -t appears to fail. Make sure there is not a
broken
alias in your environment" "$LINENO" 5
  fi
  if test "$2" = confptest.file || test $am_try -eq 2; then
    break
  fi
  # Just in case.
  sleep 1
  am_has_slept=yes
done
test "$2" = confptest.file
)
then
  # Ok.
  :
else
  as_fn_error $? "newly created file is older than distributed files!
Check your system clock" "$LINENO" 5
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
# If we didn't sleep, we still need to ensure time stamps of
config.status and
# generated files are strictly newer.
am_sleep_pid=
if grep 'slept: no' confptest.file >/dev/null 2>&1; then
  ( sleep 1 ) &
  am_sleep_pid=$!
fi

rm -f confptest.file

test "$program_prefix" != NONE &&

program_transform_name="s^&$program_prefix&;$program_transform_name"
# Use a double $ so make ignores it.
test "$program_suffix" != NONE &&

```

```

program_transform_name="s&\&$$program_suffix&;$program_transform_name"
# Double any \ or $.
# By default was `s,x,x', remove it if useless.
ac_script='s/[\\\$]/&&/g;s;/s,x,x,$//'
program_transform_name=`$as_echo "$program_transform_name" | sed
"$ac_script"`

# expand $ac_aux_dir to an absolute path
am_aux_dir=`cd $ac_aux_dir && pwd`

if test x"${MISSING+set}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      MISSING="\${SHELL} \"$am_aux_dir/missing\"" ;;
    *)
      MISSING="\${SHELL} $am_aux_dir/missing" ;;
  esac
fi
# Use eval to expand $SHELL
if eval "$MISSING --run true"; then
  am_missing_run="$MISSING --run "
else
  am_missing_run=
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: 'missing' script
is too old or missing" >&5
$as_echo "$as_me: WARNING: 'missing' script is too old or missing"
>&2;}
fi

if test x"${install_sh}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      install_sh="\${SHELL} '$am_aux_dir/install-sh'" ;;
    *)
      install_sh="\${SHELL} $am_aux_dir/install-sh"
  esac
fi

# Installed binaries are usually stripped using 'strip' when the user
# run "make install-strip". However 'strip' might not be the right
# tool to use in cross-compilation environments, therefore Automake
# will honor the 'STRIP' environment variable to overrule this
program.
if test "$cross_compiling" != no; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$STRIP"; then
        ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_STRIP="{ac_tool_prefix}strip"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
STRIP=$ac_cv_prog_STRIP
if test -n "$STRIP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
$as_echo "$STRIP" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_STRIP"; then
    ac_ct_STRIP=$STRIP
    # Extract the first word of "strip", so it can be a program name
    with args.
    set dummy strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$ac_ct_STRIP"; then
            ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
            test.
        else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS

```

```

test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_ac_ct_STRIP="strip"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
if test -n "$ac_ct_STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_STRIP" = x; then
    STRIP=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    STRIP=$ac_ct_STRIP
  fi
else
  STRIP="$ac_cv_prog_STRIP"
fi

fi
INSTALL_STRIP_PROGRAM="\$(install_sh) -c -s"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a thread-safe
mkdir -p" >&5
$as_echo_n "checking for a thread-safe mkdir -p... " >&6; }
if test -z "$MKDIR_P"; then
  if ${ac_cv_path_mkdir+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH$PATH_SEPARATOR/opt/sfw/bin

```

```

do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_prog in mkdir gmkdir; do
    for ac_exec_ext in '' $ac_executable_extensions; do
      as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext" || continue
      case `"$as_dir/$ac_prog$ac_exec_ext" --version 2>&1` in #(
        'mkdir (GNU coreutils) '* | \
        'mkdir (coreutils) '* | \
        'mkdir (fileutils) '4.1*)
        ac_cv_path_mkdir=$as_dir/$ac_prog$ac_exec_ext
        break 3;;
      esac
    done
  done
done
IFS=$as_save_IFS

fi

test -d ./--version && rmdir ./--version
if test "${ac_cv_path_mkdir+set}" = set; then
  MKDIR_P="$ac_cv_path_mkdir -p"
else
  # As a last resort, use the slow shell script. Don't cache a
  # value for MKDIR_P within a source directory, because that will
  # break other packages using the cache if that directory is
  # removed, or if the value is a relative name.
  MKDIR_P="$ac_install_sh -d"
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $MKDIR_P" >&5
$as_echo "$MKDIR_P" >&6; }

for ac_prog in gawk mawk nawk awk
do
  # Extract the first word of "$ac_prog", so it can be a program name
  with args.
  set dummy $ac_prog; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_AWK+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$AWK"; then
      ac_cv_prog_AWK="$AWK" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_AWK="$ac_prog"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$sas_save_IFS

fi
fi
AWK=$ac_cv_prog_AWK
if test -n "$AWK"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $AWK" >&5
$as_echo "$AWK" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$AWK" && break
done

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether ${MAKE-make}
sets \${MAKE}" >&5
$as_echo_n "checking whether ${MAKE-make} sets \${MAKE}... " >&6; }
set x ${MAKE-make}
ac_make=`$as_echo "$2" | sed 's/+//p/g; s/[^a-zA-Z0-9_]/_/g`
if eval \${ac_cv_prog_make_${ac_make}_set+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat >conftest.make <<\_ACEOF
SHELL = /bin/sh
all:
    @echo '@@@%=% (MAKE)=@@@%'
\_ACEOF
# GNU make sometimes prints "make[1]: Entering ...", which would
confuse us.
case ` ${MAKE-make} -f conftest.make 2>/dev/null ` in
    *@@@%=?*=@@@%*)
        eval ac_cv_prog_make_${ac_make}_set=yes;;
    *)
        eval ac_cv_prog_make_${ac_make}_set=no;;
esac
rm -f conftest.make
fi
if eval test \${ac_cv_prog_make_${ac_make}_set} = yes; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```

```

    SET_MAKE=
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    SET_MAKE="MAKE=${MAKE-make}"
fi

rm -rf .tst 2>/dev/null
mkdir .tst 2>/dev/null
if test -d .tst; then
    am__leading_dot=.
else
    am__leading_dot=_
fi
rmdir .tst 2>/dev/null

if test "`cd $srcdir && pwd`" != "`pwd`; then
    # Use -I$(srcdir) only when $(srcdir) != ., so that make's output
    # is not polluted with repeated "-I."
    am__isrc=' -I$(srcdir)'
    # test to see if srcdir already configured
    if test -f $srcdir/config.status; then
        as_fn_error $? "source directory already configured; run \"make
distclean\" there first" "$LINENO" 5
    fi
fi

# test whether we have cygpath
if test -z "$CYGPATH_W"; then
    if (cygpath --version) >/dev/null 2>/dev/null; then
        CYGPATH_W='cygpath -w'
    else
        CYGPATH_W='echo'
    fi
fi

# Define the identity of the package.
PACKAGE='dbus-glib'
VERSION='0.100.2'

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE "$PACKAGE"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define VERSION "$VERSION"
_ACEOF

# Some tools Automake needs.

```

```

ACLOCAL=${ACLOCAL-"${am_missing_run}aclocal-${am__api_version}"}

AUTOCONF=${AUTOCONF-"${am_missing_run}autoconf"}

AUTOMAKE=${AUTOMAKE-"${am_missing_run}automake-${am__api_version}"}

AUTOHEADER=${AUTOHEADER-"${am_missing_run}autoheader"}

MAKEINFO=${MAKEINFO-"${am_missing_run}makeinfo"}

# For better backward compatibility.  To be removed once Automake
# 1.9.x
# dies out for good.  For more background, see:
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00001.html>
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00014.html>
mkdir_p='$(MKDIR_P) '

# We need awk for the "check" target.  The system "awk" is bad on
# some platforms.
# Always define AMTAR for backward compatibility.  Yes, it's still
# used
# in the wild :-( We should find a proper way to deprecate it ...
AMTAR='${TAR-tar}'

am__tar='${TAR-tar} chof - "$$stardir"' am__untar='${TAR-tar} xf -'

ac_config_headers="$ac_config_headers config.h"

# Honor aclocal flags
ACLOCAL="$ACLOCAL $ACLOCAL_FLAGS"

## must come before we use the $USE_MAINTAINER_MODE variable later

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to enable
maintainer-specific portions of Makefiles" >&5
$as_echo_n "checking whether to enable maintainer-specific portions of
Makefiles... " >&6; }
    @%:@ Check whether --enable-maintainer-mode was given.
if test "${enable_maintainer_mode+set}" = set; then :
    enableval=$enable_maintainer_mode; USE_MAINTAINER_MODE=$enableval

```



```

else
  USE_MAINTAINER_MODE=no
fi

  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$USE_MAINTAINER_MODE" >&5
$as_echo "$USE_MAINTAINER_MODE" >&6; }
  if test $USE_MAINTAINER_MODE = yes; then
    MAINTAINER_MODE_TRUE=
    MAINTAINER_MODE_FALSE='#'
else
  MAINTAINER_MODE_TRUE='#'
  MAINTAINER_MODE_FALSE=
fi

  MAINT=$MAINTAINER_MODE_TRUE

@%:@ Check whether --enable-silent-rules was given.
if test "${enable_silent_rules+set}" = set; then :
  enableval=$enable_silent_rules;
fi

case $enable_silent_rules in @%:@ (((
  yes) AM_DEFAULT_VERBOSITY=0;;
  no) AM_DEFAULT_VERBOSITY=1;;
  *) AM_DEFAULT_VERBOSITY=0;;
esac
am_make=${MAKE-make}
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $am_make
supports nested variables" >&5
$as_echo_n "checking whether $am_make supports nested variables... "
>&6; }
if ${am_cv_make_support_nested_variables+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if $as_echo 'TRUE=$(BAR$(V))
BAR0=false
BAR1=true
V=1
am__doit:
  @$(TRUE)
.PHONY: am__doit' | $am_make -f - >/dev/null 2>&1; then
  am_cv_make_support_nested_variables=yes
else
  am_cv_make_support_nested_variables=no
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_make_support_nested_variables" >&5
$as_echo "$am_cv_make_support_nested_variables" >&6; }

```

```

if test $am_cv_make_support_nested_variables = yes; then
  AM_V='$(V) '
  AM_DEFAULT_V='$(AM_DEFAULT_VERBOSITY) '
else
  AM_V=$AM_DEFAULT_VERBOSITY
  AM_DEFAULT_V=$AM_DEFAULT_VERBOSITY
fi
AM_BACKSLASH='\ '

# libtool versioning - this applies to libdbus
#
# See
http://sources.redhat.com/autobook/autobook/autobook\_91.html#SEC91 for
details
#

## increment if the interface has additions, changes, removals.
LT_CURRENT=4

## increment any time the source changes; set to
## 0 if you increment CURRENT
LT_REVISION=2

## increment if any interfaces have been added; set to 0
## if any interfaces have been changed or removed. removal has
## precedence over adding, so set to 0 if both happened.
LT_AGE=2

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}gcc", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$CC"; then
      ac_cv_prog_CC="$CC" # Let the user override the test.
    else

```

```

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_CC="$ac_tool_prefix"gcc"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_CC"; then
  ac_ct_CC=$CC
  # Extract the first word of "gcc", so it can be a program name with
  args.
  set dummy gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_CC"; then
      ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_CC="gcc"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5

```

```

        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test "x$ac_ct_CC" = x; then
    CC=""
else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    CC=$ac_ct_CC
fi
else
    CC="$ac_cv_prog_CC"
fi

if test -z "$CC"; then
    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}cc", so it can be a
        program name with args.
        set dummy ${ac_tool_prefix}cc; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_CC+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            if test -n "$CC"; then
                ac_cv_prog_CC="$CC" # Let the user override the test.
            else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="${ac_tool_prefix}cc"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$sas_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $CC" >&5
    $sas_echo "$CC" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $sas_echo "no" >&6; }
fi

fi
fi
if test -z "$CC"; then
    # Extract the first word of "cc", so it can be a program name with
    args.
    set dummy cc; ac_word=$2
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $sas_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_CC+:} false; then :
        $sas_echo_n "(cached) " >&6
    else
        if test -n "$CC"; then
            ac_cv_prog_CC="$CC" # Let the user override the test.
        else
            ac_prog_rejected=no
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$sas_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' ' $ac_executable_extensions; do
                    if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
                        if test "$sas_dir/$ac_word$ac_exec_ext" = "/usr/ucb/cc"; then
                            ac_prog_rejected=yes
                            continue
                        fi
                    fi
                    ac_cv_prog_CC="cc"
                    $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5

```

```

        break 2
    fi
done
done
IFS=$as_save_IFS

if test $ac_prog_rejected = yes; then
    # We found a bogon in the path, so make sure we never use it.
    set dummy $ac_cv_prog_CC
    shift
    if test $@%:@ != 0; then
        # We chose a different compiler from the bogus one.
        # However, it has the same basename, so the bogon will be chosen
        # first if we set CC to just the basename; use the full file name.
        shift
        ac_cv_prog_CC="$as_dir/$ac_word${1+' '}$@"
    fi
fi
fi
fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$CC"; then
    if test -n "$ac_tool_prefix"; then
        for ac_prog in cl.exe
        do
            # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
            be a program name with args.
            set dummy $ac_tool_prefix$ac_prog; ac_word=$2
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
            if ${ac_cv_prog_CC+:} false; then :
                $as_echo_n "(cached) " >&6
            else
                if test -n "$CC"; then
                    ac_cv_prog_CC="$CC" # Let the user override the test.
                else
                    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                    for as_dir in $PATH
                    do
                        IFS=$as_save_IFS
                        test -z "$as_dir" && as_dir=.
                        for ac_exec_ext in '' $ac_executable_extensions; do

```

```

    if as_fn_executable_p "$sas_dir/$sas_word$sas_exec_ext"; then
        ac_cv_prog_CC="$sas_tool_prefix$sas_prog"
        $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$sas_word$sas_exec_ext" >&5
        break 2
    fi
done
done
IFS=$sas_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $CC" >&5
    $sas_echo "$CC" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $sas_echo "no" >&6; }
fi

    test -n "$CC" && break
done
fi
if test -z "$CC"; then
    ac_ct_CC=$CC
    for ac_prog in cl.exe
do
    # Extract the first word of "$sas_prog", so it can be a program name
with args.
set dummy $sas_prog; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $sas_word" >&5
    $sas_echo_n "checking for $sas_word... " >&6; }
if ${ac_cv_prog_ac_ct_CC+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_CC"; then
        ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$sas_save_IFS
    test -z "$sas_dir" && as_dir=.
        for ac_exec_ext in ' $sas_executable_extensions; do
    if as_fn_executable_p "$sas_dir/$sas_word$sas_exec_ext"; then
        ac_cv_prog_ac_ct_CC="$sas_prog"
        $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$sas_word$sas_exec_ext" >&5
        break 2
    fi

```

```

done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_CC" && break
done

  if test "x$ac_ct_CC" = x; then
    CC=""
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    CC=$ac_ct_CC
  fi
fi

fi

test -z "$CC" && { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "no acceptable C compiler found in $PATH
See `config.log' for more details" "$LINENO" 5; }

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\`* | *\`* | *\`*) ac_try_echo=\`$ac_try;;

```



```

*) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\`"\$as_me:${as_lineno-$LINENO}: $ac_try_echo\`"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    sed '10a\
... rest of stderr output deleted ...
    10q' conftest.err >conftest.er1
    cat conftest.er1 >&5
  fi
  rm -f conftest.er1 conftest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }
done

cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

;
  return 0;
}
_ACEOF
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files a.out a.out.dSYM a.exe b.out"
# Try to create an executable without -o first, disregard a.out.
# It will help us diagnose broken compilers, and finding out an
intuition
# of exeext.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
compiler works" >&5
$as_echo_n "checking whether the C compiler works... " >&6; }
ac_link_default=`$as_echo "$ac_link" | sed 's/ -o *conftest[^\` ]*//'\`

# The possible output files:
ac_files="a.out conftest.exe conftest a.exe a_out.exe b.out
conftest.*"

ac_rmfiles=
for ac_file in $ac_files
do
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    * ) ac_rmfiles="$ac_rmfiles $ac_file";;
  esac
done

```

```

rm -f $ac_rmfiles

if { { ac_try="$ac_link_default"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\`\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\`"
$as_echo "$ac_try_echo"; } >&5
(eval "$ac_link_default") 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
test $ac_status = 0; }; then :
# Autoconf-2.13 could set the ac_cv_exeext variable to `no'.
# So ignore a value of `no', otherwise this would lead to `EXEEXT =
no'
# in a Makefile. We should not override ac_cv_exeext if it was
cached,
# so that the user can short-circuit this test for compilers unknown
to
# Autoconf.
for ac_file in $ac_files ''
do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj )
      ;;
    [ab].out )
      # We found the default executable, but exeext='' is most
      # certainly right.
      break;;
    *.* )
      if test "${ac_cv_exeext+set}" = set && test "$ac_cv_exeext" !=
no;
      then ;; else
        ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)`'
      fi
      # We set ac_cv_exeext here because the later test for it is not
      # safe: cross compilers may not add the suffix if given an `-o'
      # argument, so we may need to know it at that point already.
      # Even if this section looks crufty: it has the advantage of
      # actually working.
      break;;
    * )
      break;;
  esac
done
test "$ac_cv_exeext" = no && ac_cv_exeext=

else
  ac_file=''

```

```

fi
if test -z "$ac_file"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "C compiler cannot create executables
See `config.log' for more details" "$LINENO" 5; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
default output file name" >&5
$as_echo_n "checking for C compiler default output file name... " >&6;
}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_file" >&5
$as_echo "$ac_file" >&6; }
ac_exeext=$ac_cv_exeext

rm -f -r a.out a.out.dSYM a.exe conftest$ac_cv_exeext b.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of
executables" >&5
$as_echo_n "checking for suffix of executables... " >&6; }
if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: \$ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; then :
  # If both `conftest.exe' and `conftest' are `present' (well,
observable)
# catch `conftest.exe'. For instance with Cygwin, `ls conftest' will
# work properly (i.e., refer to `conftest.exe'), while it won't with
# `rm'.
for ac_file in conftest.exe conftest conftest.*; do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    *.* ) ac_cv_exeext=`expr "$ac_file" : '[^.]*(\\..*)'`
      break;;
    * ) break;;
  esac
done

```

```

    esac
done
else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`${ac_pwd}':"
>&5
$as_echo "$as_me: error: in \`${ac_pwd}':" >&2;}
as_fn_error $? "cannot compute suffix of executables: cannot compile
and link
See \`${config.log}' for more details" "$LINENO" 5; }
fi
rm -f confptest confptest$ac_cv_exeext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_exeext" >&5
$as_echo "$ac_cv_exeext" >&6; }

rm -f confptest.$ac_ext
EXEEXT=$ac_cv_exeext
ac_exeext=$EXEEXT
cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
@%:@include <stdio.h>
int
main ()
{
FILE *f = fopen ("confptest.out", "w");
return ferror (f) || fclose (f) != 0;

;
return 0;
}
_ACEOF
ac_clean_files="$ac_clean_files confptest.out"
# Check that the compiler produces executables we can run.  If not,
either
# the compiler is broken, or we cross compile.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are cross
compiling" >&5
$as_echo_n "checking whether we are cross compiling... " >&6; }
if test "$cross_compiling" != yes; then
  { { ac_try="$ac_link"
case "($ac_try" in
*\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
*) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"\"
$as_echo "$ac_try_echo"; } >&5
(eval "$ac_link") 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
test $ac_status = 0; }
if { ac_try='./confptest$ac_cv_exeext'
{ { case "($ac_try" in
*\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;

```

```

*) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; }; then
    cross_compiling=no
  else
    if test "$cross_compiling" = maybe; then
      cross_compiling=yes
    else
      { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
>&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "cannot run C compiled programs.
If you meant to cross compile, use \`--host'.
See \`config.log' for more details" "$LINENO" 5; }
      fi
    fi
  fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $cross_compiling" >&5
$as_echo "$cross_compiling" >&6; }

rm -f conftest.$ac_ext conftest$ac_cv_exeext conftest.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of object
files" >&5
$as_echo_n "checking for suffix of object files... " >&6; }
if ${ac_cv_objext+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
rm -f conftest.o conftest.obj
if { { ac_try="$ac_compile"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\`$ac_try`;
  *) ac_try_echo=$ac_try;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5

```

```

(eval "$ac_compile") 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }; then :
for ac_file in conftest.o conftest.obj conftest.*; do
test -f "$ac_file" || continue;
case $ac_file in
*.${ac_ext} | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM ) ;;
*) ac_cv_objext=`expr "$ac_file" : '.*\.(.*)'`
break;;
esac
done
else
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "cannot compute suffix of object files: cannot compile
See `config.log' for more details" "$LINENO" 5; }
fi
rm -f conftest.$ac_cv_objext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_objext" >&5
$as_echo "$ac_cv_objext" >&6; }
OBJEXT=$ac_cv_objext
ac_objext=$OBJEXT
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C compiler" >&5
$as_echo_n "checking whether we are using the GNU C compiler... " >&6;
}
if ${ac_cv_c_compiler_gnu+:} false; then :
$as_echo_n "(cached) " >&6
else
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{
#ifdef __GNUC__
choke me
#endif

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_compiler_gnu=yes
else

```

```

    ac_compiler_gnu=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_c_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_c_compiler_gnu" >&5
$as_echo "$ac_cv_c_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
    GCC=yes
else
    GCC=
fi
ac_test_CFLAGS=${CFLAGS+set}
ac_save_CFLAGS=$CFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC accepts
-g" >&5
$as_echo_n "checking whether $CC accepts -g... " >&6; }
if ${ac_cv_prog_cc_g+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_save_c_werror_flag=$ac_c_werror_flag
    ac_c_werror_flag=yes
    ac_cv_prog_cc_g=no
    CFLAGS="-g"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_g=yes
else
    CFLAGS=""
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF

```

```

if ac_fn_c_try_compile "$LINENO"; then :

else
  ac_c_werror_flag=$ac_save_c_werror_flag
  CFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_prog_cc_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  ac_c_werror_flag=$ac_save_c_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cc_g" >&5
$as_echo "$ac_cv_prog_cc_g" >&6; }
if test "$ac_test_CFLAGS" = set; then
  CFLAGS=$ac_save_CFLAGS
elif test $ac_cv_prog_cc_g = yes; then
  if test "$GCC" = yes; then
    CFLAGS="-g -O2"
  else
    CFLAGS="-g"
  fi
else
  if test "$GCC" = yes; then
    CFLAGS="-O2"
  else
    CFLAGS=
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $CC option to
accept ISO C89" >&5
$as_echo_n "checking for $CC option to accept ISO C89... " >&6; }
if ${ac_cv_prog_cc_c89+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_cv_prog_cc_c89=no
ac_save_CC=$CC
cat confdefs.h - <<_ACEOF >conftest.$ac_ext

```



```

/* end confdefs.h. */
#include <stdarg.h>
#include <stdio.h>
struct stat;
/* Most of the following tests are stolen from RCS 5.7's src/conf.sh.
*/
struct buf { int x; };
FILE * (*rcsopen) (struct buf *, struct stat *, int);
static char *e (p, i)
    char **p;
    int i;
{
    return p[i];
}
static char *f (char * (*g) (char **, int), char **p, ...)
{
    char *s;
    va_list v;
    va_start (v,p);
    s = g (p, va_arg (v,int));
    va_end (v);
    return s;
}

/* OSF 4.0 Compaq cc is some sort of almost-ANSI by default. It has
function prototypes and stuff, but not '\xHH' hex character
constants.
These don't provoke an error unfortunately, instead are silently
treated
as 'x'. The following induces an error, until -std is added to get
proper ANSI mode. Curiously '\x00'!='x' always comes out true, for an
array size at least. It's necessary to write '\x00'==0 to get
something
that's true only with -std. */
int osf4_cc_array ['\x00' == 0 ? 1 : -1];

/* IBM C 6 for AIX is almost-ANSI by default, but it replaces macro
parameters
inside strings and character constants. */
#define FOO(x) 'x'
int xlc6_cc_array[FOO(a) == 'x' ? 1 : -1];

int test (int i, double x);
struct s1 {int (*f) (int a);};
struct s2 {int (*f) (double a);};
int pairnames (int, char **, FILE *(*)(struct buf *, struct stat *,
int), int, int);
int argc;
char **argv;
int
main ()

```

```

{
return f (e, argv, 0) != argv[0] || f (e, argv, 1) != argv[1];
;
return 0;
}
_ACEOF
for ac_arg in ' -qlanglvl=extc89 -qlanglvl=ansi -std \
    -Ae "-Aa -D_HPUX_SOURCE" "-Xc -D__EXTENSIONS__"
do
CC="$ac_save_CC $ac_arg"
if ac_fn_c_try_compile "$LINENO"; then :
ac_cv_prog_cc_c89=$ac_arg
fi
rm -f core conftest.err conftest.$ac_objext
test "x$ac_cv_prog_cc_c89" != "xno" && break
done
rm -f conftest.$ac_ext
CC=$ac_save_CC

fi
# AC_CACHE_VAL
case "x$ac_cv_prog_cc_c89" in
x)
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: none needed" >&5
$as_echo "none needed" >&6; } ;;
xno)
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: unsupported" >&5
$as_echo "unsupported" >&6; } ;;
*)
CC="$CC $ac_cv_prog_cc_c89"
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_prog_cc_c89" >&5
$as_echo "$ac_cv_prog_cc_c89" >&6; } ;;
esac
if test "x$ac_cv_prog_cc_c89" != xno; then :

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
DEPDIR="$am__leading_dot"deps"

ac_config_commands="$ac_config_commands depfiles"

am_make=${MAKE-make}
cat > confinc << 'END'
am__doit:

```

```

        @echo this is the am__doit target
.PHONY: am__doit
END
# If we don't find an include directive, just comment out the code.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for style of include
used by $am_make" >&5
$as_echo_n "checking for style of include used by $am_make... " >&6; }
am__include="#"
am__quote=
_am_result=none
# First try GNU make style include.
echo "include confinc" > confmf
# Ignore all kinds of additional output from 'make'.
case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
    am__include=include
    am__quote=
    _am_result=GNU
    ;;
esac
# Now try BSD make style include.
if test "$am__include" = "#"; then
    echo '.include "confinc"' > confmf
    case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
        am__include=.include
        am__quote="\ "
        _am_result=BSD
        ;;
    esac
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $_am_result" >&5
$as_echo "$_am_result" >&6; }
rm -f confinc confmf

@%:@ Check whether --enable-dependency-tracking was given.
if test "${enable_dependency_tracking}" = set; then :
    enableval=$enable_dependency_tracking;
fi

if test "x$enable_dependency_tracking" != xno; then
    am_depcomp="$ac_aux_dir/depcomp"
    AMDEPBACKSLASH='\'
    am__nodep='_no'
fi
if test "x$enable_dependency_tracking" != xno; then
    AMDEP_TRUE=
    AMDEP_FALSE='#'
else
    AMDEP_TRUE='#'

```

```

    AMDEP_FALSE=
fi

depcc="$CC"    am_compiler_list=

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$as_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CC_dependencies_compiler_type+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$AMDEP_TRUE" && test -f "$am_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf confptest.dir
    mkdir confptest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$am_depcomp" confptest.dir
    cd confptest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.
    mkdir sub

    am_cv_CC_dependencies_compiler_type=none
    if test "$am_compiler_list" = ""; then
      am_compiler_list=`sed -n 's/^#*\([a-zA-Z0-9]*\))$/\1/p' <
./depcomp`
    fi
    am_universal=false
    case " $depcc " in #(
      *\ -arch\ *\ -arch\ *) am_universal=true ;;
    esac

    for depmode in $am_compiler_list; do
      # Setup a source with many dependencies, because some compilers
      # like to wrap large dependency lists on column 80 (with \), and
      # we should not choose a depcomp mode which is confused by this.
      #
      # We need to recreate these files for each test, as the compiler
may
      # overwrite some of them when testing with obscure command lines.

```

```

# This happens at least with the AIX C compiler.
: > sub/confctest.c
for i in 1 2 3 4 5 6; do
    echo '#include "confstst'$i'.h"' >> sub/confctest.c
    # Using ": > sub/confstst$i.h" creates only sub/confstst1.h with
    # Solaris 10 /bin/sh.
    echo '/* dummy */' > sub/confstst$i.h
done
echo "${am__include} ${am__quote}sub/confctest.Po${am__quote}" >
confmf

# We check with '-c' and '-o' for the sake of the "dashmstdout"
# mode. It turns out that the SunPro C++ compiler does not
properly
# handle '-M -o', and we need to detect this. Also, some Intel
# versions had trouble with output in subdirs.
am__obj=sub/confctest.${OBJEXT-o}
am__minus_obj="-o $am__obj"
case $depmode in
gcc)
    # This depmode causes a compiler race in universal mode.
    test "$am__universal" = false || continue
    ;;
nosideeffect)
    # After this tag, mechanisms are not by side-effect, so they'll
    # only be used when explicitly requested.
    if test "x$enable_dependency_tracking" = xyes; then
        continue
    else
        break
    fi
    ;;
msvc7 | msvc7msys | msvisualcpp | msvcmsys)
    # This compiler won't grok '-c -o', but also, the minuso test
has
    # not run yet. These depmodes are late enough in the game, and
    # so weak that their functioning should not be impacted.
    am__obj=confctest.${OBJEXT-o}
    am__minus_obj=
    ;;
none) break ;;
esac
if depmode=$depmode \
    source=sub/confctest.c object=$am__obj \
    depfile=sub/confctest.Po tmpdepfile=sub/confctest.TPo \
    $SHELL ./depcomp $depcc -c $am__minus_obj sub/confctest.c \
    >/dev/null 2>confctest.err &&
    grep sub/confstst1.h sub/confctest.Po > /dev/null 2>&1 &&
    grep sub/confstst6.h sub/confctest.Po > /dev/null 2>&1 &&
    grep $am__obj sub/confctest.Po > /dev/null 2>&1 &&
    ${MAKE-make} -s -f confmf > /dev/null 2>&1; then

```

```

        # icc doesn't choke on unknown options, it will just issue
warnings
        # or remarks (even with -Werror).  So we grep stderr for any
message
        # that says an option was ignored or not supported.
        # When given -MP, icc 7.0 and 7.1 complain thusly:
        #   icc: Command line warning: ignoring option '-M'; no argument
required
        # The diagnosis changed in icc 8.0:
        #   icc: Command line remark: option '-MP' not supported
        if (grep 'ignoring option' conftest.err ||
            grep 'not supported' conftest.err) >/dev/null 2>&1; then ;;
else
        am_cv_CC_dependencies_compiler_type=$depmode
        break
    fi
fi
done

    cd ..
    rm -rf conftest.dir
else
    am_cv_CC_dependencies_compiler_type=none
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CC_dependencies_compiler_type" >&5
$as_echo "$am_cv_CC_dependencies_compiler_type" >&6; }
CCDEPMODE=depmode=$am_cv_CC_dependencies_compiler_type

if
    test "x$enable_dependency_tracking" != xno \
    && test "$am_cv_CC_dependencies_compiler_type" = gcc3; then
    am__fastdepCC_TRUE=
    am__fastdepCC_FALSE='#'
else
    am__fastdepCC_TRUE='#'
    am__fastdepCC_FALSE=
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing strerror" >&5
$as_echo_n "checking for library containing strerror... " >&6; }
if ${ac_cv_search_strerror+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_func_search_save_LIBS=$LIBS
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

```

```

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char strerror ();
int
main ()
{
return strerror ();
    ;
    return 0;
}
__ACEOF
for ac_lib in ' cposix; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_strerror=$ac_res
  fi
  rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
  if ${ac_cv_search_strerror+:} false; then :
    break
  fi
done
if ${ac_cv_search_strerror+:} false; then :

else
  ac_cv_search_strerror=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_strerror" >&5
$as_echo "$ac_cv_search_strerror" >&6; }
ac_res=$ac_cv_search_strerror
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'

```

```

ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to run the C
preprocessor" >&5
$as_echo_n "checking how to run the C preprocessor... " >&6; }
# On Suns, sometimes $CPP names a directory.
if test -n "$CPP" && test -d "$CPP"; then
  CPP=
fi
if test -z "$CPP"; then
  if ${ac_cv_prog_CPP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    # Double quotes because CPP needs to be expanded
    for CPP in "$CC -E" "$CC -E -traditional-cpp" "/lib/cpp"
    do
      ac_preproc_ok=false
      for ac_c_preproc_warn_flag in ' yes
do
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
  # <limits.h> exists even on freestanding compilers.
  # On the NeXT, cc -E runs the code through the compiler's parser,
  # not just through cpp. "Syntax error" is here to catch this case.
  cat confdefs.h - << _ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
          Syntax error
    _ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :

else
  # Broken: fails on valid input.
  continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext

  # OK, works on sane cases.  Now check whether nonexistent headers
  # can be detected and how.
  cat confdefs.h - << _ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
    _ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
  # Broken: success on invalid input.
  continue

```



```

else
  # Passes both tests.
ac_preproc_ok=:
break
fi
rm -f confptest.err confptest.i confptest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :
  break
fi

  done
  ac_cv_prog_CPP=$CPP

fi
  CPP=$ac_cv_prog_CPP
else
  ac_cv_prog_CPP=$CPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CPP" >&5
$as_echo "$CPP" >&6; }
ac_preproc_ok=false
for ac_c_preproc_warn_flag in '' yes
do
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
  # <limits.h> exists even on freestanding compilers.
  # On the NeXT, cc -E runs the code through the compiler's parser,
  # not just through cpp. "Syntax error" is here to catch this case.
  cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
          Syntax error
__ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :

else
  # Broken: fails on valid input.
continue
fi
rm -f confptest.err confptest.i confptest.$ac_ext

  # OK, works on sane cases. Now check whether nonexistent headers
  # can be detected and how.

```

```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
    # Broken: success on invalid input.
continue
else
    # Passes both tests.
ac_preproc_ok=:
break
fi
rm -f conftest.err conftest.i conftest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f conftest.i conftest.err conftest.$ac_ext
if $ac_preproc_ok; then :

else
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error $? "C preprocessor `'$CPP\' fails sanity check
See `config.log' for more details" "$LINENO" 5; }
fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for grep that
handles long lines and -e" >&5
$as_echo_n "checking for grep that handles long lines and -e... " >&6;
}
if ${ac_cv_path_GREP+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -z "$GREP"; then
        ac_path_GREP_found=false
        # Loop through the user's path and test for each of PROGRAMME-LIST
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_prog in grep ggrep; do
                for ac_exec_ext in ' $ac_executable_extensions; do

```

```

        ac_path_GREP="$sas_dir/$ac_prog$sac_exec_ext"
        as_fn_executable_p "$ac_path_GREP" || continue
# Check for GNU ac_path_GREP and select it if it is found.
# Check for GNU $ac_path_GREP
case `"$ac_path_GREP" --version 2>&1` in
*GNU*)
    ac_cv_path_GREP="$ac_path_GREP" ac_path_GREP_found=;;;
*)
    ac_count=0
    $sas_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $sas_echo 'GREP' >> "confptest.nl"
        "$ac_path_GREP" -e 'GREP$' -e '-(cannot match)-' < "confptest.nl"
>"confptest.out" 2>/dev/null || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_GREP_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_GREP="$ac_path_GREP"
            ac_path_GREP_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

        $ac_path_GREP_found && break 3
    done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_GREP"; then
    as_fn_error $? "no acceptable grep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_GREP=$GREP
fi

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_path_GREP" >&5
$sas_echo "$ac_cv_path_GREP" >&6; }
GREP="$ac_cv_path_GREP"

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for egrep" >&5
$sas_echo_n "checking for egrep... " >&6; }

```

```

if ${ac_cv_path_EGREP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if echo a | $GREP -E '(a|b)' >/dev/null 2>&1
  then ac_cv_path_EGREP="$GREP -E"
  else
    if test -z "$EGREP"; then
      ac_path_EGREP_found=false
      # Loop through the user's path and test for each of PROGNAMES_PATH
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_prog in egrep; do
          for ac_exec_ext in '' $ac_executable_extensions; do
            ac_path_EGREP="$as_dir/$ac_prog$ac_exec_ext"
            as_fn_executable_p "$ac_path_EGREP" || continue
          # Check for GNU ac_path_EGREP and select it if it is found.
          # Check for GNU $ac_path_EGREP
          case `"$ac_path_EGREP" --version 2>&1` in
          *GNU*)
            ac_cv_path_EGREP="$ac_path_EGREP" ac_path_EGREP_found=:;
          *)
            ac_count=0
            $as_echo_n 0123456789 >"confptest.in"
            while :
            do
              cat "confptest.in" "confptest.in" >"confptest.tmp"
              mv "confptest.tmp" "confptest.in"
              cp "confptest.in" "confptest.nl"
              $as_echo 'EGREP' >> "confptest.nl"
              "$ac_path_EGREP" 'EGREP$' < "confptest.nl" >"confptest.out"
            2>/dev/null || break
              diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
              as_fn_arith $ac_count + 1 && ac_count=$as_val
              if test $ac_count -gt ${ac_path_EGREP_max-0}; then
                # Best one so far, save it but keep looking for a better one
                ac_cv_path_EGREP="$ac_path_EGREP"
                ac_path_EGREP_max=$ac_count
              fi
              # 10*(2^10) chars as input seems more than enough
              test $ac_count -gt 10 && break
            done
            rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
          esac

          $ac_path_EGREP_found && break 3
        done
      done
    done
  done
  IFS=$as_save_IFS

```

```

    if test -z "$ac_cv_path_EGREP"; then
        as_fn_error $? "no acceptable egrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
    fi
else
    ac_cv_path_EGREP=$EGREP
fi

    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_EGREP"
>&5
$as_echo "$ac_cv_path_EGREP" >&6; }
EGREP="$ac_cv_path_EGREP"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$as_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_header_stdcl=yes
else
    ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test $ac_cv_header_stdcl = yes; then
    # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |

```

```

$EGREP "memchr" >/dev/null 2>&1; then :

else
    ac_cv_header_stdlib=no
fi
rm -f confptest*

fi

if test $ac_cv_header_stdlib = yes; then
    # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
    cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>

_ACEOF
if (eval "$ac_cpp confptest.$ac_ext") 2>&5 |
    $EGREP "free" >/dev/null 2>&1; then :

else
    ac_cv_header_stdlib=no
fi
rm -f confptest*

fi

if test $ac_cv_header_stdlib = yes; then
    # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
    if test "$cross_compiling" = yes; then :
    else
        cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0xFF) == 0x020)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
        (('a' <= (c) && (c) <= 'i' \
         || ('j' <= (c) && (c) <= 'r' \
          || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
    int i;

```

```

    for (i = 0; i < 256; i++)
        if (XOR (islower (i), ISLOWER (i))
            || toupper (i) != TOUPPER (i))
            return 2;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
    ac_cv_header_stdc=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdc"
>&5
$as_echo "$ac_cv_header_stdc" >&6; }
if test $ac_cv_header_stdc = yes; then

$as_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

@%:@ Check whether --enable-tests was given.
if test "${enable_tests+set}" = set; then :
    enableval=$enable_tests; enable_tests=$enableval
else
    enable_tests=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-ansi was given.
if test "${enable_ansi+set}" = set; then :
    enableval=$enable_ansi; enable_ansi=$enableval
else
    enable_ansi=no
fi

@%:@ Check whether --enable-verbose-mode was given.
if test "${enable_verbose_mode+set}" = set; then :
    enableval=$enable_verbose_mode; enable_verbose_mode=$enableval
else
    enable_verbose_mode=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-asserts was given.
if test "${enable_asserts+set}" = set; then :
    enableval=$enable_asserts; enable_asserts=$enableval

```

```

else
    enable_asserts=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-checks was given.
if test "${enable_checks+set}" = set; then :
    enableval=$enable_checks; enable_checks=$enableval
else
    enable_checks=yes
fi

@%:@ Check whether --enable-gcov was given.
if test "${enable_gcov+set}" = set; then :
    enableval=$enable_gcov; enable_gcov=$enableval
else
    enable_gcov=no
fi

@%:@ Check whether --enable-bash-completion was given.
if test "${enable_bash_completion+set}" = set; then :
    enableval=$enable_bash_completion; enable_bash_completion=$enableval
else
    enable_bash_completion=yes
fi

@%:@ Check whether --with-test-socket-dir was given.
if test "${with_test_socket_dir+set}" = set; then :
    withval=$with_test_socket_dir;
fi

@%:@ Check whether --with-introspect-xml was given.
if test "${with_introspect_xml+set}" = set; then :
    withval=$with_introspect_xml;
fi

    if test x$enable_bash_completion = xyes; then
        DBUS_BASH_COMPLETION_TRUE=
        DBUS_BASH_COMPLETION_FALSE='#'
    else
        DBUS_BASH_COMPLETION_TRUE='#'
        DBUS_BASH_COMPLETION_FALSE=
    fi

if test x$enable_bash_completion = xyes; then

$as_echo "@%:@define DBUS_BASH_COMPLETION 1" >>confdefs.h

```



```
fi

if test x$enable_verbose_mode = xyes; then

$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h

fi

@%:@ Check whether --with-dbus-binding-tool was given.
if test "${with_dbus_binding_tool+set}" = set; then :
  withval=$with_dbus_binding_tool; DBUS_BINDING_TOOL=$withval
else
  DBUS_BINDING_TOOL=\$(top_builddir)/dbus/dbus-binding-tool
fi

  if test x$enable_tests = xyes; then
    DBUS_BUILD_TESTS_TRUE=
    DBUS_BUILD_TESTS_FALSE='#'
  else
    DBUS_BUILD_TESTS_TRUE='#'
    DBUS_BUILD_TESTS_FALSE=
  fi

if test x$enable_tests = xyes; then

$as_echo "@%:@define DBUS_BUILD_TESTS 1" >>confdefs.h

fi

if test x$enable_verbose_mode = xyes; then

$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h

fi
if test x$enable_asserts = xno; then

$as_echo "@%:@define DBUS_DISABLE_ASSERT 1" >>confdefs.h

$as_echo "@%:@define G_DISABLE_ASSERT 1" >>confdefs.h

fi
if test x$enable_checks = xno; then

$as_echo "@%:@define DBUS_DISABLE_CHECKS 1" >>confdefs.h
```

```

$as_echo "@%:@define G_DISABLE_CHECKS 1" >>confdefs.h

fi

#### gcc warning flags

if test "x$GCC" = "xyes"; then

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether gcc
understands -Wfloat-equal" >&5
$as_echo_n "checking whether gcc understands -Wfloat-equal... " >&6; }

    ac_save_CFLAGS="$CFLAGS"
    CFLAGS="$CFLAGS -Wfloat-equal"

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

    _ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cc_flag=yes
else
    ac_cc_flag=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$ac_save_CFLAGS"

if test "x$ac_cc_flag" = "xyes"; then
    ac_flag_float_equal=yes
else
    ac_flag_float_equal=no
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cc_flag" >&5
$as_echo "$ac_cc_flag" >&6; }

    case " $CFLAGS " in
*[\ \ ]-Wall[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wall" ;;
esac

    case " $CFLAGS " in
*[\ \ ]-Wchar-subscripts[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wchar-subscripts" ;;
esac

    case " $CFLAGS " in
*[\ \ ]-Wmissing-declarations[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wmissing-declarations" ;;
esac

```

```

case " $CFLAGS " in
*[\ \ ]-Wmissing-prototypes[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wmissing-prototypes" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wnested-externs[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wnested-externs" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wpointer-arith[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wpointer-arith" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wcast-align[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wcast-align" ;;
esac

if test "x$ac_flag_float_equal" = "xyes"; then
  case " $CFLAGS " in
  *[\ \ ]-Wfloat-equal[\ \ ]*) ;;
  *) CFLAGS="$CFLAGS -Wfloat-equal" ;;
  esac
fi

case " $CFLAGS " in
*[\ \ ]-Wsign-compare[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wsign-compare" ;;
esac

# This one is special - it's not a warning override.
# http://bugs.freedesktop.org/show\_bug.cgi?id=10599
# is the bug for DBus core.
case " $CFLAGS " in
*[\ \ ]-fno-strict-aliasing[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -fno-strict-aliasing" ;;
esac

if test "x$enable_ansi" = "xyes"; then
  case " $CFLAGS " in
  *[\ \ ]-ansi[\ \ ]*) ;;
  *) CFLAGS="$CFLAGS -ansi" ;;
  esac

  case " $CFLAGS " in
  *[\ \ ]-D_POSIX_C_SOURCE*) ;;
  *) CFLAGS="$CFLAGS -D_POSIX_C_SOURCE=199309L" ;;
  esac

```

```

case " $CFLAGS " in
*[\ \ ]-D_BSD_SOURCE[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -D_BSD_SOURCE" ;;
esac

case " $CFLAGS " in
*[\ \ ]-pedantic[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -pedantic" ;;
esac
fi
if test x$enable_gcov = xyes; then
case " $CFLAGS " in
*[\ \ ]-fprofile-arcs[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -fprofile-arcs" ;;
esac
case " $CFLAGS " in
*[\ \ ]-ftest-coverage[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -ftest-coverage" ;;
esac

## remove optimization
CFLAGS=`echo "$CFLAGS" | sed -e 's/-O[0-9]*//g'`
fi
else
if test x$enable_gcov = xyes; then
as_fn_error $? "--enable-gcov can only be used with gcc" "$LINENO"
5
fi
fi
fi

case `pwd` in
*\ * | *\ *)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Libtool does not
cope well with whitespace in `pwd`" >&5
$as_echo "$as_me: WARNING: Libtool does not cope well with whitespace
in `pwd`" >&2;} ;;
esac

macro_version='2.4.2'
macro_revision='1.3337'

```

```

ltmain="$ac_aux_dir/ltmain.sh"

# Backslashify metacharacters that are still active within
# double-quoted strings.
sed_quote_subst='s/\(["`$\\]\)/\\\1/g'

# Same as above, but do not quote variable references.
double_quote_subst='s/\(["`\\]\)/\\\1/g'

# Sed substitution to delay expansion of an escaped shell variable in
a
# double_quote_subst'ed string.
delay_variable_subst='s/\\\$/\\\$/g'

# Sed substitution to delay expansion of an escaped single quote.
delay_single_quote_subst='s/\'\'/\'\'/g'

# Sed substitution to avoid accidental globbing in eval'd expressions
no_glob_subst='s/\*/\\\*/g'

ECHO='
'
ECHO=$ECHO$ECHO$ECHO$ECHO$ECHO
ECHO=$ECHO$ECHO$ECHO$ECHO$ECHO$ECHO

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to print
strings" >&5
$as_echo_n "checking how to print strings... " >&6; }
# Test print first, because it will be a builtin if present.
if test "X`( print -r -- -n ) 2>/dev/null`" = X-n && \
  test "X`print -r -- $ECHO 2>/dev/null`" = "X$ECHO"; then
  ECHO='print -r --'
elif test "X`printf %s $ECHO 2>/dev/null`" = "X$ECHO"; then
  ECHO='printf %s\n'
else
  # Use this function as a fallback that always works.
  func_fallback_echo ()
  {
    eval 'cat <<_LTECHO_EOF'
$1
_LTECHO_EOF'
  }
  ECHO='func_fallback_echo'
fi

# func_echo_all arg...
# Invoke $ECHO with all args, space-separated.
func_echo_all ()
{

```

```

    $ECHO ""
}

case "$ECHO" in
  printf*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: printf"
>&5
$as_echo "printf" >&6; } ;;
  print*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: print -r"
>&5
$as_echo "print -r" >&6; } ;;
  *) { $as_echo "$as_me:${as_lineno-$LINENO}: result: cat" >&5
$as_echo "cat" >&6; } ;;
esac

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a sed that does
not truncate output" >&5
$as_echo_n "checking for a sed that does not truncate output... " >&6;
}
if ${ac_cv_path_SED+:} false; then :
  $as_echo_n "(cached) " >&6
else
ac_script=s/aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa/bbbbbbbbbbbbbbbbbbbbbbbb
bbbbbbbbbbb/
  for ac_i in 1 2 3 4 5 6 7; do
    ac_script="$ac_script$as_nl$ac_script"
  done
  echo "$ac_script" 2>/dev/null | sed 99q >conftest.sed
  { ac_script=; unset ac_script;}
  if test -z "$SED"; then
    ac_path_SED_found=false
    # Loop through the user's path and test for each of PROGNAMES_PATH
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in sed gsed; do
        for ac_exec_ext in '' $ac_executable_extensions; do

```

```

        ac_path_SED="$as_dir/$ac_prog$ac_exec_ext"
        as_fn_executable_p "$ac_path_SED" || continue
# Check for GNU ac_path_SED and select it if it is found.
# Check for GNU $ac_path_SED
case `"$ac_path_SED" --version 2>&1` in
*GNU*)
    ac_cv_path_SED="$ac_path_SED" ac_path_SED_found=;;;
*)
    ac_count=0
    $as_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $as_echo ' ' >> "confptest.nl"
        "$ac_path_SED" -f confptest.sed < "confptest.nl" >"confptest.out"
2>/dev/null || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_SED_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_SED="$ac_path_SED"
            ac_path_SED_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

        $ac_path_SED_found && break 3
    done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_SED"; then
    as_fn_error $? "no acceptable sed could be found in \$PATH"
"$LINENO" 5
fi
else
    ac_cv_path_SED=$SED
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_SED" >&5
$as_echo "$ac_cv_path_SED" >&6; }
SED="$ac_cv_path_SED"
rm -f confptest.sed

test -z "$SED" && SED=sed
Xsed="$SED -e 1s/^X//"

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for fgrep" >&5
$sas_echo_n "checking for fgrep... " >&6; }
if ${ac_cv_path_FGREP+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if echo 'ab*c' | $GREP -F 'ab*c' >/dev/null 2>&1
  then ac_cv_path_FGREP="$GREP -F"
  else
    if test -z "$FGREP"; then
      ac_path_FGREP_found=false
      # Loop through the user's path and test for each of PROGMAME-LIST
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_prog in fgrep; do
          for ac_exec_ext in ' $ac_executable_extensions; do
            ac_path_FGREP="$as_dir/$ac_prog$ac_exec_ext"
            as_fn_executable_p "$ac_path_FGREP" || continue
          # Check for GNU ac_path_FGREP and select it if it is found.
          # Check for GNU $ac_path_FGREP
          case `"$ac_path_FGREP" --version 2>&1` in
          *GNU*)
            ac_cv_path_FGREP="$ac_path_FGREP" ac_path_FGREP_found=:;
          *)
            ac_count=0
            $sas_echo_n 0123456789 >"confptest.in"
            while :
            do
              cat "confptest.in" "confptest.in" >"confptest.tmp"
              mv "confptest.tmp" "confptest.in"
              cp "confptest.in" "confptest.nl"
              $sas_echo 'FGREP' >> "confptest.nl"
              "$ac_path_FGREP" FGREP < "confptest.nl" >"confptest.out" 2>/dev/null
            || break
              diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
            as_fn_arith $ac_count + 1 && ac_count=$as_val
            if test $ac_count -gt ${ac_path_FGREP_max-0}; then
              # Best one so far, save it but keep looking for a better one
              ac_cv_path_FGREP="$ac_path_FGREP"
            fi
          done
        done
      done
    fi
  fi

```



```

        ac_path_FGREP_max=$ac_count
    fi
    # 10*(2^10) chars as input seems more than enough
    test $ac_count -gt 10 && break
done
rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

        $ac_path_FGREP_found && break 3
    done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_FGREP"; then
    as_fn_error $? "no acceptable fgrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_FGREP=$FGREP
fi

    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_FGREP"
>&5
$as_echo "$ac_cv_path_FGREP" >&6; }
FGREP="$ac_cv_path_FGREP"

test -z "$GREP" && GREP=grep

```

```

@%:@ Check whether --with-gnu-ld was given.
if test "${with_gnu_ld+set}" = set; then :
    withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes

```

```

else
  with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
GCC" >&5
$as_echo_n "checking for ld used by GCC... " >&6; }
  case $host in
  *-*-mingw*)
    # gcc leaves a trailing carriage return which upsets mingw
    ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
  *)
    ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
  esac
  case $ac_prog in
  # Accept absolute paths.
  [\\/*] | ?:[\\/*]*)
    re_direlt=' /^[^/][^/]*/\.\./'
    # Canonicalize the pathname of ld
    ac_prog=`$ECHO "$ac_prog"| $SED 's%\\\\\%/g'`
    while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
      ac_prog=`$ECHO $ac_prog| $SED "s%$re_direlt%/"`
    done
    test -z "$LD" && LD="$ac_prog"
    ;;
  "")
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
  *)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
  esac
elif test "$with_gnu_ld" = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
      IFS="$lt_save_ifs"

```

```

    test -z "$ac_dir" && ac_dir=.
    if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.
        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
        *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break
            ;;
        *)
            test "$with_gnu_ld" != yes && break
            ;;
        esac
    fi
done
IFS="$lt_save_ifs"
else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5
$as_echo "$LD" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \$PATH"
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
    $as_echo_n "(cached) " >&6
else
    # I'd rather use --version here, but apparently some GNU lds only
accept -v.
    case `"$LD" -v 2>&1 </dev/null` in
    *GNU* | *'with BFD'*)
        lt_cv_prog_gnu_ld=yes
        ;;
    *)
        lt_cv_prog_gnu_ld=no
        ;;
    esac
fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5
$sas_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for BSD- or MS-
compatible name lister (nm)" >&5
$sas_echo_n "checking for BSD- or MS-compatible name lister (nm)... "
>&6; }
if ${lt_cv_path_NM+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test -n "$NM"; then
    # Let the user override the test.
    lt_cv_path_NM="$NM"
  else
    lt_nm_to_check="${ac_tool_prefix}nm"
    if test -n "$ac_tool_prefix" && test "$build" = "$host"; then
      lt_nm_to_check="$lt_nm_to_check nm"
    fi
    for lt_tmp_nm in $lt_nm_to_check; do
      lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
      for ac_dir in $PATH /usr/ccs/bin/elf /usr/ccs/bin /usr/ucb /bin;
      do
        IFS="$lt_save_ifs"
        test -z "$ac_dir" && ac_dir=.
        tmp_nm="$ac_dir/$lt_tmp_nm"
        if test -f "$tmp_nm" || test -f "$tmp_nm$ac_exeext" ; then
          # Check to see if the nm accepts a BSD-compat flag.
          # Adding the `sed lq' prevents false positives on HP-UX, which
          says:
          # nm: unknown option "B" ignored
          # Tru64's nm complains that /dev/null is an invalid object file
          case `"$tmp_nm" -B /dev/null 2>&1 | sed 'lq'` in
          */dev/null* | *'Invalid file or object type'*)
            lt_cv_path_NM="$tmp_nm -B"
            break
          ;;
          *)
            case `"$tmp_nm" -p /dev/null 2>&1 | sed 'lq'` in
            */dev/null*)
              lt_cv_path_NM="$tmp_nm -p"
              break
            ;;

```

```

        *)
        lt_cv_path_NM=${lt_cv_path_NM="$tmp_nm"} # keep the first
match, but
        continue # so that we can try to find one that supports BSD
flags
        ;;
    esac
    ;;
    esac
    fi
done
IFS="$lt_save_ifs"
done
: ${lt_cv_path_NM=no}
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_path_NM" >&5
$as_echo "$lt_cv_path_NM" >&6; }
if test "$lt_cv_path_NM" != "no"; then
    NM="$lt_cv_path_NM"
else
    # Didn't find any BSD compatible name lister, look for dumpbin.
    if test -n "$DUMPBIN"; then :
        # Let the user override the test.
    else
        if test -n "$ac_tool_prefix"; then
            for ac_prog in dumpbin "link -dump"
            do
                # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
                be a program name with args.
                set dummy $ac_tool_prefix$ac_prog; ac_word=$2
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
                $as_echo_n "checking for $ac_word... " >&6; }
                if ${ac_cv_prog_DUMPBIN+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    if test -n "$DUMPBIN"; then
                        ac_cv_prog_DUMPBIN="$DUMPBIN" # Let the user override the test.
                    else
                        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                        for as_dir in $PATH
                        do
                            IFS=$as_save_IFS
                            test -z "$as_dir" && as_dir=.
                            for ac_exec_ext in ' ' $ac_executable_extensions; do
                                if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                                    ac_cv_prog_DUMPBIN="$ac_tool_prefix$ac_prog"
                                    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                                    break 2
                                fi
                            done
                        done
                    fi
                fi
            done
        fi
    fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
DUMPBIN=$ac_cv_prog_DUMPBIN
if test -n "$DUMPBIN"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DUMPBIN" >&5
$as_echo "$DUMPBIN" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

test -n "$DUMPBIN" && break
done
fi
if test -z "$DUMPBIN"; then
  ac_ct_DUMPBIN=$DUMPBIN
  for ac_prog in dumpbin "link -dump"
  do
    # Extract the first word of "$ac_prog", so it can be a program name
    with args.
    set dummy $ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_DUMPBIN+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$ac_ct_DUMPBIN"; then
        ac_cv_prog_ac_ct_DUMPBIN="$ac_ct_DUMPBIN" # Let the user override
        the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in '$ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_ac_ct_DUMPBIN="$ac_prog"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
        IFS=$as_save_IFS
      fi
    fi
  fi
fi

```

```

ac_ct_DUMPBIN=$ac_cv_prog_ac_ct_DUMPBIN
if test -n "$ac_ct_DUMPBIN"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DUMPBIN" >&5
$as_echo "$ac_ct_DUMPBIN" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_DUMPBIN" && break
done

  if test "x$ac_ct_DUMPBIN" = x; then
    DUMPBIN=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DUMPBIN=$ac_ct_DUMPBIN
  fi
fi

  case ` $DUMPBIN -symbols /dev/null 2>&1 | sed '1q' ` in
*COFF*)
    DUMPBIN="$DUMPBIN -symbols"
    ;;
*)
    DUMPBIN=:
    ;;
esac
  fi

  if test "$DUMPBIN" != ":"; then
    NM="$DUMPBIN"
  fi
fi
test -z "$NM" && NM=nm

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the name lister
($NM) interface" >&5
$as_echo_n "checking the name lister ($NM) interface... " >&6; }

```

```

if ${lt_cv_nm_interface+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_nm_interface="BSD nm"
  echo "int some_variable = 0;" > confptest.$ac_ext
  (eval echo "\"\$as_me:$LINENO: $ac_compile\"" >&5)
  (eval "$ac_compile" 2>confptest.err)
  cat confptest.err >&5
  (eval echo "\"\$as_me:$LINENO: $NM \\\"confptest.$ac_objext\\\"\""
>&5)
  (eval "$NM \"confptest.$ac_objext\" 2>confptest.err > confptest.out)
  cat confptest.err >&5
  (eval echo "\"\$as_me:$LINENO: output\"" >&5)
  cat confptest.out >&5
  if $GREP 'External.*some_variable' confptest.out > /dev/null; then
    lt_cv_nm_interface="MS dumpbin"
  fi
  rm -f confptest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_nm_interface"
>&5
$as_echo "$lt_cv_nm_interface" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether ln -s works"
>&5
$as_echo_n "checking whether ln -s works... " >&6; }
LN_S=$as_ln_s
if test "$LN_S" = "ln -s"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no, using $LN_S"
>&5
$as_echo "no, using $LN_S" >&6; }
fi

# find the maximum length of command line arguments
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the maximum length
of command line arguments" >&5
$as_echo_n "checking the maximum length of command line arguments... "
>&6; }
if ${lt_cv_sys_max_cmd_len+:} false; then :
  $as_echo_n "(cached) " >&6
else
  i=0
  teststring="ABCD"

  case $build_os in
  msdosdjgpp*)
    # On DJGPP, this test can blow up pretty badly due to problems in
libc

```



```

# (any single argument exceeding 2000 bytes causes a buffer
overrun
# during glob expansion). Even if it were fixed, the result of
this
# check would be larger than it should be.
lt_cv_sys_max_cmd_len=12288;    # 12K is about right
;;

gnu*)
# Under GNU Hurd, this test is not required because there is
# no limit to the length of command line arguments.
# Libtool will interpret -1 as no limit whatsoever
lt_cv_sys_max_cmd_len=-1;
;;

cygwin* | mingw* | cegcc*)
# On Win9x/ME, this test blows up -- it succeeds, but takes
# about 5 minutes as the teststring grows exponentially.
# Worse, since 9x/ME are not pre-emptively multitasking,
# you end up with a "frozen" computer, even though with patience
# the test eventually succeeds (with a max line length of 256k).
# Instead, let's just punt: use the minimum linelength reported by
# all of the supported platforms: 8192 (on NT/2K/XP).
lt_cv_sys_max_cmd_len=8192;
;;

mint*)
# On MiNT this can take a long time and run out of memory.
lt_cv_sys_max_cmd_len=8192;
;;

amigaos*)
# On AmigaOS with pdksh, this test takes hours, literally.
# So we just punt and use a minimum line length of 8192.
lt_cv_sys_max_cmd_len=8192;
;;

netbsd* | freebsd* | openbsd* | darwin* | dragonfly*)
# This has been around since 386BSD, at least. Likely further.
if test -x /sbin/sysctl; then
  lt_cv_sys_max_cmd_len=`/sbin/sysctl -n kern.argmax`
elif test -x /usr/sbin/sysctl; then
  lt_cv_sys_max_cmd_len=`/usr/sbin/sysctl -n kern.argmax`
else
  lt_cv_sys_max_cmd_len=65536      # usable default for all BSDs
fi
# And add a safety zone
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
;;

interix*)

```

```

    # We know the value 262144 and hardcode it with a safety zone
    (like BSD)
    lt_cv_sys_max_cmd_len=196608
    ;;

os2*)
    # The test takes a long time on OS/2.
    lt_cv_sys_max_cmd_len=8192
    ;;

osf*)
    # Dr. Hans Ekkehard Plesser reports seeing a kernel panic running
    configure
    # due to this test when exec_disable_arg_limit is 1 on Tru64. It
    is not
    # nice to cause kernel panics so lets avoid the loop below.
    # First set a reasonable default.
    lt_cv_sys_max_cmd_len=16384
    #
    if test -x /sbin/sysconfig; then
        case ` /sbin/sysconfig -q proc exec_disable_arg_limit` in
            *1*) lt_cv_sys_max_cmd_len=-1 ;;
        esac
    fi
    ;;

sco3.2v5*)
    lt_cv_sys_max_cmd_len=102400
    ;;

sysv5* | sco5v6* | sysv4.2uw2*)
    kargmax=`grep ARG_MAX /etc/conf/cf.d/stune 2>/dev/null`
    if test -n "$kargmax"; then
        lt_cv_sys_max_cmd_len=`echo $kargmax | sed 's/.*[ ]//`
    else
        lt_cv_sys_max_cmd_len=32768
    fi
    ;;

*)
    lt_cv_sys_max_cmd_len=`(getconf ARG_MAX) 2> /dev/null`
    if test -n "$lt_cv_sys_max_cmd_len"; then
        lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
        lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
    else
        # Make teststring a little bigger before we do anything with it.
        # a 1K string should be a reasonable start.
        for i in 1 2 3 4 5 6 7 8 ; do
            teststring=$teststring$teststring
        done
        SHELL=${SHELL-${CONFIG_SHELL-/bin/sh}}
        # If test is not a shell built-in, we'll probably end up
        computing a
        # maximum length that is only half of the actual maximum length,
        but

```

```

# we can't tell.
while { test "X"`env echo "$teststring$teststring" 2>/dev/null`
\
    = "X$teststring$teststring"; } >/dev/null 2>&1 &&
    test $i != 17 # 1/2 MB should be enough
do
    i=`expr $i + 1`
    teststring=$teststring$teststring
done
# Only check the string length outside the loop.
lt_cv_sys_max_cmd_len=`expr "X$teststring" : ".*" 2>&1`
teststring=
# Add a significant safety factor because C++ compilers can tack
on
# massive amounts of additional arguments before passing them to
the
# linker. It appears as though 1/2 is a usable value.
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 2`
fi
;;
esac

fi

if test -n $lt_cv_sys_max_cmd_len ; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sys_max_cmd_len" >&5
$as_echo "$lt_cv_sys_max_cmd_len" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: none" >&5
$as_echo "none" >&6; }
fi
max_cmd_len=$lt_cv_sys_max_cmd_len

: ${CP="cp -f"}
: ${MV="mv -f"}
: ${RM="rm -f"}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands some XSI constructs" >&5
$as_echo_n "checking whether the shell understands some XSI
constructs... " >&6; }
# Try some XSI features
xsi_shell=no
( _lt_dummy="a/b/c"

```

```

test
"${_lt_dummy##*/},{_lt_dummy%/*},{_lt_dummy#??}"${_lt_dummy%$_lt_du
mmy"}, \
    = c,a/b,b/c, \
    && eval 'test $(( 1 + 1 )) -eq 2 \
    && test "${#_lt_dummy}" -eq 5' ) >/dev/null 2>&1 \
    && xsi_shell=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $xsi_shell" >&5
$as_echo "$xsi_shell" >&6; }

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands \"+=\"\" >&5
$as_echo_n "checking whether the shell understands \"+=\"... \" >&6; }
lt_shell_append=no
( foo=bar; set foo baz; eval "$1+=\2" && test "$foo" = barbaz ) \
    >/dev/null 2>&1 \
    && lt_shell_append=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_shell_append" >&5
$as_echo "$lt_shell_append" >&6; }

```

```

if ( (MAIL=60; unset MAIL) || exit) >/dev/null 2>&1; then
    lt_unset=unset
else
    lt_unset=false
fi

```

```

# test EBCDIC or ASCII
case `echo X|tr X '\101'` in
A) # ASCII based system
    # \n is not interpreted correctly by Solaris 8 /usr/ucb/tr
    lt_SP2NL='tr \040 \012'
    lt_NL2SP='tr \015\012 \040\040'
    ;;
*) # EBCDIC based system
    lt_SP2NL='tr \100 \n'
    lt_NL2SP='tr \r\n \100\100'
    ;;
esac

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to convert
$build file names to $host format" >&5
$sas_echo_n "checking how to convert $build file names to $host
format... " >&6; }
if ${lt_cv_to_host_file_cmd+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  case $host in
    *-*-mingw* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_host_file_cmd=func_convert_file_msys_to_w32
          ;;
        *-*-cygwin* )
          lt_cv_to_host_file_cmd=func_convert_file_cygwin_to_w32
          ;;
        * ) # otherwise, assume *nix
          lt_cv_to_host_file_cmd=func_convert_file_nix_to_w32
          ;;
      esac
    ;;
    *-*-cygwin* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_host_file_cmd=func_convert_file_msys_to_cygwin
          ;;
        *-*-cygwin* )
          lt_cv_to_host_file_cmd=func_convert_file_noop
          ;;
        * ) # otherwise, assume *nix
          lt_cv_to_host_file_cmd=func_convert_file_nix_to_cygwin
          ;;
      esac
    ;;
    * ) # unhandled hosts (and "normal" native builds)
      lt_cv_to_host_file_cmd=func_convert_file_noop
    ;;
  esac
fi

to_host_file_cmd=${lt_cv_to_host_file_cmd}
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_to_host_file_cmd" >&5
$sas_echo "$lt_cv_to_host_file_cmd" >&6; }

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to convert
$build file names to toolchain format" >&5
$sas_echo_n "checking how to convert $build file names to toolchain
format... " >&6; }
if ${lt_cv_to_tool_file_cmd+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  #assume ordinary cross tools, or native build.
lt_cv_to_tool_file_cmd=func_convert_file_noop
case $host in
  *-*-mingw* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_tool_file_cmd=func_convert_file_msys_to_w32
        ;;
      esac
    ;;
  esac
fi

to_tool_file_cmd=$lt_cv_to_tool_file_cmd
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_to_tool_file_cmd" >&5
$sas_echo "$lt_cv_to_tool_file_cmd" >&6; }

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $LD option to
reload object files" >&5
$sas_echo_n "checking for $LD option to reload object files... " >&6; }
if ${lt_cv_ld_reload_flag+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  lt_cv_ld_reload_flag='-r'
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_reload_flag" >&5
$sas_echo "$lt_cv_ld_reload_flag" >&6; }
reload_flag=$lt_cv_ld_reload_flag
case $reload_flag in
  "" | " ") ;;
  *) reload_flag="$reload_flag" ;;
esac
reload_cmds='$LD$reload_flag -o $output$reload_objs'
case $host_os in
  cygwin* | mingw* | pw32* | cegcc*)
    if test "$GCC" != yes; then
      reload_cmds=false
    fi
  fi

```

```

;;
darwin*)
  if test "$GCC" = yes; then
    reload_cmds='$LTCC $LTCFLAGS -nostdlib ${wl}-r -o
$output$reload_objs'
  else
    reload_cmds='$LD$reload_flag -o $output$reload_objs'
  fi
;;
esac

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}objdump", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$OBJDUMP"; then
      ac_cv_prog_OBJDUMP="$OBJDUMP" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_OBJDUMP="${ac_tool_prefix}objdump"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS
    fi
  fi
  OBJDUMP=$ac_cv_prog_OBJDUMP
  if test -n "$OBJDUMP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OBJDUMP" >&5

```

```

$as_echo "$OBJDUMP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_OBJDUMP"; then
  ac_ct_OBJDUMP=$OBJDUMP
  # Extract the first word of "objdump", so it can be a program name
  with args.
  set dummy objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OBJDUMP"; then
      ac_cv_prog_ac_ct_OBJDUMP="$ac_ct_OBJDUMP" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OBJDUMP="objdump"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

    fi
  fi

  ac_ct_OBJDUMP=$ac_cv_prog_ac_ct_OBJDUMP
  if test -n "$ac_ct_OBJDUMP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OBJDUMP" >&5
$as_echo "$ac_ct_OBJDUMP" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi

  if test "x$ac_ct_OBJDUMP" = x; then
    OBJDUMP="false"
  else

```



```

        case $cross_compiling:$ac_tool_warned in
yes:)
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$sas_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        OBJDUMP=$ac_ct_OBJDUMP
        fi
else
        OBJDUMP="$ac_cv_prog_OBJDUMP"
fi

test -z "$OBJDUMP" && OBJDUMP=objdump

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to recognize
dependent libraries" >&5
$sas_echo_n "checking how to recognize dependent libraries... " >&6; }
if ${lt_cv_deplibs_check_method+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    lt_cv_file_magic_cmd='$MAGIC_CMD'
lt_cv_file_magic_test_file=
lt_cv_deplibs_check_method='unknown'
# Need to set the preceding variable on all platforms that support
# interlibrary dependencies.
# 'none' -- dependencies not supported.
# `unknown' -- same as none, but documents that we really don't know.
# 'pass_all' -- all dependencies passed with no checks.
# 'test_compile' -- check by making test program.
# 'file_magic [[regex]]' -- check by looking for files in library path
# which responds to the $file_magic_cmd with a given extended regex.
# If you have `file' or equivalent on your system and you're not sure
# whether `pass_all' will *always* work, you probably want this one.

case $host_os in
aix[4-9]*)
    lt_cv_deplibs_check_method=pass_all
    ;;

beos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

```

```

bsdi[45]*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib)'
    lt_cv_file_magic_cmd='/usr/bin/file -L'
    lt_cv_file_magic_test_file=/shlib/libc.so
    ;;

cygwin*)
    # func_win32_libid is a shell function defined in ltmain.sh
    lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86 DLL'
    lt_cv_file_magic_cmd='func_win32_libid'
    ;;

mingw* | pw32*)
    # Base MSYS/MinGW do not provide the 'file' command needed by
    # func_win32_libid shell function, so use a weaker test based on
    'objdump',
    # unless we find 'file', for example because we are cross-compiling.
    # func_win32_libid assumes BSD nm, so disallow it if using MS
    dumpbin.
    if ( test "$lt_cv_nm_interface" = "BSD nm" && file / ) >/dev/null
2>&1; then
        lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86
DLL'
        lt_cv_file_magic_cmd='func_win32_libid'
    else
        # Keep this pattern in sync with the one in func_win32_libid.
        lt_cv_deplibs_check_method='file_magic file format (pei*-
i386(*architecture: i386)?|pe-arm-wince|pe-x86-64)'
        lt_cv_file_magic_cmd='$OBJDUMP -f'
    fi
    ;;

cegcc*)
    # use the weaker test based on 'objdump'. See mingw*.
    lt_cv_deplibs_check_method='file_magic file format pe-arm-
.*little(*architecture: arm)?'
    lt_cv_file_magic_cmd='$OBJDUMP -f'
    ;;

darwin* | rhapsody*)
    lt_cv_deplibs_check_method=pass_all
    ;;

freebsd* | dragonfly*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
        case $host_cpu in
            i*86 )
                # Not sure whether the presence of OpenBSD here was a mistake.
                # Let's accept both of them until this is cleared up.

```

```

        lt_cv_deplibs_check_method='file_magic
(FreeBSD|OpenBSD|DragonFly)/i[3-9]86 (compact )?demand paged shared
library'
        lt_cv_file_magic_cmd=/usr/bin/file
        lt_cv_file_magic_test_file=`echo /usr/lib/libc.so.*`
        ;;
    esac
else
    lt_cv_deplibs_check_method=pass_all
fi
;;

gnu*)
    lt_cv_deplibs_check_method=pass_all
    ;;

haiku*)
    lt_cv_deplibs_check_method=pass_all
    ;;

hpux10.20* | hpux11*)
    lt_cv_file_magic_cmd=/usr/bin/file
    case $host_cpu in
    ia64*)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF-[0-
9][0-9]) shared object file - IA64'
        lt_cv_file_magic_test_file=/usr/lib/hpux32/libc.so
        ;;
    hppa*64*)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF[ -
][0-9][0-9]) (-bit)?( [LM]SB)? shared object( file)?[, -]* PA-RISC [0-
9]\.[0-9]'
        lt_cv_file_magic_test_file=/usr/lib/pa20_64/libc.sl
        ;;
    *)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|PA-
RISC[0-9]\.[0-9]) shared library'
        lt_cv_file_magic_test_file=/usr/lib/libc.sl
        ;;
    esac
    ;;

interix[3-9]*)
    # PIC code is broken on Interix 3.x, that's why |\a not |\_pic\a
here
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so|\a)$'
    ;;

irix5* | irix6* | nonstopux*)
    case $LD in
    *-32|*" -32 ") libmagic=32-bit;;
    *-n32|*" -n32 ") libmagic=N32;;

```

```

*-64|*" -64 ") libmagic=64-bit;;
*) libmagic=never-match;;
esac
lt_cv_deplibs_check_method=pass_all
;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
  lt_cv_deplibs_check_method=pass_all
  ;;

netbsd*)
  if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|_pic\.a)$'
  else
    lt_cv_deplibs_check_method='match_pattern
/lib[^/]+(\.so|_pic\.a)$'
  fi
  ;;

newos6*)
  lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(executable|dynamic lib)'
  lt_cv_file_magic_cmd=/usr/bin/file
  lt_cv_file_magic_test_file=/usr/lib/libnls.so
  ;;

*nto* | *qnx*)
  lt_cv_deplibs_check_method=pass_all
  ;;

openbsd*)
  if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|\.[0-9]+|_pic\.a)$'
  else
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|_pic\.a)$'
  fi
  ;;

osf3* | osf4* | osf5*)
  lt_cv_deplibs_check_method=pass_all
  ;;

rdos*)
  lt_cv_deplibs_check_method=pass_all
  ;;

solaris*)

```

```

    lt_cv_deplibs_check_method=pass_all
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv4 | sysv4.3*)
    case $host_vendor in
    motorola)
        lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib) M[0-9][0-9]* Version [0-9]'
        lt_cv_file_magic_test_file=`echo /usr/lib/libc.so*`
        ;;
    ncr)
        lt_cv_deplibs_check_method=pass_all
        ;;
    sequent)
        lt_cv_file_magic_cmd='/bin/file'
        lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [LM]SB
(shared object|dynamic lib )'
        ;;
    sni)
        lt_cv_file_magic_cmd='/bin/file'
        lt_cv_deplibs_check_method="file_magic ELF [0-9][0-9]*-bit [LM]SB
dynamic lib"
        lt_cv_file_magic_test_file=/lib/libc.so
        ;;
    siemens)
        lt_cv_deplibs_check_method=pass_all
        ;;
    pc)
        lt_cv_deplibs_check_method=pass_all
        ;;
    esac
    ;;

tpf*)
    lt_cv_deplibs_check_method=pass_all
    ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_deplibs_check_method" >&5
$as_echo "$lt_cv_deplibs_check_method" >&6; }

file_magic_glob=
want_nocaseglob=no
if test "$build" = "$host"; then
    case $host_os in
    mingw* | pw32*)

```

```

    if ( shopt | grep nocaseglob ) >/dev/null 2>&1; then
        want_nocaseglob=yes
    else
        file_magic_glob=`echo
aAbBcCdDeEfFgGhHiIjJkKlLmMnNoOpPqQrRsStTuUvVwWxXyYzZ | $SED -e
"s/\(..\)/s\/[\1]\\/[\1]\\/g;/g"`
        fi
        ;;
    esac
fi

file_magic_cmd=${lt_cv_file_magic_cmd}
deplibs_check_method=${lt_cv_deplibs_check_method}
test -z "$deplibs_check_method" && deplibs_check_method=unknown

```

```

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}dlltool", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}dlltool; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_DLLTOOL+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$DLLTOOL"; then
            ac_cv_prog_DLLTOOL="$DLLTOOL" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS

```

```

test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_DLLTOOL="{ac_tool_prefix}dlltool"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

fi
fi
DLLTOOL=$ac_cv_prog_DLLTOOL
if test -n "$DLLTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DLLTOOL" >&5
$as_echo "$DLLTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_DLLTOOL"; then
  ac_ct_DLLTOOL=$DLLTOOL
  # Extract the first word of "dlltool", so it can be a program name
  with args.
  set dummy dlltool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_DLLTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_DLLTOOL"; then
      ac_cv_prog_ac_ct_DLLTOOL="$ac_ct_DLLTOOL" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' ' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_ac_ct_DLLTOOL="dlltool"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
ac_ct_DLLTOOL=$ac_cv_prog_ac_ct_DLLTOOL
if test -n "$ac_ct_DLLTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DLLTOOL" >&5
$as_echo "$ac_ct_DLLTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_DLLTOOL" = x; then
    DLLTOOL="false"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DLLTOOL=$ac_ct_DLLTOOL
  fi
else
  DLLTOOL="$ac_cv_prog_DLLTOOL"
fi

test -z "$DLLTOOL" && DLLTOOL=dlltool

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to associate
runtime and link libraries" >&5
$as_echo_n "checking how to associate runtime and link libraries... "
>&6; }
if ${lt_cv_sharedlib_from_linklib_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_sharedlib_from_linklib_cmd='unknown'

case $host_os in

```



```

cygwin* | mingw* | pw32* | cegcc*)
  # two different shell functions defined in ltmain.sh
  # decide which to use based on capabilities of $DLLTOOL
  case ` $DLLTOOL --help 2>&1 ` in
  *--identify-strict*)
    lt_cv_sharedlib_from_linklib_cmd=func_cygming_dll_for_implib
    ;;
  *)

lt_cv_sharedlib_from_linklib_cmd=func_cygming_dll_for_implib_fallback
  ;;
  esac
  ;;
*)
  # fallback: assume linklib IS sharedlib
  lt_cv_sharedlib_from_linklib_cmd="$ECHO"
  ;;
  esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sharedlib_from_linklib_cmd" >&5
$as_echo "$lt_cv_sharedlib_from_linklib_cmd" >&6; }
sharedlib_from_linklib_cmd=$lt_cv_sharedlib_from_linklib_cmd
test -z "$sharedlib_from_linklib_cmd" &&
sharedlib_from_linklib_cmd=$ECHO

if test -n "$ac_tool_prefix"; then
  for ac_prog in ar
  do
    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
    be a program name with args.
    set dummy $ac_tool_prefix$ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_AR+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$AR"; then
        ac_cv_prog_AR="$AR" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_AR="$ac_tool_prefix$ac_prog"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
    done
IFS=$sas_save_IFS

fi
fi
AR=$ac_cv_prog_AR
if test -n "$AR"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $AR" >&5
    $sas_echo "$AR" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $sas_echo "no" >&6; }
fi

    test -n "$AR" && break
done
fi
if test -z "$AR"; then
    ac_ct_AR=$AR
    for ac_prog in ar
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $sas_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_AR+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_AR"; then
        ac_cv_prog_ac_ct_AR="$ac_ct_AR" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$sas_save_IFS
    test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_AR="$ac_prog"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done

```

```

    fi
done
    done
IFS=$as_save_IFS

fi
fi
ac_ct_AR=$ac_cv_prog_ac_ct_AR
if test -n "$ac_ct_AR"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_AR" >&5
$as_echo "$ac_ct_AR" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$ac_ct_AR" && break
done

    if test "x$ac_ct_AR" = x; then
      AR="false"
    else
      case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
      AR=$ac_ct_AR
    fi
fi

: ${AR=ar}
: ${AR_FLAGS=cru}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for archiver @FILE
support" >&5
$as_echo_n "checking for archiver @FILE support... " >&6; }
if ${lt_cv_ar_at_file+:} false; then :
```

```

    $as_echo_n "(cached) " >&6
else
    lt_cv_ar_at_file=no
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    echo conftest.$ac_objext > conftest.lst
    lt_ar_try='$AR $AR_FLAGS libconftest.a @conftest.lst >&5'
    { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$lt_ar_try\""; } >&5
    (eval $lt_ar_try) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }
        if test "$ac_status" -eq 0; then
            # Ensure the archiver fails upon bogus file names.
            rm -f conftest.$ac_objext libconftest.a
            { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}: \"$lt_ar_try\"";
} >&5
            (eval $lt_ar_try) 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
            test $ac_status = 0; }
                if test "$ac_status" -ne 0; then
                    lt_cv_ar_at_file=@
                fi
            fi
            rm -f conftest.* libconftest.a

fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ar_at_file"
>&5
$as_echo "$lt_cv_ar_at_file" >&6; }

if test "x$lt_cv_ar_at_file" = xno; then
    archiver_list_spec=
else
    archiver_list_spec=$lt_cv_ar_at_file
fi

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}strip", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}strip; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_STRIP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$STRIP"; then
      ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_STRIP="${ac_tool_prefix}strip"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      STRIP=$ac_cv_prog_STRIP
      if test -n "$STRIP"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
        $as_echo "$STRIP" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi
      fi
      if test -z "$ac_cv_prog_STRIP"; then
        ac_ct_STRIP=$STRIP
        # Extract the first word of "strip", so it can be a program name
        with args.
        set dummy strip; ac_word=$2

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_STRIP"; then
    ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_STRIP="strip"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
if test -n "$ac_ct_STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_STRIP" = x; then
    STRIP=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    STRIP=$ac_ct_STRIP
  fi
else
  STRIP="$ac_cv_prog_STRIP"
fi

```

```
test -z "$STRIP" && STRIP=:
```

```
if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}ranlib", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}ranlib; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_RANLIB+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$RANLIB"; then
      ac_cv_prog_RANLIB="$RANLIB" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_RANLIB="${ac_tool_prefix}ranlib"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      RANLIB=$ac_cv_prog_RANLIB
      if test -n "$RANLIB"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $RANLIB" >&5
        $as_echo "$RANLIB" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi
      if test -z "$ac_cv_prog_RANLIB"; then
        ac_ct_RANLIB=$RANLIB
```

```

# Extract the first word of "ranlib", so it can be a program name
with args.
set dummy ranlib; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_RANLIB+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_RANLIB"; then
    ac_cv_prog_ac_ct_RANLIB="$ac_ct_RANLIB" # Let the user override the
test.
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_exec_ext in ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
          ac_cv_prog_ac_ct_RANLIB="ranlib"
          $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
          break 2
        fi
      done
    done
    IFS=$as_save_IFS

    fi
    fi
    ac_ct_RANLIB=$ac_cv_prog_ac_ct_RANLIB
    if test -n "$ac_ct_RANLIB"; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_RANLIB" >&5
$as_echo "$ac_ct_RANLIB" >&6; }
    else
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    fi

    if test "x$ac_ct_RANLIB" = x; then
      RANLIB=":"
    else
      case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
      RANLIB=$ac_ct_RANLIB
    fi

```



```

else
  RANLIB="$ac_cv_prog_RANLIB"
fi

test -z "$RANLIB" && RANLIB=:

# Determine commands to create old-style static archives.
old_archive_cmds='$AR $AR_FLAGS $oldlib$oldobjs'
old_postinstall_cmds='chmod 644 $oldlib'
old_postuninstall_cmds=

if test -n "$RANLIB"; then
  case $host_os in
    openbsd*)
      old_postinstall_cmds="$old_postinstall_cmds~\${RANLIB} -t
\${tool_oldlib}"
      ;;
    *)
      old_postinstall_cmds="$old_postinstall_cmds~\${RANLIB}
\${tool_oldlib}"
      ;;
  esac
  old_archive_cmds="$old_archive_cmds~\${RANLIB} \${tool_oldlib}"
fi

case $host_os in
  darwin*)
    lock_old_archive_extraction=yes ;;
  *)
    lock_old_archive_extraction=no ;;
esac

```

```

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Check for command to grab the raw symbol name followed by C symbol
from nm.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking command to parse $NM
output from $compiler object" >&5
$as_echo_n "checking command to parse $NM output from $compiler
object... " >&6; }
if ${lt_cv_sys_global_symbol_pipe+:} false; then :
  $as_echo_n "(cached) " >&6
else
# These are sane defaults that work on at least a few old systems.
# [They come from Ultrix.  What could be older than Ultrix?! ;)]

# Character class describing NM global symbol codes.
symcode=' [BCDEGRST] '

# Regexp to match symbols that can be accessed directly from C.
sympat='\ ([_A-Za-z][_A-Za-z0-9]*\)'

```

```

# Define system-specific variables.
case $host_os in
aix*)
    symcode='[BCDT]'
    ;;
cygwin* | mingw* | pw32* | cegcc*)
    symcode='[ABCDGISTW]'
    ;;
hpux*)
    if test "$host_cpu" = ia64; then
        symcode='[ABCDEGRST]'
    fi
    ;;
irix* | nonstopux*)
    symcode='[BCDEGRST]'
    ;;
osf*)
    symcode='[BCDEGQRST]'
    ;;
solaris*)
    symcode='[BDRT]'
    ;;
sco3.2v5*)
    symcode='[DT]'
    ;;
sysv4.2uw2*)
    symcode='[DT]'
    ;;
sysv5* | sco5v6* | unixware* | OpenUNIX*)
    symcode='[ABDT]'
    ;;
sysv4)
    symcode='[DFNSTU]'
    ;;
esac

# If we're using GNU nm, then use its standard symbol codes.
case ` $NM -V 2>&1 ` in
*GNU* | *'with BFD'*)
    symcode='[ABCDGIRSTW]' ;;
esac

# Transform an extracted symbol line into a proper C declaration.
# Some systems (esp. on ia64) link data and code symbols differently,
# so use this general approach.
lt_cv_sys_global_symbol_to_cdecl="sed -n -e 's/^T .* \\.*/extern
int \1();/p' -e 's/^$symcode* .* \\.*/extern char \1;/p'"

# Transform an extracted symbol line into symbol name and symbol
address

```

```

lt_cv_sys_global_symbol_to_c_name_address="sed -n -e 's/^: \([^ ]*\)[
]*$/ {\\\"\\1\\\"}, (void *) 0},/p' -e 's/^$symcode* \([^ ]*\) \([^
]*\)$/ {\"\\2\", (void *) \&2},/p'"
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix="sed -n -e 's/^:
\([^ ]*\)[ ]*$/ {\\\"\\1\\\"}, (void *) 0},/p' -e 's/^$symcode* \([^
]*\)\ (lib\([^ ]*\))$/ {\"\\2\", (void *) \&2},/p' -e 's/^$symcode* \([^
]*\)\ \([^ ]*\)$/ {\"lib\\2\", (void *) \&2},/p'"

# Handle CRLF in mingw tool chain
opt_cr=
case $build_os in
mingw*)
  opt_cr=`$ECHO 'x\{0,1\}' | tr x '\015'` # option cr in regexp
  ;;
esac

# Try without a prefix underscore, then with it.
for ac_symprfx in "" "_"; do

  # Transform symcode, sympat, and symprfx into a raw symbol and a C
  symbol.
  symxfrm="\\1 $ac_symprfx\\2 \\2"

  # Write the raw and C identifiers.
  if test "$lt_cv_nm_interface" = "MS dumpbin"; then
    # Fake it for dumpbin and say T for any non-static function
    # and D for any global variable.
    # Also find C++ and __fastcall symbols from MSVC++,
    # which start with @ or ?.
    lt_cv_sys_global_symbol_pipe="$AWK '\
" {last_section=section; section=\\$ 3};"\
" /^COFF SYMBOL TABLE/{for(i in hide) delete hide[i]};"\
" /Section length .*#relocs.*(pick any){hide[last_section]=1};"\
" \\$ 0!~/External *\\|/{next};"\
" / 0+ UNDEF /{next}; / UNDEF \([^|\\)*()/ {next};"\
" {if(hide[section]) next};"\
" {f=0}; \\$ 0~/\\(\\).*\\|/{f=1}; {printf f ? \"T \\\" : \"D \\\"};"\
" {split(\\$ 0, a, /\\|\\r/); split(a[2], s)};"\
" s[1]~/^[@?]/{print s[1], s[1]; next};"\
" s[1]~prfx {split(s[1],t,\"@\\"); print t[1],\
substr(t[1],length(prfx))}"\
" ' prfx=^$ac_symprfx"
  else
    lt_cv_sys_global_symbol_pipe="sed -n -e 's/^.*[
]\($symcode$symcode*\)[
]*$ac_symprfx$sympat$opt_cr$/ $symxfrm/p'"
  fi
  lt_cv_sys_global_symbol_pipe="$lt_cv_sys_global_symbol_pipe | sed '/
__gnu_lto/d'"

  # Check to see that the pipe works correctly.
  pipe_works=no

```

```

    rm -f confptest*
    cat > confptest.$ac_ext <<_LT_EOF
#ifdef __cplusplus
extern "C" {
#endif
char nm_test_var;
void nm_test_func(void);
void nm_test_func(void){}
#ifdef __cplusplus
}
#endif
int main(){nm_test_var='a';nm_test_func();return(0);}
_LT_EOF

    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    # Now try to grab the symbols.
    nlist=confptest.nm
    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}: \"$NM
confptest.$ac_objext \\\ "${lt_cv_sys_global_symbol_pipe}" \> $nlist\""; }
>&5
    (eval $NM confptest.$ac_objext \\\ "${lt_cv_sys_global_symbol_pipe}" \>
$nlist) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; } && test -s "$nlist"; then
    # Try sorting and uniquifying the output.
    if sort "$nlist" | uniq > "$nlist.T"; then
    mv -f "$nlist.T" "$nlist"
    else
    rm -f "$nlist.T"
    fi

    # Make sure that we snagged all the symbols we need.
    if $GREP ' nm_test_var$' "$nlist" >/dev/null; then
    if $GREP ' nm_test_func$' "$nlist" >/dev/null; then
    cat <<_LT_EOF > confptest.$ac_ext
/* Keep this code in sync between libtool.m4, ltmain, lt_system.h, and
tests. */
#ifdef __WIN32 || defined(__CYGWIN__) || defined(__WIN32_WCE)
/* DATA imports from DLLs on WIN32 can't be const, because runtime
relocations are performed -- see ld's documentation on pseudo-
relocs. */
# define LT@&t@_DLSYM_CONST
#elif defined(__osf__)
/* This system does not cope well with relocations in const data. */
# define LT@&t@_DLSYM_CONST

```

```

#else
# define LT@&t@_DLSYM_CONST const
#endif

#ifdef __cplusplus
extern "C" {
#endif

_LT_EOF
# Now generate the symbol file.
eval "$lt_cv_sys_global_symbol_to_cdecl" < "$nlist" | $GREP -v
main >> confftest.$ac_ext'

cat <<_LT_EOF >> confftest.$ac_ext

/* The mapping between symbol names and symbols. */
LT@&t@_DLSYM_CONST struct {
  const char *name;
  void *address;
}
lt__PROGRAM__LTX_preloaded_symbols[] =
{
  { "@PROGRAM@", (void *) 0 },
_LT_EOF
  $SED "s/^\$symcode\$symcode* \(.*\) \(.*)$/ {\\"2\", (void *)
&2},/" < "$nlist" | $GREP -v main >> confftest.$ac_ext
  cat <<\_LT_EOF >> confftest.$ac_ext
  {0, (void *) 0}
};

/* This works around a problem in FreeBSD linker */
#ifdef FREEBSD_WORKAROUND
static const void *lt_preloaded_setup() {
  return lt__PROGRAM__LTX_preloaded_symbols;
}
#endif

#ifdef __cplusplus
}
#endif
_LT_EOF
# Now try linking the two files.
mv confftest.$ac_objext confftstm.$ac_objext
lt_globsym_save_LIBS=$LIBS
lt_globsym_save_CFLAGS=$CFLAGS
LIBS="conftstm.$ac_objext"
CFLAGS="$CFLAGS$lt_prog_compiler_no_built_in_flag"
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$ac_link\""; } >&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5

```

```

test $ac_status = 0; } && test -s confptest${ac_exeext}; then
    pipe_works=yes
fi
LIBS=$lt_globsym_save_LIBS
CFLAGS=$lt_globsym_save_CFLAGS
else
    echo "cannot find nm_test_func in $nlist" >&5
fi
else
    echo "cannot find nm_test_var in $nlist" >&5
fi
else
    echo "cannot run $lt_cv_sys_global_symbol_pipe" >&5
fi
else
    echo "$progname: failed program was:" >&5
    cat confptest.$ac_ext >&5
fi
rm -rf confptest* confst*

# Do not use the global_symbol_pipe unless it works.
if test "$pipe_works" = yes; then
    break
else
    lt_cv_sys_global_symbol_pipe=
fi
done

fi

if test -z "$lt_cv_sys_global_symbol_pipe"; then
    lt_cv_sys_global_symbol_to_cdecl=
fi
if test -z
"$lt_cv_sys_global_symbol_pipe$lt_cv_sys_global_symbol_to_cdecl"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: failed" >&5
$as_echo "failed" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: ok" >&5
$as_echo "ok" >&6; }
fi

# Response file support.
if test "$lt_cv_nm_interface" = "MS dumpbin"; then
    nm_file_list_spec='@'
elif $NM --help 2>/dev/null | grep '@FILE' >/dev/null; then
    nm_file_list_spec='@'
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for sysroot" >&5
$as_echo_n "checking for sysroot... " >&6; }

@%:@ Check whether --with-libtool-sysroot was given.
if test "${with_libtool_sysroot+set}" = set; then :
  withval=$with_libtool_sysroot;
else
  with_libtool_sysroot=no
fi

lt_sysroot=
case ${with_libtool_sysroot} in #(
yes)
  if test "$GCC" = yes; then
    lt_sysroot=`$CC --print-sysroot 2>/dev/null`
  fi
  ;; #(
/*)
  lt_sysroot=`echo "$with_libtool_sysroot" | sed -e
"$sed_quote_subst"`
  ;; #(
no|'')
  ;; #(
*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
${with_libtool_sysroot}" >&5
$as_echo "${with_libtool_sysroot}" >&6; }
  as_fn_error $? "The sysroot must be an absolute path." "$LINENO" 5

```



```

    ;;
esac

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: ${lt_sysroot:-no}"
>&5
$zas_echo "${lt_sysroot:-no}" >&6; }

@%:@ Check whether --enable-libtool-lock was given.
if test "${enable_libtool_lock+set}" = set; then :
  enableval=$enable_libtool_lock;
fi

test "x$enable_libtool_lock" != xno && enable_libtool_lock=yes

# Some flags need to be propagated to the compiler or linker for good
# libtool support.
case $host in
ia64-*-hpux*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\$sas_me\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
  ac_status=$?
  $zas_echo "$sas_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }; then
    case `usr/bin/file conftest.$ac_objext` in
      *ELF-32*)
        HPUX_IA64_MODE="32"
        ;;
      *ELF-64*)
        HPUX_IA64_MODE="64"
        ;;
    esac
  fi
  rm -rf conftest*
  ;;
*-*-irix6*)
  # Find out which ABI we are using.
  echo '#line '$LINENO' "configure"' > conftest.$ac_ext
  if { { eval echo "\"\$sas_me\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
  ac_status=$?
  $zas_echo "$sas_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }; then
    if test "$lt_cv_prog_gnu_ld" = yes; then
      case `usr/bin/file conftest.$ac_objext` in

```

```

*32-bit*)
    LD="${LD-ld} -melf32bsmip"
    ;;
*N32*)
    LD="${LD-ld} -melf32bmipn32"
    ;;
*64-bit*)
    LD="${LD-ld} -melf64bmip"
    ;;
esac
else
case ` /usr/bin/file conftest.$ac_objext ` in
*32-bit*)
    LD="${LD-ld} -32"
    ;;
*N32*)
    LD="${LD-ld} -n32"
    ;;
*64-bit*)
    LD="${LD-ld} -64"
    ;;
esac
fi
fi
rm -rf conftest*
;;

x86_64-*kfreebsd*-gnu|x86_64-*linux*|ppc*-*linux*|powerpc*-*linux*| \
s390*-*linux*|s390*-*tpf*|sparc*-*linux*)
# Find out which ABI we are using.
echo 'int i;' > conftest.$ac_ext
if { { eval echo "\"\${as_me}\"":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }; then
case ` /usr/bin/file conftest.o ` in
*32-bit*)
case $host in
x86_64-*kfreebsd*-gnu)
    LD="${LD-ld} -m elf_i386_fbsd"
    ;;
x86_64-*linux*)
    LD="${LD-ld} -m elf_i386"
    ;;
ppc64-*linux*|powerpc64-*linux*)
    LD="${LD-ld} -m elf32ppclinux"
    ;;
s390x-*linux*)
    LD="${LD-ld} -m elf_s390"
    ;;

```

```

    sparc64-*linux*)
        LD="${LD-ld} -m elf32_sparc"
        ;;
    esac
    ;;
    *64-bit*)
    case $host in
        x86_64-*kfreebsd*-gnu)
            LD="${LD-ld} -m elf_x86_64_fbsd"
            ;;
        x86_64-*linux*)
            LD="${LD-ld} -m elf_x86_64"
            ;;
        ppc*-*linux*|powerpc*-*linux*)
            LD="${LD-ld} -m elf64ppc"
            ;;
        s390*-*linux*|s390*-*tpf*)
            LD="${LD-ld} -m elf64_s390"
            ;;
        sparc*-*linux*)
            LD="${LD-ld} -m elf64_sparc"
            ;;
    esac
    ;;
    esac
fi
rm -rf conftest*
;;

*-*sco3.2v5*)
    # On SCO OpenServer 5, we need -belf to get full-featured binaries.
    SAVE_CFLAGS="$CFLAGS"
    CFLAGS="$CFLAGS -belf"
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
    compiler needs -belf" >&5
    $as_echo_n "checking whether the C compiler needs -belf... " >&6; }
    if ${lt_cv_cc_needs_belf+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        ac_ext=c
        ac_cpp='$CPP $CPPFLAGS'
        ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
        ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
        conftest.$ac_ext $LIBS >&5'
        ac_compiler_gnu=$ac_cv_c_compiler_gnu

        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
        /* end confdefs.h.  */

    int
    main ()
    {

```

```

;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_cc_needs_belf=yes
else
  lt_cv_cc_needs_belf=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_cc_needs_belf"
>&5
$as_echo "$lt_cv_cc_needs_belf" >&6; }
if test x"$lt_cv_cc_needs_belf" != x"yes"; then
  # this is probably gcc 2.8.0, egcs 1.0 or newer; no need for -belf
  CFLAGS="$SAVE_CFLAGS"
fi
;;
*-*solaris*)
# Find out which ABI we are using.
echo 'int i;' > conftest.$ac_ext
if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }; then
  case ` /usr/bin/file conftest.o` in
    *64-bit*)
      case $lt_cv_prog_gnu_ld in
        yes*)
          case $host in
            i?86-*-*solaris*)
              LD="{LD-ld} -m elf_x86_64"
              ;;
            sparc*-*solaris*)
              LD="{LD-ld} -m elf64_sparc"
              ;;
          esac
          # GNU ld 2.21 introduced _sol2 emulations. Use them if
available.
          if ${LD-ld} -V | grep _sol2 >/dev/null 2>&1; then

```

```

        LD="${LD-ld}_sol2"
    fi
    ;;
*)
    if ${LD-ld} -64 -r -o conftest2.o conftest.o >/dev/null 2>&1;
then
    LD="${LD-ld} -64"
    fi
    ;;
esac
    ;;
esac
fi
rm -rf conftest*
;;
esac

need_locks="$enable_libtool_lock"

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}mt", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}mt; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_MANIFEST_TOOL+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$MANIFEST_TOOL"; then
            ac_cv_prog_MANIFEST_TOOL="$MANIFEST_TOOL" # Let the user override
            the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_MANIFEST_TOOL="${ac_tool_prefix}mt"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
                        $as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

        fi
    fi
    MANIFEST_TOOL=$ac_cv_prog_MANIFEST_TOOL
    if test -n "$MANIFEST_TOOL"; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MANIFEST_TOOL" >&5
$as_echo "$MANIFEST_TOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_MANIFEST_TOOL"; then
    ac_ct_MANIFEST_TOOL=$MANIFEST_TOOL
    # Extract the first word of "mt", so it can be a program name with
args.
set dummy mt; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_MANIFEST_TOOL"; then
        ac_cv_prog_ac_ct_MANIFEST_TOOL="$ac_ct_MANIFEST_TOOL" # Let the user
override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_ac_ct_MANIFEST_TOOL="mt"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_MANIFEST_TOOL=$ac_cv_prog_ac_ct_MANIFEST_TOOL
if test -n "$ac_ct_MANIFEST_TOOL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_ct_MANIFEST_TOOL" >&5
$as_echo "$ac_ct_MANIFEST_TOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test "x$ac_ct_MANIFEST_TOOL" = x; then

```

```

    MANIFEST_TOOL=":"
else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    MANIFEST_TOOL=$ac_ct_MANIFEST_TOOL
    fi
else
    MANIFEST_TOOL="$ac_cv_prog_MANIFEST_TOOL"
fi

test -z "$MANIFEST_TOOL" && MANIFEST_TOOL=mt
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $MANIFEST_TOOL is
a manifest tool" >&5
$as_echo_n "checking if $MANIFEST_TOOL is a manifest tool... " >&6; }
if ${lt_cv_path_manifest_tool+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_path_manifest_tool=no
    echo "$as_me:$LINENO: $MANIFEST_TOOL '-?'" >&5
    $MANIFEST_TOOL '-?' 2>conftest.err > conftest.out
    cat conftest.err >&5
    if $GREP 'Manifest Tool' conftest.out > /dev/null; then
        lt_cv_path_manifest_tool=yes
    fi
    rm -f conftest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_path_manifest_tool" >&5
$as_echo "$lt_cv_path_manifest_tool" >&6; }
if test "x$lt_cv_path_manifest_tool" != xyes; then
    MANIFEST_TOOL=:
fi

case $host_os in
    rhapsody* | darwin*)
        if test -n "$ac_tool_prefix"; then
            # Extract the first word of "${ac_tool_prefix}dsymutil", so it can
            be a program name with args.
            set dummy ${ac_tool_prefix}dsymutil; ac_word=$2
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
            $as_echo_n "checking for $ac_word... " >&6; }

```

```

if ${ac_cv_prog_DSYMUTIL+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$DSYMUTIL"; then
    ac_cv_prog_DSYMUTIL="$DSYMUTIL" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_DSYMUTIL="${ac_tool_prefix}dsymutil"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
DSYMUTIL=$ac_cv_prog_DSYMUTIL
if test -n "$DSYMUTIL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DSYMUTIL" >&5
$as_echo "$DSYMUTIL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_DSYMUTIL"; then
  ac_ct_DSYMUTIL=$DSYMUTIL
  # Extract the first word of "dsymutil", so it can be a program name
  with args.
  set dummy dsymutil; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_DSYMUTIL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_DSYMUTIL"; then
      ac_cv_prog_ac_ct_DSYMUTIL="$ac_ct_DSYMUTIL" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```



```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_ac_ct_DSYMUTIL="dsymutil"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DSYMUTIL=$ac_cv_prog_ac_ct_DSYMUTIL
if test -n "$ac_ct_DSYMUTIL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DSYMUTIL"
>&5
$as_echo "$ac_ct_DSYMUTIL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_DSYMUTIL" = x; then
    DSYMUTIL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DSYMUTIL=$ac_ct_DSYMUTIL
  fi
else
  DSYMUTIL="$ac_cv_prog_DSYMUTIL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}nmedit", so it can be
a program name with args.
set dummy ${ac_tool_prefix}nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_NMEDIT+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$NMEDIT"; then

```

```

    ac_cv_prog_NMEDIT="$NMEDIT" # Let the user override the test.
else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_NMEDIT="{ac_tool_prefix}nmedit"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
NMEDIT=$ac_cv_prog_NMEDIT
if test -n "$NMEDIT"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $NMEDIT" >&5
$as_echo "$NMEDIT" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_NMEDIT"; then
    ac_ct_NMEDIT=$NMEDIT
    # Extract the first word of "nmedit", so it can be a program name
    with args.
    set dummy nmedit; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_NMEDIT+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$ac_ct_NMEDIT"; then
            ac_cv_prog_ac_ct_NMEDIT="$ac_ct_NMEDIT" # Let the user override the
            test.
        else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then

```

```

        ac_cv_prog_ac_ct_NMEDIT="nmedit"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_NMEDIT=$ac_cv_prog_ac_ct_NMEDIT
if test -n "$ac_ct_NMEDIT"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_NMEDIT" >&5
$as_echo "$ac_ct_NMEDIT" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_NMEDIT" = x; then
        NMEDIT=":"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        NMEDIT=$ac_ct_NMEDIT
    fi
else
    NMEDIT="$ac_cv_prog_NMEDIT"
fi

    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}lipo", so it can be a
program name with args.
set dummy ${ac_tool_prefix}lipo; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_LIPO+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$LIPO"; then
        ac_cv_prog_LIPO="$LIPO" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_LIPO="${ac_tool_prefix}lipo"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
LIPO=$ac_cv_prog_LIPO
if test -n "$LIPO"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LIPO" >&5
$as_echo "$LIPO" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_LIPO"; then
  ac_ct_LIPO=$LIPO
  # Extract the first word of "lipo", so it can be a program name with
  args.
  set dummy lipo; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_LIPO+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_LIPO"; then
      ac_cv_prog_ac_ct_LIPO="$ac_ct_LIPO" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_LIPO="lipo"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        fi
      done
    fi
  fi

```

```

done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_LIPO=$ac_cv_prog_ac_ct_LIPO
if test -n "$ac_ct_LIPO"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_LIPO" >&5
$as_echo "$ac_ct_LIPO" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_LIPO" = x; then
    LIPO=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    LIPO=$ac_ct_LIPO
  fi
else
  LIPO="$ac_cv_prog_LIPO"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}otool; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_OTOOL+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$OTOOL"; then
        ac_cv_prog_OTOOL="$OTOOL" # Let the user override the test.
      else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_prog_OTOOL="${ac_tool_prefix}otool"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
OTOOL=$ac_cv_prog_OTOOL
if test -n "$OTOOL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL" >&5
$as_echo "$OTOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL"; then
    ac_ct_OTOOL=$OTOOL
    # Extract the first word of "otool", so it can be a program name
    with args.
    set dummy otool; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_OTOOL+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$ac_ct_OTOOL"; then
            ac_cv_prog_ac_ct_OTOOL="$ac_ct_OTOOL" # Let the user override the
            test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '$ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_ac_ct_OTOOL="otool"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

fi
fi

```

```

fi
ac_ct_OTOOL=$ac_cv_prog_ac_ct_OTOOL
if test -n "$ac_ct_OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL" >&5
$as_echo "$ac_ct_OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_OTOOL" = x; then
    OTOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OTOOL=$ac_ct_OTOOL
  fi
else
  OTOOL="$ac_cv_prog_OTOOL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool64", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}otool64; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_OTOOL64+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$OTOOL64"; then
        ac_cv_prog_OTOOL64="$OTOOL64" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_OTOOL64="${ac_tool_prefix}otool64"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
      fi
    fi
  fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
OTOOL64=$ac_cv_prog_OTOOL64
if test -n "$OTOOL64"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL64" >&5
$as_echo "$OTOOL64" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_OTOOL64"; then
  ac_ct_OTOOL64=$OTOOL64
  # Extract the first word of "otool64", so it can be a program name
  with args.
  set dummy otool64; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL64+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL64"; then
      ac_cv_prog_ac_ct_OTOOL64="$ac_ct_OTOOL64" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OTOOL64="otool64"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

    fi
  fi
  ac_ct_OTOOL64=$ac_cv_prog_ac_ct_OTOOL64
  if test -n "$ac_ct_OTOOL64"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL64" >&5
$as_echo "$ac_ct_OTOOL64" >&6; }
  fi

```



```

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_OTOOL64" = x; then
    OTOOL64=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OTOOL64=$ac_ct_OTOOL64
  fi
else
  OTOOL64="$ac_cv_prog_OTOOL64"
fi

```

```

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
single_module linker flag" >&5
$as_echo_n "checking for -single_module linker flag... " >&6; }
if ${lt_cv_apple_cc_single_mod+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    lt_cv_apple_cc_single_mod=no
    if test -z "${LT_MULTI_MODULE}"; then
        # By default we will add the -single_module flag. You can
        override
        # by either setting the environment variable LT_MULTI_MODULE
        # non-empty at configure time, or by adding -multi_module to the
        # link flags.
        rm -rf libconfptest.dylib*
        echo "int foo(void){return 1;}" > confptest.c
        echo "$LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
-dynamiclib -Wl,-single_module confptest.c" >&5
        $LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
        -dynamiclib -Wl,-single_module confptest.c 2>confptest.err
        _lt_result=$?
        # If there is a non-empty error log, and "single_module"
        # appears in it, assume the flag caused a linker warning
        if test -s confptest.err && $GREP single_module confptest.err;
then
            cat confptest.err >&5
            # Otherwise, if the output was created with a 0 exit code from
            # the compiler, it worked.
            elif test -f libconfptest.dylib && test $_lt_result -eq 0; then
                lt_cv_apple_cc_single_mod=yes
            else
                cat confptest.err >&5
            fi
            rm -rf libconfptest.dylib*
            rm -f confptest.*
            fi
        fi
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
    $lt_cv_apple_cc_single_mod" >&5
    $as_echo "$lt_cv_apple_cc_single_mod" >&6; }

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
    exported_symbols_list linker flag" >&5
    $as_echo_n "checking for -exported_symbols_list linker flag... " >&6;
    }
    if ${lt_cv_ld_exported_symbols_list+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        lt_cv_ld_exported_symbols_list=no
        save_LDFLAGS=$LDFLAGS
        echo "_main" > confptest.sym
        LDFLAGS="$LDFLAGS -Wl,-exported_symbols_list,confptest.sym"
        cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
    /* end confdefs.h. */

    int
    main ()

```

```

{
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    lt_cv_ld_exported_symbols_list=yes
else
    lt_cv_ld_exported_symbols_list=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_exported_symbols_list" >&5
$as_echo "$lt_cv_ld_exported_symbols_list" >&6; }

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -force_load
linker flag" >&5
$as_echo_n "checking for -force_load linker flag... " >&6; }
if ${lt_cv_ld_force_load+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_ld_force_load=no
    cat > conftest.c << _LT_EOF
int forced_loaded() { return 2;}
_LT_EOF
    echo "$LTCC $LTCFLAGS -c -o conftest.o conftest.c" >&5
    $LTCC $LTCFLAGS -c -o conftest.o conftest.c 2>&5
    echo "$AR cru libconftest.a conftest.o" >&5
    $AR cru libconftest.a conftest.o 2>&5
    echo "$RANLIB libconftest.a" >&5
    $RANLIB libconftest.a 2>&5
    cat > conftest.c << _LT_EOF
int main() { return 0;}
_LT_EOF
    echo "$LTCC $LTCFLAGS $LDFLAGS -o conftest conftest.c -Wl,-
force_load,./libconftest.a" >&5
    $LTCC $LTCFLAGS $LDFLAGS -o conftest conftest.c -Wl,-
force_load,./libconftest.a 2>conftest.err
    _lt_result=$?
    if test -s conftest.err && $GREP force_load conftest.err; then
        cat conftest.err >&5
    elif test -f conftest && test $_lt_result -eq 0 && $GREP
forced_load conftest >/dev/null 2>&1 ; then
        lt_cv_ld_force_load=yes
    else
        cat conftest.err >&5
    fi

```

```

        rm -f confptest.err libconfptest.a confptest confptest.c
        rm -rf confptest.dSYM

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ld_force_load"
>&5
$as_echo "$lt_cv_ld_force_load" >&6; }
    case $host_os in
        rhapsody* | darwin1.[012])
            _lt_dar_allow_undefined='${wl}-undefined ${wl}suppress' ;;
        darwin1.*)
            _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
        darwin*) # darwin 5.x on
            # if running on 10.5 or later, the deployment target defaults
            # to the OS version, if on x86, and 10.4, the deployment
            # target defaults to 10.4. Don't you love it?
            case ${MACOSX_DEPLOYMENT_TARGET-10.0},$host in
                10.0,*86*-darwin8*|10.0,*-darwin[91]*)
                    _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
;;
                10.[012]*)
                    _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
                10.*)
                    _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
;;
            esac
        ;;
    esac
    if test "$lt_cv_apple_cc_single_mod" = "yes"; then
        _lt_dar_single_mod='${single_module}'
    fi
    if test "$lt_cv_ld_exported_symbols_list" = "yes"; then
        _lt_dar_export_syms=' ${wl}-
exported_symbols_list,$output_objdir/${libname}-symbols.expsym'
    else
        _lt_dar_export_syms='~$NMEDIT -s $output_objdir/${libname}-
symbols.expsym ${lib}'
    fi
    if test "$DSYMUTIL" != ":" && test "$lt_cv_ld_force_load" = "no";
then
        _lt_dsymutil='~$DSYMUTIL $lib || :'
    else
        _lt_dsymutil=
    fi
    ;;
esac

# On IRIX 5.3, sys/types and inttypes.h are conflicting.
for ac_header in sys/types.h sys/stat.h stdlib.h string.h memory.h
strings.h \

```

```

        inttypes.h stdint.h unistd.h
do :
  as_ac_Header=`$as_echo "ac_cv_header_$ac_header" | $as_tr_sh`
ac_fn_c_check_header_compile "$LINENO" "$ac_header" "$as_ac_Header"
"$ac_includes_default"
"
if eval test \"x\$$as_ac_Header\" = x"yes"; then :
  cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_header" | $as_tr_cpp` 1
_ACEOF

fi

done

for ac_header in dlfcn.h
do :
  ac_fn_c_check_header_compile "$LINENO" "dlfcn.h"
"ac_cv_header_dlfcn_h" "$ac_includes_default"
"
if test "x$ac_cv_header_dlfcn_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DLFCN_H 1
_ACEOF

fi

done

# Set options

        enable_dlopen=no

        enable_win32_dll=no

        @%:@ Check whether --enable-shared was given.
if test "${enable_shared+set}" = set; then :
  enableval=$enable_shared; p=${PACKAGE-default}
  case $enableval in
    yes) enable_shared=yes ;;
    no) enable_shared=no ;;
    *)
      enable_shared=no

```

```

        # Look at the argument we got.  We use all the common list
separators.
        lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
        for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
            enable_shared=yes
        fi
        done
        IFS="$lt_save_ifs"
        ;;
    esac
else
    enable_shared=yes
fi

```

```

@%:@ Check whether --enable-static was given.
if test "${enable_static+set}" = set; then :
    enableval=$enable_static; p=${PACKAGE-default}
    case $enableval in
    yes) enable_static=yes ;;
    no) enable_static=no ;;
    *)
        enable_static=no
        # Look at the argument we got.  We use all the common list
separators.
        lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
        for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
            enable_static=yes
        fi
        done
        IFS="$lt_save_ifs"
        ;;
    esac
else
    enable_static=yes
fi

```

```

@%:@ Check whether --with-pic was given.
if test "${with_pic+set}" = set; then :
  withval=$with_pic; lt_p=${PACKAGE-default}
  case $withval in
    yes|no) pic_mode=$withval ;;
    *)
      pic_mode=default
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for lt_pkg in $withval; do
        IFS="$lt_save_ifs"
        if test "X$lt_pkg" = "X$lt_p"; then
          pic_mode=yes
        fi
      done
      IFS="$lt_save_ifs"
      ;;
    esac
else
  pic_mode=default
fi

test -z "$pic_mode" && pic_mode=default

```

```

@%:@ Check whether --enable-fast-install was given.
if test "${enable_fast_install+set}" = set; then :
  enableval=$enable_fast_install; p=${PACKAGE-default}
  case $enableval in
    yes) enable_fast_install=yes ;;
    no) enable_fast_install=no ;;
    *)
      enable_fast_install=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_fast_install=yes

```

```
    fi
    done
    IFS="$lt_save_ifs"
    ;;
  esac
else
  enable_fast_install=yes
fi
```

```
# This can be used to rebuild libtool when needed
LIBTOOL_DEPS="$ltmain"
```

```
# Always use our own libtool.
LIBTOOL='$(top_builddir) '
LIBTOOL="$LIBTOOL/${host_alias}-libtool"
```



```
test -z "$LN_S" && LN_S="ln -s"
```

```
if test -n "${ZSH_VERSION+set}" ; then  
    setopt NO_GLOB_SUBST  
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for objdir" >&5  
$as_echo_n "checking for objdir... " >&6; }  
if ${lt_cv_objdir+:} false; then :  
    $as_echo_n "(cached) " >&6  
else  
    rm -f .libs 2>/dev/null  
mkdir .libs 2>/dev/null  
if test -d .libs; then  
    lt_cv_objdir=.libs  
else  
    # MS-DOS does not allow filenames that begin with a dot.  
    lt_cv_objdir=_libs  
fi  
rmdir .libs 2>/dev/null  
fi  
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_objdir" >&5  
$as_echo "$lt_cv_objdir" >&6; }  
objdir=$lt_cv_objdir
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define LT_OBJDIR "$lt_cv_objdir/"  
_ACEOF
```

```

case $host_os in
aix3*)
    # AIX sometimes has problems with the GCC collect2 program.  For
    some
    # reason, if we set the COLLECT_NAMES environment variable, the
    problems
    # vanish in a puff of smoke.
    if test "X${COLLECT_NAMES+set}" != Xset; then
        COLLECT_NAMES=
        export COLLECT_NAMES
    fi
    ;;
esac

# Global variables:
ofile=${host_alias}-libtool
can_build_shared=yes

# All known linkers require a `.a' archive for static linking (except
MSVC,
# which needs '.lib').
libext=a

with_gnu_ld="$lt_cv_prog_gnu_ld"

old_CC="$CC"
old_CFLAGS="$CFLAGS"

# Set sane defaults for various variables
test -z "$CC" && CC=cc
test -z "$LTCC" && LTCC=$CC
test -z "$LTCFLAGS" && LTCFLAGS=$CFLAGS
test -z "$LD" && LD=ld
test -z "$ac_objext" && ac_objext=o

for cc_temp in $compiler""; do
    case $cc_temp in
        compile | *[\//]compile | ccache | *[\//]ccache ) ;;
        distcc | *[\//]distcc | purify | *[\//]purify ) ;;
        \-*) ;;
        *) break;;
    esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^$host_alias-%%"`

# Only perform the check for file, if the check method requires it
test -z "$MAGIC_CMD" && MAGIC_CMD=file
case $deplibs_check_method in
file_magic*)
    if test "$file_magic_cmd" = '$MAGIC_CMD'; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
${ac_tool_prefix}file" >&5
$as_echo_n "checking for ${ac_tool_prefix}file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
  [\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
  for ac_dir in $ac_dummy; do
    IFS="$lt_save_ifs"
    test -z "$ac_dir" && ac_dir=.
    if test -f $ac_dir/${ac_tool_prefix}file; then
      lt_cv_path_MAGIC_CMD="$ac_dir/${ac_tool_prefix}file"
      if test -n "$file_magic_test_file"; then
        case $deplibs_check_method in
        "file_magic ")
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

_LT_EOF
          fi ;;
        esac
      fi
    break
  fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac

```

```

fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test -z "$lt_cv_path_MAGIC_CMD"; then
  if test -n "$ac_tool_prefix"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for file" >&5
$as_echo_n "checking for file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
  [\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
  for ac_dir in $ac_dummy; do
    IFS="$lt_save_ifs"
    test -z "$ac_dir" && ac_dir=.
    if test -f $ac_dir/file; then
      lt_cv_path_MAGIC_CMD="$ac_dir/file"
      if test -n "$file_magic_test_file"; then
        case $deplibs_check_method in
        "file_magic "*)
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that

```

```
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org
```

```
_LT_EOF
    fi ;;
  esac
  fi
  break
fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

else
  MAGIC_CMD=:
fi
fi

fi
;;
esac

# Use C for the default configuration in the libtool script

lt_save_CC="$CC"
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

# Source file extension for C test sources.
ac_ext=c

# Object file extension for compiled C test sources.
```

```

objext=o
objext=$objext

# Code to be used in simple compile tests
lt_simple_compile_test_code="int some_variable = 0;"

# Code to be used in simple link tests
lt_simple_link_test_code='int main(){return(0);}'

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Save the default compiler, since it gets overwritten when the other
# tags are being tested, and _LT_TAGVAR(compiler, []) is a NOP.
compiler_DEFAULT=$CC

# save warnings/boilerplate of simple test code
ac_outfile=confptest.$ac_objext
echo "$lt_simple_compile_test_code" >confptest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>confptest.err
_lt_compiler_boilerplate=`cat confptest.err`
$RM confptest*

ac_outfile=confptest.$ac_objext
echo "$lt_simple_link_test_code" >confptest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >confptest.err
_lt_linker_boilerplate=`cat confptest.err`
$RM -r confptest*

if test -n "$compiler"; then

lt_prog_compiler_no_builtin_flag=

if test "$GCC" = yes; then
  case $cc_basename in
  nvcc*)
    lt_prog_compiler_no_builtin_flag=' -Xcompiler -fno-builtin' ;;
  *)

```

```

    lt_prog_compiler_no_builtin_flag=' -fno-builtin' ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -fno-rtti -fno-exceptions" >&5
$as_echo_n "checking if $compiler supports -fno-rtti -fno-
exceptions... " >&6; }
if ${lt_cv_prog_compiler_rtti_exceptions+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_rtti_exceptions=no
  ac_outfile=confptest.$ac_objext
  echo "$lt_simple_compile_test_code" > confptest.$ac_ext
  lt_compiler_flag="-fno-rtti -fno-exceptions"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "confptest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>confptest.err)
  ac_status=$?
  cat confptest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
    $SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
    if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
      lt_cv_prog_compiler_rtti_exceptions=yes
    fi
  fi
  $RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_rtti_exceptions" >&5
$as_echo "$lt_cv_prog_compiler_rtti_exceptions" >&6; }

if test x"$lt_cv_prog_compiler_rtti_exceptions" = xyes; then

lt_prog_compiler_no_builtin_flag="$lt_prog_compiler_no_builtin_flag -
fno-rtti -fno-exceptions"

```

```
else
:
fi
fi
```

```
lt_prog_compiler_wl=
lt_prog_compiler_pic=
lt_prog_compiler_static=
```

```
if test "$GCC" = yes; then
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_static='-static'

  case $host_os in
    aix*)
      # All AIX code is PIC.
      if test "$host_cpu" = ia64; then
        # AIX 5 now supports IA64 processor
        lt_prog_compiler_static='-Bstatic'
      fi
      ;;

    amigaos*)
      case $host_cpu in
        powerpc)
          # see comment about AmigaOS4 .so support
          lt_prog_compiler_pic='-fPIC'
          ;;
        m68k)
          # FIXME: we need at least 68020 code to build shared
          libraries, but
          # adding the '-m68020' flag to GCC prevents building
          anything better,
          # like '-m68040'.
          lt_prog_compiler_pic='-m68020 -resident32 -malways-
restore-a4'
          ;;
        esac
          ;;

    beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)
      # PIC is the default for these OSes.
      ;;

    mingw* | cygwin* | pw32* | os2* | cegcc*)
```



```

    # This hack is so that the source file can tell whether it is
being
    # built for inclusion in a dll (and should export symbols for
example).
    # Although the cygwin gcc ignores -fPIC, still need this for
old-style
    # (--disable-auto-import) libraries
    lt_prog_compiler_pic='-DDLL_EXPORT'
    ;;

darwin* | rhapsody*)
    # PIC is the default on this platform
    # Common symbols not allowed in MH_DYLIB files
    lt_prog_compiler_pic='-fno-common'
    ;;

haiku*)
    # PIC is the default for Haiku.
    # The "-static" flag exists, but is broken.
    lt_prog_compiler_static=
    ;;

hpux*)
    # PIC is the default for 64-bit PA HP-UX, but not for 32-bit
    # PA HP-UX.  On IA64 HP-UX, PIC is the default but the pic flag
    # sets the default TLS model and affects inlining.
    case $host_cpu in
    hppa*64*)
    # +Z the default
    ;;
    *)
    lt_prog_compiler_pic='-fPIC'
    ;;
    esac
    ;;

interix[3-9]*)
    # Interix 3.x gcc -fpic/-fPIC options generate broken code.
    # Instead, we relocate shared libraries at runtime.
    ;;

msdosdjgpp*)
    # Just because we use GCC doesn't mean we suddenly get shared
libraries
    # on systems that don't support them.
    lt_prog_compiler_can_build_shared=no
    enable_shared=no
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise

```

```

# it will coredump.
lt_prog_compiler_pic='-fPIC -shared'
;;

sysv4*MP*)
  if test -d /usr/nec; then
    lt_prog_compiler_pic=-Kconform_pic
  fi
  ;;

*)
  lt_prog_compiler_pic='-fPIC'
  ;;
esac

case $cc_basename in
nvcc*) # Cuda Compiler Driver 2.2
  lt_prog_compiler_wl='-Xlinker '
  if test -n "$lt_prog_compiler_pic"; then
    lt_prog_compiler_pic="-Xcompiler $lt_prog_compiler_pic"
  fi
  ;;
esac
else
# PORTME Check for flag to pass linker flags through the system
compiler.
case $host_os in
aix*)
  lt_prog_compiler_wl='-Wl,'
  if test "$host_cpu" = ia64; then
# AIX 5 now supports IA64 processor
lt_prog_compiler_static='-Bstatic'
else
lt_prog_compiler_static='-bnso -bI:/lib/syscalls.exp'
fi
;;

mingw* | cygwin* | pw32* | os2* | cegcc*)
# This hack is so that the source file can tell whether it is
being
# built for inclusion in a dll (and should export symbols for
example).
lt_prog_compiler_pic='-DDLL_EXPORT'
;;

hpux9* | hpux10* | hpux11*)
  lt_prog_compiler_wl='-Wl,'
  # PIC is the default for IA64 HP-UX and 64-bit HP-UX, but
  # not for PA HP-UX.
  case $host_cpu in
  hppa*64*|ia64*)
    # +Z the default

```

```

;;
*)
lt_prog_compiler_pic='+Z'
;;
esac
# Is there a better lt_prog_compiler_static that works with the
bundled CC?
lt_prog_compiler_static='${wl}-a ${wl}archive'
;;

irix5* | irix6* | nonstopux*)
lt_prog_compiler_wl='-Wl,'
# PIC (with -KPIC) is the default.
lt_prog_compiler_static='-non_shared'
;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
case $cc_basename in
# old Intel for x86_64 which still supported -KPIC.
ecc*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-static'
;;
# icc used to be incompatible with GCC.
# ICC 10 doesn't accept -KPIC any more.
icc* | ifort*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fPIC'
lt_prog_compiler_static='-static'
;;
# Lahey Fortran 8.1.
lf95*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='--shared'
lt_prog_compiler_static='--static'
;;
nagfor*)
# NAG Fortran compiler
lt_prog_compiler_wl='-Wl,-Wl,,'
lt_prog_compiler_pic='-PIC'
lt_prog_compiler_static='-Bstatic'
;;
pgcc* | pgf77* | pgf90* | pgf95* | pgfortran*)
# Portland Group compilers (*not* the Pentium gcc compiler,
# which looks to be a dead project)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fpic'
lt_prog_compiler_static='-Bstatic'
;;
ccc*)
lt_prog_compiler_wl='-Wl,'

```

```

    # All Alpha code is PIC.
    lt_prog_compiler_static='-non_shared'
    ;;
xl* | bgxl* | bgf* | mpixl*)
# IBM XL C 8.0/Fortran 10.1, 11.1 on PPC and BlueGene
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-qplic'
lt_prog_compiler_static='-qstaticlink'
;;
*)
case ` $CC -V 2>&1 | sed 5q` in
*Sun\ Ceres\ Fortran* | *Sun*Fortran*\ [1-7].* | *Sun*Fortran*\
8.[0-3]*)
    # Sun Fortran 8.3 passes all unrecognized flags to the linker
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    lt_prog_compiler_wl=''
    ;;
*Sun\ F* | *Sun*Fortran*)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    lt_prog_compiler_wl='-Qoption ld '
    ;;
*Sun\ C*)
    # Sun C 5.9
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    lt_prog_compiler_wl='-Wl,'
    ;;
    *Intel*\ [CF]*Compiler*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-fpic'
    lt_prog_compiler_static='-static'
    ;;
*Portland\ Group*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-fpic'
    lt_prog_compiler_static='-Bstatic'
    ;;
esac
;;
esac
;;

newsos6)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
    otherwise

```

```

# it will coredump.
lt_prog_compiler_pic='-fPIC -shared'
;;

osf3* | osf4* | osf5*)
  lt_prog_compiler_wl='-Wl,'
  # All OSF/1 code is PIC.
  lt_prog_compiler_static='-non_shared'
  ;;

rdos*)
  lt_prog_compiler_static='-non_shared'
  ;;

solaris*)
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  case $cc_basename in
    f77* | f90* | f95* | sunf77* | sunf90* | sunf95*)
      lt_prog_compiler_wl='-Qoption ld ';;
    *)
      lt_prog_compiler_wl='-Wl, ';;
  esac
  ;;

sunos4*)
  lt_prog_compiler_wl='-Qoption ld '
  lt_prog_compiler_pic='-PIC'
  lt_prog_compiler_static='-Bstatic'
  ;;

sysv4 | sysv4.2uw2* | sysv4.3*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  ;;

sysv4*MP*)
  if test -d /usr/nec ;then
    lt_prog_compiler_pic='-Kconform_pic'
    lt_prog_compiler_static='-Bstatic'
  fi
  ;;

sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  ;;

unicos*)
  lt_prog_compiler_wl='-Wl,'

```

```

    lt_prog_compiler_can_build_shared=no
    ;;

    uts4*)
        lt_prog_compiler_pic='-pic'
        lt_prog_compiler_static='-Bstatic'
        ;;

    *)
        lt_prog_compiler_can_build_shared=no
        ;;
    esac
fi

case $host_os in
# For platforms which do not support PIC, -DPIC is meaningless:
*djgpp*)
    lt_prog_compiler_pic=
    ;;
*)
    lt_prog_compiler_pic="$lt_prog_compiler_pic@&t@ -DPIC"
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic=$lt_prog_compiler_pic
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic" >&5
$as_echo "$lt_cv_prog_compiler_pic" >&6; }
lt_prog_compiler_pic=$lt_cv_prog_compiler_pic

#
# Check to make sure the PIC flag actually works.
#
if test -n "$lt_prog_compiler_pic"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_works=no
    ac_outfile=conftest.$ac_objext
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext
    lt_compiler_flag="$lt_prog_compiler_pic@&t@ -DPIC"

```

```

# Insert the option either (1) after the last *FLAGS variable, or
# (2) before a word containing "confptest.", or (3) at the end.
# Note that $ac_compile itself does not contain backslashes and
begins
# with a dollar sign (not a hyphen), so the echo should work
correctly.
# The option is referenced via a variable to avoid confusing sed.
lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS)\{0,1\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*confptest\. : $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
(eval echo "\"\${as_me:$LINENO: $lt_compile}\"" >&5)
(eval "$lt_compile" 2>confptest.err)
ac_status=$?
cat confptest.err >&5
echo "$as_me:$LINENO: \$? = $ac_status" >&5
if (exit $ac_status) && test -s "$ac_outfile"; then
# The compiler can only warn and ignore the option if not
recognized
# So say no if there are warnings other than the usual output.
$ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
$SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
lt_cv_prog_compiler_pic_works=yes
fi
fi
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works" >&5
$as_echo "$lt_cv_prog_compiler_pic_works" >&6; }

if test x"$lt_cv_prog_compiler_pic_works" = xyes; then
case $lt_prog_compiler_pic in
"" | " *") ;;
*) lt_prog_compiler_pic="$lt_cv_prog_compiler_pic" ;;
esac
else
lt_prog_compiler_pic=
lt_prog_compiler_can_build_shared=no
fi
fi

```

```

#
# Check to make sure the static flag actually works.
#
wl=$lt_prog_compiler_wl eval
lt_tmp_static_flag="\$lt_prog_compiler_static\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_static_works=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
  # The linker can only warn and ignore the option if not
  recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&5
    $ECHO "$lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_static_works=yes
    fi
  else
    lt_cv_prog_compiler_static_works=yes
  fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works" >&5
$as_echo "$lt_cv_prog_compiler_static_works" >&6; }

if test x"$lt_cv_prog_compiler_static_works" = xyes; then
:
else
  lt_prog_compiler_static=
fi

```



```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o=no
  $RM -r conftest 2>/dev/null
  mkdir conftest
  cd conftest
  mkdir out
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext

  lt_compiler_flag="-o out/conftest2.$ac_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\ :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>out/conftest.err)
  ac_status=$?
  cat out/conftest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s out/conftest2.$ac_objext
  then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/conftest.exp
    $SED '/^$/d; /^ *+/d' out/conftest.err >out/conftest.er2
    if test ! -s out/conftest.er2 || diff out/conftest.exp
out/conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_c_o=yes
    fi
  fi
  chmod u+w . 2>&5
  $RM conftest*
  # SGI C++ compiler will create directory out/ii_files/ for
  # template instantiation

```

```

test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r conftest
$RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o=no
  $RM -r conftest 2>/dev/null
  mkdir conftest
  cd conftest
  mkdir out
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext

  lt_compiler_flag="-o out/conftest2.$ac_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
  begins
  # with a dollar sign (not a hyphen), so the echo should work
  correctly.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>out/conftest.err)
  ac_status=$?
  cat out/conftest.err >&5
  echo "$as_me:$LINENO: $? = $ac_status" >&5
  if (exit $ac_status) && test -s out/conftest2.$ac_objext
  then
    # The compiler can only warn and ignore the option if not
    recognized
    # So say no if there are warnings

```

```

    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
    $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
    if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
        lt_cv_prog_compiler_c_o=yes
    fi
fi
chmod u+w . 2>&5
$RM confptest*
# SGI C++ compiler will create directory out/ii_files/ for
# template instantiation
test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r confptest
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o" = no && test "$need_locks" != no;
then
    # do not overwrite the value of need_locks provided by the user
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
    hard_links=yes
    $RM confptest*
    ln confptest.a confptest.b 2>/dev/null && hard_links=no
    touch confptest.a
    ln confptest.a confptest.b 2>&5 || hard_links=no
    ln confptest.a confptest.b 2>/dev/null && hard_links=no
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }
    if test "$hard_links" = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: `\$CC' does not
support `'-c -o', so `make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: `\$CC' does not support `'-c -o', so `make
-j' may be unsafe" >&2;}
        need_locks=warn
    fi
else
    need_locks=no
fi

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }

runpath_var=
allow_undefined_flag=
always_export_symbols=no
archive_cmds=
archive_expsym_cmds=
compiler_needs_object=no
enable_shared_with_static_runtimes=no
export_dynamic_flag_spec=
export_symbols_cmds='$NM $libobjs $convenience | $global_symbol_pipe
| $SED '\''s/.* //'\' | sort | uniq > $export_symbols'
hardcode_automatic=no
hardcode_direct=no
hardcode_direct_absolute=no
hardcode_libdir_flag_spec=
hardcode_libdir_separator=
hardcode_minus_L=no
hardcode_shlibpath_var=unsupported
inherit_rpath=no
link_all_deplibs=unknown
module_cmds=
module_expsym_cmds=
old_archive_from_new_cmds=
old_archive_from_expsyms_cmds=
thread_safe_flag_spec=
whole_archive_flag_spec=
# include_expsyms should be a list of space-separated symbols to be
*always*
# included in the symbol list
include_expsyms=
# exclude_expsyms can be an extended regexp of symbols to exclude
# it will be wrapped by ` (' and `)$', so one must not match
beginning or
# end of line. Example: `a|bc|.*d.*' will exclude the symbols `a'
and `bc',
# as well as any symbol that contains `d'.
exclude_expsyms='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'
# Although _GLOBAL_OFFSET_TABLE_ is a valid symbol C name, most
a.out
# platforms (ab)use it in PIC code, but their linkers get confused
if
# the symbol is explicitly referenced. Since portable code cannot

```

```

# rely on this symbol name, it's probably fine to never include it
in
# preloaded symbol tables.
# Exclude shared library initialization/finalization symbols.
extract_expsyms_cmds=

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
# FIXME: the MSVC++ port hasn't been tested in a loooong time
# When not using gcc, we currently assume that we are using
# Microsoft Visual C++.
if test "$GCC" != yes; then
with_gnu_ld=no
fi
;;
interix*)
# we just hope/assume this is gcc and not c89 (= MSVC++)
with_gnu_ld=yes
;;
openbsd*)
with_gnu_ld=no
;;
esac

ld_shlibs=yes

# On some targets, GNU ld is compatible enough with the native
linker
# that we're better off using the native interface for both.
lt_use_gnu_ld_interface=no
if test "$with_gnu_ld" = yes; then
case $host_os in
aix*)
# The AIX port of GNU ld has always aspired to compatibility
# with the native linker. However, as the warning in the GNU ld
# block says, versions before 2.19.5* couldn't really create
working
# shared libraries, regardless of the interface used.
case ` $LD -v 2>&1 ` in
*\ (GNU\ Binutils)\ 2.19.5*) ;;
*\ (GNU\ Binutils)\ 2.[2-9]*) ;;
*\ (GNU\ Binutils)\ [3-9]*) ;;
*)
lt_use_gnu_ld_interface=yes
;;
esac
;;
*)
lt_use_gnu_ld_interface=yes
;;
esac
fi

```

```

if test "$lt_use_gnu_ld_interface" = yes; then
  # If archive_cmds runs LD, not CC, wlarc should be empty
  wlarc='${wl}'

  # Set some defaults for GNU ld with shared library support. These
  # are reset later if shared libraries are not supported. Putting
them
  # here allows them to be overridden if necessary.
  runpath_var=LD_RUN_PATH
  hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
  export_dynamic_flag_spec='${wl}--export-dynamic'
  # ancient GNU ld didn't support --whole-archive et. al.
  if $LD --help 2>&1 | $GREP 'no-whole-archive' > /dev/null; then
    whole_archive_flag_spec="$wlarc"--whole-archive$convenience
  "$wlarc"--no-whole-archive'
  else
    whole_archive_flag_spec=
  fi
  supports_anon_versioning=no
  case ` $LD -v 2>&1 ` in
    *GNU\ gold*) supports_anon_versioning=yes ;;
    *\ [01].* | *\ 2.[0-9].* | *\ 2.10.*) ;; # catch versions < 2.11
    *\ 2.11.93.0.2\ *) supports_anon_versioning=yes ;; # RH7.3 ...
    *\ 2.11.92.0.12\ *) supports_anon_versioning=yes ;; # Mandrake
8.2 ...
    *\ 2.11.*) ;; # other 2.11 versions
    *) supports_anon_versioning=yes ;;
  esac

  # See if GNU ld supports shared libraries.
  case $host_os in
aix[3-9]*)
  # On AIX/PPC, the GNU linker is very broken
  if test "$host_cpu" != ia64; then
    ld_shlibs=no
    cat <<_LT_EOF 1>&2

*** Warning: the GNU linker, at least up to release 2.19, is reported
*** to be unable to reliably create shared libraries on AIX.
*** Therefore, libtool is disabling shared libraries support.  If you
*** really care for shared libraries, you may want to install binutils
*** 2.20 or above, or modify your PATH so that a non-GNU linker is
found.
*** You will then need to restart the configuration process.

_LT_EOF
    fi
    ;;

amigaos*)
  case $host_cpu in

```

```

powerpc)
    # see comment about AmigaOS4 .so support
    archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds=''
    ;;
m68k)
    archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_minus_L=yes
    ;;
esac
;;

beos*)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
        allow_undefined_flag=unsupported
        # Joseph Beckenbach <jrb3@best.com> says some releases of gcc
        # support --undefined. This deserves some investigation. FIXME
        archive_cmds='$CC -nostart $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
        else
            ld_shlibs=no
            fi
        ;;

cygwin* | mingw* | pw32* | cegcc*)
    # _LT_TAGVAR(hardcode_libdir_flag_spec, ) is actually
meaningless,
    # as there is no search path for DLLs.
    hardcode_libdir_flag_spec='-L$libdir'
    export_dynamic_flag_spec='${wl}--export-all-symbols'
    allow_undefined_flag=unsupported
    always_export_symbols=no
    enable_shared_with_static_runtimes=yes
    export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\ ]*\)/\1
DATA/;s/^\.*[ ]__nm__\([^\ ]*\)[ ]\([^\ ]*/\1 DATA/;^I[ ]/d;/^[AITW][
]/s/.* //'\' | sort | uniq > $export_symbols'

exclude_expsyms='[_]+GLOBAL_OFFSET_TABLE_|[_]+GLOBAL__[FID]_.*|[_]+hea
d_[A-Za-z0-9_]+_dll|[A-Za-z0-9_]+_dll_iname'

    if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then

```

```

        archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
        # If the export-symbols file already is a .def file (1st line
        # is EXPORTS), use it as is; otherwise, prepend...
        archive_expsym_cmds='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
        cp $export_symbols $output_objdir/$soname.def;
        else
        echo EXPORTS > $output_objdir/$soname.def;
        cat $export_symbols >> $output_objdir/$soname.def;
        fi~
        $CC -shared $output_objdir/$soname.def $libobjs $deplibs
$compiler_flags -o $output_objdir/$soname ${wl}--enable-auto-image-
base -Xlinker --out-implib -Xlinker $lib'
        else
        ld_shlibs=no
        fi
        ;;

haiku*)
        archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
        link_all_deplibs=yes
        ;;

interix[3-9]*)
        hardcode_direct=no
        hardcode_shlibpath_var=no
        hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
        export_dynamic_flag_spec='${wl}-E'
        # Hack: On Interix 3.x, we cannot compile PIC because of a
broken gcc.
        # Instead, shared libraries are loaded at an image base
(0x10000000 by
        # default) and relocated if they conflict, which is a slow very
memory
        # consuming and fragmenting process. To avoid this, we pick a
random,
        # 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000
at link
        # time. Moving up from 0x10000000 also allows more sbrk(2)
space.
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,`expr ${RANDOM} %
4096 / 2 \* 262144 + 1342177280` -o $lib'
        archive_expsym_cmds='sed "s,^,_" $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,`expr ${RANDOM}
% 4096 / 2 \* 262144 + 1342177280` -o $lib'
        ;;

```



```

gnu* | linux* | tpf* | k*bsd*-gnu | kopensolaris*-gnu)
    tmp_diet=no
    if test "$host_os" = linux-dietlibc; then
    case $cc_basename in
        diet\ *) tmp_diet=yes;; # linux-dietlibc with static linking
(!diet-dyn)
    esac
    fi
    if $LD --help 2>&1 | $EGREP ': supported targets:.* elf' >
/dev/null \
    && test "$tmp_diet" = no
    then
    tmp_addflag=' $pic_flag'
    tmp_sharedflag='-shared'
    case $cc_basename,$host_cpu in
        pgcc*) # Portland Group C compiler
            whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'
            tmp_addflag=' $pic_flag'
            ;;
        pgf77* | pgf90* | pgf95* | pgfortran*)
            # Portland Group f77 and f90 compilers
            whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'
            tmp_addflag=' $pic_flag -Mnomain' ;;
        ecc*,ia64* | icc*,ia64*) # Intel C compiler on ia64
            tmp_addflag=' -i_dynamic' ;;
        efc*,ia64* | ifort*,ia64*) # Intel Fortran compiler on ia64
            tmp_addflag=' -i_dynamic -nofor_main' ;;
        ifc* | ifort*) # Intel Fortran compiler
            tmp_addflag=' -nofor_main' ;;
        lf95*) # Lahey Fortran 8.1
            whole_archive_flag_spec=
            tmp_sharedflag='--shared' ;;
        xl[cC]* | bgxl[cC]* | mpixl[cC]*) # IBM XL C 8.0 on PPC (deal
with xlf below)
            tmp_sharedflag='-qmkshrobj'
            tmp_addflag= ;;
        nvcc*) # Cuda Compiler Driver 2.2
            whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'
            compiler_needs_object=yes
            ;;
    esac
    case ` $CC -V 2>&1 | sed 5q` in

```

```

    *Sun\ C*)                # Sun C 5.9
        whole_archive_flag_spec='${wl}--whole-archive`new_convenience=;
for conv in $convenience\`"; do test -z \"$conv\" ||
new_convenience=\"`$new_convenience,$conv\"; done; func_echo_all
\"`$new_convenience\` ` ${wl}--no-whole-archive'
        compiler_needs_object=yes
        tmp_sharedflag='-G' ;;
    *Sun\ F*)                # Sun Fortran 8.3
        tmp_sharedflag='-G' ;;
esac
    archive_cmds='$CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname -o $lib'

    if test "x$supports_anon_versioning" = xyes; then
        archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
        cat $export_symbols | sed -e "s/\(.*\)/\1;/" >>
$output_objdir/$libname.ver~
        echo "local: *; };" >> $output_objdir/$libname.ver~
        $CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-version-script
${wl}$output_objdir/$libname.ver -o $lib'
    fi

    case $cc_basename in
    xlf* | bgf* | bgxlf* | mpixlf*)
        # IBM XL Fortran 10.1 on PPC cannot create shared libs itself
        whole_archive_flag_spec='--whole-archive$convenience --no-
whole-archive'
        hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
        archive_cmds='$LD -shared $libobjs $deplibs $linker_flags -
soname $soname -o $lib'
        if test "x$supports_anon_versioning" = xyes; then
            archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
            cat $export_symbols | sed -e "s/\(.*\)/\1;/" >>
$output_objdir/$libname.ver~
            echo "local: *; };" >> $output_objdir/$libname.ver~
            $LD -shared $libobjs $deplibs $linker_flags -soname $soname
-version-script $output_objdir/$libname.ver -o $lib'
        fi
        ;;
    esac
    else
        ld_shlibs=no
    fi
    ;;
netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable $libobjs $deplibs $linker_flags -o
$lib'

```

```

    wlarc=
    else
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
        fi
        ;;

solaris*)
    if $LD -v 2>&1 | $GREP 'BFD 2\.8' > /dev/null; then
        ld_shlibs=no
        cat <<_LT_EOF 1>&2

*** Warning: The releases 2.8.* of the GNU linker cannot reliably
*** create shared libraries on Solaris systems.  Therefore, libtool
*** is disabling shared libraries support.  We urge you to upgrade GNU
*** binutils to release 2.9.1 or newer.  Another option is to modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

_LT_EOF
        elif $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
            archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
            else
                ld_shlibs=no
            fi
            ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX*)
    case ` $LD -v 2>&1 ` in
        *\ [01].* | *\ 2.[0-9].* | *\ 2.1[0-5].*)
            ld_shlibs=no
            cat <<_LT_EOF 1>&2

*** Warning: Releases of the GNU linker prior to 2.16.91.0.3 can not
*** reliably create shared libraries on SCO systems.  Therefore,
libtool
*** is disabling shared libraries support.  We urge you to upgrade GNU
*** binutils to release 2.16.91.0.3 or newer.  Another option is to
modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

_LT_EOF
        ;;

```

```

*)
# For security reasons, it is highly recommended that you
always
# use absolute paths for naming shared libraries, and exclude
the
# DT_RUNPATH tag from executables and libraries. But doing so
# requires that you compile everything twice, which is a pain.
if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    else
        ld_shlibs=no
    fi
;;
esac
;;

sunos4*)
archive_cmds='$LD -assert pure-text -Bshareable -o $lib $libobjs
$deplibs $linker_flags'
wlarc=
hardcode_direct=yes
hardcode_shlibpath_var=no
;;

*)
if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
    archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    else
        ld_shlibs=no
    fi
;;
esac

if test "$ld_shlibs" = no; then
    runpath_var=
    hardcode_libdir_flag_spec=
    export_dynamic_flag_spec=
    whole_archive_flag_spec=
fi
else

```

```

# PORTME fill in a description of your system's linker (not GNU
ld)
case $host_os in
aix3*)
    allow_undefined_flag=unsupported
    always_export_symbols=yes
    archive_expsym_cmds='$LD -o $output_objdir/$soname $libobjs
$deplibs $linker_flags -bE:$export_symbols -T512 -H512 -bM:SRE~$AR
$AR_FLAGS $lib $output_objdir/$soname'
    # Note: this linker hardcodes the directories in LIBPATH if
there
    # are no directories specified by -L.
    hardcode_minus_L=yes
    if test "$GCC" = yes && test -z "$lt_prog_compiler_static"; then
# Neither direct hardcoding nor static linking is supported with
a
    # broken collect2.
    hardcode_direct=unsupported
    fi
    ;;

aix[4-9]*)
    if test "$host_cpu" = ia64; then
# On IA64, the linker does run time linking by default, so we
don't
    # have to do anything special.
    aix_use_runtimelinking=no
    exp_sym_flag='-Bexport'
    no_entry_flag=""
    else
# If we're using GNU nm, then we don't want the "-C" option.
# -C means demangle to AIX nm, but means don't demangle with GNU
nm
    # Also, AIX nm treats weak defined symbols like other global
# defined symbols, whereas GNU nm marks them as "W".
    if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then
        export_symbols_cmds='$NM -Bpg $libobjs $convenience | awk '\''{
if ((\($ 2 == "T") || (\$ 2 == "D") || (\$ 2 == "B") || (\$ 2 == "W"))
&& (substr(\$ 3,1,1) != ".")) { print \$ 3 } }'\'' | sort -u >
$export_symbols'
    else
        export_symbols_cmds='$NM -BCpg $libobjs $convenience | awk
'\''{ if ((\($ 2 == "T") || (\$ 2 == "D") || (\$ 2 == "B")) &&
(substr(\$ 3,1,1) != ".")) { print \$ 3 } }'\'' | sort -u >
$export_symbols'
    fi
    aix_use_runtimelinking=no

# Test if we are trying to use run time linking or normal
# AIX style linking. If -brtl is somewhere in LDFLAGS, we
# need to do runtime linking.
case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)

```

```

    for ld_flag in $LDFLAGS; do
    if (test $ld_flag = "-brtl" || test $ld_flag = "-Wl,-brtl");
then
        aix_use_runtimelinking=yes
        break
    fi
    done
    ;;
esac

exp_sym_flag='-bexport'
no_entry_flag='-bnoentry'
fi

# When large executables or shared objects are built, AIX ld can
# have problems creating the table of contents.  If linking a
library
# or program results in "error TOC overflow" add -mminimal-toc
to
# CXXFLAGS/CFLAGS for g++/gcc.  In the cases where that is not
# enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

archive_cmds=''
hardcode_direct=yes
hardcode_direct_absolute=yes
hardcode_libdir_separator=':'
link_all_deplibs=yes
file_list_spec='${wl}-f,'

if test "$GCC" = yes; then
case $host_os in aix4.[012]|aix4.[012].*)
# We only want to do this on AIX 4.2 and lower, the check
# below for broken collect2 doesn't work under 4.3+
collect2name=`${CC} -print-prog-name=collect2`
if test -f "$collect2name" &&
strings "$collect2name" | $GREP resolve_lib_name >/dev/null
then
# We have reworked collect2
:
else
# We have old collect2
hardcode_direct=unsupported
# It fails to find uninstalled libraries when the uninstalled
# path is not listed in the libpath.  Setting hardcode_minus_L
# to unsupported forces relinking
hardcode_minus_L=yes
hardcode_libdir_flag_spec='-L$libdir'
hardcode_libdir_separator=
fi
;;
esac
shared_flag='-shared'

```

```

if test "$aix_use_runtimelinking" = yes; then
    shared_flag="$shared_flag "${wl}-G'
fi
else
# not using gcc
if test "$host_cpu" = ia64; then
# VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3 Release
# chokes on -Wl,-G. The following line is correct:
    shared_flag='-G'
else
    if test "$aix_use_runtimelinking" = yes; then
        shared_flag='${wl}-G'
    else
        shared_flag='${wl}-bM:SRE'
    fi
fi
fi

export_dynamic_flag_spec='${wl}-bexpall'
# It seems that -bexpall does not export symbols beginning with
# underscore (_), so it is better to generate a list of symbols
to export.
always_export_symbols=yes
if test "$aix_use_runtimelinking" = yes; then
# Warning - without using the other runtime loading flags (-
brtl),
# -berok will link without error, but may produce a broken
library.
    allow_undefined_flag='-berok'
    # Determine the default libpath from the value encoded in an
    # empty executable.
    if test "${lt_cv_aix_libpath+set}" = set; then
        aix_libpath=$lt_cv_aix_libpath
    else
        if ${lt_cv_aix_libpath_+set} false; then :
            $as_echo_n "(cached) " >&6
        else
            cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {

```

```

        /^0/ {
            s/^0 *\[([^\ ]*)\] *$/\1/
            p
        }
    }'
    lt_cv_aix_libpath_=`dump -H conftest$sac_exeext 2>/dev/null | $SED -n
-e "$lt_cv_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_cv_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_
fi

        hardcode_libdir_flag_spec='${wl}-
bilibpath:$libdir:""$aix_libpath"
        archive_expsym_cmds='$CC -o $output_objdir/$soname $libobjs
$deplibs '"'\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else ;; fi`
'"'\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
        else
            if test "$host_cpu" = ia64; then
                hardcode_libdir_flag_spec='${wl}-R $libdir:/usr/lib:/lib'
                allow_undefined_flag="-z nodefs"
                archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs '"'\${wl}$no_entry_flag"'
$compiler_flags ${wl}${allow_undefined_flag}
'"'\${wl}$exp_sym_flag:\$export_symbols"
            else
                # Determine the default libpath from the value encoded in an
                # empty executable.
                if test "${lt_cv_aix_libpath+set}" = set; then
                    aix_libpath=$lt_cv_aix_libpath
                else
                    if ${lt_cv_aix_libpath+:} false; then :
                        $as_echo_n "(cached) " >&6
                    else
                        cat confdefs.h - <<_ACEOF >>conftest.$sac_ext
/* end confdefs.h. */

int

```



```

main ()
{
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0  *\([^ ]*\) */\1/
                P
            }
        }'
    lt_cv_aix_libpath_=`dump -H conftest$sac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_
fi

    hardcode_libdir_flag_spec='${wl}-
bllibpath:$libdir:"$aix_libpath"
    # Warning - without using the other run time loading flags,
    # -berok will link without error, but may produce a broken
library.
    no_undefined_flag=' ${wl}-bernotok'
    allow_undefined_flag=' ${wl}-berok'
    if test "$with_gnu_ld" = yes; then
        # We only use this code for GNU lds that support --whole-
archive.
        whole_archive_flag_spec='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
    else
        # Exported symbols can be pulled into shared objects from
archives
        whole_archive_flag_spec='$convenience'
    fi

```

```

        archive_cmds_need_lc=yes
        # This is similar to how AIX traditionally builds its shared
libraries.
        archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
        fi
        fi
        ;;

amigaos*)
        case $host_cpu in
        powerpc)
                # see comment about AmigaOS4 .so support
                archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
                archive_expsym_cmds='
                ;;
        m68k)
                archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
                hardcode_libdir_flag_spec='-L$libdir'
                hardcode_minus_L=yes
                ;;
        esac
        ;;

bsdi[45]*)
        export_dynamic_flag_spec=-rdynamic
        ;;

cygwin* | mingw* | pw32* | cegcc*)
        # When not using gcc, we currently assume that we are using
        # Microsoft Visual C++.
        # hardcode_libdir_flag_spec is actually meaningless, as there is
        # no search path for DLLs.
        case $cc_basename in
        cl*)
                # Native MSVC
                hardcode_libdir_flag_spec=' '
                allow_undefined_flag=unsupported
                always_export_symbols=yes
                file_list_spec='@'
                # Tell ltmain to make .lib files, not .a files.
                libext=lib
                # Tell ltmain to make .dll files, not .so files.

```

```

shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
archive_expsym_cmds='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
    sed -n -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' -
e '1\\\\\\\\!p' < $export_symbols > $output_objdir/$soname.exp;
    else
    sed -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
$export_symbols > $output_objdir/$soname.exp;
    fi~
    $CC -o $tool_output_objdir$soname $libobjs $compiler_flags
$deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
IMPLIB:"$tool_output_objdir$libname.dll.lib"~
    linknames='
# The linker will not automatically build a static lib if we
build a DLL.
# _LT_TAGVAR(old_archive_from_new_cmds, )='true'
enable_shared_with_static_runtimes=yes
exclude_expsyms='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_.*'
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\\'/^[BCDGRS][ ]/s/.*[ ]\\([^\
]*\\)/\1,DATA/' | $SED -e '\\'/^[AITW][ ]/s/.*[ ]//'\'' | sort |
uniq > $export_symbols'
# Don't use ranlib
old_postinstall_cmds='chmod 644 $oldlib'
postlink_cmds='lt_outputfile="@OUTPUT@"~
lt_tool_outputfile="@TOOL_OUTPUT@"~
case $lt_outputfile in
*.exe|*.EXE) ;;
*)
    lt_outputfile="$lt_outputfile.exe"
    lt_tool_outputfile="$lt_tool_outputfile.exe"
    ;;
esac~
if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
    $MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
    $RM "$lt_outputfile.manifest";
fi'
;;
*)
# Assume MSVC wrapper
hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.

```

```

        archive_cmds='$CC -o $lib $libobjs $compiler_flags `func_echo_all
"$deplibs" | $SED '\`s/ -lc$//'\` -link -dll~linknames='
        # The linker will automatically build a .lib file if we build a
DLL.
        old_archive_from_new_cmds='true'
        # FIXME: Should let the user specify the lib program.
        old_archive_cmds='lib -OUT:$oldlib$oldobjs$old_deplibs'
        enable_shared_with_static_runtimes=yes
        ;;
    esac
    ;;

darwin* | rhapsody*)

```

```

archive_cmds_need_lc=no
hardcode_direct=no
hardcode_automatic=yes
hardcode_shlibpath_var=unsupported
if test "$lt_cv_ld_force_load" = "yes"; then
    whole_archive_flag_spec='`for conv in $convenience\`"; do test -
n "$conv" && new_convenience="$new_convenience ${wl}-
force_load,$conv\`; done; func_echo_all "$new_convenience\`'
else
    whole_archive_flag_spec=''
fi
link_all_deplibs=yes
allow_undefined_flag="$lt_dar_allow_undefined"
case $cc_basename in
    ifort*) _lt_dar_can_shared=yes ;;
    *) _lt_dar_can_shared=$GCC ;;
esac
if test "$lt_dar_can_shared" = "yes"; then
    output_verbose_link_cmd=func_echo_all
    archive_cmds="\$CC -dynamiclib \$allow_undefined_flag -o \$lib
\$libobjs \$deplibs \$compiler_flags -install_name \$rpath/\$soname
\$verstring \$lt_dar_single_mod${_lt_dsymutil}"
    module_cmds="\$CC \$allow_undefined_flag -o \$lib -bundle
\$libobjs \$deplibs \$compiler_flags${_lt_dsymutil}"
    archive_expsym_cmds="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -dynamiclib
\$allow_undefined_flag -o \$lib \$libobjs \$deplibs \$compiler_flags -
install_name \$rpath/\$soname \$verstring
\${_lt_dar_single_mod}\${_lt_dar_export_syms}\${_lt_dsymutil}"
    module_expsym_cmds="sed -e 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC \$allow_undefined_flag
-o \$lib -bundle \$libobjs \$deplibs
\$compiler_flags\${_lt_dar_export_syms}\${_lt_dsymutil}"
else
    ld_shlibs=no

```

```

fi

    ;;

    dgux*)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_shlibpath_var=no
        ;;

    # FreeBSD 2.2.[012] allows us to include c++rt0.o to get C++
    constructor
    # support.  Future versions do this automatically, but an explicit
    c++rt0.o
    # does not break anything, and helps significantly (at the cost of
    a little
    # extra space).
    freebsd2.2*)
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags /usr/lib/c++rt0.o'
        hardcode_libdir_flag_spec='-R$libdir'
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        ;;

    # Unfortunately, older versions of FreeBSD 2 do not have this
    feature.
    freebsd2.*)
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=yes
        hardcode_minus_L=yes
        hardcode_shlibpath_var=no
        ;;

    # FreeBSD 3 and greater uses gcc -shared to do shared libraries.
    freebsd* | dragonfly*)
        archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
        hardcode_libdir_flag_spec='-R$libdir'
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        ;;

    hpux9*)
        if test "$GCC" = yes; then
            archive_cmds='$RM $output_objdir/$soname~$CC -shared $pic_flag
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $libobjs
$deplibs $compiler_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
        else

```

```

        archive_cmds='$RM $output_objdir/$soname~$LD -b +b
$install_libdir -o $output_objdir/$soname $libobjs $deplibs
$linker_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
        fi
        hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
        hardcode_libdir_separator=:
        hardcode_direct=yes

        # hardcode_minus_L: Not really in the search PATH,
        # but as the default location of the library.
        hardcode_minus_L=yes
        export_dynamic_flag_spec='${wl}-E'
        ;;

hpux10*)
        if test "$GCC" = yes && test "$with_gnu_ld" = no; then
            archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
        else
            archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
        fi
        if test "$with_gnu_ld" = no; then
            hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
            hardcode_libdir_separator=:
            hardcode_direct=yes
            hardcode_direct_absolute=yes
            export_dynamic_flag_spec='${wl}-E'
            # hardcode_minus_L: Not really in the search PATH,
            # but as the default location of the library.
            hardcode_minus_L=yes
        fi
        ;;

hpux11*)
        if test "$GCC" = yes && test "$with_gnu_ld" = no; then
            case $host_cpu in
                hppa*64*)
                    archive_cmds='$CC -shared ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
                    ;;
                ia64*)
                    archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $libobjs $deplibs $compiler_flags'
                    ;;
                *)
                    archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+b ${wl}$install_libdir -o $lib $libobjs $deplibs
$compiler_flags'
                    ;;
            esac
        fi
        esac

```

```

else
case $host_cpu in
hppa*64*)
    archive_cmds='$CC -b ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
    ;;
ia64*)
    archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+nodefaulttrpath
-o $lib $libobjs $deplibs $compiler_flags'
    ;;
*)
    # Older versions of the 11.00 compiler do not understand -b yet
    # (HP92453-01 A.11.01.20 doesn't, HP92453-01 B.11.X.35175-
35176.GP does)
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $CC
understands -b" >&5
$as_echo_n "checking if $CC understands -b... " >&6; }
if ${lt_cv_prog_compiler__b+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler__b=no
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -b"
    echo "$lt_simple_link_test_code" > conftest.$ac_ext
    if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
        # The linker can only warn and ignore the option if not
recognized
        # So say no if there are warnings
        if test -s conftest.err; then
            # Append any errors to the config.log.
            cat conftest.err 1>&5
            $ECHO "$lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
            $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
            if diff conftest.exp conftest.er2 >/dev/null; then
                lt_cv_prog_compiler__b=yes
            fi
        else
            lt_cv_prog_compiler__b=yes
        fi
    fi
    $RM -r conftest*
    LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler__b" >&5
$as_echo "$lt_cv_prog_compiler__b" >&6; }

if test x"$lt_cv_prog_compiler__b" = xyes; then

```

```

        archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
else
        archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
fi

        ;;
esac
fi
if test "$with_gnu_ld" = no; then
hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
hardcode_libdir_separator=:

case $host_cpu in
hppa*64*|ia64*)
        hardcode_direct=no
        hardcode_shlibpath_var=no
        ;;
*)
        hardcode_direct=yes
        hardcode_direct_absolute=yes
        export_dynamic_flag_spec='${wl}-E'

        # hardcode_minus_L: Not really in the search PATH,
        # but as the default location of the library.
        hardcode_minus_L=yes
        ;;
esac
fi
;;

irix5* | irix6* | nonstopux*)
if test "$GCC" = yes; then
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations -o $lib'
        # Try to use the -exported_symbol ld option, if it does not
        # work, assume that -exports_file does not work either and
        # implicitly export all symbols.
        # This should be the same for all languages, so no per-tag cache
variable.
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$host_os linker accepts -exported_symbol" >&5
$as_echo_n "checking whether the $host_os linker accepts -
exported_symbol... " >&6; }
if ${lt_cv_irix_exported_symbol+:} false; then :
        $as_echo_n "(cached) " >&6
else
save_LDFLAGS="$LDFLAGS"

```



```

        LDFLAGS="$LDFLAGS -shared ${wl}-exported_symbol ${wl}foo
${wl}-update_registry ${wl}/dev/null"
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
int foo (void) { return 0; }
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    lt_cv_irix_exported_symbol=yes
else
    lt_cv_irix_exported_symbol=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS="$save_LDFLAGS"
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_irix_exported_symbol" >&5
$as_echo "$lt_cv_irix_exported_symbol" >&6; }
    if test "$lt_cv_irix_exported_symbol" = yes; then
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations ${wl}-exports_file
${wl}$export_symbols -o $lib'
    fi
    else
        archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -
soname $soname `test -n "$verstring" && func_echo_all "-set_version
$verstring"` -update_registry ${output_objdir}/so_locations -o $lib'
        archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags -soname $soname `test -n "$verstring" && func_echo_all
"-set_version $verstring"` -update_registry
${output_objdir}/so_locations -exports_file $export_symbols -o $lib'
    fi
    archive_cmds_need_lc='no'
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    inherit_rpath=yes
    link_all_deplibs=yes
;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags' # a.out
    else
        archive_cmds='$LD -shared -o $lib $libobjs $deplibs
$linker_flags' # ELF
    fi
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no

```

```

;;

newsos6)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_direct=yes
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_shlibpath_var=no
    ;;

*nto* | *qnx*)
    ;;

openbsd*)
    if test -f /usr/libexec/ld.so; then
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        hardcode_direct_absolute=yes
        if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
            archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
            archive_expsym_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags ${wl}-retain-symbols-file,$export_symbols'
            hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
            export_dynamic_flag_spec='${wl}-E'
        else
            case $host_os in
                openbsd[01].* | openbsd2.[0-7] | openbsd2.[0-7].*)
                    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
                    hardcode_libdir_flag_spec='-R$libdir'
                    ;;
                *)
                    archive_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags'
                    hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
                    ;;
            esac
        fi
    else
        ld_shlibs=no
    fi
    ;;

os2*)
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_minus_L=yes
    allow_undefined_flag=unsupported
    archive_cmds='$ECHO "LIBRARY $libname INITINSTANCE" >
$output_objdir/$libname.def~$ECHO "DESCRIPTION \"$libname\"" >>

```

```

$output_objdir/$libname.def~echo DATA >>
$output_objdir/$libname.def~echo " SINGLE NONSHARED" >>
$output_objdir/$libname.def~echo EXPORTS >>
$output_objdir/$libname.def~emxexp $libobjs >>
$output_objdir/$libname.def~$CC -Zdll -Zcrtdll -o $lib $libobjs
$deplibs $compiler_flags $output_objdir/$libname.def'
    old_archive_from_new_cmds='emximp -o $output_objdir/$libname.a
$output_objdir/$libname.def'
    ;;

    osf3*)
        if test "$GCC" = yes; then
            allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
            archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$sverstring" && func_echo_all "${wl}-set_version ${wl}$sverstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
        else
            allow_undefined_flag=' -expect_unresolved \*'
            archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -soname $soname `test -n "$sverstring" &&
func_echo_all "-set_version $sverstring"` -update_registry
${output_objdir}/so_locations -o $lib'
        fi
        archive_cmds_need_lc='no'
        hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
        hardcode_libdir_separator=:
    ;;

    osf4* | osf5*) # as osf3* with the addition of -msym flag
        if test "$GCC" = yes; then
            allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
            archive_cmds='$CC -shared${allow_undefined_flag} $pic_flag
$libobjs $deplibs $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$sverstring" && func_echo_all "${wl}-set_version
${wl}$sverstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
            hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
        else
            allow_undefined_flag=' -expect_unresolved \*'
            archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -msym -soname $soname `test -n "$sverstring"
&& func_echo_all "-set_version $sverstring"` -update_registry
${output_objdir}/so_locations -o $lib'
            archive_expsym_cmds='for i in `cat $export_symbols`; do printf
"%s %s\n" -exported_symbol "\$i" >> $lib.exp; done; printf "%s\n" "-
hidden">> $lib.exp~
            $CC -shared${allow_undefined_flag} ${wl}-input ${wl}$lib.exp
$compiler_flags $libobjs $deplibs -soname $soname `test -n
"$sverstring" && $ECHO "-set_version $sverstring"` -update_registry
${output_objdir}/so_locations -o $lib~$RM $lib.exp'

```

```

# Both c and cxx compiler support -rpath directly
hardcode_libdir_flag_spec='-rpath $libdir'
fi
archive_cmds_need_lc='no'
hardcode_libdir_separator=:
;;

solaris*)
no_undefined_flag=' -z defs'
if test "$GCC" = yes; then
wlarc='${wl}'
archive_cmds='$CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-h
${wl}$soname -o $lib $libobjs $deplibs $compiler_flags'
archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-M ${wl}$lib.exp
${wl}-h ${wl}$soname -o $lib $libobjs $deplibs $compiler_flags~$RM
$lib.exp'
else
case ` $CC -V 2>&1 ` in
*"Compilers 5.0"*)
wlarc=''
archive_cmds='$LD -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $linker_flags'
archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$LD -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $linker_flags~$RM $lib.exp'
;;
*)
wlarc='${wl}'
archive_cmds='$CC -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $compiler_flags'
archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $compiler_flags~$RM $lib.exp'
;;
esac
fi
hardcode_libdir_flag_spec='-R$libdir'
hardcode_shlibpath_var=no
case $host_os in
solaris2.[0-5] | solaris2.[0-5].*) ;;
*)
# The compiler driver will combine and reorder linker options,
# but understands '-z linker_flag'. GCC discards it without
`$wl',
# but is careful enough not to reorder.

```

```

# Supported since Solaris 2.6 (maybe 2.5.1?)
if test "$GCC" = yes; then
    whole_archive_flag_spec='${wl}-z ${wl}allextract$convenience
${wl}-z ${wl}defaultextract'
else
    whole_archive_flag_spec='-z allextract$convenience -z
defaultextract'
fi
;;
esac
link_all_deplibs=yes
;;

sunos4*)
    if test "x$host_vendor" = xsequent; then
        # Use $CC to link under sequent, because it throws in some extra
.o
        # files that make .init and .fini sections work.
        archive_cmds='$CC -G ${wl}-h $soname -o $lib $libobjs $deplibs
$compiler_flags'
    else
        archive_cmds='$LD -assert pure-text -Bstatic -o $lib $libobjs
$deplibs $linker_flags'
    fi
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_direct=yes
    hardcode_minus_L=yes
    hardcode_shlibpath_var=no
    ;;

sysv4)
    case $host_vendor in
        sni)
            archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
            hardcode_direct=yes # is this really true???
            ;;
        siemens)
            ## LD is ld it makes a PLAMLIB
            ## CC just makes a GrossModule.
            archive_cmds='$LD -G -o $lib $libobjs $deplibs $linker_flags'
            reload_cmds='$CC -r -o $output$reload_objs'
            hardcode_direct=no
            ;;
        motorola)
            archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
            hardcode_direct=no #Motorola manual says yes, but my tests say
they lie
            ;;
    esac
    runpath_var='LD_RUN_PATH'

```

```

hardcode_shlibpath_var=no
;;

sysv4.3*)
archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
hardcode_shlibpath_var=no
export_dynamic_flag_spec='-Bexport'
;;

sysv4*MP*)
if test -d /usr/nec; then
archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
hardcode_shlibpath_var=no
runpath_var=LD_RUN_PATH
hardcode_runpath_var=yes
ld_shlibs=yes
fi
;;

sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
no_undefined_flag='${wl}-z,text'
archive_cmds_need_lc=no
hardcode_shlibpath_var=no
runpath_var='LD_RUN_PATH'

if test "$GCC" = yes; then
archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
else
archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
fi
;;

sysv5* | sco3.2v5* | sco5v6*)
# Note: We can NOT use -z defs as we might desire, because we do
not
# link with -lc, and that would cause any symbols used from libc
to
# always be unresolved, which means just about no library would
# ever link correctly.  If we're not using GNU ld we use -z text
# though, which does catch some bad symbols but isn't as heavy-
handed
# as -z defs.
no_undefined_flag='${wl}-z,text'

```

```

allow_undefined_flag='${wl}-z,nodefs'
archive_cmds_need_lc=no
hardcode_shlibpath_var=no
hardcode_libdir_flag_spec='${wl}-R,$libdir'
hardcode_libdir_separator=':'
link_all_deplibs=yes
export_dynamic_flag_spec='${wl}-Bexport'
runpath_var='LD_RUN_PATH'

if test "$GCC" = yes; then
archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
else
archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
fi
;;

uts4*)
archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
hardcode_libdir_flag_spec='-L$libdir'
hardcode_shlibpath_var=no
;;

*)
ld_shlibs=no
;;
esac

if test x$host_vendor = xsni; then
case $host in
sysv4 | sysv4.2uw2* | sysv4.3* | sysv5*)
export_dynamic_flag_spec='${wl}-Blargedynsym'
;;
esac
fi
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs" >&5
$as_echo "$ld_shlibs" >&6; }
test "$ld_shlibs" = no && can_build_shared=no

with_gnu_ld=$with_gnu_ld

```

```

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc" in
x|xyes)
    # Assume -lc should be added
    archive_cmds_need_lc=yes

    if test "$enable_shared" = yes && test "$GCC" = yes; then
        case $archive_cmds in
        *'~'*)
            # FIXME: we may have to deal with multi-command sequences.
            ;;
        '$CC '* )
            # Test whether the compiler implicitly links with -lc since on
some
            # systems, -lgcc has to come before -lc. If gcc already passes -
lc
            # to ld, don't add -lc before -lgcc.
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$as_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }
if ${lt_cv_archive_cmds_need_lc+:} false; then :
    $as_echo_n "(cached) " >&6
else
    $RM conftest*
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } 2>conftest.err; then
        soname=conftest
        lib=conftest
        libobjs=conftest.$ac_objext
        deplibs=
        wl=$lt_prog_compiler_wl
        pic_flag=$lt_prog_compiler_pic

```



```

compiler_flags=-v
linker_flags=-v
verstring=
output_objdir=.
libname=conftest
lt_save_allow_undefined_flag=$allow_undefined_flag
allow_undefined_flag=
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$archive_cmds 2\>\&1 \| $GREP \" -lc \" \>/dev/null 2\>\&1\""; } >&5
(eval $archive_cmds 2\>\&1 \| $GREP \" -lc \" \>/dev/null 2\>\&1)
2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; }
then
  lt_cv_archive_cmds_need_lc=no
else
  lt_cv_archive_cmds_need_lc=yes
fi
allow_undefined_flag=$lt_save_allow_undefined_flag
else
  cat conftest.err 1>&5
fi
$RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc" >&5
$as_echo "$lt_cv_archive_cmds_need_lc" >&6; }
  archive_cmds_need_lc=$lt_cv_archive_cmds_need_lc
  ;;
esac
fi
;;
esac

```



```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }

if test "$GCC" = yes; then
  case $host_os in
    darwin*) lt_awk_arg="/^libraries:/,/LR/" ;;
    *) lt_awk_arg="/^libraries:/" ;;
  esac
  case $host_os in
    mingw* | cegcc*) lt_sed_strip_eq="s,=\([A-Za-z]:\) ,\1,g" ;;
    *) lt_sed_strip_eq="s,=/,/,g" ;;
  esac
  lt_search_path_spec=`$CC -print-search-dirs | awk $lt_awk_arg | $SED
-e "s/^libraries:/" -e $lt_sed_strip_eq`
  case $lt_search_path_spec in
    *\;*)
      # if the path contains ";" then we assume it to be the separator
      # otherwise default to the standard path separator (i.e. ":") - it
is

```

```

    # assumed that no part of a normal pathname contains ";" but that
    should
    # okay in the real world where ";" in dirpaths is itself
    problematic.
    lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED 's;/;/
/g'`
    ;;
*)
    lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED
"s/$PATH_SEPARATOR/ /g"`
    ;;
esac
# Ok, now we have the path, separated by spaces, we can step through
it
# and add multilib dir if necessary.
lt_tmp_lt_search_path_spec=
lt_multi_os_dir=`$CC $CPPFLAGS $CFLAGS $LDFLAGS -print-multi-os-
directory 2>/dev/null`
for lt_sys_path in $lt_search_path_spec; do
    if test -d "$lt_sys_path/$lt_multi_os_dir"; then
        lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path/$lt_multi_os_dir"
    else
        test -d "$lt_sys_path" && \
        lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path"
    fi
done
lt_search_path_spec=`$ECHO "$lt_tmp_lt_search_path_spec" | awk '
BEGIN {RS=" "; FS="|\\n";} {
lt_foo="";
lt_count=0;
for (lt_i = NF; lt_i > 0; lt_i--) {
    if ($lt_i != "" && $lt_i != ".") {
        if ($lt_i == "..") {
            lt_count++;
        } else {
            if (lt_count == 0) {
                lt_foo="/" $lt_i lt_foo;
            } else {
                lt_count--;
            }
        }
    }
}
}
if (lt_foo != "") { lt_freq[lt_foo]++; }
if (lt_freq[lt_foo] == 1) { print lt_foo; }
}'`
# AWK program above erroneously prepends '/' to C:/dos/paths
# for these hosts.
case $host_os in

```

```

mingw* | cegcc*) lt_search_path_spec=`$ECHO "$lt_search_path_spec"
|\
    $SED 's,/\/([A-Za-z]:\),\1,g'` ;;
esac
sys_lib_search_path_spec=`$ECHO "$lt_search_path_spec" | $lt_NL2SP`
else
sys_lib_search_path_spec="/lib /usr/lib /usr/local/lib"
fi
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
finish_eval=
shlibpath_var=
shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
aix3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
    shlibpath_var=LIBPATH

    # AIX 3 has no versioning support, so we append a major version to
the name.
    soname_spec='${libname}${release}${shared_ext}$major'
    ;;
aix[4-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    hardcode_into_libs=yes
    if test "$host_cpu" = ia64; then
        # AIX 5 supports IA64
        library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'

```

```

shlibpath_var=LD_LIBRARY_PATH
else
# With GCC up to 2.95.x, collect2 would create an import file
# for dependence libraries. The import file would start with
# the line `#! .' . This would cause the generated library to
# depend on `.', always an invalid library. This was fixed in
# development snapshots of GCC prior to 3.0.
case $host_os in
aix4 | aix4.[01] | aix4.[01].*)
if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)';
echo ' yes '
echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
:
else
can_build_shared=no
fi
;;
esac
# AIX (on Power*) has no versioning support, so currently we can
not hardcode correct
# soname into executable. Probably we can add versioning support
to
# collect2, so additional links can be useful in future.
if test "$aix_use_runtimelinking" = yes; then
# If using run time linking (on AIX 4.2 or later) use
lib<name>.so
# instead of lib<name>.a to let people know that these are not
# typical AIX shared libraries.
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
else
# We preserve .a as extension for shared libraries through
AIX4.2
# and later when we are not doing run time linking.
library_names_spec='${libname}${release}.a $libname.a'
soname_spec='${libname}${release}${shared_ext}$major'
fi
shlibpath_var=LIBPATH
fi
;;

amigaos*)
case $host_cpu in
powerpc)
# Since July 2007 AmigaOS4 officially supports .so libraries.
# When compiling the executable, add -use-dynld -Lsojbs: to the
compileline.
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
;;
m68k)

```

```

        library_names_spec='$libname.ixlibrary $libname.a'
        # Create ${libname}_ixlibrary.a entries in /sys/libs.
        finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
'\''s%^.*\/\([^\/]*\)\.ixlibrary$%\1%\''`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
        ;;
    esac
    ;;

```

```

beos*)
    library_names_spec='${libname}${shared_ext}'
    dynamic_linker="$host_os ld.so"
    shlibpath_var=LIBRARY_PATH
    ;;

```

```

bsd[45]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
    sys_lib_dlsearch_path_spec="/shlib /usr/lib /usr/local/lib"
    # the default ld.so.conf also contains /usr/contrib/lib and
    # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
    # libtool to hard-code these into programs
    ;;

```

```

cygwin* | mingw* | pw32* | cegcc*)
    version_type=windows
    shrext_cmds=".dll"
    need_version=no
    need_lib_prefix=no

```

```

    case $GCC,$cc_basename in
    yes,*)
        # gcc
        library_names_spec='$libname.dll.a'
        # DLL is installed to $(libdir)/../bin by postinstall_cmds
        postinstall_cmds='base_file=`basename \${file}`~
dldir=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\''\`i; echo
\${dldir}`~
dldir=$destdir/`dirname \${dldir}`~
test -d \${dldir} || mkdir -p \${dldir}~

```



```

$install_prog $dir/$dlname \${dldir}/$dlname~
chmod a+x \${dldir}/$dlname~
if test -n '\${stripme}\'' && test -n '\${striplib}\''; then
    eval '\${striplib} \${dldir}/$dlname\'' || exit \${?};
fi'
postuninstall_cmds='dldll=\${SHELL} 2>&1 -c '\'. $file; echo
\${dlname}\''~
    dlpath=$dir/\${dldll}~
    $RM \${dlpath}'
shlibpath_overrides_runpath=yes

case $host_os in
cygwin*)
    # Cygwin DLLs use 'cyg' prefix rather than 'lib'
    soname_spec=`echo ${libname} | sed -e 's/^lib/cyg/'`echo
${release} | $SED -e 's/[.]/-/g'\${versuffix}${shared_ext}'

    sys_lib_search_path_spec="\${sys_lib_search_path_spec}
/usr/lib/w32api"
    ;;
mingw* | cegcc*)
    # MinGW DLLs use traditional 'lib' prefix
    soname_spec='${libname}`echo ${release} | $SED -e 's/[.]/-/
/g'\${versuffix}${shared_ext}'
    ;;
pw32*)
    # pw32 DLLs use 'pw' prefix rather than 'lib'
    library_names_spec=`echo ${libname} | sed -e 's/^lib/pw/'`echo
${release} | $SED -e 's/[.]/-/g'\${versuffix}${shared_ext}'
    ;;
esac
dynamic_linker='Win32 ld.exe'
;;

*,cl*)
# Native MSVC
libname_spec='$name'
soname_spec='${libname}`echo ${release} | $SED -e 's/[.]/-/
/g'\${versuffix}${shared_ext}'
library_names_spec='${libname}.dll.lib'

case $build_os in
mingw*)
    sys_lib_search_path_spec=
    lt_save_ifs=$IFS
    IFS=';'
    for lt_path in $LIB
    do
        IFS=$lt_save_ifs
        # Let DOS variable expansion print the short 8.3 style file
name.

```

```

        lt_path=`cd "$lt_path" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si" `
        sys_lib_search_path_spec="$sys_lib_search_path_spec $lt_path"
done
IFS=$lt_save_ifs
# Convert to MSYS style.
sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\|/|g' -e 's| \\([a-zA-Z]\\|):| /|g' -e 's|^| |' `
;;
cygwin*)
# Convert to unix form, then to dos form, then back to unix form
# but this time dos style (no spaces!) so that the unix form
looks
# like /cygdrive/c/PROGRA~1:/cygdr...
sys_lib_search_path_spec=`cygpath --path --unix "$LIB" `
sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null `
sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g" `
;;
*)
sys_lib_search_path_spec="$LIB"
if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zA-Z]:/'
>/dev/null; then
# It is most probably a Windows format PATH.
sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's/;/ /g' `
else
sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g" `
fi
# FIXME: find the short name or the path components, as spaces
are
# common. (e.g. "Program Files" -> "PROGRA~1")
;;
esac

# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\''. $dir/\${base_file}'\''i; echo
\${dlname}'\''~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dlname} \${dldir}/\${dlname}'
postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\''~
dlpath=$dir/\${dldll}~
$RM \${dlpath}'
shlibpath_overrides_runpath=yes
dynamic_linker='Win32 link.exe'
;;

```

```

*)
  # Assume MSVC wrapper
  library_names_spec='${libname}`echo ${release} | $SED -e 's/[.]/-
/g'`${versuffix}${shared_ext} $libname.lib'
  dynamic_linker='Win32 ld.exe'
  ;;
esac
# FIXME: first we should search . and the directory the executable
is in
shlibpath_var=PATH
;;

darwin* | rhapsody*)
dynamic_linker="$host_os dyld"
version_type=darwin
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${major}${shared_ext}
${libname}${shared_ext}'
soname_spec='${libname}${release}${major}${shared_ext}'
shlibpath_overrides_runpath=yes
shlibpath_var=DYLD_LIBRARY_PATH
shrext_cmds='`test $.module = .yes && echo .so || echo .dylib`'

sys_lib_search_path_spec="$sys_lib_search_path_spec /usr/local/lib"
sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
;;

dgux*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}${versuffix}
${libname}${release}${shared_ext}${major} $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}${major}'
shlibpath_var=LD_LIBRARY_PATH
;;

freebsd* | dragonfly*)
# DragonFly does not have a.out.  When/if they implement a new
# versioning mechanism, adjust this.
if test -x /usr/bin/objformat; then
  objformat=`/usr/bin/objformat`
else
  case $host_os in
    freebsd[23].*) objformat=aout ;;
    *) objformat=elf ;;
  esac
fi
version_type=freebsd-$objformat
case $version_type in

```

```

    freebsd-elf*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
        need_version=no
        need_lib_prefix=no
        ;;
    freebsd-*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname${shared_ext}$versuffix'
        need_version=yes
        ;;
esac
shlibpath_var=LD_LIBRARY_PATH
case $host_os in
freebsd2.*)
    shlibpath_overrides_runpath=yes
    ;;
freebsd3.[01]* | freebsdelf3.[01]*)
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    ;;
freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;
*) # from 4.6 on, and DragonFly
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    ;;
esac
;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

haiku*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
    ;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in
    ia64*)
        shrext_cmds='.so'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.so"
        shlibpath_var=LD_LIBRARY_PATH
        shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        if test "X$HPUX_IA64_MODE" = X32; then
            sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
        else
            sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
        fi
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
        ;;
    hppa*64*)
        shrext_cmds='.sl'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.sl"
        shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
        ;;
    *)
        shrext_cmds='.sl'
        dynamic_linker="$host_os dld.sl"
        shlibpath_var=SHLIB_PATH

```

```

    shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    ;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

irix5* | irix6* | nonstopux*)
    case $host_os in
        nonstopux*) version_type=nonstopux ;;
        *)
            if test "$lt_cv_prog_gnu_ld" = yes; then
                version_type=linux # correct to gnu/linux during the next
big refactor
            else
                version_type=irix
            fi ;;
    esac
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext} $libname${shared_ext}'
    case $host_os in
        irix5* | nonstopux*)
            libsuff= shlibsuff=
            ;;
    *)
        case $LD in # libtool.m4 will add one of these switches to LD
*-32|*" -32 " | *-melf32bsmip|*" -melf32bsmip ")

```

```

        libsuff= shlibsuff= libmagic=32-bit;;
*-n32|*" -n32 "|*-melf32bmipn32|*" -melf32bmipn32 ")
        libsuff=32 shlibsuff=N32 libmagic=N32;;
*-64|*" -64 "|*-melf64bmip|*" -melf64bmip ")
        libsuff=64 shlibsuff=64 libmagic=64-bit;;
*) libsuff= shlibsuff= libmagic=never-match;;
esac
;;
esac
shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
shlibpath_overrides_runpath=no
sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
/usr/local/lib${libsuff}"
sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
hardcode_into_libs=yes
;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)
    dynamic_linker=no
    ;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no

    # Some binutils ld are patched to set DT_RUNPATH
    if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        lt_cv_shlibpath_overrides_runpath=no
        save_LDFLAGS=$LDFLAGS
        save_libdir=$libdir
        eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl\"; \
            LDFLAGS=\"\$LDFLAGS $hardcode_libdir_flag_spec\""
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    if ($OBJDUMP -p conftest$sac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
    lt_cv_shlibpath_overrides_runpath=yes
fi
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
    LDFLAGS=$save_LDFLAGS
    libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.
# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
    lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \2)); skip = 1; } { if (!skip) print \2; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ ]*hwcap[ ]/d;s/[: , ]/
/g;s/=[^=]*$/;/s/=[^= ]* /g;s/"//g;/^$/d' | tr '\n' ' '`
    sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker. Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.
dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
        finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
        dynamic_linker='NetBSD (a.out) ld.so'
    else

```



```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='NetBSD ld.elf_so'
fi
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
;;

newsos6)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    ;;

*nto* | *qnx*)
    version_type=qnx
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    dynamic_linker='ldqnx.so'
    ;;

openbsd*)
    version_type=sunos
    sys_lib_dlsearch_path_spec="/usr/lib"
    need_lib_prefix=no
    # Some older versions of OpenBSD (3.3 at least) *do* need versioned
libs.
    case $host_os in
        openbsd3.3 | openbsd3.3.*)    need_version=yes ;;
        *)                            need_version=no  ;;
    esac
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        case $host_os in
            openbsd2.[89] | openbsd2.[89].*)
                shlibpath_overrides_runpath=no
                ;;

```

```

        *)
        shlibpath_overrides_runpath=yes
        ;;
    esac
else
    shlibpath_overrides_runpath=yes
fi
;;

os2*)
    libname_spec='$name'
    shrext_cmds=".dll"
    need_lib_prefix=no
    library_names_spec='$libname${shared_ext} $libname.a'
    dynamic_linker='OS/2 ld.exe'
    shlibpath_var=LIBPATH
    ;;

osf3* | osf4* | osf5*)
    version_type=osf
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
    sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
    ;;

rdos*)
    dynamic_linker=no
    ;;

solaris*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    # ldd complains unless libraries are executable
    postinstall_cmds='chmod +x $lib'
    ;;

sunos4*)
    version_type=sunos

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
;;

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)
            shlibpath_overrides_runpath=no
            need_lib_prefix=no
            runpath_var=LD_RUN_PATH
            ;;
        siemens)
            need_lib_prefix=no
            ;;
        motorola)
            need_lib_prefix=no
            need_version=no
            shlibpath_overrides_runpath=no
            sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
            ;;
    esac
;;

sysv4*MP*)
    if test -d /usr/nec ;then
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='$libname${shared_ext}.$versuffix
$libname${shared_ext}.$major $libname${shared_ext}'
        soname_spec='$libname${shared_ext}.$major'
        shlibpath_var=LD_LIBRARY_PATH
    fi
;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf
    need_lib_prefix=no
    need_version=no

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
                ;;
            esac
        fi
        sys_lib_dlsearch_path_spec='/usr/lib'
        ;;

tpf*)
    # TPF is a cross-target only. Preferred cross-host = GNU/Linux.
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

uts4*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

*)
    dynamic_linker=no
    ;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then

```

```
variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec+set}" = set; then
  sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec+set}" = set; then
  sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to hardcode  
library paths into programs" >&5
```

```

$as_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action=
if test -n "$hardcode_libdir_flag_spec" ||
  test -n "$runpath_var" ||
  test "X$hardcode_automatic" = "Xyes" ; then

  # We can hardcode non-existent directories.
  if test "$hardcode_direct" != no &&
    # If the only mechanism to avoid hardcoding is shlibpath_var, we
    # have to relink, otherwise we might link with an installed
library
    # when we should be linking with a yet-to-be-installed one
    ## test "$_LT_TAGVAR(hardcode_shlibpath_var, )" != no &&
    test "$hardcode_minus_L" != no; then
    # Linking always hardcodes the temporary library directory.
    hardcode_action=relink
  else
    # We can link without hardcoding, and we can hardcode nonexisting
dirs.
    hardcode_action=immediate
  fi
else
  # We cannot hardcode anything, or else we can only hardcode existing
  # directories.
  hardcode_action=unsupported
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hardcode_action" >&5
$as_echo "$hardcode_action" >&6; }

if test "$hardcode_action" = relink ||
  test "$inherit_rpath" = yes; then
  # Fast installation is not supported
  enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
  test "$enable_shared" = no; then
  # Fast installation is not necessary
  enable_fast_install=needless
fi

  if test "x$enable_dlopen" != xyes; then
    enable_dlopen=unknown
    enable_dlopen_self=unknown
    enable_dlopen_self_static=unknown
  else
    lt_cv_dlopen=no
    lt_cv_dlopen_libs=

```

```

case $host_os in
beos*)
    lt_cv_dlopen="load_add_on"
    lt_cv_dlopen_libs=
    lt_cv_dlopen_self=yes
    ;;

mingw* | pw32* | cegcc*)
    lt_cv_dlopen="LoadLibrary"
    lt_cv_dlopen_libs=
    ;;

cygwin*)
    lt_cv_dlopen="dlopen"
    lt_cv_dlopen_libs=
    ;;

darwin*)
    # if libdl is installed we need to link against it
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \

```



```

        conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else

    lt_cv_dlopen="dyld"
    lt_cv_dlopen_libs=
    lt_cv_dlopen_self=yes

fi

;;

*)
    ac_fn_c_check_func "$LINENO" "shl_load" "ac_cv_func_shl_load"
if test "x$ac_cv_func_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for shl_load in -
ldld" >&5
$as_echo_n "checking for shl_load in -ldld... " >&6; }
if ${ac_cv_lib_dld_shl_load+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char shl_load ();
int
main ()
{
return shl_load ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dld_shl_load=yes
else

```

```

    ac_cv_lib_dld_shl_load=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_shl_load" >&5
$as_echo "$ac_cv_lib_dld_shl_load" >&6; }
if test "x$ac_cv_lib_dld_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load" lt_cv_dlopen_libs="-ldld"
else
    ac_fn_c_check_func "$LINENO" "dlopen" "ac_cv_func_dlopen"
if test "x$ac_cv_func_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
lsvld" >&5
$as_echo_n "checking for dlopen in -lsvld... " >&6; }
if ${ac_cv_lib_svld_dlopen+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lsvld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_svld_dlopen=yes
else
  ac_cv_lib_svld_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_svld_dlopen" >&5
$as_echo "$ac_cv_lib_svld_dlopen" >&6; }
if test "x$ac_cv_lib_svld_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-lsvld"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dld_link in -
ldld" >&5
$as_echo_n "checking for dld_link in -ldld... " >&6; }
if ${ac_cv_lib_dld_dld_link+:} false; then :
  $as_echo_n "(cached) " >&6

```

```

else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dld_link ();
int
main ()
{
return dld_link ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_dld_dld_link=yes
else
  ac_cv_lib_dld_dld_link=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_dld_link" >&5
$as_echo "$ac_cv_lib_dld_dld_link" >&6; }
if test "x$ac_cv_lib_dld_dld_link" = xyes; then :
  lt_cv_dlopen="dld_link" lt_cv_dlopen_libs="-ldld"
fi

fi

fi

fi

fi

fi

```

```

    ;;
esac

if test "x$lt_cv_dlopen" != xno; then
    enable_dlopen=yes
else
    enable_dlopen=no
fi

case $lt_cv_dlopen in
dlopen)
    save_CPPFLAGS="$CPPFLAGS"
    test "x$ac_cv_header_dlfcn_h" = xyes && CPPFLAGS="$CPPFLAGS -
DHAVE_DLFCN_H"

    save_LDFLAGS="$LDFLAGS"
    wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$export_dynamic_flag_spec\`"

    save_LIBS="$LIBS"
    LIBS="$lt_cv_dlopen_libs $LIBS"

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
program can dlopen itself" >&5
$as_echo_n "checking whether a program can dlopen itself... " >&6; }
if ${lt_cv_dlopen_self+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test "$cross_compiling" = yes; then :
        lt_cv_dlopen_self=cross
    else
        lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
        lt_status=$lt_dlunknown
        cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

#ifdef RTLD_GLOBAL
# define LT_DLGLOBAL          RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL          DL_GLOBAL
# else
#   define LT_DLGLOBAL          0
# endif
# endif
#endif

```

```

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
#  ifdef RTLD_LAZY
#    define LT_DLLAZY_OR_NOW          RTLD_LAZY
#  else
#    ifdef DL_LAZY
#      define LT_DLLAZY_OR_NOW        DL_LAZY
#    else
#      ifdef RTLD_NOW
#        define LT_DLLAZY_OR_NOW      RTLD_NOW
#      else
#        ifdef DL_NOW
#          define LT_DLLAZY_OR_NOW      DL_NOW
#        else
#          define LT_DLLAZY_OR_NOW      0
#        endif
#      endif
#    endif
#  endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#if defined(__GNUC__) && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else
        {
          if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
          else puts (dlerror ());
        }
      /* dlclose (self); */
    }
  else
    puts (dlerror ());

  return status;
}
_LT_EOF

```

```

    if { { eval echo "\"\$as_me\"":${as_lineno-$LINENO}: \"\$ac_link\""; }
>&5
    (eval $ac_link) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \"\$? = $ac_status\" >&5
    test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self=no ;;
    esac
    else :
        # compilation failed
        lt_cv_dlopen_self=no
    fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_dlopen_self"
>&5
$as_echo "$lt_cv_dlopen_self" >&6; }

    if test "x$lt_cv_dlopen_self" = xyes; then
        wl=$lt_prog_compiler_wl eval LDFLAGS="\$LDFLAGS
$lt_prog_compiler_static\"
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
statically linked program can dlopen itself\" >&5
$as_echo_n "checking whether a statically linked program can dlopen
itself... \" >&6; }
if ${lt_cv_dlopen_self_static+:} false; then :
    $as_echo_n "(cached) \" >&6
else
    if test "$cross_compiling" = yes; then :
        lt_cv_dlopen_self_static=cross
    else
        lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
        lt_status=$lt_dlunknown
        cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

```

```

#ifdef RTLD_GLOBAL
# define LT_DLGLOBAL      RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL    DL_GLOBAL
# else
#   define LT_DLGLOBAL    0
# endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
# ifdef RTLD_LAZY
#   define LT_DLLAZY_OR_NOW      RTLD_LAZY
# else
#   ifdef DL_LAZY
#     define LT_DLLAZY_OR_NOW    DL_LAZY
#   else
#     ifdef RTLD_NOW
#       define LT_DLLAZY_OR_NOW RTLD_NOW
#     else
#       ifdef DL_NOW
#         define LT_DLLAZY_OR_NOW    DL_NOW
#       else
#         define LT_DLLAZY_OR_NOW    0
#       endif
#     endif
#   endif
# endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#ifdef __GNUC__
#if defined(__GNUC__) && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else
        {
          if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
          else puts (dlerror ());
        }
    }
}

```



```

    }
    /* dlclose (self); */
}
else
    puts (dlerror ());

return status;
}
_LT_EOF
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self_static=no ;;
    esac
else :
    # compilation failed
    lt_cv_dlopen_self_static=no
fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_dlopen_self_static" >&5
$as_echo "$lt_cv_dlopen_self_static" >&6; }
fi

    CPPFLAGS="$save_CPPFLAGS"
    LDFLAGS="$save_LDFLAGS"
    LIBS="$save_LIBS"
    ;;
esac

case $lt_cv_dlopen_self in
yes|no) enable_dlopen_self=$lt_cv_dlopen_self ;;
*) enable_dlopen_self=unknown ;;
esac

case $lt_cv_dlopen_self_static in
yes|no) enable_dlopen_self_static=$lt_cv_dlopen_self_static ;;
*) enable_dlopen_self_static=unknown ;;
esac

```

```
fi
```

```
striplib=
old_striplib=
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether stripping
libraries is possible" >&5
$as_echo_n "checking whether stripping libraries is possible... " >&6;
}
if test -n "$STRIP" && $STRIP -V 2>&1 | $GREP "GNU strip" >/dev/null;
then
  test -z "$old_striplib" && old_striplib="$STRIP --strip-debug"
  test -z "$striplib" && striplib="$STRIP --strip-unneeded"
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
# FIXME - insert some real tests, host_os isn't really good enough
case $host_os in
darwin*)
  if test -n "$STRIP" ; then
    striplib="$STRIP -x"
    old_striplib="$STRIP -S"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi
  ;;
*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  ;;
esac
fi
```

```

# Report which library types will actually be built
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if libtool
supports shared libraries" >&5
$as_echo_n "checking if libtool supports shared libraries... " >&6; }
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $scan_build_shared"
>&5
$as_echo "$scan_build_shared" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
shared libraries" >&5
$as_echo_n "checking whether to build shared libraries... " >&6; }
test "$scan_build_shared" = "no" && enable_shared=no

# On AIX, shared libraries and static libraries use the same
namespace, and
# are all built from PIC.
case $host_os in
aix3*)
test "$enable_shared" = yes && enable_static=no
if test -n "$RANLIB"; then
archive_cmds="$archive_cmds~\${RANLIB} \${lib}"
postinstall_cmds='\${RANLIB} \${lib}'
fi
;;
aix[4-9]*)
if test "$host_cpu" != ia64 && test "$aix_use_runtimelinking" = no
; then
test "$enable_shared" = yes && enable_static=no
fi
;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_shared" >&5
$as_echo "$enable_shared" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
static libraries" >&5
$as_echo_n "checking whether to build static libraries... " >&6; }
# Make sure either enable_shared or enable_static is yes.
test "$enable_shared" = yes || enable_static=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_static" >&5
$as_echo "$enable_static" >&6; }

```

```
fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

CC="$lt_save_CC"
```

```
ac_config_commands="$ac_config_commands libtool"
```

```
# Only expand once:
```

```
# compress spaces in flags
CFLAGS=`echo "$CFLAGS" | sed -e 's/ +/ /g'`
CPPFLAGS=`echo "$CPPFLAGS" | sed -e 's/ +/ /g'`
```

```
if test x$enable_gcov = xyes; then
    # so that config.h changes when you toggle gcov support
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_GCOV_ENABLED __GNUC__ * 10000 + __GNUC_MINOR__ * 100 +
__GNUC_PATCHLEVEL__
_ACEOF
```

```
fi
```

```
#### Various functions
```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing socket" >&5
$as_echo_n "checking for library containing socket... " >&6; }
if ${ac_cv_search_socket+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char socket ();
int
main ()
{
return socket ();
  ;
  return 0;
}
_ACEOF
for ac_lib in ' ' socket; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_socket=$ac_res
  fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext
  if ${ac_cv_search_socket+:} false; then :
    break
  fi
done
if ${ac_cv_search_socket+:} false; then :

else
  ac_cv_search_socket=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_search_socket"
>&5
$as_echo "$ac_cv_search_socket" >&6; }

```

```

ac_res=$ac_cv_search_socket
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether socklen_t is
defined" >&5
$as_echo_n "checking whether socklen_t is defined... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>

int
main ()
{

socklen_t foo;
foo = 1;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  dbus_have_socklen_t=yes
else
  dbus_have_socklen_t=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_socklen_t"
>&5
$as_echo "$dbus_have_socklen_t" >&6; }

if test "x$dbus_have_socklen_t" = "xyes"; then

$as_echo "@%:@define HAVE_SOCKLEN_T 1" >>confdefs.h

fi

#### Abstract sockets

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking abstract socket
namespace" >&5
$as_echo_n "checking abstract socket namespace... " >&6; }
if ${ac_cv_have_abstract_sockets+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "cannot run test program while cross compiling
See `config.log' for more details" "$LINENO" 5; }
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <stdlib.h>
#include <string.h>
#include <stdio.h>
#include <sys/socket.h>
#include <sys/un.h>
#include <errno.h>

int
main ()
{

  int listen_fd;
  struct sockaddr_un addr;

  listen_fd = socket (PF_UNIX, SOCK_STREAM, 0);

  if (listen_fd < 0)
    {
      fprintf (stderr, "socket() failed: %s\n", strerror (errno));
      exit (1);
    }

  memset (&addr, '\0', sizeof (addr));
  addr.sun_family = AF_UNIX;
  strcpy (addr.sun_path, "X/tmp/dbus-fake-socket-path-used-in-
configure-test");
  addr.sun_path[0] = '\0'; /* this is what makes it abstract */

  if (bind (listen_fd, (struct sockaddr*) &addr, SUN_LEN (&addr)) < 0)
    {
      fprintf (stderr, "Abstract socket namespace bind() failed:
%s\n",
              strerror (errno));
      exit (1);
    }

```

```

    }
    else
        exit (0);

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    ac_cv_have_abstract_sockets=yes
else
    ac_cv_have_abstract_sockets=no

fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$sac_cv_have_abstract_sockets" >&5
$as_echo "$sac_cv_have_abstract_sockets" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$sac_ext >&5'
ac_link='$CC -o conftest$sac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$sac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test x$enable_abstract_sockets = xyes; then
    if test x$sac_cv_have_abstract_sockets = xno; then
        as_fn_error $? "Abstract sockets explicitly required, and support
not detected." "$LINENO" 5
    fi
fi

if test x$enable_abstract_sockets = xno; then
    ac_cv_have_abstract_sockets=no;
fi

if test x$sac_cv_have_abstract_sockets = xyes ; then
    DBUS_PATH_OR_ABSTRACT=abstract

$as_echo "@%:@define HAVE_ABSTRACT_SOCKETS 1" >>confdefs.h

else
    DBUS_PATH_OR_ABSTRACT=path
fi

# this is used in addresses to prefer abstract, e.g.
# unix:path=/foo or unix:abstract=/foo

```



```

#### Sort out XML library

# see what we have
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
XML_ParserCreate_MM in -lexpat" >&5
$as_echo_n "checking for XML_ParserCreate_MM in -lexpat... " >&6; }
if ${ac_cv_lib_expat_XML_ParserCreate_MM+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lexpat $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char XML_ParserCreate_MM ();
int
main ()
{
return XML_ParserCreate_MM ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_expat_XML_ParserCreate_MM=yes
else
  ac_cv_lib_expat_XML_ParserCreate_MM=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_expat_XML_ParserCreate_MM" >&5
$as_echo "$ac_cv_lib_expat_XML_ParserCreate_MM" >&6; }
if test "x$ac_cv_lib_expat_XML_ParserCreate_MM" = xyes; then :
  for ac_header in expat.h
do :
  ac_fn_c_check_header_mongrel "$LINENO" "expat.h"
"ac_cv_header_expat_h" "$ac_includes_default"
if test "x$ac_cv_header_expat_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXPAT_H 1
_ACEOF

```

```

    have_expat=true
else
    have_expat=false
fi

done

else
    have_expat=false
fi

if ! $have_expat ; then
    as_fn_error $? "expat library not found, check config.log for failed
attempts" "$LINENO" 5
fi

XML_LIBS=-lexpat
XML_CFLAGS=

#### Set up final flags

if test "x$sac_cv_env_PKG_CONFIG_set" != "xset"; then
    if test -n "$sac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
        be a program name with args.
        set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_path_PKG_CONFIG+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            case $PKG_CONFIG in
            [\\/] * | ?:[\\/] *)
                ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
                with a path.
                ;;
            *)
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in '' $sac_executable_extensions; do
                        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then

```

```

        ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
    ac_pt_PKG_CONFIG=$PKG_CONFIG
    # Extract the first word of "pkg-config", so it can be a program
    name with args.
    set dummy pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        case $ac_pt_PKG_CONFIG in
            [\\/]*)
                ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
                override the test with a path.
                ;;
            *)
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in ' $ac_executable_extensions; do
                        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                            ac_cv_path_ac_pt_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
                            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                            break 2
                        fi
                    done
                done
            fi
        done
    fi

```

```

done
IFS=$as_save_IFS

;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
  >&5
  $as_echo "$ac_pt_PKG_CONFIG" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
  $as_echo "no" >&6; }
fi

if test "x$ac_pt_PKG_CONFIG" = x; then
  PKG_CONFIG=""
else
  case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
  PKG_CONFIG=$ac_pt_PKG_CONFIG
fi
else
  PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
  _pkg_min_version=0.9.0
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
  $as_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }
  if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
  $as_echo "yes" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
  $as_echo "no" >&6; }
    PKG_CONFIG=""
  fi
fi

pkg_failed=no

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS" >&5
$as_echo_n "checking for DBUS... " >&6; }

if test -n "$DBUS_CFLAGS"; then
  pkg_cv_DBUS_CFLAGS="$DBUS_CFLAGS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
    { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-1 >= 1.2.16\>"; } >&5
    ($PKG_CONFIG --exists --print-errors "dbus-1 >= 1.2.16") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_DBUS_CFLAGS=`$PKG_CONFIG --cflags "dbus-1 >= 1.2.16"
2>/dev/null`
  else
    pkg_failed=yes
  fi
else
  pkg_failed=untried
fi
if test -n "$DBUS_LIBS"; then
  pkg_cv_DBUS_LIBS="$DBUS_LIBS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
    { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-1 >= 1.2.16\>"; } >&5
    ($PKG_CONFIG --exists --print-errors "dbus-1 >= 1.2.16") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_DBUS_LIBS=`$PKG_CONFIG --libs "dbus-1 >= 1.2.16" 2>/dev/null`
  else
    pkg_failed=yes
  fi
else
  pkg_failed=untried
fi

if test $pkg_failed = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
  _pkg_short_errors_supported=yes
else
  _pkg_short_errors_supported=no
fi
if
  if test $_pkg_short_errors_supported = yes; then

```

```

        DBUS_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "dbus-1 >= 1.2.16" 2>&1`
        else
            DBUS_PKG_ERRORS=`$PKG_CONFIG --print-errors "dbus-1 >=
1.2.16" 2>&1`
        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_PKG_ERRORS" >&5

        as_fn_error $? "Package requirements (dbus-1 >= 1.2.16) were not
met:

$DBUS_PKG_ERRORS

Consider adjusting the PKG_CONFIG_PATH environment variable if you
installed software in a non-standard prefix.

Alternatively, you may set the environment variables DBUS_CFLAGS
and DBUS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details." "$LINENO" 5
    elif test $pkg_failed = untried; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
        as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

Alternatively, you may set the environment variables DBUS_CFLAGS
and DBUS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details.

To get pkg-config, see <http://pkg-config.freedesktop.org/>.
See `config.log' for more details" "$LINENO" 5; }
    else
        DBUS_CFLAGS=$pkg_cv_DBUS_CFLAGS
        DBUS_LIBS=$pkg_cv_DBUS_LIBS
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

    fi

# Glib detection

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS_GLIB" >&5
$as_echo_n "checking for DBUS_GLIB... " >&6; }

```

```

if test -n "$DBUS_GLIB_CFLAGS"; then
    pkg_cv_DBUS_GLIB_CFLAGS="$DBUS_GLIB_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"gobject-2.0 >= 2.26, gio-2.0 >= 2.26\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gobject-2.0 >= 2.26, gio-2.0
>= 2.26") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_CFLAGS=`$PKG_CONFIG --cflags "gobject-2.0 >= 2.26,
gio-2.0 >= 2.26" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
else
    pkg_failed=untried
fi
if test -n "$DBUS_GLIB_LIBS"; then
    pkg_cv_DBUS_GLIB_LIBS="$DBUS_GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"gobject-2.0 >= 2.26, gio-2.0 >= 2.26\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gobject-2.0 >= 2.26, gio-2.0
>= 2.26") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_LIBS=`$PKG_CONFIG --libs "gobject-2.0 >= 2.26, gio-
2.0 >= 2.26" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
fi

if test $pkg_failed = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
    $as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
if
    if test $_pkg_short_errors_supported = yes; then

```

```

        DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "gobject-2.0 >= 2.26, gio-2.0 >= 2.26" 2>&1`
        else
            DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors
"gobject-2.0 >= 2.26, gio-2.0 >= 2.26" 2>&1`
        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_GLIB_PKG_ERRORS" >&5

        as_fn_error $? "Package requirements (gobject-2.0 >= 2.26, gio-
2.0 >= 2.26) were not met:

```

```
$DBUS_GLIB_PKG_ERRORS
```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables DBUS_GLIB_CFLAGS and DBUS_GLIB_LIBS to avoid the need to call pkg-config.

See the pkg-config man page for more details." "\$LINENO" 5

```
elif test $pkg_failed = untried; then
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
```

```
$as_echo "no" >&6; }
```

```
{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
```

```
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
```

```
as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
```

```
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.
```

Alternatively, you may set the environment variables DBUS_GLIB_CFLAGS and DBUS_GLIB_LIBS to avoid the need to call pkg-config.

See the pkg-config man page for more details.

To get pkg-config, see <<http://pkg-config.freedesktop.org/>>.

```
See `config.log' for more details" "$LINENO" 5; }
```

```
else
```

```
    DBUS_GLIB_CFLAGS=$pkg_cv_DBUS_GLIB_CFLAGS
```

```
    DBUS_GLIB_LIBS=$pkg_cv_DBUS_GLIB_LIBS
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
```

```
$as_echo "yes" >&6; }
```

```
fi
```

```
pkg_failed=no
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
```

```
DBUS_GLIB_THREADS" >&5
```

```
$as_echo_n "checking for DBUS_GLIB_THREADS... " >&6; }
```

```
if test -n "$DBUS_GLIB_THREADS_CFLAGS"; then
```

```
    pkg_cv_DBUS_GLIB_THREADS_CFLAGS="$DBUS_GLIB_THREADS_CFLAGS"
```



```

elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"gthread-2.0 >= 2.6\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gthread-2.0 >= 2.6") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_THREADS_CFLAGS=`$PKG_CONFIG --cflags "gthread-2.0
>= 2.6" 2>/dev/null`
    else
        pkg_failed=yes
    fi
    else
        pkg_failed=untried
    fi
if test -n "$DBUS_GLIB_THREADS_LIBS"; then
    pkg_cv_DBUS_GLIB_THREADS_LIBS="$DBUS_GLIB_THREADS_LIBS"
    elif test -n "$PKG_CONFIG"; then
        if test -n "$PKG_CONFIG" && \
            { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"gthread-2.0 >= 2.6\""; } >&5
            ($PKG_CONFIG --exists --print-errors "gthread-2.0 >= 2.6") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
            test $ac_status = 0; }; then
            pkg_cv_DBUS_GLIB_THREADS_LIBS=`$PKG_CONFIG --libs "gthread-2.0 >=
2.6" 2>/dev/null`
        else
            pkg_failed=yes
        fi
        else
            pkg_failed=untried
        fi
fi

if test $pkg_failed = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
    $as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        DBUS_GLIB_THREADS_PKG_ERRORS=`$PKG_CONFIG --short-errors
--print-errors "gthread-2.0 >= 2.6" 2>&1`
    else
        DBUS_GLIB_THREADS_PKG_ERRORS=`$PKG_CONFIG --print-errors
"gthread-2.0 >= 2.6" 2>&1`

```

```

        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_GLIB_THREADS_PKG_ERRORS" >&5

        have_glib_threads=no
    elif test $pkg_failed = untried; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        have_glib_threads=no
    else
        DBUS_GLIB_THREADS_CFLAGS=$pkg_cv_DBUS_GLIB_THREADS_CFLAGS
        DBUS_GLIB_THREADS_LIBS=$pkg_cv_DBUS_GLIB_THREADS_LIBS
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
        have_glib_threads=yes
    fi

    if test x$have_glib_threads = xyes; then
        HAVE_GLIB_THREADS_TRUE=
        HAVE_GLIB_THREADS_FALSE='#'
    else
        HAVE_GLIB_THREADS_TRUE='#'
        HAVE_GLIB_THREADS_FALSE=
    fi

GLIB_GENMARSHAL=`$PKG_CONFIG --variable=glib_genmarshal glib-2.0`

DBUS_GLIB_TOOL_CFLAGS=$XML_CFLAGS
DBUS_GLIB_TOOL_LIBS="$XML_LIBS"

### gtk-doc Documentation

    # Extract the first word of "gtkdoc-check", so it can be a program
    name with args.
    set dummy gtkdoc-check; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_GTKDOC_CHECK+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        case $GTKDOC_CHECK in
        [\\/] * | ?:[\\/] *)

```

```

    ac_cv_path_GTKDOC_CHECK="$GTKDOC_CHECK" # Let the user override the
test with a path.
    ;;
*)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_GTKDOC_CHECK="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

    ;;
esac
fi
GTKDOC_CHECK=$ac_cv_path_GTKDOC_CHECK
if test -n "$GTKDOC_CHECK"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_CHECK" >&5
$as_echo "$GTKDOC_CHECK" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    for ac_prog in gtkdoc-rebase
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_GTKDOC_REBASE+:} false; then :
    $as_echo_n "(cached) " >&6
else
    case $GTKDOC_REBASE in
    [\\/]*)
        ac_cv_path_GTKDOC_REBASE="$GTKDOC_REBASE" # Let the user override
the test with a path.
        ;;
*)
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_GTKDOC_REBASE="$as_dir/$ac_word$ac_exec_ext"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

;;
esac
fi
GTKDOC_REBASE=$ac_cv_path_GTKDOC_REBASE
if test -n "$GTKDOC_REBASE"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_REBASE" >&5
$as_echo "$GTKDOC_REBASE" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

test -n "$GTKDOC_REBASE" && break
done
test -n "$GTKDOC_REBASE" || GTKDOC_REBASE="true"

# Extract the first word of "gtkdoc-mkpdf", so it can be a program
name with args.
set dummy gtkdoc-mkpdf; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_GTKDOC_MKPDF+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $GTKDOC_MKPDF in
  [\\/] * | ?:[\\/] *)
    ac_cv_path_GTKDOC_MKPDF="$GTKDOC_MKPDF" # Let the user override the
test with a path.
    ;;
  *)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_GTKDOC_MKPDF="$as_dir/$ac_word$ac_exec_ext"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
GTKDOC_MKPDF=$ac_cv_path_GTKDOC_MKPDF
if test -n "$GTKDOC_MKPDF"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_MKPDF" >&5
$as_echo "$GTKDOC_MKPDF" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

@%:@ Check whether --with-html-dir was given.
if test "${with_html_dir+set}" = set; then :
    withval=$with_html_dir;
else
    with_html_dir='${datadir}/gtk-doc/html'
fi

HTML_DIR="$with_html_dir"

@%:@ Check whether --enable-gtk-doc was given.
if test "${enable_gtk_doc+set}" = set; then :
    enableval=$enable_gtk_doc;
else
    enable_gtk_doc=no
fi

if test x$enable_gtk_doc = xyes; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"gtk-doc >= 1.4\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gtk-doc >= 1.4") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        :
    else

```

```

    as_fn_error $? "You need to have gtk-doc >= 1.4 installed to build
$PACKAGE_NAME" "$LINENO" 5
fi
    if test "x$PACKAGE_NAME" != "xglib"; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GTKDOC_DEPS" >&5
$as_echo_n "checking for GTKDOC_DEPS... " >&6; }

if test -n "$GTKDOC_DEPS_CFLAGS"; then
    pkg_cv_GTKDOC_DEPS_CFLAGS="$GTKDOC_DEPS_CFLAGS"
    elif test -n "$PKG_CONFIG"; then
        if test -n "$PKG_CONFIG" && \
            { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0\""; } >&5
            ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.10.0 gobject-2.0
>= 2.10.0") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
            test $ac_status = 0; }; then
                pkg_cv_GTKDOC_DEPS_CFLAGS=`$PKG_CONFIG --cflags "glib-2.0 >= 2.10.0
gobject-2.0 >= 2.10.0" 2>/dev/null`
            else
                pkg_failed=yes
            fi
        else
            pkg_failed=untried
        fi
    if test -n "$GTKDOC_DEPS_LIBS"; then
        pkg_cv_GTKDOC_DEPS_LIBS="$GTKDOC_DEPS_LIBS"
        elif test -n "$PKG_CONFIG"; then
            if test -n "$PKG_CONFIG" && \
                { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0\""; } >&5
                ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.10.0 gobject-2.0
>= 2.10.0") 2>&5
                ac_status=$?
                $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
                test $ac_status = 0; }; then
                    pkg_cv_GTKDOC_DEPS_LIBS=`$PKG_CONFIG --libs "glib-2.0 >= 2.10.0
gobject-2.0 >= 2.10.0" 2>/dev/null`
                else
                    pkg_failed=yes
                fi
            else
                pkg_failed=untried
            fi
        fi
    if test $pkg_failed = yes; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        GTKDOC_DEPS_PKG_ERRORS=`$PKG_CONFIG --short-errors --
print-errors "glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0" 2>&1`
    else
        GTKDOC_DEPS_PKG_ERRORS=`$PKG_CONFIG --print-errors "glib-
2.0 >= 2.10.0 gobject-2.0 >= 2.10.0" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$GTKDOC_DEPS_PKG_ERRORS" >&5

    as_fn_error $? "Package requirements (glib-2.0 >= 2.10.0 gobject-
2.0 >= 2.10.0) were not met:

$GTKDOC_DEPS_PKG_ERRORS

```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables

```

GTKDOC_DEPS_CFLAGS
and GTKDOC_DEPS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details." "$LINENO" 5
elif test $pkg_failed = untried; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

```

Alternatively, you may set the environment variables

```

GTKDOC_DEPS_CFLAGS
and GTKDOC_DEPS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details.

```

To get pkg-config, see <<http://pkg-config.freedesktop.org/>>.

See `config.log' for more details" "\$LINENO" 5; }

```

else
    GTKDOC_DEPS_CFLAGS=$pkg_cv GTKDOC_DEPS_CFLAGS
    GTKDOC_DEPS_LIBS=$pkg_cv GTKDOC_DEPS_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```

```

fi
    fi
fi

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build
gtk-doc documentation" >&5
$sas_echo_n "checking whether to build gtk-doc documentation... " >&6;
}
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $enable_gtk_doc"
>&5
$sas_echo "$enable_gtk_doc" >&6; }

    @%:@ Check whether --enable-gtk-doc-html was given.
if test "${enable_gtk_doc_html+set}" = set; then :
    enableval=$enable_gtk_doc_html;
else
    enable_gtk_doc_html=yes
fi

    @%:@ Check whether --enable-gtk-doc-pdf was given.
if test "${enable_gtk_doc_pdf+set}" = set; then :
    enableval=$enable_gtk_doc_pdf;
else
    enable_gtk_doc_pdf=no
fi

if test -z "$GTKDOC_MKPDF"; then
    enable_gtk_doc_pdf=no
fi

    if test x$enable_gtk_doc = xyes; then
        ENABLE_GTK_DOC_TRUE=
        ENABLE_GTK_DOC_FALSE='#'
    else
        ENABLE_GTK_DOC_TRUE='#'
        ENABLE_GTK_DOC_FALSE=
    fi

    if test x$enable_gtk_doc_html = xyes; then
        GTK_DOC_BUILD_HTML_TRUE=
        GTK_DOC_BUILD_HTML_FALSE='#'
    else
        GTK_DOC_BUILD_HTML_TRUE='#'
        GTK_DOC_BUILD_HTML_FALSE=
    fi

    if test x$enable_gtk_doc_pdf = xyes; then
        GTK_DOC_BUILD_PDF_TRUE=
        GTK_DOC_BUILD_PDF_FALSE='#'

```



```

else
  GTK_DOC_BUILD_PDF_TRUE='#'
  GTK_DOC_BUILD_PDF_FALSE=
fi

  if test -n "$LIBTOOL"; then
    GTK_DOC_USE_LIBTOOL_TRUE=
    GTK_DOC_USE_LIBTOOL_FALSE='#'
  else
    GTK_DOC_USE_LIBTOOL_TRUE='#'
    GTK_DOC_USE_LIBTOOL_FALSE=
  fi

  if test -n "$GTKDOC_REBASE"; then
    GTK_DOC_USE_REBASE_TRUE=
    GTK_DOC_USE_REBASE_FALSE='#'
  else
    GTK_DOC_USE_REBASE_TRUE='#'
    GTK_DOC_USE_REBASE_FALSE=
  fi

##### Have to go $localstatedir->$prefix/var->/usr/local/var
##### someone please fix this a better way...

##### find the actual value for $prefix that we'll end up with
## (I know this is broken and should be done in the Makefile, but
## that's a major pain and almost nobody actually seems to care)
REAL_PREFIX=
if test "x$prefix" = "xNONE"; then
  REAL_PREFIX=$ac_default_prefix
else
  REAL_PREFIX=$prefix
fi

## temporarily change prefix and exec_prefix
old_prefix=$prefix
prefix=$REAL_PREFIX

if test "x$exec_prefix" = xNONE ; then
  REAL_EXEC_PREFIX=$REAL_PREFIX
else
  REAL_EXEC_PREFIX=$exec_prefix
fi
old_exec_prefix=$exec_prefix
exec_prefix=$REAL_EXEC_PREFIX

## eval everything
LOCALSTATEDIR_TMP="$localstatedir"
EXPANDED_LOCALSTATEDIR=`eval echo $LOCALSTATEDIR_TMP`

```

```
SYSCONFDIR_TMP="$sysconfdir"
EXPANDED_SYSCONFDIR=`eval echo $SYSCONFDIR_TMP`
```

```
BINDIR_TMP="$bindir"
EXPANDED_BINDIR=`eval echo $BINDIR_TMP`
```

```
LIBDIR_TMP="$libdir"
EXPANDED_LIBDIR=`eval echo $LIBDIR_TMP`
```

```
DATADIR_TMP="$datadir"
EXPANDED_DATADIR=`eval echo $DATADIR_TMP`
```

```
## put prefix and exec_prefix back
prefix=$old_prefix
exec_prefix=$old_exec_prefix
```

```
#### Tell tests where to find certain stuff in builddir
ABSOLUTE_TOP_BUILDDIR=`cd ${ac_top_builddir}. && pwd`
```

```
TEST_SERVICE_DIR=${ABSOLUTE_TOP_BUILDDIR}/test/data/valid-service-
files
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_SERVICE_DIR "$TEST_SERVICE_DIR"
_ACEOF
```

```
TEST_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-service
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_SERVICE_BINARY "$TEST_SERVICE_BINARY"
_ACEOF
```

```
TEST_SHELL_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-shell-
service
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_SHELL_SERVICE_BINARY "$TEST_SHELL_SERVICE_BINARY"
_ACEOF
```

```
TEST_CORE_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/core/test-  
service-glib
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_CORE_SERVICE_BINARY "$TEST_CORE_SERVICE_BINARY"  
_ACEOF
```

```
TEST_INTERFACES_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/interface  
s/test-service
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_INTERFACES_SERVICE_BINARY  
"$TEST_INTERFACES_SERVICE_BINARY"  
_ACEOF
```

```
TEST_EXIT_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-exit
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_EXIT_BINARY "$TEST_EXIT_BINARY"  
_ACEOF
```

```
TEST_SEGFAULT_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-segfault
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SEGFAULT_BINARY "$TEST_SEGFAULT_BINARY"  
_ACEOF
```

```
TEST_SLEEP_FOREVER_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-sleep-  
forever
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SLEEP_FOREVER_BINARY "$TEST_SLEEP_FOREVER_BINARY"  
_ACEOF
```

```
if ! test -z "$with_test_socket_dir" ; then
    TEST_SOCKET_DIR="$with_test_socket_dir"
else
    TEST_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_SOCKET_DIR "$TEST_SOCKET_DIR"
_ACEOF
```

```
ac_config_files="$ac_config_files Makefile m4/Makefile doc/Makefile
doc/reference/Makefile doc/reference/version.xml dbus/Makefile
dbus/examples/Makefile dbus/examples/statemachine/Makefile
test/Makefile test/core/Makefile test/interfaces/Makefile
test/data/valid-service-files/debug-glib.service test/data/valid-
service-files/debug-echo.service test/data/valid-service-
files/interfaces-test.service test/lib/Makefile test/manual/Makefile
tools/Makefile dbus-glib-1.pc dbus-glib-1-uninstalled.pc"
```

```
cat >confcache <<\_ACEOF
# This file is a shell script that caches the results of configure
# tests run on this system so they can be shared between configure
# scripts and configure runs, see configure's option --config-cache.
# It is not useful on other systems.  If it contains results you don't
# want to keep, you may remove or edit it.
#
# config.status only pays attention to the cache file if you give it
# the --recheck option to rerun configure.
#
# `ac_cv_env_foo' variables (set or unset) will be overridden when
# loading this file, other *unset* `ac_cv_foo' will be assigned the
# following values.
```

```
_ACEOF
```

```
# The following way of writing the cache mishandles newlines in
values,
# but we know of no workaround that is simple, portable, and
efficient.
# So, we kill variables containing newlines.
# Ultrix sh set writes to stderr and can't be redirected directly,
# and sets the high bit in the cache file unless we assign to the
vars.
(
  for ac_var in `(set) 2>&1 | sed -n 's/^\([a-zA-Z_][a-zA-Z0-
9_]*\)=.*/\1/p'`; do
    eval ac_val=\${$ac_var}
    case $ac_val in #(
```

```

*${as_nl}*)
    case $ac_var in #(
        *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5
$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
    esac
    case $ac_var in #(
        _ | IFS | as_nl) ;; #(
        BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
        *) { eval $ac_var=; unset $ac_var;} ;;
    esac ;;
esac
done

(set) 2>&1 |
    case $as_nl `(ac_space=' '; set) 2>&1` in #(
        *${as_nl}ac_space=\ *)
            # `set' does not quote correctly, so add quotes: double-quote
            # substitution turns \\ \\ into \, and sed turns \ into \.
            sed -n \
            "s/'/'\\\\"'/g;

s/^\([_${as_cr_alnum}]*_cv_[_${as_cr_alnum}]*\)=\(.*\)/\1='\2'/p"
        ;; #(
        *)
            # `set' quotes correctly as required by POSIX, so do not add
            quotes.
            sed -n "/^[_${as_cr_alnum}]*_cv_[_${as_cr_alnum}]*=/p"
            ;;
    esac |
    sort
) |
sed '
/^ac_cv_env_/b end
t clear
:clear
s/^\([^=]*\)=\(.*\)[{}].*\)/test "${\1+set}" = set || &/
t end
s/^\([^=]*\)=\(.*\)/\1=${\1=\2}/
:end' >>confcache
if diff "$cache_file" confcache >/dev/null 2>&1; then ;; else
if test -w "$cache_file"; then
if test "x$cache_file" != "x/dev/null"; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: updating cache
$cache_file" >&5
$as_echo "$as_me: updating cache $cache_file" >&6;}
if test ! -f "$cache_file" || test -h "$cache_file"; then
cat confcache >"$cache_file"
else
case $cache_file in #(
    */* | ?:* )

```

```

        mv -f confcache "$cache_file"$$ &&
        mv -f "$cache_file"$$ "$cache_file" ;; #(
            *)
        mv -f confcache "$cache_file" ;;
    esac
    fi
fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: not updating unwritable
cache $cache_file" >&5
$as_echo "$as_me: not updating unwritable cache $cache_file" >&6;}
    fi
fi
rm -f confcache

test "x$prefix" = xNONE && prefix=$ac_default_prefix
# Let make expand exec_prefix.
test "x$exec_prefix" = xNONE && exec_prefix='${prefix}'

DEFS=-DHAVE_CONFIG_H

ac_libobjs=
ac_ltlibobjs=
U=
for ac_i in : $LIB@&t@OBSJ; do test "x$ac_i" = x: && continue
# 1. Remove the extension, and $U if already installed.
ac_script='s/\$U\././;s/\.o$//;s/\.obj$//'
ac_i=`$as_echo "$ac_i" | sed "$ac_script"`
# 2. Prepend LIBOBJDIR.  When used with automake>=1.10 LIBOBJDIR
# will be set to the directory where LIBOBS objects are built.
as_fn_append ac_libobjs " \${LIBOBJDIR}$ac_i\$U.$ac_objext"
as_fn_append ac_ltlibobjs " \${LIBOBJDIR}$ac_i"'\$U.lo'
done
LIB@&t@OBSJ=$ac_libobjs

LTLIBOBS=$ac_ltlibobjs

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking that generated files
are newer than configure" >&5
$as_echo_n "checking that generated files are newer than configure...
" >&6; }
    if test -n "$am_sleep_pid"; then
        # Hide warnings about reused PIDs.
        wait $am_sleep_pid 2>/dev/null
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: done" >&5
$as_echo "done" >&6; }
    if test -n "$EXEEXT"; then
        am_EXEEXT_TRUE=
        am_EXEEXT_FALSE='#'
    else

```

```

    am__EXEEXT_TRUE='#'
    am__EXEEXT_FALSE=
fi

if test -z "${MAINTAINER_MODE_TRUE}" && test -z
"${MAINTAINER_MODE_FALSE}"; then
    as_fn_error $? "conditional \"MAINTAINER_MODE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${AMDEP_TRUE}" && test -z "${AMDEP_FALSE}"; then
    as_fn_error $? "conditional \"AMDEP\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCC_TRUE}" && test -z
"${am__fastdepCC_FALSE}"; then
    as_fn_error $? "conditional \"am__fastdepCC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BASH_COMPLETION_TRUE}" && test -z
"${DBUS_BASH_COMPLETION_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BASH_COMPLETION\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUILD_TESTS_TRUE}" && test -z
"${DBUS_BUILD_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUILD_TESTS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_GLIB_THREADS_TRUE}" && test -z
"${HAVE_GLIB_THREADS_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_GLIB_THREADS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${ENABLE_GTK_DOC_TRUE}" && test -z
"${ENABLE_GTK_DOC_FALSE}"; then
    as_fn_error $? "conditional \"ENABLE_GTK_DOC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_BUILD_HTML_TRUE}" && test -z
"${GTK_DOC_BUILD_HTML_FALSE}"; then
    as_fn_error $? "conditional \"GTK_DOC_BUILD_HTML\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5

```

```

fi
if test -z "${GTK_DOC_BUILD_PDF_TRUE}" && test -z
"${GTK_DOC_BUILD_PDF_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_BUILD_PDF\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_USE_LIBTOOL_TRUE}" && test -z
"${GTK_DOC_USE_LIBTOOL_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_USE_LIBTOOL\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_USE_REBASE_TRUE}" && test -z
"${GTK_DOC_USE_REBASE_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_USE_REBASE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

: "${CONFIG_STATUS=./config.status}"
ac_write_fail=0
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files $CONFIG_STATUS"
{ $as_echo "$as_me:${as_lineno-$LINENO}: creating $CONFIG_STATUS" >&5
$as_echo "$as_me: creating $CONFIG_STATUS" >&6;}
as_write_fail=0
cat >$CONFIG_STATUS <<_ASEOF || as_write_fail=1
#! $SHELL
# Generated by $as_me.
# Run this file to recreate the current configuration.
# Compiler output produced by configure, useful for debugging
# configure, is in config.log if it exists.

debug=false
ac_cs_recheck=false
ac_cs_silent=false

SHELL=\${CONFIG_SHELL-$SHELL}
export SHELL
_ASEOF
cat >>$CONFIG_STATUS <<\_ASEOF || as_write_fail=1
## ----- ##
## M4sh Initialization. ##
## ----- ##

# Be more Bourne compatible
DUALCASE=1; export DUALCASE # for MKS sh
if test -n "${ZSH_VERSION+set}" && (emulate sh) >/dev/null 2>&1; then
:

```



```

    as_echo_n='sh -c $as_echo_n_body as_echo'
fi
export as_echo_body
as_echo='sh -c $as_echo_body as_echo'
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
  PATH_SEPARATOR=:
  (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
    (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
      PATH_SEPARATOR=';'
  }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " $as_nl

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
  *[\ \/]* ) as_myself=$0 ;;
  *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
  as_myself=$0
fi
if test ! -f "$as_myself"; then
  $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
  exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in

```

```

# pre-3.0 UWIN ksh).  But do not cause bugs in bash 2.01; the "|| exit
1"
# suppresses any "Segmentation fault" message there.  '(((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
  && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr.  If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
  as_status=$1; test $as_status -eq 0 && as_status=1
  if test "$4"; then
    as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
  fi
  $as_echo "$as_me: error: $2" >&2
  as_fn_exit $as_status
} @%:@ as_fn_error

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @S|@? to STATUS, without forking.
as_fn_set_status ()
{
  return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS

```

```

@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\${as_var} = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
        {
            eval $1+=\${2}
        }'
else
    as_fn_append ()
    {
        eval $1=\${$1}\${2}
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \${(( 1 + 1 ))} = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
        {
            as_val=$(( $* ))
        }'

```

```

else
  as_fn_arith ()
  {
    as_val=`expr "$@" || test $? -eq 1`
  }
fi # as_fn_arith

if expr a : '\(a\)' >/dev/null 2>&1 &&
  test "X`expr 00001 : '.*\(...\)`" = X001; then
  as_expr=expr
else
  as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
  "X/"; then
  as_basename=basename
else
  as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]*\)/*$' \| \| \
  X"$0" : 'X\(\(\)\)$' \| \| \
  X"$0" : 'X\(\(\)\)' \| \| . 2>/dev/null ||
$as_echo X/"$0" |
  sed '/^\.*\/\([^\/]*\)\/*$/ {
    s//\1/
    q
  }
/^X\(\(\)\)$/ {
  s//\1/
  q
}
/^X\(\(\)\)\.*$/ {
  s//\1/
  q
}
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxyz'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS

```

```

as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*)
  case `echo 'xy\c'` in
  *c*) ECHO_T=' ';; # ECHO_T is single tab character.
  xy) ECHO_C='\c';;
  *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
     ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$$ conf$$$exe conf$$$file
if test -d conf$$$dir; then
  rm -f conf$$$dir/conf$$$file
else
  rm -f conf$$$dir
  mkdir conf$$$dir 2>/dev/null
fi
if (echo >conf$$$file) 2>/dev/null; then
  if ln -s conf$$$file conf$$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$$file conf$$$dir 2>/dev/null && test ! -f conf$$$exe
  ||
    as_ln_s='cp -pR'
  elif ln conf$$$file conf$$$ 2>/dev/null; then
    as_ln_s=ln
  else
    as_ln_s='cp -pR'
  fi
else
  as_ln_s='cp -pR'
fi
rm -f conf$$$ conf$$$exe conf$$$dir/conf$$$file conf$$$file
rmdir conf$$$dir 2>/dev/null

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "@S|@as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{

```

```

case $as_dir in #(
-*) as_dir=./$as_dir;;
esac
test -d "$as_dir" || eval $as_mkdir_p || {
  as_dirs=
  while ;; do
    case $as_dir in #(
      *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\'/g"`;;
    #'(
      *) as_qdir=$as_dir;;
    esac
    as_dirs="'$as_qdir' $as_dirs"
    as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\([^\/\\\]\)*\/*\[^\][^\]*/*$' \| \| \
  X"$as_dir" : 'X\([^\/\\\]\)[^\]' \| \| \
  X"$as_dir" : 'X\([^\/\\\]$' \| \| \
  X"$as_dir" : 'X\([^\/\\\]' \| \| . 2>/dev/null ||
$as_echo X"$as_dir" |
  sed '/^X\([^\/\\\]\)*\/*\[^\][^\]*\/*$/ {
    s//\1/
    q
  }
/^X\([^\/\\\]\)[^\].*/ {
  s//\1/
  q
}
/^X\([^\/\\\]\)$/ {
  s//\1/
  q
}
/^X\([^\/\\\].*/ {
  s//\1/
  q
}
s/././; q'`
    test -d "$as_dir" && break
  done
  test -z "$as_dirs" || eval "mkdir $as_dirs"
} || test -d "$as_dir" || as_fn_error $? "cannot create directory
$as_dir"

} @%:@ as_fn_mkdir_p
if mkdir -p . 2>/dev/null; then
  as_mkdir_p='mkdir -p "$as_dir"'
else
  test -d ./-p && rmdir ./-p
  as_mkdir_p=false
fi

```

```

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+_%pp%;s%[^_$as_cr_alnum]%%_g'"

exec 6>&1
## ----- ##
## Main body of $CONFIG_STATUS script. ##
## ----- ##
_ASEOF
test $as_write_fail = 0 && chmod +x $CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# Save the log message, to keep $0 and so on meaningful, and to
# report actual input values of CONFIG_FILES etc. instead of their
# values after options handling.
ac_log=""
This file was extended by dbus-glib $as_me 0.100.2, which was
generated by GNU Autoconf 2.69.  Invocation command line was

    CONFIG_FILES    = $CONFIG_FILES
    CONFIG_HEADERS  = $CONFIG_HEADERS
    CONFIG_LINKS    = $CONFIG_LINKS
    CONFIG_COMMANDS = $CONFIG_COMMANDS
$ $0 $@

on `(hostname || uname -n) 2>/dev/null | sed 1q`
"

_ACEOF

case $ac_config_files in *)
*) set x $ac_config_files; shift; ac_config_files=$*;
esac

case $ac_config_headers in *)
*) set x $ac_config_headers; shift; ac_config_headers=$*;
esac

```



```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
# Files that config.status was made for.
config_files="$ac_config_files"
config_headers="$ac_config_headers"
config_commands="$ac_config_commands"
```

_ACEOF

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
ac_cs_usage="\
`$as_me' instantiates files and other configuration actions
from templates according to the current configuration. Unless the
files
and actions are specified as TAGs, all are instantiated by default.
```

Usage: \$0 [OPTION]... [TAG]...

```
  -h, --help          print this help, then exit
  -V, --version       print version number and configuration settings,
then exit
      --config        print configuration, then exit
  -q, --quiet, --silent
                        do not print progress messages
  -d, --debug         don't remove temporary files
      --recheck       update $as_me by reconfiguring in the same
conditions
      --file=FILE[:TEMPLATE]
                        instantiate the configuration file FILE
      --header=FILE[:TEMPLATE]
                        instantiate the configuration header FILE
```

Configuration files:
\$config_files

Configuration headers:
\$config_headers

Configuration commands:
\$config_commands

Report bugs to
<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLib>."

_ACEOF

```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_cs_config="\`$as_echo "$ac_configure_args" | sed 's/^ //;
s/[\\\"\"\\`\\$]/\\\\\\&/g'`"
ac_cs_version="\`
dbus-glib config.status 0.100.2
configured by $0, generated by GNU Autoconf 2.69,
```

```
with options \\\"$ac_cs_config\\\"
```

```
Copyright (C) 2012 Free Software Foundation, Inc.  
This config.status script is free software; the Free Software  
Foundation  
gives unlimited permission to copy, distribute and modify it."
```

```
ac_pwd='$ac_pwd'  
srcdir='$srcdir'  
INSTALL='$INSTALL'  
MKDIR_P='$MKDIR_P'  
AWK='$AWK'  
test -n "\\$AWK" || AWK=awk  
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1  
# The default lists apply if the user does not specify any file.  
ac_need_defaults=:  
while test $# != 0  
do  
  case $1 in  
    --*=?*)  
      ac_option=`expr "X$1" : 'X\[^\]=*\)`  
      ac_optarg=`expr "X$1" : 'X\[^\]=*\(.*\)`  
      ac_shift=:  
      ;;  
    --*=)  
      ac_option=`expr "X$1" : 'X\[^\]=*\)`  
      ac_optarg=  
      ac_shift=:  
      ;;  
    *)  
      ac_option=$1  
      ac_optarg=$2  
      ac_shift=shift  
      ;;  
  esac  
  
  case $ac_option in  
    # Handling of the options.  
    -recheck | --recheck | --rehec | --reche | --rech | --rec | --re |  
--r)  
      ac_cs_recheck=: ;;  
    --version | --versio | --versi | --vers | --ver | --ve | --v | -V )  
      $as_echo "$ac_cs_version"; exit ;;  
    --config | --confi | --conf | --con | --co | --c )  
      $as_echo "$ac_cs_config"; exit ;;  
    --debug | --debu | --deb | --de | --d | -d )  
      debug=: ;;  
    --file | --fil | --fi | --f )  
      $ac_shift  
      case $ac_optarg in
```

```

        *\'*) ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
    ') as_fn_error $? "missing file argument" ;;
esac
as_fn_append CONFIG_FILES " '$ac_optarg'"
ac_need_defaults=false;;
--header | --heade | --head | --hea )
    $ac_shift
    case $ac_optarg in
        *\'*) ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
    esac
    as_fn_append CONFIG_HEADERS " '$ac_optarg'"
    ac_need_defaults=false;;
--he | --h)
    # Conflict between --help and --header
    as_fn_error $? "ambiguous option: \`$1'"
Try \`$0 --help' for more information.";;
--help | --hel | -h )
    $as_echo "$ac_cs_usage"; exit ;;
-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil | --si | --s)
    ac_cs_silent=: ;;

# This is an error.
-*) as_fn_error $? "unrecognized option: \`$1'"
Try \`$0 --help' for more information." ;;

*) as_fn_append ac_config_targets " $1"
    ac_need_defaults=false ;;

    esac
    shift
done

ac_configure_extra_args=

if $ac_cs_silent; then
    exec 6>/dev/null
    ac_configure_extra_args="$ac_configure_extra_args --silent"
fi

_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
if \${ac_cs_recheck}; then
    set X $SHELL '$0' $ac_configure_args \${ac_configure_extra_args} --no-
create --no-recursion
    shift
    \${as_echo} "running CONFIG_SHELL=$SHELL \$*" >&6
    CONFIG_SHELL='$SHELL'
    export CONFIG_SHELL
    exec "\$@"

```

fi

```
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
exec 5>>config.log
{
  echo
  sed 'h;s/./-/g;s/^\.../@%:@%:@ /;s/...$/ @%:@%:@/;p;x;p;x' <<_ASBOX
  @%:@%:@ Running $as_me. @%:@%:@
  _ASBOX
  $as_echo "$ac_log"
} >&5
```

```
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
#
# INIT-COMMANDS
#
AMDEP_TRUE="$AMDEP_TRUE" ac_aux_dir="$ac_aux_dir"
```

```
# The HP-UX ksh and POSIX shell print the target directory to stdout
# if CDPATH is set.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH
```

```
sed_quote_subst='`$sed_quote_subst`'
double_quote_subst='`$double_quote_subst`'
delay_variable_subst='`$delay_variable_subst`'
macro_version='`$ECHO "$macro_version" | $SED
"$delay_single_quote_subst"``'
macro_revision='`$ECHO "$macro_revision" | $SED
"$delay_single_quote_subst"``'
enable_shared='`$ECHO "$enable_shared" | $SED
"$delay_single_quote_subst"``'
enable_static='`$ECHO "$enable_static" | $SED
"$delay_single_quote_subst"``'
pic_mode='`$ECHO "$pic_mode" | $SED "$delay_single_quote_subst"``'
enable_fast_install='`$ECHO "$enable_fast_install" | $SED
"$delay_single_quote_subst"``'
SHELL='`$ECHO "$SHELL" | $SED "$delay_single_quote_subst"``'
ECHO='`$ECHO "$ECHO" | $SED "$delay_single_quote_subst"``'
PATH_SEPARATOR='`$ECHO "$PATH_SEPARATOR" | $SED
"$delay_single_quote_subst"``'
host_alias='`$ECHO "$host_alias" | $SED "$delay_single_quote_subst"``'
host='`$ECHO "$host" | $SED "$delay_single_quote_subst"``'
host_os='`$ECHO "$host_os" | $SED "$delay_single_quote_subst"``'
build_alias='`$ECHO "$build_alias" | $SED
"$delay_single_quote_subst"``'
build='`$ECHO "$build" | $SED "$delay_single_quote_subst"``'
build_os='`$ECHO "$build_os" | $SED "$delay_single_quote_subst"``'
SED='`$ECHO "$SED" | $SED "$delay_single_quote_subst"``'
Xsed='`$ECHO "$Xsed" | $SED "$delay_single_quote_subst"``'
```

```
GREP='`$ECHO "$GREP" | $SED "$delay_single_quote_subst"``'
EGREP='`$ECHO "$EGREP" | $SED "$delay_single_quote_subst"``'
FGREP='`$ECHO "$FGREP" | $SED "$delay_single_quote_subst"``'
LD='`$ECHO "$LD" | $SED "$delay_single_quote_subst"``'
NM='`$ECHO "$NM" | $SED "$delay_single_quote_subst"``'
LN_S='`$ECHO "$LN_S" | $SED "$delay_single_quote_subst"``'
max_cmd_len='`$ECHO "$max_cmd_len" | $SED
"$delay_single_quote_subst"``'
ac_objext='`$ECHO "$ac_objext" | $SED "$delay_single_quote_subst"``'
exeext='`$ECHO "$exeext" | $SED "$delay_single_quote_subst"``'
lt_unset='`$ECHO "$lt_unset" | $SED "$delay_single_quote_subst"``'
lt_SP2NL='`$ECHO "$lt_SP2NL" | $SED "$delay_single_quote_subst"``'
lt_NL2SP='`$ECHO "$lt_NL2SP" | $SED "$delay_single_quote_subst"``'
lt_cv_to_host_file_cmd='`$ECHO "$lt_cv_to_host_file_cmd" | $SED
"$delay_single_quote_subst"``'
lt_cv_to_tool_file_cmd='`$ECHO "$lt_cv_to_tool_file_cmd" | $SED
"$delay_single_quote_subst"``'
reload_flag='`$ECHO "$reload_flag" | $SED
"$delay_single_quote_subst"``'
reload_cmds='`$ECHO "$reload_cmds" | $SED
"$delay_single_quote_subst"``'
OBJDUMP='`$ECHO "$OBJDUMP" | $SED "$delay_single_quote_subst"``'
deplibs_check_method='`$ECHO "$deplibs_check_method" | $SED
"$delay_single_quote_subst"``'
file_magic_cmd='`$ECHO "$file_magic_cmd" | $SED
"$delay_single_quote_subst"``'
file_magic_glob='`$ECHO "$file_magic_glob" | $SED
"$delay_single_quote_subst"``'
want_nocaseglob='`$ECHO "$want_nocaseglob" | $SED
"$delay_single_quote_subst"``'
DLLTOOL='`$ECHO "$DLLTOOL" | $SED "$delay_single_quote_subst"``'
sharedlib_from_linklib_cmd='`$ECHO "$sharedlib_from_linklib_cmd" |
$SED "$delay_single_quote_subst"``'
AR='`$ECHO "$AR" | $SED "$delay_single_quote_subst"``'
AR_FLAGS='`$ECHO "$AR_FLAGS" | $SED "$delay_single_quote_subst"``'
archiver_list_spec='`$ECHO "$archiver_list_spec" | $SED
"$delay_single_quote_subst"``'
STRIP='`$ECHO "$STRIP" | $SED "$delay_single_quote_subst"``'
RANLIB='`$ECHO "$RANLIB" | $SED "$delay_single_quote_subst"``'
old_postinstall_cmds='`$ECHO "$old_postinstall_cmds" | $SED
"$delay_single_quote_subst"``'
old_postuninstall_cmds='`$ECHO "$old_postuninstall_cmds" | $SED
"$delay_single_quote_subst"``'
old_archive_cmds='`$ECHO "$old_archive_cmds" | $SED
"$delay_single_quote_subst"``'
lock_old_archive_extraction='`$ECHO "$lock_old_archive_extraction" |
$SED "$delay_single_quote_subst"``'
CC='`$ECHO "$CC" | $SED "$delay_single_quote_subst"``'
CFLAGS='`$ECHO "$CFLAGS" | $SED "$delay_single_quote_subst"``'
compiler='`$ECHO "$compiler" | $SED "$delay_single_quote_subst"``'
GCC='`$ECHO "$GCC" | $SED "$delay_single_quote_subst"``'
```

```
lt_cv_sys_global_symbol_pipe=`$ECHO "$lt_cv_sys_global_symbol_pipe" |
$SED "$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_cdecl=`$ECHO
"$lt_cv_sys_global_symbol_to_cdecl" | $SED
"$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_c_name_address=`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address" | $SED
"$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix=`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address_lib_prefix" | $SED
"$delay_single_quote_subst"`
nm_file_list_spec=`$ECHO "$nm_file_list_spec" | $SED
"$delay_single_quote_subst"`
lt_sysroot=`$ECHO "$lt_sysroot" | $SED "$delay_single_quote_subst"`
objdir=`$ECHO "$objdir" | $SED "$delay_single_quote_subst"`
MAGIC_CMD=`$ECHO "$MAGIC_CMD" | $SED "$delay_single_quote_subst"`
lt_prog_compiler_no_built_in_flag=`$ECHO
"$lt_prog_compiler_no_built_in_flag" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_pic=`$ECHO "$lt_prog_compiler_pic" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_wl=`$ECHO "$lt_prog_compiler_wl" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_static=`$ECHO "$lt_prog_compiler_static" | $SED
"$delay_single_quote_subst"`
lt_cv_prog_compiler_c_o=`$ECHO "$lt_cv_prog_compiler_c_o" | $SED
"$delay_single_quote_subst"`
need_locks=`$ECHO "$need_locks" | $SED "$delay_single_quote_subst"`
MANIFEST_TOOL=`$ECHO "$MANIFEST_TOOL" | $SED
"$delay_single_quote_subst"`
DSYMUTIL=`$ECHO "$DSYMUTIL" | $SED "$delay_single_quote_subst"`
NMEDIT=`$ECHO "$NMEDIT" | $SED "$delay_single_quote_subst"`
LIPO=`$ECHO "$LIPO" | $SED "$delay_single_quote_subst"`
OTOOL=`$ECHO "$OTOOL" | $SED "$delay_single_quote_subst"`
OTOOL64=`$ECHO "$OTOOL64" | $SED "$delay_single_quote_subst"`
libext=`$ECHO "$libext" | $SED "$delay_single_quote_subst"`
shrext_cmds=`$ECHO "$shrext_cmds" | $SED
"$delay_single_quote_subst"`
extract_expsyms_cmds=`$ECHO "$extract_expsyms_cmds" | $SED
"$delay_single_quote_subst"`
archive_cmds_need_lc=`$ECHO "$archive_cmds_need_lc" | $SED
"$delay_single_quote_subst"`
enable_shared_with_static_runtimes=`$ECHO
"$enable_shared_with_static_runtimes" | $SED
"$delay_single_quote_subst"`
export_dynamic_flag_spec=`$ECHO "$export_dynamic_flag_spec" | $SED
"$delay_single_quote_subst"`
whole_archive_flag_spec=`$ECHO "$whole_archive_flag_spec" | $SED
"$delay_single_quote_subst"`
compiler_needs_object=`$ECHO "$compiler_needs_object" | $SED
"$delay_single_quote_subst"`
```

```
old_archive_from_new_cmds='`$ECHO "$old_archive_from_new_cmds" | $SED
"$delay_single_quote_subst"`'
old_archive_from_expsyms_cmds='`$ECHO "$old_archive_from_expsyms_cmds"
| $SED "$delay_single_quote_subst"`'
archive_cmds='`$ECHO "$archive_cmds" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds='`$ECHO "$archive_expsym_cmds" | $SED
"$delay_single_quote_subst"`'
module_cmds='`$ECHO "$module_cmds" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds='`$ECHO "$module_expsym_cmds" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld='`$ECHO "$with_gnu_ld" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag='`$ECHO "$allow_undefined_flag" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag='`$ECHO "$no_undefined_flag" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_flag_spec='`$ECHO "$hardcode_libdir_flag_spec" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_separator='`$ECHO "$hardcode_libdir_separator" | $SED
"$delay_single_quote_subst"`'
hardcode_direct='`$ECHO "$hardcode_direct" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_absolute='`$ECHO "$hardcode_direct_absolute" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L='`$ECHO "$hardcode_minus_L" | $SED
"$delay_single_quote_subst"`'
hardcode_shlibpath_var='`$ECHO "$hardcode_shlibpath_var" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic='`$ECHO "$hardcode_automatic" | $SED
"$delay_single_quote_subst"`'
inherit_rpath='`$ECHO "$inherit_rpath" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs='`$ECHO "$link_all_deplibs" | $SED
"$delay_single_quote_subst"`'
always_export_symbols='`$ECHO "$always_export_symbols" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds='`$ECHO "$export_symbols_cmds" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms='`$ECHO "$exclude_expsyms" | $SED
"$delay_single_quote_subst"`'
include_expsyms='`$ECHO "$include_expsyms" | $SED
"$delay_single_quote_subst"`'
prelink_cmds='`$ECHO "$prelink_cmds" | $SED
"$delay_single_quote_subst"`'
postlink_cmds='`$ECHO "$postlink_cmds" | $SED
"$delay_single_quote_subst"`'
file_list_spec='`$ECHO "$file_list_spec" | $SED
"$delay_single_quote_subst"`'
variables_saved_for_relink='`$ECHO "$variables_saved_for_relink" |
$SED "$delay_single_quote_subst"`'
```

```

need_lib_prefix='`$ECHO "$need_lib_prefix" | $SED
"$delay_single_quote_subst"`'
need_version='`$ECHO "$need_version" | $SED
"$delay_single_quote_subst"`'
version_type='`$ECHO "$version_type" | $SED
"$delay_single_quote_subst"`'
runpath_var='`$ECHO "$runpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_var='`$ECHO "$shlibpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_overrides_runpath='`$ECHO "$shlibpath_overrides_runpath" |
$SED "$delay_single_quote_subst"`'
libname_spec='`$ECHO "$libname_spec" | $SED
"$delay_single_quote_subst"`'
library_names_spec='`$ECHO "$library_names_spec" | $SED
"$delay_single_quote_subst"`'
soname_spec='`$ECHO "$soname_spec" | $SED
"$delay_single_quote_subst"`'
install_override_mode='`$ECHO "$install_override_mode" | $SED
"$delay_single_quote_subst"`'
postinstall_cmds='`$ECHO "$postinstall_cmds" | $SED
"$delay_single_quote_subst"`'
postuninstall_cmds='`$ECHO "$postuninstall_cmds" | $SED
"$delay_single_quote_subst"`'
finish_cmds='`$ECHO "$finish_cmds" | $SED
"$delay_single_quote_subst"`'
finish_eval='`$ECHO "$finish_eval" | $SED
"$delay_single_quote_subst"`'
hardcode_into_libs='`$ECHO "$hardcode_into_libs" | $SED
"$delay_single_quote_subst"`'
sys_lib_search_path_spec='`$ECHO "$sys_lib_search_path_spec" | $SED
"$delay_single_quote_subst"`'
sys_lib_dlsearch_path_spec='`$ECHO "$sys_lib_dlsearch_path_spec" |
$SED "$delay_single_quote_subst"`'
hardcode_action='`$ECHO "$hardcode_action" | $SED
"$delay_single_quote_subst"`'
enable_dlopen='`$ECHO "$enable_dlopen" | $SED
"$delay_single_quote_subst"`'
enable_dlopen_self='`$ECHO "$enable_dlopen_self" | $SED
"$delay_single_quote_subst"`'
enable_dlopen_self_static='`$ECHO "$enable_dlopen_self_static" | $SED
"$delay_single_quote_subst"`'
old_striplib='`$ECHO "$old_striplib" | $SED
"$delay_single_quote_subst"`'
striplib='`$ECHO "$striplib" | $SED "$delay_single_quote_subst"`'

LTCC='$LTCC'
LTCFLAGS='$LTCFLAGS'
compiler='$compiler_DEFAULT'

# A function that is used when there is no print builtin or printf.
func_fallback_echo ()

```



```

{
  eval 'cat <<_LTECHO_EOF
\$1
_LTECHO_EOF'
}

# Quote evaled strings.
for var in SHELL \
ECHO \
PATH_SEPARATOR \
SED \
GREP \
EGREP \
FGREP \
LD \
NM \
LN_S \
lt_SP2NL \
lt_NL2SP \
reload_flag \
OBJDUMP \
deplibs_check_method \
file_magic_cmd \
file_magic_glob \
want_nocaseglob \
DLLTOOL \
sharedlib_from_linklib_cmd \
AR \
AR_FLAGS \
archiver_list_spec \
STRIP \
RANLIB \
CC \
CFLAGS \
compiler \
lt_cv_sys_global_symbol_pipe \
lt_cv_sys_global_symbol_to_cdecl \
lt_cv_sys_global_symbol_to_c_name_address \
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix \
nm_file_list_spec \
lt_prog_compiler_no_builtin_flag \
lt_prog_compiler_pic \
lt_prog_compiler_wl \
lt_prog_compiler_static \
lt_cv_prog_compiler_c_o \
need_locks \
MANIFEST_TOOL \
DSYMUTIL \
NMEDIT \
LIPO \
OTOOL \
OTOOL64 \

```

```

shrex_t_cmds \
export_dynamic_flag_spec \
whole_archive_flag_spec \
compiler_needs_object \
with_gnu_ld \
allow_undefined_flag \
no_undefined_flag \
hardcode_libdir_flag_spec \
hardcode_libdir_separator \
exclude_expsyms \
include_expsyms \
file_list_spec \
variables_saved_for_relink \
libname_spec \
library_names_spec \
soname_spec \
install_override_mode \
finish_eval \
old_strip_lib \
strip_lib; do
    case `eval \\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var"\\\\\\\\\\"` in
    *[\\\\\\\\\\\`\\\\\\"\\\\\\\\\\$]*)
        eval "lt_\\$var=\\\\\\\\\\\\\\\\\\"\\\\\\\\\\`\\\\\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var\\\\\\\\\\" | \\\\\\\$SED
\\\\\\\\\\$sed_quote_subst\\\\\\\\\\"\\\\\\\\\\`\\\\\\\\\\\\\\\\\\""
        ;;
    *)
        eval "lt_\\$var=\\\\\\\\\\\\\\\\\\"\\\\\\\\\\$\\$var\\\\\\\\\\\\\\\\\\""
        ;;
    esac
done

```

```

# Double-quote double-eval'd strings.

```

```

for var in reload_cmds \
old_postinstall_cmds \
old_postuninstall_cmds \
old_archive_cmds \
extract_expsyms_cmds \
old_archive_from_new_cmds \
old_archive_from_expsyms_cmds \
archive_cmds \
archive_expsym_cmds \
module_cmds \
module_expsym_cmds \
export_symbols_cmds \
prelink_cmds \
postlink_cmds \
postinstall_cmds \
postuninstall_cmds \
finish_cmds \
sys_lib_search_path_spec \
sys_lib_dlsearch_path_spec; do
    case `eval \\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var"\\\\\\\\\\"` in

```



```

    "dbus/examples/statemachine/Makefile") CONFIG_FILES="$CONFIG_FILES
dbus/examples/statemachine/Makefile" ;;
    "test/Makefile") CONFIG_FILES="$CONFIG_FILES test/Makefile" ;;
    "test/core/Makefile") CONFIG_FILES="$CONFIG_FILES
test/core/Makefile" ;;
    "test/interfaces/Makefile") CONFIG_FILES="$CONFIG_FILES
test/interfaces/Makefile" ;;
    "test/data/valid-service-files/debug-glib.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/debug-
glib.service" ;;
    "test/data/valid-service-files/debug-echo.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/debug-
echo.service" ;;
    "test/data/valid-service-files/interfaces-test.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/interfaces-
test.service" ;;
    "test/lib/Makefile") CONFIG_FILES="$CONFIG_FILES
test/lib/Makefile" ;;
    "test/manual/Makefile") CONFIG_FILES="$CONFIG_FILES
test/manual/Makefile" ;;
    "tools/Makefile") CONFIG_FILES="$CONFIG_FILES tools/Makefile" ;;
    "dbus-glib-1.pc") CONFIG_FILES="$CONFIG_FILES dbus-glib-1.pc" ;;
    "dbus-glib-1-uninstalled.pc") CONFIG_FILES="$CONFIG_FILES dbus-
glib-1-uninstalled.pc" ;;

```

```

    *) as_fn_error $? "invalid argument: \`${ac_config_target}'" "$LINENO"
5;;
    esac
done

```

```

# If the user did not use the arguments to specify the items to
# instantiate,
# then the envvar interface is used. Set only those that are not.
# We use the long form for the default assignment because of an
# extremely
# bizarre bug on SunOS 4.1.3.
if $ac_need_defaults; then
    test "${CONFIG_FILES+set}" = set || CONFIG_FILES=$config_files
    test "${CONFIG_HEADERS+set}" = set || CONFIG_HEADERS=$config_headers
    test "${CONFIG_COMMANDS+set}" = set ||
CONFIG_COMMANDS=$config_commands
fi

```

```

# Have a temporary directory for convenience. Make it in the build
# tree
# simply because there is no reason against having it here, and in
# addition,
# creating and moving files from /tmp can sometimes cause problems.
# Hook for its removal unless debugging.
# Note that there is a small window in which the directory will not be
# cleaned:

```

```

# after its creation but before its name has been assigned to `\$tmp'.
\$debug ||
{
  tmp= ac_tmp=
  trap 'exit_status=$?'
  : "${ac_tmp:=\$tmp}"
  { test ! -d "\$ac_tmp" || rm -fr "\$ac_tmp"; } && exit \$exit_status
' 0
  trap 'as_fn_exit 1' 1 2 13 15
}
# Create a (secure) tmp directory for tmp files.

{
  tmp=`(umask 077 && mktemp -d "./confXXXXXX") 2>/dev/null` &&
  test -d "\$tmp"
} ||
{
  tmp=./conf$$-$RANDOM
  (umask 077 && mkdir "\$tmp")
} || as_fn_error $? "cannot create a temporary directory in ."
"\$LINENO" 5
ac_tmp=\$tmp

# Set up the scripts for CONFIG_FILES section.
# No need to generate them if there are no CONFIG_FILES.
# This happens for instance with `./config.status config.h'.
if test -n "\$CONFIG_FILES"; then

ac_cr=`echo X | tr X '\015'`
# On cygwin, bash can eat \r inside `` if the user requested igncr.
# But we know of no other shell where ac_cr would be empty at this
# point, so we can use a bashism as a fallback.
if test "x\$ac_cr" = x; then
  eval ac_cr=\$\'\r\'
fi
ac_cs_awk_cr=`$AWK 'BEGIN { print "a\rb" }' </dev/null 2>/dev/null`
if test "\$ac_cs_awk_cr" = "a${ac_cr}b"; then
  ac_cs_awk_cr='\r'
else
  ac_cs_awk_cr=\$ac_cr
fi

echo 'BEGIN {' >"\$ac_tmp/subs1.awk" &&
_ACEOF

{
  echo "cat >conf$$subs.awk <<_ACEOF" &&
  echo "\$ac_subst_vars" | sed 's/.*/&!\$\$\$ac_delim/' &&
  echo "_ACEOF"
} >conf$$subs.sh ||

```

```

    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
ac_delim_num=`echo "$ac_subst_vars" | grep -c '^`
ac_delim='%!_!# '
for ac_last_try in false false false false false ;; do
  . ./conf$$subs.sh ||
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5

  ac_delim_n=`sed -n "s/.*$ac_delim\$/X/p" conf$$subs.awk | grep -c X`
  if test $ac_delim_n = $ac_delim_num; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
  else
    ac_delim="$ac_delim!$ac_delim _$ac_delim!! "
  fi
done
rm -f conf$$subs.sh

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
cat >>"$ac_tmp/subs1.awk" <<\"_ACAWK &&
_ACEOF
sed -n '
h
s/^[S["/; s/!.*"/]=/
p
g
s/^[^!]*!//
:repl
t repl
s/"$ac_delim"$//
t delim
:nl
h
s/\(.\\{148\\}\)\.*/\1/
t more1
s/["\\]/\&/g; s/"/"; s/$/\n"\\
p
n
b repl
:more1
s/["\\]/\&/g; s/"/"; s/$/"\\
p
g
s/\\.\\{148\\}//
t nl
:delim
h
s/\(.\\{148\\}\)\.*/\1/
t more2
s/["\\]/\&/g; s/"/"; s/$"/
p
b

```

```

:more2
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/.\{148\}//
t delim
' <conf$$subs.awk | sed '
/^[^"]/{
    N
    s/\n//
}
' >>$CONFIG_STATUS || ac_write_fail=1
rm -f conf$$subs.awk
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
_ACAWK
cat >>"\${ac_tmp}/subs1.awk" <<_ACAWK &&
    for (key in S) S_is_set[key] = 1
    FS = " "
}
{
    line = $ 0
    nfields = split(line, field, "@")
    substed = 0
    len = length(field[1])
    for (i = 2; i < nfields; i++) {
        key = field[i]
        keylen = length(key)
        if (S_is_set[key]) {
            value = S[key]
            line = substr(line, 1, len) "" value "" substr(line, len +
keylen + 3)
            len += length(value) + length(field[++i])
            substed = 1
        } else
            len += 1 + keylen
    }

    print line
}

_ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
if sed "s/\${ac_cr}//" < /dev/null > /dev/null 2>&1; then
    sed "s/\${ac_cr}\$//; s/\${ac_cr}/\${ac_cs_awk_cr}/g"
else
    cat
fi < "\${ac_tmp}/subs1.awk" > "\${ac_tmp}/subs.awk" \
    || as_fn_error $? "could not setup config files machinery" "$LINENO"
5
_ACEOF

```

```

# VPATH may cause trouble with some makes, so we remove sole
$(srcdir),
# ${srcdir} and @srcdir@ entries from VPATH if srcdir is ".", strip
leading and
# trailing colons and then remove the whole line if VPATH becomes
empty
# (actually we leave an empty line to preserve line numbers).
if test "x${srcdir}" = x.; then
  ac_vpsub='/^[ ]*VPATH[ ]*=[ ]*{/
h
s///
s/^\:/
s/[ ]*$\:/
s/:\$(srcdir)::/g
s/:\${srcdir}::/g
s/:\@srcdir@::/g
s/^\:*/
s/:\:*/
x
s/\(=[ ]*\)\.*/\1/
G
s/\n//
s/^[^=]*=[ ]*$//
}'
fi

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
fi # test -n "$CONFIG_FILES"

# Set up the scripts for CONFIG_HEADERS section.
# No need to generate them if there are no CONFIG_HEADERS.
# This happens for instance with './config.status Makefile'.
if test -n "$CONFIG_HEADERS"; then
cat >"$ac_tmp/defines.awk" <<\_ACAWK ||
BEGIN {
  _ACEOF

# Transform confdefs.h into an awk script `defines.awk', embedded as
# here-document in config.status, that substitutes the proper values
into
# config.h.in to produce config.h.

# Create a delimiter string that does not exist in confdefs.h, to ease
# handling of long lines.
ac_delim='%!_!# '
for ac_last_try in false false ;; do
  ac_tt=`sed -n "/$ac_delim/p" confdefs.h`
  if test -z "$ac_tt"; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_HEADERS" "$LINENO" 5

```



```

else
    ac_delim="$ac_delim!$ac_delim_$ac_delim!! "
fi
done

# For the awk script, D is an array of macro values keyed by name,
# likewise P contains macro parameters if any. Preserve backslash
# newline sequences.

ac_word_re=[_$_$as_cr_Letters][_$_$as_cr_alnum]*
sed -n '
s/.\{148\}/&'"$ac_delim"'/g
t rset
:rset
s/^[ ]*#[ ]*define[ ]*[ ]*/ /
t def
d
:def
s/\\$//
t bsnl
s/["\\]/\\&/g
s/^\ ("$ac_word_re"\)\ ([[^\]]*)\ [ ]*\ (.*) /P["\1"]="\2"\
D["\1"]=" \3"/p
s/^\ ("$ac_word_re"\)[ ]*\ (.*) /D["\1"]=" \2"/p
d
:bsnl
s/["\\]/\\&/g
s/^\ ("$ac_word_re"\)\ ([[^\]]*)\ [ ]*\ (.*) /P["\1"]="\2"\
D["\1"]=" \3\\n"/p
t cont
s/^\ ("$ac_word_re"\)[ ]*\ (.*) /D["\1"]=" \2\\n"/p
t cont
d
:cont
n
s/.\{148\}/&'"$ac_delim"'/g
t clear
:clear
s/\\$//
t bsnlc
s/["\\]/\\&/g; s/^\ //; s/$//p
d
:bsnlc
s/["\\]/\\&/g; s/^\ //; s/$/\\n"/p
b cont
' <confdefs.h | sed '
s/"$ac_delim"/"\\
"/g' >>$CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
for (key in D) D_is_set[key] = 1
FS = " "

```

```

}
/^[ \t ]*#[ \t ]*(define|undef)[ \t ]+${_word_re}([ \t ]|\$)/ {
    line = \$ 0
    split(line, arg, " ")
    if (arg[1] == "#") {
        defundef = arg[2]
        mac1 = arg[3]
    } else {
        defundef = substr(arg[1], 2)
        mac1 = arg[2]
    }
    split(mac1, mac2, "(") #)
    macro = mac2[1]
    prefix = substr(line, 1, index(line, defundef) - 1)
    if (D_is_set[macro]) {
        # Preserve the white space surrounding the "#".
        print prefix "define", macro P[macro] D[macro]
        next
    } else {
        # Replace #undef with comments. This is necessary, for example,
        # in the case of _POSIX_SOURCE, which is predefined and required
        # on some systems where configure will not decide to define it.
        if (defundef == "undef") {
            print "/*", prefix defundef, macro, "*/"
            next
        }
    }
}
}
{ print }
_ACAWK
_ACEOF
cat >>${CONFIG_STATUS} <<\_ACEOF || ac_write_fail=1
    as_fn_error $? "could not setup config headers machinery" "$LINENO"
5
fi # test -n "${CONFIG_HEADERS}"

eval set X " :F $CONFIG_FILES :H $CONFIG_HEADERS :C
$CONFIG_COMMANDS"
shift
for ac_tag
do
    case $ac_tag in
        :[FHLC]) ac_mode=$ac_tag; continue;;
    esac
    case $ac_mode$ac_tag in
        :[FHL]*:*);;
        :L* | :C*:* ) as_fn_error $? "invalid tag \"$ac_tag\"" "$LINENO" 5;;
        :[FH]-) ac_tag=-:-;;
        :[FH]*) ac_tag=$ac_tag:$ac_tag.in;;
    esac
    ac_save_IFS=$IFS

```

```

IFS=:
set x $ac_tag
IFS=$ac_save_IFS
shift
ac_file=$1
shift

case $ac_mode in
:L) ac_source=$1;;
:[FH])
    ac_file_inputs=
    for ac_f
    do
        case $ac_f in
        -) ac_f="$ac_tmp/stdin";;
        *) # Look for the file first in the build tree, then in the
source tree
            # (if the path is not absolute). The absolute path cannot be
DOS-style,
            # because $ac_f cannot contain `:'.
            test -f "$ac_f" ||
            case $ac_f in
            [\\/$]*) false;;
            *) test -f "$srcdir/$ac_f" && ac_f="$srcdir/$ac_f";;
            esac ||
            as_fn_error 1 "cannot find input file: \`$ac_f'" "$LINENO" 5;;
            esac
            case $ac_f in *\`*) ac_f=`$as_echo "$ac_f" | sed
"s/'/'\`\\|\`\\|\`/'/g"`;; esac
            as_fn_append ac_file_inputs " '$ac_f'"
        done

        # Let's still pretend it is `configure' which instantiates (i.e.,
don't
        # use $as_me), people would be surprised to read:
        # /* config.h. Generated by config.status. */
        configure_input='Generated from `
$as_echo "$*" | sed 's|^[^:]*|/|;s|:[^:]*|/, |g'
`' by configure.'
        if test x"$ac_file" != x-; then
            configure_input="$ac_file. $configure_input"
            { $as_echo "$as_me:${as_lineno-$LINENO}: creating $ac_file" >&5
$as_echo "$as_me: creating $ac_file" >&6;}
        fi
        # Neutralize special characters interpreted by sed in replacement
strings.
        case $configure_input in #(
*\&* | *\\|* | *\\*)
            ac_sed_conf_input=`$as_echo "$configure_input" |
sed 's/[\\&|]/\\&/g'`; # (
        *) ac_sed_conf_input=$configure_input;;
        esac

```

```

    case $ac_tag in
    *:-:* | *:-) cat >"$ac_tmp/stdin" \
        || as_fn_error $? "could not create $ac_file" "$LINENO" 5 ;;
    esac
    ;;
esac

ac_dir=`$as_dirname -- "$ac_file" ||
$as_expr X"$ac_file" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
    X"$ac_file" : 'X\(//\)[^/]' \| \
    X"$ac_file" : 'X\(//\)$' \| \
    X"$ac_file" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$ac_file" |
    sed '/^X\(.*[^/]\)\/*[^/][^/]*/*$/{
        s//\1/
        q
    }
/^X\(\\\/\)\[^/].*${
    s//\1/
    q
}
/^X\(\\\/\)$/{
    s//\1/
    q
}
/^X\(\\\/\).*${
    s//\1/
    q
}
s/.*\/./; q'`
as_dir="$ac_dir"; as_fn_mkdir_p
ac_buildidir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_buildidir_sub=. ac_top_build_prefix= ;;
*)
    ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.([\//]|||)`
    # A "." for each directory in $ac_dir_suffix.
    ac_top_buildidir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\\/]*/|/..|g;s|/|||`
    case $ac_top_buildidir_sub in
    "") ac_top_buildidir_sub=. ac_top_build_prefix= ;;
    *) ac_top_build_prefix=$ac_top_buildidir_sub/ ;;
    esac ;;
esac
esac
ac_abs_top_buildidir=$ac_pwd
ac_abs_buildidir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_buildidir=$ac_top_build_prefix

case $srcdir in

```

```

.) # We are building in place.
  ac_srcdir=.
  ac_top_srcdir=$ac_top_builddir_sub
  ac_abs_top_srcdir=$ac_pwd ;;
[\\/* | ?:[\\/* ] # Absolute name.
  ac_srcdir=$srcdir$ac_dir_suffix;
  ac_top_srcdir=$srcdir
  ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
  ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
  ac_top_srcdir=$ac_top_build_prefix$srcdir
  ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

case $ac_mode in
:F)
#
# CONFIG_FILE
#

case $INSTALL in
[\\/* | ?:[\\/* ] ac_INSTALL=$INSTALL ;;
*) ac_INSTALL=$ac_top_build_prefix$INSTALL ;;
esac
ac_MKDIR_P=$MKDIR_P
case $MKDIR_P in
[\\/* | ?:[\\/* ] ) ;;
*/*) ac_MKDIR_P=$ac_top_build_prefix$MKDIR_P ;;
esac
_ACEOF

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# If the template does not know about datarootdir, expand it.
# FIXME: This hack should be removed a few years after 2.60.
ac_datarootdir_hack=; ac_datarootdir_seen=
ac_sed_dataroot='
/datarootdir/ {
  p
  q
}
/@datadir@/p
/@docdir@/p
/@infodir@/p
/@localedir@/p
/@mandir@/p'
case `eval "sed -n \"\$ac_sed_dataroot\" $ac_file_inputs"` in
*datarootdir*) ac_datarootdir_seen=yes;;
*@datadir@*|*@docdir@*|*@infodir@*|*@localedir@*|*@mandir@*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file_inputs
seems to ignore the --datarootdir setting" >&5

```

```

$as_echo "$as_me: WARNING: $ac_file_inputs seems to ignore the --
datarootdir setting" >&2;}
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
  ac_datarootdir_hack='
  s@datadir@&$datadir&g
  s@docdir@&$docdir&g
  s@infodir@&$infodir&g
  s@localedir@&$localedir&g
  s@mandir@&$mandir&g
  s\\$\\{datarootdir}&$datarootdir&' ;;
esac
_ACEOF

# Neutralize VPATH when `srcdir' = `.'.
# Shell code in configure.ac might set extrasub.
# FIXME: do we really want to maintain this feature?
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_sed_extra="$ac_vpsub
$extrasub
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
:t
/@[a-zA-Z_][a-zA-Z_0-9]*@/!b
s|@configure_input@|${ac_sed_conf_input}|;t t
s@top_builddir@&$ac_top_builddir_sub&;t t
s@top_build_prefix@&$ac_top_build_prefix&;t t
s@srcdir@&$ac_srcdir&;t t
s@abs_srcdir@&$ac_abs_srcdir&;t t
s@top_srcdir@&$ac_top_srcdir&;t t
s@abs_top_srcdir@&$ac_abs_top_srcdir&;t t
s@builddir@&$ac_builddir&;t t
s@abs_builddir@&$ac_abs_builddir&;t t
s@abs_top_builddir@&$ac_abs_top_builddir&;t t
s@INSTALL@&$ac_INSTALL&;t t
s@MKDIR_P@&$ac_MKDIR_P&;t t
$ac_datarootdir_hack
"
eval sed "\${ac_sed_extra}" "$ac_file_inputs" | $AWK -f
"$ac_tmp/subs.awk" \
  >$ac_tmp/out || as_fn_error $? "could not create $ac_file" "$LINENO"
5

test -z "$ac_datarootdir_hack$ac_datarootdir_seen" &&
  { ac_out=`sed -n '/\${datarootdir}/p' "$ac_tmp/out"`; test -n
"$ac_out"; } &&
  { ac_out=`sed -n '/^[ ]*datarootdir[ ]*:*=/p' \
    "$ac_tmp/out"`; test -z "$ac_out"; } &&
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file contains
a reference to the variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&5

```

```

$as_echo "$as_me: WARNING: $ac_file contains a reference to the
variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&2;}

rm -f "$ac_tmp/stdin"
case $ac_file in
-) cat "$ac_tmp/out" && rm -f "$ac_tmp/out";;
*) rm -f "$ac_file" && mv "$ac_tmp/out" "$ac_file";;
esac \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
;;
:H)
#
# CONFIG_HEADER
#
if test x"$ac_file" != x-; then
{
$as_echo "/* $configure_input */" \
&& eval '$AWK -f "$ac_tmp/defines.awk" "$ac_file_inputs"
} >"$ac_tmp/config.h" \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
if diff "$ac_file" "$ac_tmp/config.h" >/dev/null 2>&1; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: $ac_file is unchanged"
>&5
$as_echo "$as_me: $ac_file is unchanged" >&6;}
else
rm -f "$ac_file"
mv "$ac_tmp/config.h" "$ac_file" \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
fi
else
$as_echo "/* $configure_input */" \
&& eval '$AWK -f "$ac_tmp/defines.awk" "$ac_file_inputs" \
|| as_fn_error $? "could not create -" "$LINENO" 5
fi
# Compute "$ac_file"'s index in $config_headers.
_am_arg="$ac_file"
_am_stamp_count=1
for _am_header in $config_headers ;; do
case $_am_header in
$_am_arg | $_am_arg:* )
break ;;
* )
_am_stamp_count=`expr $_am_stamp_count + 1` ;;
esac
done
echo "timestamp for $_am_arg" >`$as_dirname -- "$_am_arg" ||
$as_expr X"$_am_arg" : 'X\([^/]\)\/*\([^/]\)\/*\*$' \|| \
X"$_am_arg" : 'X\(/\)\[^/]' \|| \
X"$_am_arg" : 'X\(/\)\$' \|| \
X"$_am_arg" : 'X\(/)\$' \|| . 2>/dev/null ||
$as_echo X"$_am_arg" |

```

```

sed '/^X\(.*[^\)]\)\)\)\/*[^\)]\[^)]*\/*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\[^)]\.*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\)$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\.*$/{
    s//\1/
    q
}
s/.*\/./; q'\`/stamp-h$_am_stamp_count
;;

:C) { $sas_echo "$sas_me:${as_lineno-$LINENO}: executing $ac_file
commands" >&5
$sas_echo "$sas_me: executing $ac_file commands" >&6;}
;;
esac

case $ac_file$ac_mode in
  "depfiles":C) test x"$SAMDEP_TRUE" != x"" || {
# Autoconf 2.62 quotes --file arguments for eval, but not when files
# are listed without --file. Let's play safe and only enable the
eval
# if we detect the quoting.
case $CONFIG_FILES in
*\') eval set x "$CONFIG_FILES" ;;
*) set x $CONFIG_FILES ;;
esac
shift
for mf
do
# Strip MF so we end up with the name of the file.
mf=`echo "$mf" | sed -e 's/:.*$//'\`
# Check whether this is an Automake generated Makefile or not.
# We used to match only the files named 'Makefile.in', but
# some people rename them; so instead we look at the file content.
# Grep'ing the first line is not enough: some people post-process
# each Makefile.in and add a new line on top of each file to say
so.
# Grep'ing the whole file is not good either: AIX grep has a line
# limit of 2048, but all sed's we know have understand at least
4000.
if sed -n 's,^#.*generated by automake.*,X,p' "$mf" | grep X
>/dev/null 2>&1; then

```



```

    dirpart=`$as_dirname -- "$mf" ||
$as_expr X"$mf" : 'X\(.^[^/]\)\/*[^/][^/]*/*$' \|\ \
    X"$mf" : 'X\(/\)\ [^/]' \|\ \
    X"$mf" : 'X\(/\)\$' \|\ \
    X"$mf" : 'X\(/)\' \|\ . 2>/dev/null ||
$as_echo X"$mf" |
    sed '/^X\(.^[^/]\)\*\/*[^/][^/]*\/*$/{
        s//\1/
        q
    }
    /^X\(\*\/*[^/][^/]*\/*$/{
        s//\1/
        q
    }
    /^X\(\*\/*[^/][^/]*\/*$/{
        s//\1/
        q
    }
    /^X\(\*\/*[^/][^/]*\/*$/{
        s//\1/
        q
    }
    s/.*\/./; q'`
else
    continue
fi
# Extract the definition of DEPDIR, am__include, and am__quote
# from the Makefile without running 'make'.
DEPDIR=`sed -n 's/^DEPDIR = //p' < "$mf"`
test -z "$DEPDIR" && continue
am__include=`sed -n 's/^am__include = //p' < "$mf"`
test -z "am__include" && continue
am__quote=`sed -n 's/^am__quote = //p' < "$mf"`
# Find all dependency output files, they are included files with
# $(DEPDIR) in their names. We invoke sed twice because it is the
# simplest approach to changing $(DEPDIR) to its actual value in
the
# expansion.
for file in `sed -n "
    s/^$am__include $am__quote\(.*(DEPDIR).*\)$am__quote"'\$/\1/p'
<"$mf" | \
    sed -e 's/\$(DEPDIR)/'"$DEPDIR"'/g`; do
    # Make sure the directory exists.
    test -f "$dirpart/$file" && continue
    fdir=`$as_dirname -- "$file" ||
$as_expr X"$file" : 'X\(.^[^/]\)\/*[^/][^/]*/*$' \|\ \
    X"$file" : 'X\(/\)\ [^/]' \|\ \
    X"$file" : 'X\(/\)\$' \|\ \
    X"$file" : 'X\(/)\' \|\ . 2>/dev/null ||
$as_echo X"$file" |
    sed '/^X\(.^[^/]\)\*\/*[^/][^/]*\/*$/{
        s//\1/

```

```

        q
    }
    /^X\(\\\/\\\/)[^/].*/{
        s//\1/
        q
    }
    /^X\(\\\/\\\/)${/ {
        s//\1/
        q
    }
    /^X\(\\\/).*/{
        s//\1/
        q
    }
    s/.*\/./; q`
as_dir=$dirpart/$fdir; as_fn_mkdir_p
# echo "creating $dirpart/$file"
echo '# dummy' > "$dirpart/$file"
done
done
}
;;
"libtool":C)

# See if we are running on zsh, and set the options which allow
our
# commands through without removal of \ escapes.
if test -n "${ZSH_VERSION+set}" ; then
    setopt NO_GLOB_SUBST
fi

cfgfile="${ofile}T"
trap "$RM \"$cfgfile\"; exit 1" 1 2 15
$RM "$cfgfile"

cat <<_LT_EOF >> "$cfgfile"
#! $SHELL

# `ECHO "$ofile" | sed 's%^.*/%%'` - Provide generalized library-
building support services.
# Generated automatically by $as_me ($PACKAGE$TIMESTAMP) $VERSION
# Libtool was configured on host `(hostname || uname -n) 2>/dev/null |
sed lq`:
# NOTE: Changes made to this file will be lost: look at ltmain.sh.
#
# Copyright (C) 1996, 1997, 1998, 1999, 2000, 2001, 2003, 2004,
2005,
#           2006, 2007, 2008, 2009, 2010, 2011 Free Software
#           Foundation, Inc.
# Written by Gordon Matzigkeit, 1996
#
# This file is part of GNU Libtool.

```

```
#
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# 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

# The names of the tagged configurations supported by this script.
available_tags=""

# ### BEGIN LIBTOOL CONFIG

# Which release of libtool.m4 was used?
macro_version=$macro_version
macro_revision=$macro_revision

# Whether or not to build shared libraries.
build_libtool_libs=$enable_shared

# Whether or not to build static libraries.
build_old_libs=$enable_static

# What type of objects to build.
pic_mode=$pic_mode

# Whether or not to optimize for fast installation.
fast_install=$enable_fast_install

# Shell to use when invoking shell scripts.
SHELL=$lt_SHELL

# An echo program that protects backslashes.
ECHO=$lt_ECHO

# The PATH separator for the build system.
PATH_SEPARATOR=$lt_PATH_SEPARATOR
```

```
# The host system.
host_alias=$host_alias
host=$host
host_os=$host_os

# The build system.
build_alias=$build_alias
build=$build
build_os=$build_os

# A sed program that does not truncate output.
SED=$lt_SED

# Sed that helps us avoid accidentally triggering echo(1) options like
-n.
Xsed="\$SED -e 1s/^X//"

# A grep program that handles long lines.
GREP=$lt_GREP

# An ERE matcher.
EGREP=$lt_EGREP

# A literal string matcher.
FGREP=$lt_FGREP

# A BSD- or MS-compatible name lister.
NM=$lt_NM

# Whether we need soft or hard links.
LN_S=$lt_LN_S

# What is the maximum length of a command?
max_cmd_len=$max_cmd_len

# Object file suffix (normally "o").
objext=$ac_objext

# Executable file suffix (normally "").
exeext=$exeext

# whether the shell understands "unset".
lt_unset=$lt_unset

# turn spaces into newlines.
SP2NL=$lt_lt_SP2NL

# turn newlines into spaces.
NL2SP=$lt_lt_NL2SP

# convert \$build file names to \$host format.
```

```
to_host_file_cmd=$lt_cv_to_host_file_cmd

# convert \${build} files to toolchain format.
to_tool_file_cmd=$lt_cv_to_tool_file_cmd

# An object symbol dumper.
OBJDUMP=$lt_OBJDUMP

# Method to check whether dependent libraries are shared objects.
deplibs_check_method=$lt_deplibs_check_method

# Command to use when deplibs_check_method = "file_magic".
file_magic_cmd=$lt_file_magic_cmd

# How to find potential files when deplibs_check_method =
"file_magic".
file_magic_glob=$lt_file_magic_glob

# Find potential files using nocaseglob when deplibs_check_method =
"file_magic".
want_nocaseglob=$lt_want_nocaseglob

# DLL creation program.
DLLTOOL=$lt_DLLTOOL

# Command to associate shared and link libraries.
sharedlib_from_linklib_cmd=$lt_sharedlib_from_linklib_cmd

# The archiver.
AR=$lt_AR

# Flags to create an archive.
AR_FLAGS=$lt_AR_FLAGS

# How to feed a file listing to the archiver.
archiver_list_spec=$lt_archiver_list_spec

# A symbol stripping program.
STRIP=$lt_STRIP

# Commands used to install an old-style archive.
RANLIB=$lt_RANLIB
old_postinstall_cmds=$lt_old_postinstall_cmds
old_postuninstall_cmds=$lt_old_postuninstall_cmds

# Whether to use a lock for old archive extraction.
lock_old_archive_extraction=$lock_old_archive_extraction

# A C compiler.
LTCC=$lt_CC

# LTCC compiler flags.
```

```
LTCFLAGS=$lt_CFLAGS

# Take the output of nm and produce a listing of raw symbols and C
names.
global_symbol_pipe=$lt_lt_cv_sys_global_symbol_pipe

# Transform the output of nm in a proper C declaration.
global_symbol_to_cdecl=$lt_lt_cv_sys_global_symbol_to_cdecl

# Transform the output of nm in a C name address pair.
global_symbol_to_c_name_address=$lt_lt_cv_sys_global_symbol_to_c_name_
address

# Transform the output of nm in a C name address pair when lib prefix
is needed.
global_symbol_to_c_name_address_lib_prefix=$lt_lt_cv_sys_global_symbol
_to_c_name_address_lib_prefix

# Specify filename containing input files for \${NM}.
nm_file_list_spec=$lt_nm_file_list_spec

# The root where to search for dependent libraries, and in which our
libraries should be installed.
lt_sysroot=$lt_sysroot

# The name of the directory that contains temporary libtool files.
objdir=${objdir}

# Used to examine libraries when file_magic_cmd begins with "file".
MAGIC_CMD=${MAGIC_CMD}

# Must we lock files when doing compilation?
need_locks=$lt_need_locks

# Manifest tool.
MANIFEST_TOOL=$lt_MANIFEST_TOOL

# Tool to manipulate archived DWARF debug symbol files on Mac OS X.
DSYMUTIL=$lt_DSYMUTIL

# Tool to change global to local symbols on Mac OS X.
NMEDIT=$lt_NMEDIT

# Tool to manipulate fat objects and archives on Mac OS X.
LIPO=$lt_LIPO

# ldd/readelf like tool for Mach-O binaries on Mac OS X.
OTOOL=$lt_OTOOL

# ldd/readelf like tool for 64 bit Mach-O binaries on Mac OS X 10.4.
OTOOL64=$lt_OTOOL64
```

```
# Old archive suffix (normally "a").
libext=$libext

# Shared library suffix (normally ".so").
shrext_cmds=$lt_shrext_cmds

# The commands to extract the exported symbol list from a shared
archive.
extract_expsyms_cmds=$lt_extract_expsyms_cmds

# Variables whose values should be saved in libtool wrapper scripts
and
# restored at link time.
variables_saved_for_relink=$lt_variables_saved_for_relink

# Do we need the "lib" prefix for modules?
need_lib_prefix=$need_lib_prefix

# Do we need a version for libraries?
need_version=$need_version

# Library versioning type.
version_type=$version_type

# Shared library runtime path variable.
runpath_var=$runpath_var

# Shared library path variable.
shlibpath_var=$shlibpath_var

# Is shlibpath searched before the hard-coded library search path?
shlibpath_overrides_runpath=$shlibpath_overrides_runpath

# Format of library name prefix.
libname_spec=$lt_libname_spec

# List of archive names.  First name is the real one, the rest are
links.
# The last name is the one that the linker finds with -lNAME
library_names_spec=$lt_library_names_spec

# The coded name of the library, if different from the real name.
soname_spec=$lt_soname_spec

# Permission mode override for installation of shared libraries.
install_override_mode=$lt_install_override_mode

# Command to use after installation of a shared archive.
postinstall_cmds=$lt_postinstall_cmds

# Command to use after uninstallation of a shared archive.
postuninstall_cmds=$lt_postuninstall_cmds
```

```
# Commands used to finish a libtool library installation in a
directory.
finish_cmds=$lt_finish_cmds

# As "finish_cmds", except a single script fragment to be evaled but
# not shown.
finish_eval=$lt_finish_eval

# Whether we should hardcode library paths into libraries.
hardcode_into_libs=$hardcode_into_libs

# Compile-time system search path for libraries.
sys_lib_search_path_spec=$lt_sys_lib_search_path_spec

# Run-time system search path for libraries.
sys_lib_dlsearch_path_spec=$lt_sys_lib_dlsearch_path_spec

# Whether dlopen is supported.
dlopen_support=$enable_dlopen

# Whether dlopen of programs is supported.
dlopen_self=$enable_dlopen_self

# Whether dlopen of statically linked programs is supported.
dlopen_self_static=$enable_dlopen_self_static

# Commands to strip libraries.
old_striplib=$lt_old_striplib
striplib=$lt_striplib

# The linker used to build libraries.
LD=$lt_LD

# How to create reloadable object files.
reload_flag=$lt_reload_flag
reload_cmds=$lt_reload_cmds

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds

# A language specific compiler.
CC=$lt_compiler

# Is the compiler the GNU compiler?
with_gcc=$GCC

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag

# Additional compiler flags for building library objects.
```



```
pic_flag=$lt_lt_prog_compiler_pic

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_runtimes

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds
archive_expsym_cmds=$lt_archive_expsym_cmds

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds
module_expsym_cmds=$lt_module_expsym_cmds

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag
```

```
# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=${lt_hardcode_libdir_flag_spec}

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=${lt_hardcode_libdir_separator}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=${hardcode_direct}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=${hardcode_direct_absolute}

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=${hardcode_minus_L}

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=${hardcode_shlibpath_var}

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=${hardcode_automatic}

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=${inherit_rpath}

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=${link_all_deplibs}

# Set to "yes" if exported symbols are required.
always_export_symbols=${always_export_symbols}

# The commands to list exported symbols.
export_symbols_cmds=${lt_export_symbols_cmds}

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=${lt_exclude_expsyms}
```

```

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action

# ### END LIBTOOL CONFIG

_LT_EOF

case $host_os in
aix3*)
    cat <<\_LT_EOF >> "$cfgfile"
# AIX sometimes has problems with the GCC collect2 program.  For some
# reason, if we set the COLLECT_NAMES environment variable, the
problems
# vanish in a puff of smoke.
if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
fi
_LT_EOF
;;
esac

ltmain="$ac_aux_dir/ltmain.sh"

# We use sed instead of cat because bash on DJGPP gets confused if
# if finds mixed CR/LF and LF-only lines.  Since sed operates in
# text mode, it properly converts lines to CR/LF.  This bash problem
# is reportedly fixed, but why not run on old versions too?
sed '$q' "$ltmain" >> "$cfgfile" \
    || (rm -f "$cfgfile"; exit 1)

if test x"$xsi_shell" = xyesh; then
    sed -e '/^func_dirname ()$/,/^} # func_dirname /c\
func_dirname ()\
{\
\    case ${1} in\

```

```

\      */*) func_dirname_result="${1%/*}${2}" ;;\
\      * ) func_dirname_result="${3}" ;;\
\    esac\
} # Extended-shell func_dirname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_basename ()$/,/^\} # func_basename /c\
func_basename ()\
{\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_basename implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_dirname_and_basename ()$/,/^\} #
func_dirname_and_basename /c\
func_dirname_and_basename ()\
{\
\   case ${1} in\
\     */*) func_dirname_result="${1%/*}${2}" ;;\
\     * ) func_dirname_result="${3}" ;;\
\   esac\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_dirname_and_basename implementation'
"$cfgfile" > $cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_stripname ()$/,/^\} # func_stripname /c\
func_stripname ()\
{\
\   # pdksh 5.2.14 does not do ${X%$Y} correctly if both X and Y are\
\   # positional parameters, so assign one to ordinary parameter
first.\
\   func_stripname_result=${3}\
\   func_stripname_result=${func_stripname_result#"${1}"}\
\   func_stripname_result=${func_stripname_result%"${2}"}\
} # Extended-shell func_stripname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \

```

```
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:
```

```
    sed -e '/^func_split_long_opt ()$/,/^\} # func_split_long_opt /c\
func_split_long_opt ()\
{\
\   func_split_long_opt_name=${1%*=*}\
\   func_split_long_opt_arg=${1#*=}\
} # Extended-shell func_split_long_opt implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:
```

```
    sed -e '/^func_split_short_opt ()$/,/^\} # func_split_short_opt /c\
func_split_short_opt ()\
{\
\   func_split_short_opt_arg=${1#??}\
\   func_split_short_opt_name=${1%"$func_split_short_opt_arg"}\
} # Extended-shell func_split_short_opt implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:
```

```
    sed -e '/^func_lo2o ()$/,/^\} # func_lo2o /c\
func_lo2o ()\
{\
\   case ${1} in\
\     *.lo) func_lo2o_result=${1%.lo}.${objext} ;;\
\     *)   func_lo2o_result=${1} ;;\
\   esac\
} # Extended-shell func_lo2o implementation' "$cfgfile" > $cfgfile.tmp
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:
```

```
    sed -e '/^func_xform ()$/,/^\} # func_xform /c\
func_xform ()\
{\
\   func_xform_result=${1%.*}.lo\
} # Extended-shell func_xform implementation' "$cfgfile" >
$cfgfile.tmp \
```

```

    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_arith ()$/,/^{ } # func_arith /c\
func_arith ()\
{\
    func_arith_result=$(( $* ))\
} # Extended-shell func_arith implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_len ()$/,/^{ } # func_len /c\
func_len ()\
{\
    func_len_result=${#1}\
} # Extended-shell func_len implementation' "$cfgfile" > $cfgfile.tmp
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

fi

if test x"$lt_shell_append" = xyes; then
    sed -e '/^func_append ()$/,/^{ } # func_append /c\
func_append ()\
{\
    eval "${1}+=\\${2}"\
} # Extended-shell func_append implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_append_quoted ()$/,/^{ } # func_append_quoted /c\
func_append_quoted ()\
{\
    \    func_quote_for_eval "${2}"\
    \    eval "${1}+=\\\ \\\ $func_quote_for_eval_result"\
} # Extended-shell func_append_quoted implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \

```

```

    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    # Save a `func_append' function call where possible by direct use of
'+='
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1+= "%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
else
    # Save a `func_append' function call even when '+=' is not available
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1=" $\1%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
fi

if test x"$_lt_function_replace_fail" = x":"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Unable to
substitute extended shell functions in $ofile" >&5
$as_echo "$as_me: WARNING: Unable to substitute extended shell
functions in $ofile" >&2;}
fi

    mv -f "$cfgfile" "$ofile" ||
    (rm -f "$ofile" && cp "$cfgfile" "$ofile" && rm -f "$cfgfile")
    chmod +x "$ofile"

;;

esac
done # for ac_tag

as_fn_exit 0
_ACEOF
ac_clean_files=$ac_clean_files_save

test $ac_write_fail = 0 ||
    as_fn_error $? "write failure creating $CONFIG_STATUS" "$LINENO" 5

# configure is writing to config.log, and then calls config.status.
# config.status does its own redirection, appending to config.log.
# Unfortunately, on DOS this fails, as config.log is still kept open

```

```

# by configure, so config.status won't be able to write to it; its
# output is simply discarded.  So we exec the FD to /dev/null,
# effectively closing config.log, so it can be properly (re)opened and
# appended to by config.status.  When coming back to configure, we
# need to make the FD available again.
if test "$no_create" != yes; then
  ac_cs_success=:
  ac_config_status_args=
  test "$silent" = yes &&
    ac_config_status_args="$ac_config_status_args --quiet"
  exec 5>/dev/null
  $SHELL $CONFIG_STATUS $ac_config_status_args || ac_cs_success=false
  exec 5>>config.log
  # Use ||, not &&, to avoid exiting from the if with $? = 1, which
  # would make configure fail if this is the last instruction.
  $ac_cs_success || as_fn_exit 1
fi
if test -n "$ac_unrecognized_opts" && test "$enable_option_checking"
!= no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: unrecognized
options: $ac_unrecognized_opts" >&5
$as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2;}
fi

echo "
                D-BUS GLIB BINDINGS $VERSION
                =====

prefix:                ${prefix}
exec_prefix:           ${exec_prefix}
  libdir:                ${EXPANDED_LIBDIR}
  bindir:                ${EXPANDED_BINDIR}
  sysconfdir:           ${EXPANDED_SYSCONFDIR}
  localstatedir:       ${EXPANDED_LOCALSTATEDIR}
datadir:               ${EXPANDED_DATADIR}
source code location:  ${srcdir}
compiler:              ${CC}
cflags:                ${CFLAGS}
cppflags:              ${CPPFLAGS}
"

echo "
  Maintainer mode:      ${USE_MAINTAINER_MODE}
  gcc coverage profiling:  ${enable_gcov}
  Building unit tests:  ${enable_tests}
  Building verbose mode:  ${enable_verbose_mode}
  Building assertions:  ${enable_asserts}
  Building checks:      ${enable_checks}
  Building Gtk-doc docs:  ${enable_gtk_doc}
  Bash Completion:     ${enable_bash_completion}

```



```

        Using XML parser:          ${with_xml}
        'make check' socket dir:  ${TEST_SOCKET_DIR}
"

if test x$enable_tests = xyes; then
    echo "NOTE: building with unit tests increases the size of the
installed library and renders it insecure."
fi
if test x$enable_tests = xyes -a x$enable_asserts = xno; then
    echo "NOTE: building with unit tests but without assertions
means tests may not properly report failures (this configuration is
only useful when doing something like profiling the tests)"
fi
if test x$enable_gcov = xyes; then
    echo "NOTE: building with coverage profiling is definitely for
developers only."
fi
if test x$enable_verbose_mode = xyes; then
    echo "NOTE: building with verbose mode increases library size,
may slightly increase security risk, and decreases performance."
fi
if test x$enable_asserts = xyes; then
    echo "NOTE: building with assertions increases library size
and decreases performance."
fi
if test x$enable_checks = xno; then
    echo "NOTE: building without checks for arguments passed to
public API makes it harder to debug apps using D-BUS, but will
slightly decrease D-BUS library size and _very_ slightly improve
performance."
fi

```

File = output.1.~1~

```

@%:@! /bin/sh
@%:@ Guess values for system-dependent variables and create Makefiles.
@%:@ Generated by GNU Autoconf 2.69 for dbus 1.6.8.
@%:@
@%:@ Report bugs to
<https://bugs.freedesktop.org/enter\_bug.cgi?product=dbus>.
@%:@
@%:@
@%:@ Copyright (C) 1992-1996, 1998-2012 Free Software Foundation, Inc.
@%:@
@%:@
@%:@ This configure script is free software; the Free Software
Foundation
@%:@ gives unlimited permission to copy, distribute and modify it.
## ----- ##
## M4sh Initialization. ##

```



```

    expr "X$arg" : "X\\(.*\\) $as_nl";
    arg=`expr "X$arg" : ".*$as_nl\\(.*\\)" `;;
    esac;
    expr "X$arg" : "X\\(.*\\)" | tr -d "$as_nl"
,
    export as_echo_n_body
    as_echo_n='sh -c $as_echo_n_body as_echo'
fi
export as_echo_body
as_echo='sh -c $as_echo_body as_echo'
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
    PATH_SEPARATOR=:
    (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
        (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
            PATH_SEPARATOR=';'
    }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " $as_nl

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
    *[\//]* ) as_myself=$0 ;;
    *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
    as_myself=$0
fi
if test ! -f "$as_myself"; then

```

```

    $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
    exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh).  But do not cause bugs in bash 2.01; the "|| exit
# 1"
# suppresses any "Segmentation fault" message there.  '(((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
    && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

# Use a proper internal environment variable to ensure we don't fall
# into an infinite loop, continuously re-executing ourselves.
if test x"${_as_can_reexec}" != xno && test "x$CONFIG_SHELL" != x;
then
    _as_can_reexec=no; export _as_can_reexec;
    # We cannot yet assume a decent shell, so we have to provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec'.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
as_fn_exit 255
fi

```

```

# We don't want this to propagate to other subprocesses.
    { _as_can_reexec=; unset _as_can_reexec;}
if test "x$CONFIG_SHELL" = x; then
    as_bourne_compatible="if test -n \"\${ZSH_VERSION+set}\" && (emulate
sh) >/dev/null 2>&1; then :
    emulate sh
    NULLCMD=:
    # Pre-4.2 versions of Zsh do word splitting on \"\${1+\"$@\"}\", which
    # is contrary to our usage.  Disable this feature.
    alias -g \"\${1+\"$@\"}\"='\"$@\"'
    setopt NO_GLOB_SUBST
else
    case \"(set -o) 2>/dev/null\" in @%:@(
*posix*) :
        set -o posix ;; @%:@(
*) :
        ;;
esac
fi
"
    as_required="as_fn_return () { (exit \$1); }
as_fn_success () { as_fn_return 0; }
as_fn_failure () { as_fn_return 1; }
as_fn_ret_success () { return 0; }
as_fn_ret_failure () { return 1; }

exitcode=0
as_fn_success || { exitcode=1; echo as_fn_success failed.; }
as_fn_failure && { exitcode=1; echo as_fn_failure succeeded.; }
as_fn_ret_success || { exitcode=1; echo as_fn_ret_success failed.; }
as_fn_ret_failure && { exitcode=1; echo as_fn_ret_failure succeeded.; }
}
if ( set x; as_fn_ret_success y && test x = \"\$1\" ); then :

else
    exitcode=1; echo positional parameters were not saved.
fi
test x\$exitcode = x0 || exit 1
test -x / || exit 1"
    as_suggested="
as_lineno_1=";as_suggested=$as_suggested$LINENO;as_suggested=$as_sugge
sted" as_lineno_1a=\$LINENO

as_lineno_2=";as_suggested=$as_suggested$LINENO;as_suggested=$as_sugge
sted" as_lineno_2a=\$LINENO
    eval 'test \"x\$as_lineno_1'\$as_run'\" !=
\"x\$as_lineno_2'\$as_run'\" &&
    test \"x\`expr \$as_lineno_1'\$as_run' + 1`\`\" =
\"x\$as_lineno_2'\$as_run'\" || exit 1
test \"\$( ( 1 + 1 ) ) = 2 || exit 1

    test -n \"\${ZSH_VERSION+set}\${BASH_VERSION+set}\" || (

```

```

ECHO='////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
\\'
    ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO
    ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO
    PATH=/empty FPATH=/empty; export PATH FPATH
    test \"X\`printf %s \$ECHO\`\" = \"X\$ECHO\" \\\
        || test \"X\`print -r -- \$ECHO\`\" = \"X\$ECHO\" ) || exit 1\"
    if (eval \"$as_required\") 2>/dev/null; then :
        as_have_required=yes
    else
        as_have_required=no
    fi
    if test x$as_have_required = xyes && (eval \"$as_suggested\")
2>/dev/null; then :

else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
as_found=false
for as_dir in /bin$PATH_SEPARATOR/usr/bin$PATH_SEPARATOR$PATH
do
    IFS=$as_save_IFS
    test -z \"$as_dir\" && as_dir=.
    as_found=:
    case $as_dir in @%:@(
        /*)
            for as_base in sh bash ksh sh5; do
                # Try only shells that exist, to save several forks.
                as_shell=$as_dir/$as_base
                if { test -f \"$as_shell\" || test -f \"$as_shell.exe\"; } &&
                    { $as_echo \"$as_bourne_compatible\" \"$as_required\" |
as_run=a \"$as_shell\"; } 2>/dev/null; then :
                    CONFIG_SHELL=$as_shell as_have_required=yes
                        if { $as_echo \"$as_bourne_compatible\" \"$as_suggested\" |
as_run=a \"$as_shell\"; } 2>/dev/null; then :
                            break 2
                        fi
                    fi
                done;;
            esac
        as_found=false
    done
$as_found || { if { test -f \"$SHELL\" || test -f \"$SHELL.exe\"; } &&
    { $as_echo \"$as_bourne_compatible\" \"$as_required\" | as_run=a
\"$SHELL\"; } 2>/dev/null; then :
        CONFIG_SHELL=$SHELL as_have_required=yes
    fi; }
IFS=$as_save_IFS

```

```

        if test "x$CONFIG_SHELL" != x; then :
export CONFIG_SHELL
        # We cannot yet assume a decent shell, so we have to
provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec`.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
exit 255
fi

        if test x$as_have_required = xno; then :
$as_echo "$0: This script requires a shell more modern than all"
$as_echo "$0: the shells that I found on your system."
if test x${ZSH_VERSION+set} = xset ; then
    $as_echo "$0: In particular, zsh $ZSH_VERSION has bugs and should"
    $as_echo "$0: be upgraded to zsh 4.3.4 or later."
else
    $as_echo "$0: Please tell bug-autoconf@gnu.org and
$0: https://bugs.freedesktop.org/enter\_bug.cgi?product=dbus
$0: about your system, including any error possibly output
$0: before this message. Then install a modern shell, or
$0: manually run the script under such a shell if you do
$0: have one."
fi
        exit 1
fi
fi
fi
SHELL=${CONFIG_SHELL-/bin/sh}
export SHELL
# Unset more variables known to interfere with behavior of common
tools.
CLICOLOR_FORCE= GREP_OPTIONS=
unset CLICOLOR_FORCE GREP_OPTIONS

## ----- ##
## M4sh Shell Functions. ##
## ----- ##
@%:@ as_fn_unset VAR

```

```

@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @$|@? to STATUS, without forking.
as_fn_set_status ()
{
    return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS
@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "@S|@as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{
    case $as_dir in #(
    -*) as_dir=./$as_dir;;
    esac
    test -d "$as_dir" || eval $as_mkdir_p || {
        as_dirs=
        while ;; do
            case $as_dir in #(
            *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\"/g"`;;
            #\'(
            *) as_qdir=$as_dir;;
            esac
            as_dirs="'$as_qdir' $as_dirs"
            as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\([^/]\)\/*\([^/]\/*\*$' \\\ \
    X"$as_dir" : 'X\(/\)\[^/]' \\\ \
    X"$as_dir" : 'X\(/\)\$' \\\ \
    X"$as_dir" : 'X\(/)\' \\\ . 2>/dev/null ||
$as_echo X"$as_dir" |

```



```

sed '/^X\(.*[^\)]\)\(\)/\/*[^\)] [^\)]*\/*$/{
    s//\1/
    q
}
/^X\(\(\)/\)\) [^\)].*/{
    s//\1/
    q
}
/^X\(\(\)/\)\)$/{
    s//\1/
    q
}
/^X\(\(\)/\).*/{
    s//\1/
    q
}
s/.*/./; q'`
test -d "$sas_dir" && break
done
test -z "$sas_dirs" || eval "mkdir $sas_dirs"
} || test -d "$sas_dir" || as_fn_error $? "cannot create directory
$sas_dir"

} @%:@ as_fn_mkdir_p

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$sas_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
    {
        eval $1+=\$2
    }'
else
    as_fn_append ()
    {
        eval $1=\$ $1\$2
    }

```

```

    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \${(( 1 + 1 ))} = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
        {
            as_val=$(( $* ))
        }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
    as_status=$1; test $as_status -eq 0 && as_status=1
    if test "$4"; then
        as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
        $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
    fi
    $as_echo "$as_me: error: $2" >&2
    as_fn_exit $as_status
} @%:@ as_fn_error

if expr a : '\(a\)' >/dev/null 2>&1 &&
    test "X`expr 00001 : '.*\(...\)`" = X001; then
    as_expr=expr
else
    as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
    as_basename=basename

```

```

else
  as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]\{*\}\)/*$' \| \| \
X"$0" : 'X\(/\)\$' \| \| \
X"$0" : 'X\(/\) ' \| \| . 2>/dev/null ||
$as_echo X/"$0" |
sed '/^.*\/\([^\/]\{*\}\)\/*$/{
  s//\1/
  q
}
/^X\/\(\//\)\$/{
  s//\1/
  q
}
/^X\/\(\//\).*\/{
  s//\1/
  q
}
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxy'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

as_lineno_1=$LINENO as_lineno_1a=$LINENO
as_lineno_2=$LINENO as_lineno_2a=$LINENO
eval 'test "x$as_lineno_1'$as_run'" != "x$as_lineno_2'$as_run'" &&
test "x`expr $as_lineno_1'$as_run' + 1`" = "x$as_lineno_2'$as_run'"'
|| {
# Blame Lee E. McMahon (1931-1989) for sed's syntax. :-)
sed -n '
  p
  /[$]LINENO/=
  ' <$as_myself |
  sed '
    s/[$]LINENO.*&-/
    t lineno
    b

```

```

        :lineno
        N
        :loop
        s/[$]LINENO\([^\$as_cr_alnum'_].*\n\)\(.*\)/\2\1\2/
        t loop
        s/-\n.*//
        ' >$as_me.lineno &&
        chmod +x "$as_me.lineno" ||
        { $as_echo "$as_me: error: cannot create $as_me.lineno; rerun with
a POSIX shell" >&2; as_fn_exit 1; }

# If we had to re-execute with $CONFIG_SHELL, we're ensured to have
# already done that, so ensure we don't try to do so again and fall
# in an infinite loop. This has already happened in practice.
_as_can_reexec=no; export _as_can_reexec
# Don't try to exec as it changes ${0}, causing all sort of problems
# (the dirname of ${0} is not the place where we might find the
# original and so on. Autoconf is especially sensitive to this).
. "$as_me.lineno"
# Exit status is that of the last command.
exit
}

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*))
  case `echo 'xy\c'` in
    *c*) ECHO_T=' ';; # ECHO_T is single tab character.
    xy) ECHO_C='\c';;
    *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
       ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$ conf$$exe conf$$file
if test -d conf$$dir; then
  rm -f conf$$dir/conf$$file
else
  rm -f conf$$dir
  mkdir conf$$dir 2>/dev/null
fi
if (echo >conf$$file) 2>/dev/null; then
  if ln -s conf$$file conf$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.

```

```

    ln -s conf$$.$file conf$$.$dir 2>/dev/null && test ! -f conf$$.$exe
||
    as_ln_s='cp -pR'
elif ln conf$$.$file conf$$ 2>/dev/null; then
    as_ln_s=ln
else
    as_ln_s='cp -pR'
fi
else
    as_ln_s='cp -pR'
fi
rm -f conf$$ conf$$.$exe conf$$.$dir/conf$$.$file conf$$.$file
rmdir conf$$.$dir 2>/dev/null

if mkdir -p . 2>/dev/null; then
    as_mkdir_p='mkdir -p "$as_dir"'
else
    test -d ./-p && rmdir ./-p
    as_mkdir_p=false
fi

as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+%pp%;s%[^_$as_cr_alnum]%%_g'"

SHELL=${CONFIG_SHELL-/bin/sh}

test -n "$DJDIR" || exec 7<&0 </dev/null
exec 6>&1

# Name of the host.
# hostname on some systems (SVR3.2, old GNU/Linux) returns a bogus
exit status,
# so uname gets run too.
ac_hostname=`(hostname || uname -n) 2>/dev/null | sed 1q`

#
# Initializations.
#
ac_default_prefix=/usr/local
ac_clean_files=
ac_config_libobj_dir=.
LIB@&t@OBS=
cross_compiling=no
subdirs=

```

```
MFLAGS=
MAKEFLAGS=

# Identity of this package.
PACKAGE_NAME='dbus'
PACKAGE_TARNAME='dbus'
PACKAGE_VERSION='1.6.8'
PACKAGE_STRING='dbus 1.6.8'
PACKAGE_BUGREPORT='https://bugs.freedesktop.org/enter_bug.cgi?product=
dbus'
PACKAGE_URL=''

# Factoring default headers for most tests.
ac_includes_default="\
#include <stdio.h>
#ifdef HAVE_SYS_TYPES_H
# include <sys/types.h>
#endif
#ifdef HAVE_SYS_STAT_H
# include <sys/stat.h>
#endif
#ifdef STDC_HEADERS
# include <stdlib.h>
# include <stddef.h>
#else
# ifdef HAVE_STDLIB_H
# include <stdlib.h>
# endif
#endif
#ifdef HAVE_STRING_H
# if !defined STDC_HEADERS && defined HAVE_MEMORY_H
# include <memory.h>
# endif
# include <string.h>
#endif
#ifdef HAVE_STRINGS_H
# include <strings.h>
#endif
#ifdef HAVE_INTTYPES_H
# include <inttypes.h>
#endif
#ifdef HAVE_STDINT_H
# include <stdint.h>
#endif
#ifdef HAVE_UNISTD_H
# include <unistd.h>
#endif"

ac_subst_vars='am__EXEEXT_FALSE
am__EXEEXT_TRUE
LTLIBOBJS
LIB@&t@OBJJS'
```

DBUS_SESSION_BUS_DEFAULT_ADDRESS
DBUS_SESSION_SOCKET_DIR
TEST_LISTEN
TEST_SOCKET_DIR
TEST_LAUNCH_HELPER_BINARY
TEST_BUS_BINARY
DBUS_TEST_EXEC
DBUS_TEST_DATA
DBUS_LIBEXECDIR
DBUS_BINDIR
DBUS_DAEMONDIR
DBUS_DATADIR
DBUS_PREFIX
DBUS_USER
DBUS_CONSOLE_OWNER_FILE
DBUS_CONSOLE_AUTH_DIR
DBUS_SYSTEM_PID_FILE
DBUS_SYSTEM_BUS_DEFAULT_ADDRESS
DBUS_SYSTEM_SOCKET
HAVE_SYSTEMD_FALSE
HAVE_SYSTEMD_TRUE
systemdsystemunitdir
DBUS_INIT_SCRIPTS_CYGWIN_FALSE
DBUS_INIT_SCRIPTS_CYGWIN_TRUE
DBUS_INIT_SCRIPTS_SLACKWARE_FALSE
DBUS_INIT_SCRIPTS_SLACKWARE_TRUE
DBUS_INIT_SCRIPTS_RED_HAT_FALSE
DBUS_INIT_SCRIPTS_RED_HAT_TRUE
EXPANDED_DATADIR
EXPANDED_LIBEXECDIR
EXPANDED_LIBDIR
EXPANDED_BINDIR
EXPANDED_SYSCONFDIR
EXPANDED_LOCALSTATEDIR
EXPANDED_PREFIX
DBUS_CAN_UPLOAD_DOCS_FALSE
DBUS_CAN_UPLOAD_DOCS_TRUE
DBUS_HAVE_MAN2HTML_FALSE
DBUS_HAVE_MAN2HTML_TRUE
MAN2HTML
DBUS_XML_DOCS_ENABLED_FALSE
DBUS_XML_DOCS_ENABLED_TRUE
XMLTO
DBUS_HAVE_XSLTPROC_FALSE
DBUS_HAVE_XSLTPROC_TRUE
XSLTPROC
DBUS_DOXYGEN_DOCS_ENABLED_FALSE
DBUS_DOXYGEN_DOCS_ENABLED_TRUE
DOXYGEN
DBUS_X_LIBS
DBUS_X_CFLAGS
X_EXTRA_LIBS

X_LIBS
X_PRE_LIBS
X_CFLAGS
LIBDBUS_LIBS
VALGRIND_LIBS
VALGRIND_CFLAGS
NETWORK_libs
ADT_LIBS
SELINUX_LIBS
HAVE_LIBAUDIT_FALSE
HAVE_LIBAUDIT_TRUE
SYSTEMD_LIBS
SYSTEMD_CFLAGS
HAVE_CONSOLE_OWNER_FILE_FALSE
HAVE_CONSOLE_OWNER_FILE_TRUE
LAUNCHD_AGENT_DIR
DBUS_ENABLE_LAUNCHD_FALSE
DBUS_ENABLE_LAUNCHD_TRUE
LAUNCHCTL
DBUS_BUS_ENABLE_KQUEUE_FALSE
DBUS_BUS_ENABLE_KQUEUE_TRUE
HAVE_LINUX_EPOLL_FALSE
HAVE_LINUX_EPOLL_TRUE
DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE
DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE
DBUS_BUS_ENABLE_INOTIFY_FALSE
DBUS_BUS_ENABLE_INOTIFY_TRUE
HAVE_SELINUX_FALSE
HAVE_SELINUX_TRUE
THREAD_LIBS
XML_LIBS
XML_CFLAGS
DBUS_USE_LIBXML_FALSE
DBUS_USE_LIBXML_TRUE
DBUS_USE_EXPAT_FALSE
DBUS_USE_EXPAT_TRUE
LIBXML_LIBS
LIBXML_CFLAGS
DBUS_PATH_OR_ABSTRACT
DBUS_INT16_TYPE
DBUS_INT32_TYPE
DBUS_HAVE_INT64
DBUS_UINT64_CONSTANT
DBUS_INT64_CONSTANT
DBUS_INT64_TYPE
R_DYNAMIC_LDFLAG
pkgpyexecdir
pyexecdir
pkgpythondir
pythondir
PYTHON_PLATFORM
PYTHON_EXEC_PREFIX

PYTHON_LIB_PREFIX
PYTHON_PREFIX
PYTHON_VERSION
PYTHON
DBUS_ENABLE_INSTALLED_TESTS_FALSE
DBUS_ENABLE_INSTALLED_TESTS_TRUE
DBUS_WITH_GLIB_FALSE
DBUS_WITH_GLIB_TRUE
DBUS_ENABLE_MODULAR_TESTS_FALSE
DBUS_ENABLE_MODULAR_TESTS_TRUE
DBUS_GLIB_LIBS
DBUS_GLIB_CFLAGS
GLIB_LIBS
GLIB_CFLAGS
DBUS_ENABLE_EMBEDDED_TESTS_FALSE
DBUS_ENABLE_EMBEDDED_TESTS_TRUE
DBUS_BUILD_TESTS_FALSE
DBUS_BUILD_TESTS_TRUE
DBUS_STATIC_BUILD_CPPFLAGS
DBUS_CYGWIN_FALSE
DBUS_CYGWIN_TRUE
DBUS_UNIX_FALSE
DBUS_UNIX_TRUE
DBUS_WINCE_FALSE
DBUS_WINCE_TRUE
DBUS_WIN_FALSE
DBUS_WIN_TRUE
WINDRES
BUILD_FILEVERSION
BUILD_TIMESTAMP
RC
PKG_CONFIG
CXXCPP
OTOOL64
OTOOL
LIPO
NMEDIT
DSYMUTIL
MANIFEST_TOOL
RANLIB
ac_ct_AR
AR
DLLTOOL
OBJDUMP
LN_S
NM
ac_ct_DUMPBIN
DUMPBIN
LD
FGREP
SED
LIBTOOL

EGREP
GREP
CPP
am__fastdepCXX_FALSE
am__fastdepCXX_TRUE
CXXDEPMODE
ac_ct_CXX
CXXFLAGS
CXX
am__fastdepCC_FALSE
am__fastdepCC_TRUE
CCDEPMODE
am__nodep
AMDEPBACKSLASH
AMDEP_FALSE
AMDEP_TRUE
am__quote
am__include
DEPDIR
OBJEXT
EXEEXT
ac_ct_CC
CPPFLAGS
LDFLAGS
CFLAGS
CC
DBUS_VERSION
DBUS_MICRO_VERSION
DBUS_MINOR_VERSION
DBUS_MAJOR_VERSION
LT_AGE
LT_REVISION
LT_CURRENT
AM_BACKSLASH
AM_DEFAULT_VERBOSITY
AM_DEFAULT_V
AM_V
MAINT
MAINTAINER_MODE_FALSE
MAINTAINER_MODE_TRUE
GETTEXT_PACKAGE
am__untar
am__tar
AMTAR
am__leading_dot
SET_MAKE
AWK
mkdir_p
MKDIR_P
INSTALL_STRIP_PROGRAM
STRIP
install_sh

MAKEINFO
AUTOHEADER
AUTOMAKE
AUTOCONF
ACLOCAL
VERSION
PACKAGE
CYGPATH_W
am__isrc
INSTALL_DATA
INSTALL_SCRIPT
INSTALL_PROGRAM
host_os
host_vendor
host_cpu
host
build_os
build_vendor
build_cpu
build
target_alias
host_alias
build_alias
LIBS
ECHO_T
ECHO_N
ECHO_C
DEFS
mandir
localedir
libdir
psdir
pdfdir
dvidir
htmldir
infodir
docdir
oldincludedir
includedir
localstatedir
sharedstatedir
sysconfdir
datadir
datarootdir
libexecdir
sbindir
bindir
program_transform_name
prefix
exec_prefix
PACKAGE_URL
PACKAGE_BUGREPORT

```
PACKAGE_STRING
PACKAGE_VERSION
PACKAGE_TARNAME
PACKAGE_NAME
PATH_SEPARATOR
SHELL'
ac_subst_files=''
ac_user_opts='
enable_option_checking
enable_maintainer_mode
enable_silent_rules
enable_dependency_tracking
enable_shared
enable_static
with_pic
enable_fast_install
with_gnu_ld
with_libtool_sysroot
enable_libtool_lock
enable_compiler_coverage
enable_compiler_optimisations
enable_developer
enable_ansi
enable_verbose_mode
enable_asserts
enable_checks
enable_xml_docs
enable_doxygen_docs
enable_abstract_sockets
enable_selinux
enable_libaudit
enable_dnotify
enable_inotify
enable_kqueue
enable_console_owner_file
enable_userdb_cache
enable_launchd
enable_systemd
with_xml
with_init_scripts
with_session_socket_dir
with_test_socket_dir
with_system_pid_file
with_system_socket
with_console_auth_dir
with_console_owner_file
with_launchd_agent_dir
with_dbus_user
with_dbus_daemon_dir
with_dbus_session_bus_default_address
enable_embedded_tests
enable_modular_tests
```

```
enable_tests
enable_installed_tests
with_64_bit
enable_epoll
with_valgrind
enable_x11_autolaunch
with_x
enable_Werror
with_systemdsystemunitdir
with_dbus_test_dir
enable_stats
'
    ac_precious_vars='build_alias
host_alias
target_alias
CC
CFLAGS
LDFLAGS
LIBS
CPPFLAGS
CXX
CXXFLAGS
CCC
CPP
CXXCPP
PKG_CONFIG
GLIB_CFLAGS
GLIB_LIBS
DBUS_GLIB_CFLAGS
DBUS_GLIB_LIBS
PYTHON
LIBXML_CFLAGS
LIBXML_LIBS
SYSTEMD_CFLAGS
SYSTEMD_LIBS
VALGRIND_CFLAGS
VALGRIND_LIBS
MAN2HTML'
```

```
# Initialize some variables set by options.
ac_init_help=
ac_init_version=false
ac_unrecognized_opts=
ac_unrecognized_sep=
# The variables have the same names as the options, with
# dashes changed to underlines.
cache_file=/dev/null
exec_prefix=NONE
no_create=
no_recursion=
prefix=NONE
```

```

program_prefix=NONE
program_suffix=NONE
program_transform_name=s,x,x,
silent=
site=
srcdir=
verbose=
x_includes=NONE
x_libraries=NONE

# Installation directory options.
# These are left unexpanded so users can "make install
exec_prefix=/foo"
# and all the variables that are supposed to be based on exec_prefix
# by default will actually change.
# Use braces instead of parens because sh, perl, etc. also accept
them.
# (The list follows the same order as the GNU Coding Standards.)
bindir='${exec_prefix}/bin'
sbindir='${exec_prefix}/sbin'
libexecdir='${exec_prefix}/libexec'
datarootdir='${prefix}/share'
datadir='${datarootdir}'
sysconfdir='${prefix}/etc'
sharedstatedir='${prefix}/com'
localstatedir='${prefix}/var'
includedir='${prefix}/include'
oldincludedir='/usr/include'
docdir='${datarootdir}/doc/${PACKAGE_TARNAME}'
infodir='${datarootdir}/info'
htmldir='${docdir}'
dvidir='${docdir}'
pdfdir='${docdir}'
psdir='${docdir}'
libdir='${exec_prefix}/lib'
localedir='${datarootdir}/locale'
mandir='${datarootdir}/man'

ac_prev=
ac_dashdash=
for ac_option
do
    # If the previous option needs an argument, assign it.
    if test -n "$ac_prev"; then
        eval $ac_prev=\$ac_option
        ac_prev=
        continue
    fi

    case $ac_option in
        *=?*) ac_optarg=`expr "X$ac_option" : '[^=]*\(.*\)'` ;;
        *)    ac_optarg= ;;
    esac
done

```

```

*)    ac_optarg=yes ;;
esac

# Accept the important Cygnus configure options, so we can diagnose
typos.

case $ac_dashdash$ac_option in
--)
    ac_dashdash=yes ;;

-bindir | --bindir | --bindi | --bind | --bin | --bi)
    ac_prev=bindir ;;
-bindir=* | --bindir=* | --bindi=* | --bind=* | --bin=* | --bi=*)
    bindir=$ac_optarg ;;

-build | --build | --buil | --bui | --bu)
    ac_prev=build_alias ;;
-build=* | --build=* | --buil=* | --bui=* | --bu=*)
    build_alias=$ac_optarg ;;

-cache-file | --cache-file | --cache-fil | --cache-fi \
| --cache-f | --cache- | --cache | --cach | --cac | --ca | --c)
    ac_prev=cache_file ;;
-cache-file=* | --cache-file=* | --cache-fil=* | --cache-fi=* \
| --cache-f=* | --cache-=* | --cache=* | --cach=* | --cac=* | --ca=*
| --c=*)
    cache_file=$ac_optarg ;;

--config-cache | -C)
    cache_file=config.cache ;;

-datadir | --datadir | --datadi | --datad)
    ac_prev=datadir ;;
-datadir=* | --datadir=* | --datadi=* | --datad=*)
    datadir=$ac_optarg ;;

-datarootdir | --datarootdir | --datarootdi | --datarootd | --
dataroot \
| --dataroo | --dataro | --datar)
    ac_prev=datarootdir ;;
-datarootdir=* | --datarootdir=* | --datarootdi=* | --datarootd=* \
| --dataroot=* | --dataroo=* | --dataro=* | --datar=*)
    datarootdir=$ac_optarg ;;

-disable-* | --disable-*)
    ac_useropt=`expr "x$ac_option" : 'x-*disable-\(.*\)'`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
    as_fn_error $? "invalid feature name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in

```

```

        *"
"enable_${ac_useropt}"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
disable-${ac_useropt}_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval enable_${ac_useropt}=no ;;

-docdir | --docdir | --docdi | --doc | --do)
    ac_prev=docdir ;;
-docdir=* | --docdir=* | --docdi=* | --doc=* | --do=*)
    docdir=${ac_optarg} ;;

-dvidir | --dvidir | --dvidi | --dvid | --dvi | --dv)
    ac_prev=dvidir ;;
-dvidir=* | --dvidir=* | --dvidi=* | --dvid=* | --dvi=* | --dv=*)
    dvidir=${ac_optarg} ;;

-enable-* | --enable-*)
    ac_useropt=`expr "x${ac_option}" : 'x-*enable-\([^=]*\)'`
    # Reject names that are not valid shell variable names.
    expr "x${ac_useropt}" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid feature name: ${ac_useropt}"
    ac_useropt_orig=${ac_useropt}
    ac_useropt=`$as_echo "${ac_useropt}" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *"
"enable_${ac_useropt}"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
enable-${ac_useropt}_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval enable_${ac_useropt}=\${ac_optarg} ;;

-exec-prefix | --exec_prefix | --exec-prefix | --exec-prefi \
| --exec-pref | --exec-pre | --exec-pr | --exec-p | --exec- \
| --exec | --exe | --ex)
    ac_prev=exec_prefix ;;
-exec-prefix=* | --exec_prefix=* | --exec-prefix=* | --exec-prefi=*
\
| --exec-pref=* | --exec-pre=* | --exec-pr=* | --exec-p=* | --exec-
=* \
| --exec=* | --exe=* | --ex=*)
    exec_prefix=${ac_optarg} ;;

-gas | --gas | --ga | --g)
    # Obsolete; use --with-gas.
    with_gas=yes ;;

```



```

-help | --help | --hel | --he | -h)
    ac_init_help=long ;;
-help=r* | --help=r* | --hel=r* | --he=r* | -hr*)
    ac_init_help=recursive ;;
-help=s* | --help=s* | --hel=s* | --he=s* | -hs*)
    ac_init_help=short ;;

-host | --host | --hos | --ho)
    ac_prev=host_alias ;;
-host=* | --host=* | --hos=* | --ho=*)
    host_alias=$ac_optarg ;;

-htmldir | --htmldir | --htmldi | --htmld | --html | --htm | --ht)
    ac_prev=htmldir ;;
-htmldir=* | --htmldir=* | --htmldi=* | --htmld=* | --html=* | --
htm=* \
| --ht=*)
    htmldir=$ac_optarg ;;

-includedir | --includedir | --includedi | --included | --include \
| --includ | --inclu | --incl | --inc)
    ac_prev=includedir ;;
-includedir=* | --includedir=* | --includedi=* | --included=* | --
include=* \
| --includ=* | --inclu=* | --incl=* | --inc=*)
    includedir=$ac_optarg ;;

-infodir | --infodir | --infodi | --infod | --info | --inf)
    ac_prev=infodir ;;
-infodir=* | --infodir=* | --infodi=* | --infod=* | --info=* | --
inf=*)
    infodir=$ac_optarg ;;

-libdir | --libdir | --libdi | --libd)
    ac_prev=libdir ;;
-libdir=* | --libdir=* | --libdi=* | --libd=*)
    libdir=$ac_optarg ;;

-libexecdir | --libexecdir | --libexecdi | --libexecd | --libexec \
| --libexe | --libex | --libe)
    ac_prev=libexecdir ;;
-libexecdir=* | --libexecdir=* | --libexecdi=* | --libexecd=* | --
libexec=* \
| --libexe=* | --libex=* | --libe=*)
    libexecdir=$ac_optarg ;;

-localedir | --localedir | --localedi | --localed | --locale)
    ac_prev=localedir ;;
-localedir=* | --localedir=* | --localedi=* | --localed=* | --
locale=*)
    localedir=$ac_optarg ;;

```

```

-localstatedir | --localstatedir | --localstatedi | --localstated \
| --localstate | --localstat | --localsta | --localst | --locals)
    ac_prev=localstatedir ;;
-localstatedir=* | --localstatedir=* | --localstatedi=* | --
localstated=* \
| --localstate=* | --localstat=* | --localsta=* | --localst=* | --
locals=*)
    localstatedir=$ac_optarg ;;

-mandir | --mandir | --mandi | --mand | --man | --ma | --m)
    ac_prev=mandir ;;
-mandir=* | --mandir=* | --mandi=* | --mand=* | --man=* | --ma=* | -
-m=*)
    mandir=$ac_optarg ;;

-nfp | --nfp | --nf)
    # Obsolete; use --without-fp.
    with_fp=no ;;

-no-create | --no-create | --no-creat | --no-crea | --no-cre \
| --no-cr | --no-c | -n)
    no_create=yes ;;

-no-recursion | --no-recursion | --no-recursio | --no-recursi \
| --no-recurs | --no-recur | --no-recu | --no-rec | --no-re | --no-
r)
    no_recursion=yes ;;

-oldincludedir | --oldincludedir | --oldincludedi | --oldincluded \
| --oldinclude | --oldinclud | --oldinclu | --oldincl | --oldinc \
| --oldin | --oldi | --old | --ol | --o)
    ac_prev=oldincludedir ;;
-oldincludedir=* | --oldincludedir=* | --oldincludedi=* | --
oldincluded=* \
| --oldinclude=* | --oldinclud=* | --oldinclu=* | --oldincl=* | --
oldinc=* \
| --oldin=* | --oldi=* | --old=* | --ol=* | --o=*)
    oldincludedir=$ac_optarg ;;

-prefix | --prefix | --prefi | --pref | --pre | --pr | --p)
    ac_prev=prefix ;;
-prefix=* | --prefix=* | --prefi=* | --pref=* | --pre=* | --pr=* | -
-p=*)
    prefix=$ac_optarg ;;

-program-prefix | --program-prefix | --program-prefi | --program-
pref \
| --program-pre | --program-pr | --program-p)
    ac_prev=program_prefix ;;
-program-prefix=* | --program-prefix=* | --program-prefi=* \

```

```

| --program-pref=* | --program-pre=* | --program-pr=* | --program-
p=*)
    program_prefix=$ac_optarg ;;

-program-suffix | --program-suffix | --program-suffi | --program-
suff \
| --program-suf | --program-su | --program-s)
    ac_prev=program_suffix ;;
-program-suffix=* | --program-suffix=* | --program-suffi=* \
| --program-suff=* | --program-suf=* | --program-su=* | --program-
s=*)
    program_suffix=$ac_optarg ;;

-program-transform-name | --program-transform-name \
| --program-transform-nam | --program-transform-na \
| --program-transform-n | --program-transform- \
| --program-transform | --program-transfor \
| --program-transfo | --program-transf \
| --program-trans | --program-tran \
| --progr-tra | --program-tr | --program-t)
    ac_prev=program_transform_name ;;
-program-transform-name=* | --program-transform-name=* \
| --program-transform-nam=* | --program-transform-na=* \
| --program-transform-n=* | --program-transform-=* \
| --program-transform=* | --program-transfor=* \
| --program-transfo=* | --program-transf=* \
| --program-trans=* | --program-tran=* \
| --progr-tra=* | --program-tr=* | --program-t=*)
    program_transform_name=$ac_optarg ;;

-pdfdir | --pdfdir | --pdfdi | --pdfd | --pdf | --pd)
    ac_prev=pdfdir ;;
-pdfdir=* | --pdfdir=* | --pdfdi=* | --pdfd=* | --pdf=* | --pd=*)
    pdfdir=$ac_optarg ;;

-psdir | --psdir | --psdi | --psd | --ps)
    ac_prev=psdir ;;
-psdir=* | --psdir=* | --psdi=* | --psd=* | --ps=*)
    psdir=$ac_optarg ;;

-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil)
    silent=yes ;;

-sbindir | --sbindir | --sbindi | --sbind | --sbin | --sbi | --sb)
    ac_prev=sbindir ;;
-sbindir=* | --sbindir=* | --sbindi=* | --sbind=* | --sbin=* \
| --sbi=* | --sb=*)
    sbindir=$ac_optarg ;;

-sharedstatedir | --sharedstatedir | --sharedstatedi \
| --sharedstated | --sharedstate | --sharedstat | --sharedsta \

```

```

| --sharedst | --shares | --shared | --share | --shar \
| --sha | --sh)
  ac_prev=sharedstatedir ;;
-sharedstatedir=* | --sharedstatedir=* | --sharedstatedi=* \
| --sharedstated=* | --sharedstate=* | --sharedstat=* | --
sharedsta=* \
| --sharedst=* | --shares=* | --shared=* | --share=* | --shar=* \
| --sha=* | --sh=*)
  sharedstatedir=$ac_optarg ;;

-site | --site | --sit)
  ac_prev=site ;;
-site=* | --site=* | --sit=*)
  site=$ac_optarg ;;

-srcdir | --srcdir | --srcdi | --srcd | --src | --sr)
  ac_prev=srcdir ;;
-srcdir=* | --srcdir=* | --srcdi=* | --srcd=* | --src=* | --sr=*)
  srcdir=$ac_optarg ;;

-sysconfdir | --sysconfdir | --sysconfdi | --sysconfd | --sysconf \
| --syscon | --sysco | --sysc | --sys | --sy)
  ac_prev=sysconfdir ;;
-sysconfdir=* | --sysconfdir=* | --sysconfdi=* | --sysconfd=* | --
sysconf=* \
| --syscon=* | --sysco=* | --sysc=* | --sys=* | --sy=*)
  sysconfdir=$ac_optarg ;;

-target | --target | --targe | --targ | --tar | --ta | --t)
  ac_prev=target_alias ;;
-target=* | --target=* | --targe=* | --targ=* | --tar=* | --ta=* | -
-t=*)
  target_alias=$ac_optarg ;;

-v | -verbose | --verbose | --verbos | --verbo | --verb)
  verbose=yes ;;

-version | --version | --versio | --versi | --vers | -V)
  ac_init_version=: ;;

-with-* | --with-*)
  ac_useropt=`expr "x$ac_option" : 'x-*with-\([^=]*\)'`
  # Reject names that are not valid shell variable names.
  expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
  as_fn_error $? "invalid package name: $ac_useropt"
  ac_useropt_orig=$ac_useropt
  ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
  case $ac_user_opts in
    *)
"with_$ac_useropt"
"*) ;;

```

```

        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--with-
$ac_useropt_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval with_$ac_useropt=\$ac_optarg ;;

-without-* | --without-*)
    ac_useropt=`expr "x$ac_option" : 'x-*without-\(.*\)'\`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid package name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'\`
    case $ac_user_opts in
        *)
"with_$ac_useropt"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
without-$ac_useropt_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval with_$ac_useropt=no ;;

--x)
    # Obsolete; use --with-x.
    with_x=yes ;;

-x-includes | --x-includes | --x-include | --x-includ | --x-inclu \
| --x-incl | --x-inc | --x-in | --x-i)
    ac_prev=x_includes ;;
-x-includes=* | --x-includes=* | --x-include=* | --x-includ=* | --x-
inclu=* \
| --x-incl=* | --x-inc=* | --x-in=* | --x-i=*)
    x_includes=$ac_optarg ;;

-x-libraries | --x-libraries | --x-librarie | --x-librari \
| --x-librar | --x-libra | --x-libr | --x-lib | --x-li | --x-l)
    ac_prev=x_libraries ;;
-x-libraries=* | --x-libraries=* | --x-librarie=* | --x-librari=* \
| --x-librar=* | --x-libra=* | --x-libr=* | --x-lib=* | --x-li=* | -
-x-l=*)
    x_libraries=$ac_optarg ;;

-*) as_fn_error $? "unrecognized option: \`$ac_option'
Try \`$0 --help' for more information"
    ;;

*=*)
    ac_envvar=`expr "x$ac_option" : 'x\([^=]*\)='`
    # Reject names that are not valid shell variable names.

```

```

case $ac_envvar in #(
    '' | [0-9]* | *[_$as_cr_alnum]* )
    as_fn_error $? "invalid variable name: \`$ac_envvar'" ;;
esac
eval $ac_envvar=\$ac_optarg
export $ac_envvar ;;

*)
# FIXME: should be removed in autoconf 3.0.
$as_echo "$as_me: WARNING: you should use --build, --host, --
target" >&2
expr "x$ac_option" : ".*[^-._$as_cr_alnum]" >/dev/null &&
$as_echo "$as_me: WARNING: invalid host type: $ac_option" >&2
: "${build_alias=$ac_option} ${host_alias=$ac_option}
${target_alias=$ac_option}"
;;

esac
done

if test -n "$ac_prev"; then
ac_option=--`echo $ac_prev | sed 's/_/_/g'`
as_fn_error $? "missing argument to $ac_option"
fi

if test -n "$ac_unrecognized_opts"; then
case $enable_option_checking in
no) ;;
fatal) as_fn_error $? "unrecognized options:
$ac_unrecognized_opts" ;;
*)
$as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2 ;;
esac
fi

# Check all directory arguments for consistency.
for ac_var in exec_prefix prefix bindir sbindir libexecdir
datarootdir \
datadir sysconfdir sharedstatedir localstatedir includedir
\
oldincludedir docdir infodir htmdir dvidir pdfdir psdir \
libdir localedir mandir
do
eval ac_val=\$$ac_var
# Remove trailing slashes.
case $ac_val in
*/ )
ac_val=`expr "X$ac_val" : 'X\([^/]\)' \| "X$ac_val" :
'X\(.*)'`
eval $ac_var=\$ac_val;;
esac
# Be sure to have absolute directory names.

```

```

case $ac_val in
  [\\/$]* | ?:[\\/*] ) continue;;
  NONE | ' ' ) case $ac_var in *prefix ) continue;; esac;;
esac
as_fn_error $? "expected an absolute directory name for --$ac_var:
$ac_val"
done

# There might be people who depend on the old broken behavior: ` $host '
# used to hold the argument of --host etc.
# FIXME: To remove some day.
build=$build_alias
host=$host_alias
target=$target_alias

# FIXME: To remove some day.
if test "x$host_alias" != x; then
  if test "x$build_alias" = x; then
    cross_compiling=maybe
  elif test "x$build_alias" != "x$host_alias"; then
    cross_compiling=yes
  fi
fi

ac_tool_prefix=
test -n "$host_alias" && ac_tool_prefix=$host_alias-

test "$silent" = yes && exec 6>/dev/null

ac_pwd=`pwd` && test -n "$ac_pwd" &&
ac_ls_di=`ls -di .` &&
ac_pwd_ls_di=`cd "$ac_pwd" && ls -di .` ||
  as_fn_error $? "working directory cannot be determined"
test "X$ac_ls_di" = "X$ac_pwd_ls_di" ||
  as_fn_error $? "pwd does not report name of working directory"

# Find the source files, if location was not specified.
if test -z "$srcdir"; then
  ac_srcdir_defaulted=yes
  # Try the directory containing this script, then the parent
  directory.
  ac_confdir=`$as_dirname -- "$as_myself" ||
$as_expr X"$as_myself" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$as_myself" : 'X\(//\)[^/]' \| \
  X"$as_myself" : 'X\(//\)$' \| \
  X"$as_myself" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$as_myself" |
  sed '/^X\(.*[^/]\)\/*[^/][^/]*\/*$/{
    s//\1/
  }
q

```

```

    }
    /^X\(\\\/\\\/)\ [^/].*/{
        s//\1/
        q
    }
    /^X\(\\\/\\\/)$/{
        s//\1/
        q
    }
    /^X\(\\\/)\.*/{
        s//\1/
        q
    }
    s/.*\/./; q'`
srcdir=$ac_confdir
if test ! -r "$srcdir/$ac_unique_file"; then
    srcdir=..
fi
else
    ac_srcdir_defaulted=no
fi
if test ! -r "$srcdir/$ac_unique_file"; then
    test "$ac_srcdir_defaulted" = yes && srcdir="$ac_confdir or .."
    as_fn_error $? "cannot find sources ($ac_unique_file) in $srcdir"
fi
ac_msg="sources are in $srcdir, but `cd $srcdir` does not work"
ac_abs_confdir=`(
    cd "$srcdir" && test -r "./$ac_unique_file" || as_fn_error $?
"$ac_msg"
    pwd)`
# When building in place, set srcdir=.
if test "$ac_abs_confdir" = "$ac_pwd"; then
    srcdir=.
fi
# Remove unnecessary trailing slashes from srcdir.
# Double slashes in file names in object file debugging info
# mess up M-x gdb in Emacs.
case $srcdir in
*/) srcdir=`expr "X$srcdir" : 'X\([^\/]*\)' \| "X$srcdir" :
'X\([^\/]*\)'\`;;
esac
for ac_var in $ac_precious_vars; do
    eval ac_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_env_${ac_var}_value=\${${ac_var}_value}
    eval ac_cv_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_cv_env_${ac_var}_value=\${${ac_var}_value}
done

#
# Report the --help message.
#
if test "$ac_init_help" = "long"; then

```



```
# Omit some internal or obsolete options to make the list less
imposing.
# This message is too long to be a string in the A/UX 3.1 sh.
cat <<_ACEOF
\`configure' configures dbus 1.6.8 to adapt to many kinds of systems.
```

Usage: \$0 [OPTION]... [VAR=VALUE]...

To assign environment variables (e.g., CC, CFLAGS...), specify them as VAR=VALUE. See below for descriptions of some of the useful variables.

Defaults for the options are specified in brackets.

Configuration:

```
-h, --help                display this help and exit
  --help=short            display options specific to this package
  --help=recursive       display the short help of all the included
packages
-V, --version             display version information and exit
-q, --quiet, --silent    do not print ``checking ...' messages
  --cache-file=FILE      cache test results in FILE [disabled]
-C, --config-cache       alias for ``--cache-file=config.cache'
-n, --no-create           do not create output files
  --srcdir=DIR           find the sources in DIR [configure dir or
\`..']
```

Installation directories:

```
--prefix=PREFIX          install architecture-independent files in
PREFIX
                          @<:@@S|@ac_default_prefix@:>@
--exec-prefix=EPREFIX    install architecture-dependent files in
EPREFIX
                          @<:@PREFIX@:>@
```

By default, ``make install' will install all the files in ``\$ac_default_prefix/bin', ``\$ac_default_prefix/lib' etc. You can specify an installation prefix other than ``\$ac_default_prefix' using ``--prefix', for instance ``--prefix=\$HOME'.

For better control, use the options below.

Fine tuning of the installation directories:

```
--bindir=DIR             user executables [EPREFIX/bin]
--sbindir=DIR            system admin executables [EPREFIX/sbin]
--libexecdir=DIR         program executables [EPREFIX/libexec]
--sysconfdir=DIR         read-only single-machine data [PREFIX/etc]
--sharedstatedir=DIR     modifiable architecture-independent data
[PREFIX/com]
--localstatedir=DIR     modifiable single-machine data [PREFIX/var]
```

```

--libdir=DIR          object code libraries [EPREFIX/lib]
--includedir=DIR     C header files [PREFIX/include]
--oldincludedir=DIR  C header files for non-gcc [/usr/include]
--datarootdir=DIR    read-only arch.-independent data root
[PREFIX/share]
--datadir=DIR        read-only architecture-independent data
[DATAROOTDIR]
--infodir=DIR        info documentation [DATAROOTDIR/info]
--localedir=DIR     locale-dependent data [DATAROOTDIR/locale]
--mandir=DIR        man documentation [DATAROOTDIR/man]
--docdir=DIR        documentation root
@<:@DATAROOTDIR/doc/dbus@:>@
--htmldir=DIR       html documentation [DOCDIR]
--dvidir=DIR        dvi documentation [DOCDIR]
--pdfdir=DIR        pdf documentation [DOCDIR]
--psdir=DIR         ps documentation [DOCDIR]
_ACEOF

```

```
cat <<\_ACEOF
```

Program names:

```

--program-prefix=PREFIX      prepend PREFIX to installed
program names
--program-suffix=SUFFIX      append SUFFIX to installed
program names
--program-transform-name=PROGRAM  run sed PROGRAM on installed
program names

```

X features:

```

--x-includes=DIR    X include files are in DIR
--x-libraries=DIR   X library files are in DIR

```

System types:

```

--build=BUILD      configure for building on BUILD [guessed]
--host=HOST        cross-compile to build programs to run on HOST
[BUILD]

```

```
_ACEOF
```

```
fi
```

```

if test -n "$ac_init_help"; then
  case $ac_init_help in
    short | recursive ) echo "Configuration of dbus 1.6.8:>";;
    esac
  cat <<\_ACEOF

```

Optional Features:

```

--disable-option-checking  ignore unrecognized --enable/--with
options
--disable-FEATURE          do not include FEATURE (same as --enable-
FEATURE=no)
--enable-FEATURE[=ARG]    include FEATURE [ARG=yes]
--disable-maintainer-mode

```

```

useful (and
    disable make rules and dependencies not
    sometimes confusing) to the casual installer
--enable-silent-rules    less verbose build output (undo: "make V=1")
--disable-silent-rules  verbose build output (undo: "make V=0")
--enable-dependency-tracking
                        do not reject slow dependency extractors
--disable-dependency-tracking
                        speeds up one-time build
--enable-shared@<:@=PKGS@:>@  build shared libraries
@<:@default=yes@:>@
--enable-static@<:@=PKGS@:>@  build static libraries
@<:@default=yes@:>@
--enable-fast-install@<:@=PKGS@:>@
                        optimize for fast installation
@<:@default=yes@:>@
--disable-libtool-lock  avoid locking (might break parallel builds)
--enable-compiler-coverage
                        Enable generation of coverage data
--disable-compiler-optimisations
                        Disable compiler optimisations
--enable-developer      set defaults to be appropriate for a D-Bus
developer
                        instead of a distribution/end-user
--enable-ansi           enable -ansi -pedantic gcc flags
--enable-verbose-mode   support verbose debug mode
--enable-asserts        include assertion checks
--enable-checks         include sanity checks on public API
--enable-xml-docs       build XML documentation (requires xmlto)
--enable-doxygen-docs   build DOXYGEN documentation (requires
Doxygen)
--enable-abstract-sockets
                        use abstract socket namespace (linux only)
--enable-selinux        build with SELinux support
--enable-libaudit       build audit daemon support for SELinux
--enable-dnotify        build with dnotify support (linux only)
--enable-inotify        build with inotify support (linux only)
--enable-kqueue         build with kqueue support
--enable-console-owner-file
                        enable console owner file
--enable-userdb-cache   build with userdb-cache support
--enable-launchd        build with launchd auto-launch support
--enable-systemd        build with systemd at_console support
--enable-embedded-tests enable unit test code in the library and
binaries
--enable-modular-tests  enable modular regression tests (requires
GLib)
--enable-tests          enable/disable all tests, overriding
                        embedded-tests/modular-tests
--enable-installed-tests
                        enable unit test code in the library and
binaries

```

```

--enable-epoll          use epoll(4) on Linux
--enable-x11-autolaunch build with X11 auto-launch support
--disable-Werror        compile without -Werror (normally enabled in
                        development builds)
--enable-stats          enable bus daemon usage statistics

Optional Packages:
--with-PACKAGE[=ARG]    use PACKAGE [ARG=yes]
--without-PACKAGE       do not use PACKAGE (same as --with-
PACKAGE=no)
--with-pic@<:@=PKGS@:>@    try to use only PIC/non-PIC objects
@<:@default=use
                        both@:>@
--with-gnu-ld           assume the C compiler uses GNU ld
@<:@default=no@:>@
--with-libtool-sysroot=DIR Search for dependent libraries within DIR
                        (or the compiler's sysroot if not specified).
--with-xml=libxml/expat XML library to use (libxml may be named
libxml2 on
                        some systems)
--with-init-scripts=redhat
                        Style of init scripts to install
--with-session-socket-dir=dirname
                        Where to put sockets for the per-login-
session
                        message bus
--with-test-socket-dir=dirname
                        Where to put sockets for make check
--with-system-pid-file=pidfile
                        PID file for systemwide daemon
--with-system-socket=filename
                        UNIX domain socket for systemwide daemon
--with-console-auth-dir=dirname
                        directory to check for console ownership
--with-console-owner-file=filename
                        file whose owner determines current console
owner
--with-launchd-agent-dir=dirname
                        directory to put the launchd agent (default:
                        /Library/LaunchAgents)
--with-dbus-user=<user> User for running the DBUS daemon
(messagebus)
--with-dbus-daemon-dir=dirname
                        Directory for installing the DBUS daemon
--with-dbus-session-bus-default-address=nonce-
tcp:/autolaunch:/tcp:host:port
                        Transport Type to be used (default: nonce-
tcp:)
--without-64-bit        If you have to use this option, please
report it as
                        a bug

```

```

--with-valgrind      Add instrumentation to help valgrind to
understand
                    our allocator
--with-x             use the X Window System
--with-systemdsystemunitdir=DIR
                    Directory for systemd service files
--with-dbus-test-dir=dirname
                    path where the tests tools are available

```

Some influential environment variables:

```

CC                  C compiler command
CFLAGS              C compiler flags
LDFLAGS             linker flags, e.g. -L<lib dir> if you have libraries in
a
                    nonstandard directory <lib dir>
LIBS                libraries to pass to the linker, e.g. -l<library>
CPPFLAGS            (Objective) C/C++ preprocessor flags, e.g. -I<include
dir> if
                    you have headers in a nonstandard directory <include
dir>
CXX                 C++ compiler command
CXXFLAGS            C++ compiler flags
CPP                 C preprocessor
CXXCPP              C++ preprocessor
PKG_CONFIG           path to pkg-config utility
GLIB_CFLAGS          C compiler flags for GLIB, overriding pkg-config
GLIB_LIBS            linker flags for GLIB, overriding pkg-config
DBUS_GLIB_CFLAGS     C compiler flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_LIBS       linker flags for DBUS_GLIB, overriding pkg-config
PYTHON               the Python interpreter
LIBXML_CFLAGS        C compiler flags for LIBXML, overriding pkg-config
LIBXML_LIBS          linker flags for LIBXML, overriding pkg-config
SYSTEMD_CFLAGS       C compiler flags for SYSTEMD, overriding pkg-config
SYSTEMD_LIBS         linker flags for SYSTEMD, overriding pkg-config
VALGRIND_CFLAGS      C compiler flags for VALGRIND, overriding pkg-config
VALGRIND_LIBS        linker flags for VALGRIND, overriding pkg-config
MAN2HTML             Path to man2html (optional)

```

Use these variables to override the choices made by `configure' or to help it to find libraries and programs with nonstandard names/locations.

Report bugs to

<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus>.

_ACEOF

```

ac_status=$?
fi

if test "$ac_init_help" = "recursive"; then
  # If there are subdirs, report their specific --help.
  for ac_dir in : $ac_subdirs_all; do test "x$ac_dir" = x: && continue
    test -d "$ac_dir" ||
      { cd "$srcdir" && ac_pwd=`pwd` && srcdir=. && test -d "$ac_dir";
    } ||
      continue
    ac_builddir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_builddir_sub=. ac_top_build_prefix= ;;
*)
  ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.([\//]||)'`
  # A ".." for each directory in $ac_dir_suffix.
  ac_top_builddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\//]*|/..|g;s|/||'`
  case $ac_top_builddir_sub in
  "") ac_top_builddir_sub=. ac_top_build_prefix= ;;
  *) ac_top_build_prefix=$ac_top_builddir_sub/ ;;
  esac ;;
esac
ac_abs_top_builddir=$ac_pwd
ac_abs_builddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_builddir=$ac_top_build_prefix

case $srcdir in
.) # We are building in place.
  ac_srcdir=.
  ac_top_srcdir=$ac_top_builddir_sub
  ac_abs_top_srcdir=$ac_pwd ;;
[\\/* | ?:[\\/*]* ) # Absolute name.
  ac_srcdir=$srcdir$ac_dir_suffix;
  ac_top_srcdir=$srcdir
  ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
  ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
  ac_top_srcdir=$ac_top_build_prefix$srcdir
  ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

cd "$ac_dir" || { ac_status=$?; continue; }
# Check for gusted configure.
if test -f "$ac_srcdir/configure.gnu"; then
  echo &&
  $SHELL "$ac_srcdir/configure.gnu" --help=recursive
elif test -f "$ac_srcdir/configure"; then
  echo &&

```

```

        $SHELL "$ac_srcdir/configure" --help=recursive
    else
        $as_echo "$as_me: WARNING: no configuration information is in
$ac_dir" >&2
        fi || ac_status=$?
        cd "$ac_pwd" || { ac_status=$?; break; }
    done
fi

test -n "$ac_init_help" && exit $ac_status
if $ac_init_version; then
    cat <<\_ACEOF
dbus configure 1.6.8
generated by GNU Autoconf 2.69

Copyright (C) 2012 Free Software Foundation, Inc.
This configure script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it.
_ACEOF
    exit
fi

## ----- ##
## Autoconf initialization. ##
## ----- ##

@%:@ ac_fn_c_try_compile LINENO
@%:@ -----
@%:@ Try to compile conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_compile ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f conftest.$ac_objext
    if { { ac_try="$ac_compile"
case "($ac_try" in
    *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_compile") 2>conftest.err
    ac_status=$?
    if test -s conftest.err; then
        grep -v '^ *+' conftest.err >conftest.er1
        cat conftest.er1 >&5
        mv -f conftest.er1 conftest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
    test $ac_status = 0; } && {
        test -z "$ac_c_werror_flag" ||

```

```

        test ! -s conftest.err
        } && test -s conftest.$ac_objext; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' conftest.$ac_ext >&5

        ac_retval=1
fi
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
    as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_compile

@%:@ ac_fn_cxx_try_compile LINENO
@%:@ -----
@%:@ Try to compile conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_compile ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f conftest.$ac_objext
    if { { ac_try="$ac_compile"
case "($ac_try" in
    *\`* | *\`* | *\`*) ac_try_echo=\`$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_compile") 2>conftest.err
    ac_status=$?
    if test -s conftest.err; then
        grep -v '^ *+' conftest.err >conftest.er1
        cat conftest.er1 >&5
        mv -f conftest.er1 conftest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
    test $ac_status = 0; } && {
        test -z "$ac_cxx_werror_flag" ||
        test ! -s conftest.err
        } && test -s conftest.$ac_objext; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' conftest.$ac_ext >&5

        ac_retval=1
fi
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
    as_fn_set_status $ac_retval

```



```

} @%:@ ac_fn_cxx_try_compile

@%:@ ac_fn_c_try_cpp LINENO
@%:@ -----
@%:@ Try to preprocess confptest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_cpp ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if { { ac_try="$ac_cpp confptest.$ac_ext"
case "($ac_try" in
    *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_cpp confptest.$ac_ext") 2>confptest.err
    ac_status=$?
    if test -s confptest.err; then
        grep -v '^ *+' confptest.err >confptest.er1
        cat confptest.er1 >&5
        mv -f confptest.er1 confptest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
    test $ac_status = 0; } > confptest.i && {
        test -z "$ac_c_preproc_warn_flag$ac_c_werror_flag" ||
        test ! -s confptest.err
    }; then :
        ac_retval=0
    else
        $as_echo "$as_me: failed program was:" >&5
        sed 's/^/| /' confptest.$ac_ext >&5

        ac_retval=1
    fi
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_cpp

@%:@ ac_fn_c_check_header_mongrel LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists, giving a warning if it cannot be
compiled using
@%:@ the include files in INCLUDES and setting the cache variable VAR
@%:@ accordingly.
ac_fn_c_check_header_mongrel ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if eval \"\${$3+:} false; then :

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval `:${3+:} false; then :
  $as_echo_n "(cached) " >&6
fi
eval ac_res=\${3}
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
else
  # Is the header compilable?
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 usability" >&5
$as_echo_n "checking $2 usability... " >&6; }
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
  /* end confdefs.h.  */
  $4
  @%:@include <$2>
  _ACEOF
  if ac_fn_c_try_compile "$LINENO"; then :
    ac_header_compiler=yes
  else
    ac_header_compiler=no
  fi
  rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_compiler"
>&5
$as_echo "$ac_header_compiler" >&6; }

  # Is the header present?
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 presence" >&5
$as_echo_n "checking $2 presence... " >&6; }
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
  /* end confdefs.h.  */
  @%:@include <$2>
  _ACEOF
  if ac_fn_c_try_cpp "$LINENO"; then :
    ac_header_preproc=yes
  else
    ac_header_preproc=no
  fi
  rm -f conftest.err conftest.i conftest.$ac_ext
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_preproc"
>&5
$as_echo "$ac_header_preproc" >&6; }

  # So?  What about this header?
  case $ac_header_compiler:$ac_header_preproc:$ac_c_preproc_warn_flag in
  #((
    yes:no: )
      { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: accepted by
the compiler, rejected by the preprocessor!" >&5

```

```

$as_echo "$as_me: WARNING: $2: accepted by the compiler, rejected by
the preprocessor!" >&2;}
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
  ;;
  no:yes:* )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: present but
cannot be compiled" >&5
$as_echo "$as_me: WARNING: $2: present but cannot be compiled" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      check
for missing prerequisite headers?" >&5
$as_echo "$as_me: WARNING: $2:      check for missing prerequisite
headers?" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: see the
Autoconf documentation" >&5
$as_echo "$as_me: WARNING: $2: see the Autoconf documentation" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      section
\"Present But Cannot Be Compiled\"" >&5
$as_echo "$as_me: WARNING: $2:      section \"Present But Cannot Be
Compiled\"" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
  ( $as_echo "## -----
----- ##
## Report this to
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus ##
## -----
--- ##"
    ) | sed "s/^/$as_me: WARNING:      /" >&2
  ;;
esac
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval "\${$3+:} false; then :
  $as_echo_n "(cached) " >&6
else
  eval "$3=\$ac_header_compiler"
fi
eval ac_res=\${$3}
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
fi
  eval $as_lineno_stack; ${as_lineno_stack+:} unset as_lineno

} @%:@ ac_fn_c_check_header_mongrel

@%:@ ac_fn_c_try_run LINENO

```

```

@%:@ -----
@%:@ Try to link confctest.@S|@ac_ext, and return whether this
succeeded. Assumes
@%:@ that executables *can* be run.
ac_fn_c_try_run ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } && { ac_try='./confctest$ac_exeext'
  { { case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; }; then :
  ac_retval=0
else
  $as_echo "$as_me: program exited with status $ac_status" >&5
  $as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' confctest.$ac_ext >&5

  ac_retval=$ac_status
fi
  rm -rf confctest.dSYM confctest_ipa8_confctest.oo
  eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
  as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_run

@%:@ ac_fn_c_check_header_compile LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists and can be compiled using the include
files in
@%:@ INCLUDES, setting the cache variable VAR accordingly.
ac_fn_c_check_header_compile ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack

```

```

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $2" >&5
$sas_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$_sas_ext
/* end confdefs.h. */
$4
@%:@include <$2>
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    eval "$3=yes"
else
    eval "$3=no"
fi
rm -f core conftest.err conftest.$_sas_objext conftest.$_sas_ext
fi
eval ac_res=\${$3}
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $_sas_res"
>&5
$sas_echo "$_sas_res" >&6; }
    eval $_sas_lineno_stack; ${as_lineno_stack+:} unset as_lineno

} @%:@ ac_fn_c_check_header_compile

@%:@ ac_fn_c_try_link LINENO
@%:@ -----
@%:@ Try to link conftest.@S|@_sas_ext, and return whether this
succeeded.
ac_fn_c_try_link ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f conftest.$_sas_objext conftest$_sas_exeext
    if { { ac_try="$_sas_link"
case "($_sas_try" in
    *\`* | *\`* | *\`*) ac_try_echo=\$_sas_try;;
    *) ac_try_echo=$_sas_try;;
esac
eval ac_try_echo="\"$_sas_me:${as_lineno-$LINENO}: $_sas_try_echo\""
$sas_echo "$_sas_try_echo"; } >&5
    (eval "$_sas_link") 2>conftest.err
    ac_status=$?
    if test -s conftest.err; then
        grep -v '^ *+' conftest.err >conftest.er1
        cat conftest.er1 >&5
        mv -f conftest.er1 conftest.err
    fi
    $sas_echo "$sas_me:${as_lineno-$LINENO}: \$_sas? = $_sas_status" >&5
    test $_sas_status = 0; } && {
        test -z "$_sas_c_werror_flag" ||
        test ! -s conftest.err

```

```

        } && test -s confptest$ac_exeext && {
        test "$cross_compiling" = yes ||
        test -x confptest$ac_exeext
        }; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' confptest.$ac_ext >&5

        ac_retval=1
fi
# Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
# created by the PGI compiler (confptest_ipa8_confptest.o), as it
would
# interfere with the next link command; also delete a directory that
is
# left behind by Apple's compiler. We do this before executing the
actions.
rm -rf confptest.dSYM confptest_ipa8_confptest.o
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_link

@%:@ ac_fn_c_check_func LINENO FUNC VAR
@%:@ -----
@%:@ Tests whether FUNC exists, setting the cache variable VAR
accordingly
ac_fn_c_check_func ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
    if eval \${$3+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
/* end confdefs.h. */
/* Define $2 to an innocuous variant, in case <limits.h> declares $2.
   For example, HP-UX 11i <limits.h> declares gettimeofday. */
#define $2 innocuous_$2

/* System header to define __stub macros and hopefully few prototypes,
   which can conflict with char $2 (); below.
   Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
   <limits.h> exists even on freestanding compilers. */

#ifdef __STDC__
# include <limits.h>
#else

```

```

# include <assert.h>
#endif

#undef $2

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char $2 ();
/* The GNU C library defines this for functions which it implements
   to always fail with ENOSYS. Some functions are actually named
   something starting with __ and the normal name is an alias. */
#ifdef __stub_$2 || defined __stub___$2
choke me
#endif

int
main ()
{
return $2 ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
eval "$3=yes"
else
eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
fi
eval ac_res=\${$3}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_func

@%:@ ac_fn_cxx_try_cpp LINENO
@%:@ -----
@%:@ Try to preprocess conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_cpp ()
{
as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
if { { ac_try="$ac_cpp conftest.$ac_ext"

```

```

case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
(eval "$ac_cpp conftest.$ac_ext") 2>conftest.err
ac_status=$?
if test -s conftest.err; then
  grep -v '^ *+' conftest.err >conftest.er1
  cat conftest.er1 >&5
  mv -f conftest.er1 conftest.err
fi
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; } > conftest.i && {
  test -z "$ac_cxx_preproc_warn_flag$ac_cxx_werror_flag" ||
  test ! -s conftest.err
}; then :
  ac_retval=0
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' conftest.$ac_ext >&5

  ac_retval=1
fi
eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_cxx_try_cpp

@%:@ ac_fn_cxx_try_link LINENO
@%:@ -----
@%:@ Try to link conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_link ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  rm -f conftest.$ac_objext conftest$ac_exeext
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    grep -v '^ *+' conftest.err >conftest.er1
    cat conftest.er1 >&5
    mv -f conftest.er1 conftest.err

```



```

fi
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } && {
    test -z "$ac_cxx_werror_flag" ||
    test ! -s conftest.err
    } && test -s conftest$ac_exeext && {
    test "$cross_compiling" = yes ||
    test -x conftest$ac_exeext
    }; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' conftest.$ac_ext >&5

    ac_retval=1
fi
# Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
# created by the PGI compiler (conftest_ipa8_conftest.o), as it
would
# interfere with the next link command; also delete a directory that
is
# left behind by Apple's compiler. We do this before executing the
actions.
rm -rf conftest.dSYM conftest_ipa8_conftest.o
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_cxx_try_link

@%:@ ac_fn_c_compute_int LINENO EXPR VAR INCLUDES
@%:@ -----
@%:@ Tries to find the compile-time value of EXPR in a program that
includes
@%:@ INCLUDES, setting VAR accordingly. Returns whether the value
could be
@%:@ computed
ac_fn_c_compute_int ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if test "$cross_compiling" = yes; then
        # Depending upon the size, compute the lo and hi bounds.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !((($2) >= 0)@>@;
test_array @<:@0@>@ = 0;
return test_array @<:@0@>@;

```

```

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_lo=0 ac_mid=0
while ;; do
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !(($2) <= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_hi=$ac_mid; break
else
as_fn_arith $ac_mid + 1 && ac_lo=$as_val
if test $ac_lo -le $ac_mid; then
ac_lo= ac_hi=
break
fi
as_fn_arith 2 '*' $ac_mid + 1 && ac_mid=$as_val
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
else
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !(($2) < 0)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_hi=-1 ac_mid=-1
while ;; do

```

```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !(($2) >= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_lo=$ac_mid; break
else
    as_fn_arith '(' $ac_mid ')' - 1 && ac_hi=$as_val
        if test $ac_mid -le $ac_hi; then
            ac_lo= ac_hi=
            break
        fi
    as_fn_arith 2 '*' $ac_mid && ac_mid=$as_val
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
else
    ac_lo= ac_hi=
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
# Binary search between lo and hi bounds.
while test "x$ac_lo" != "x$ac_hi"; do
    as_fn_arith '(' $ac_hi - $ac_lo ')' / 2 + $ac_lo && ac_mid=$as_val
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !(($2) <= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_hi=$ac_mid
else

```

```

    as_fn_arith '(' $ac_mid ')' + 1 && ac_lo=$as_val
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
case $ac_lo in @%:@((
?*) eval "$3=\$ac_lo"; ac_retval=0 ;;
'') ac_retval=1 ;;
esac
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
static long int longval () { return $2; }
static unsigned long int ulongval () { return $2; }
@%:@include <stdio.h>
@%:@include <stdlib.h>
int
main ()
{

    FILE *f = fopen ("conftest.val", "w");
    if (! f)
        return 1;
    if (($2) < 0)
        {
            long int i = longval ();
            if (i != ($2))
                return 1;
            fprintf (f, "%ld", i);
        }
    else
        {
            unsigned long int i = ulongval ();
            if (i != ($2))
                return 1;
            fprintf (f, "%lu", i);
        }
    /* Do not output a trailing newline, as this causes \r\n confusion
       on some platforms. */
    return ferror (f) || fclose (f) != 0;

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    echo >>conftest.val; read $3 <conftest.val; ac_retval=0
else
    ac_retval=1
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
    conftest.$ac_objext conftest.beam conftest.$ac_ext

```

```

rm -f conftest.val

fi
eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_compute_int

@%:@ ac_fn_c_check_decl LINENO SYMBOL VAR INCLUDES
@%:@ -----
@%:@ Tests whether SYMBOL is declared in INCLUDES, setting cache
variable VAR
@%:@ accordingly.
ac_fn_c_check_decl ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  as_decl_name=`echo $2|sed 's/ *(.*/'`
  as_decl_use=`echo $2|sed -e 's/(/(/' -e 's/)/)/' 0&/' -e 's/,/,)' 0&
(/g'`
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether
$as_decl_name is declared" >&5
$as_echo_n "checking whether $as_decl_name is declared... " >&6; }
if eval `\$${3+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
$4
int
main ()
{
@%:@ifndef $as_decl_name
@%:@ifdef __cplusplus
  (void) $as_decl_use;
@%:@else
  (void) $as_decl_name;
@%:@endif
@%:@endif

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  eval "$3=yes"
else
  eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
eval ac_res=\$3

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
    eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno

} @%:@ ac_fn_c_check_decl
cat >config.log <<_ACEOF
This file contains any messages produced by compilers while
running configure, to aid debugging if configure makes a mistake.

It was created by dbus $as_me 1.6.8, which was
generated by GNU Autoconf 2.69.  Invocation command line was

    $ $0 $@

_ACEOF
exec 5>>config.log
{
cat <<_ASUNAME
## ----- ##
## Platform. ##
## ----- ##

hostname = `(hostname || uname -n) 2>/dev/null | sed 1q`
uname -m = `(uname -m) 2>/dev/null || echo unknown`
uname -r = `(uname -r) 2>/dev/null || echo unknown`
uname -s = `(uname -s) 2>/dev/null || echo unknown`
uname -v = `(uname -v) 2>/dev/null || echo unknown`

/usr/bin/uname -p = `(/usr/bin/uname -p) 2>/dev/null || echo unknown`
/bin/uname -X      = `(/bin/uname -X) 2>/dev/null      || echo unknown`

/bin/arch          = `(/bin/arch) 2>/dev/null          || echo
unknown`
/usr/bin/arch -k   = `(/usr/bin/arch -k) 2>/dev/null   || echo
unknown`
/usr/convex/getsysinfo = `(/usr/convex/getsysinfo) 2>/dev/null || echo
unknown`
/usr/bin/hostinfo  = `(/usr/bin/hostinfo) 2>/dev/null  || echo
unknown`
/bin/machine      = `(/bin/machine) 2>/dev/null      || echo
unknown`
/usr/bin/oslevel  = `(/usr/bin/oslevel) 2>/dev/null   || echo
unknown`
/bin/universe     = `(/bin/universe) 2>/dev/null     || echo
unknown`

_ASUNAME

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  $as_echo "PATH: $as_dir"
done
IFS=$as_save_IFS

} >&5

cat >&5 <<_ACEOF

## ----- ##
## Core tests. ##
## ----- ##

ACEOF

# Keep a trace of the command line.
# Strip out --no-create and --no-recursion so they do not pile up.
# Strip out --silent because we don't want to record it for future
runs.
# Also quote any args containing shell meta-characters.
# Make two passes to allow for proper duplicate-argument suppression.
ac_configure_args=
ac_configure_args0=
ac_configure_args1=
ac_must_keep_next=false
for ac_pass in 1 2
do
  for ac_arg
  do
    case $ac_arg in
      -no-create | --no-c* | -n | -no-recursion | --no-r*) continue ;;
      -q | -quiet | --quiet | --quie | --qui | --qu | --q \
      | -silent | --silent | --silen | --sile | --sil)
        continue ;;
      *\')
        ac_arg=`$as_echo "$ac_arg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"` ;;
    esac
    case $ac_pass in
      1) as_fn_append ac_configure_args0 " '$ac_arg'" ;;
      2)
        as_fn_append ac_configure_args1 " '$ac_arg'"
        if test $ac_must_keep_next = true; then
          ac_must_keep_next=false # Got value, back to normal.
        else
          case $ac_arg in
            *=* | --config-cache | -C | -disable-* | --disable-* \
            | -enable-* | --enable-* | -gas | --g* | -nfp | --nf* \
            | -q | -quiet | --q* | -silent | --sil* | -v | -verb* \
            | -with-* | --with-* | -without-* | --without-* | --x)

```

```

        case "$ac_configure_args0 " in
            "$ac_configure_args1"* " '$ac_arg' "*" ) continue ;;
        esac
        ;;
        -* ) ac_must_keep_next=true ;;
    esac
    fi
    as_fn_append ac_configure_args " '$ac_arg'"
    ;;
esac
done
done
{ ac_configure_args0=; unset ac_configure_args0;}
{ ac_configure_args1=; unset ac_configure_args1;}

# When interrupted or exit'd, cleanup temporary files, and complete
# config.log. We remove comments because anyway the quotes in there
# would cause problems or look ugly.
# WARNING: Use '\'' to represent an apostrophe within the trap.
# WARNING: Do not start the trap code with a newline, due to a FreeBSD
4.0 bug.
trap 'exit_status=$?'
    # Save into config.log some information that might help in
debugging.
    {
        echo

        $as_echo "## ----- ##"
## Cache variables. ##
## ----- ##"
        echo
        # The following way of writing the cache mishandles newlines in
values,
(
    for ac_var in `(set) 2>&1 | sed -n '\''s/^\([a-zA-Z_][a-zA-Z0-
9_]*\)=.*\/\1/p'\''` ; do
        eval ac_val=\${$ac_var}
        case $ac_val in #(
            *${as_nl}*)
                case $ac_var in #(
                    *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5
$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
                esac
            case $ac_var in #(
                _ | IFS | as_nl) ;; #(
                BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
                *) { eval $ac_var=; unset $ac_var;} ;;
            esac ;;
        esac
    done
done

```



```

(set) 2>&1 |
  case $as_nl` (ac_space='\'\' '\'); set) 2>&1` in #(
    *${as_nl}ac_space=\ *)
      sed -n \
        "s/'\'/'\'\'\'\'\'\'\'\'\'\'\'\'\'\'/g;

s/^\([_$_as_cr_alnum]*_cv_[_$_as_cr_alnum]*\)=\(.*\)/\1='\'\'\'2'\''
/p"
  ;; #(
*)
  sed -n "/^[_$_as_cr_alnum]*_cv_[_$_as_cr_alnum]*=/p"
  ;;
esac |
sort
)
echo

  $_as_echo "## ----- ##
## Output variables. ##
## ----- ##"
echo
for ac_var in $_as_subst_vars
do
  eval ac_val=\$$ac_var
  case $ac_val in
    *'\''*) ac_val=`$_as_echo "$ac_val" | sed
"s/'\'/'\'\'\'\'\'\'\'\'\'\'\'\'\'\'/g"`;;
  esac
  $_as_echo "$ac_var='\'\'$ac_val'\''"
done | sort
echo

  if test -n "$_as_subst_files"; then
    $_as_echo "## ----- ##
## File substitutions. ##
## ----- ##"
    echo
    for ac_var in $_as_subst_files
    do
      eval ac_val=\$$ac_var
      case $ac_val in
        *'\''*) ac_val=`$_as_echo "$ac_val" | sed
"s/'\'/'\'\'\'\'\'\'\'\'\'\'\'\'\'\'/g"`;;
      esac
      $_as_echo "$ac_var='\'\'$ac_val'\''"
    done | sort
    echo
  fi

  if test -s confdefs.h; then
    $_as_echo "## ----- ##
## confdefs.h. ##"

```

```

## ----- ##"
    echo
    cat confdefs.h
    echo
fi
test "$ac_signal" != 0 &&
    $as_echo "$as_me: caught signal $ac_signal"
    $as_echo "$as_me: exit $exit_status"
} >&5
rm -f core *.core core.conftest.* &&
rm -f -r conftest* confdefs* conf$$* $ac_clean_files &&
exit $exit_status
' 0
for ac_signal in 1 2 13 15; do
    trap 'ac_signal='$ac_signal'; as_fn_exit 1' $ac_signal
done
ac_signal=0

# confdefs.h avoids OS command line length limits that DEFS can
# exceed.
rm -f -r conftest* confdefs.h

$as_echo "/* confdefs.h */" > confdefs.h

# Predefined preprocessor variables.

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_NAME "$PACKAGE_NAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_TARNAME "$PACKAGE_TARNAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_VERSION "$PACKAGE_VERSION"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_STRING "$PACKAGE_STRING"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_BUGREPORT "$PACKAGE_BUGREPORT"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_URL "$PACKAGE_URL"
_ACEOF

# Let the site file select an alternate cache file if it wants to.

```

```

# Prefer an explicitly selected file to automatically selected ones.
ac_site_file1=NONE
if test -n "$CONFIG_SITE"; then
  # We do not want a PATH search for config.site.
  case $CONFIG_SITE in @%:@(
    -*) ac_site_file1=./$CONFIG_SITE;;
    */*) ac_site_file1=$CONFIG_SITE;;
    *) ac_site_file1=./$CONFIG_SITE;;
  esac
fi
for ac_site_file in $ac_site_file1
do
  test "x$ac_site_file" = xNONE && continue
  if test /dev/null != "$ac_site_file" && test -r "$ac_site_file";
  then
    { $as_echo "$as_me:${as_lineno-$LINENO}: loading site script
$ac_site_file" >&5
$as_echo "$as_me: loading site script $ac_site_file" >&6;}
    sed 's/^\| /' "$ac_site_file" >&5
    . "$ac_site_file" \
    || { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "failed to load site script $ac_site_file
See \`config.log' for more details" "$LINENO" 5; }
    fi
  done

if test -r "$cache_file"; then
  # Some versions of bash will fail to source /dev/null (special files
  # actually), so we avoid doing that. DJGPP emulates it as a regular
  file.
  if test /dev/null != "$cache_file" && test -f "$cache_file"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: loading cache
$cache_file" >&5
$as_echo "$as_me: loading cache $cache_file" >&6;}
    case $cache_file in
      [\\\/]* | ?:[\\\/]* ) . "$cache_file";;
      *) . "$cache_file";;
    esac
  fi
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: creating cache $cache_file"
>&5
$as_echo "$as_me: creating cache $cache_file" >&6;}
  >$cache_file
fi

# Check that the precious variables saved in the cache have kept the
same
# value.
ac_cache_corrupted=false

```

```

for ac_var in $ac_precious_vars; do
  eval ac_old_set=\$ac_cv_env_${ac_var}_set
  eval ac_new_set=\$ac_env_${ac_var}_set
  eval ac_old_val=\$ac_cv_env_${ac_var}_value
  eval ac_new_val=\$ac_env_${ac_var}_value
  case $ac_old_set,$ac_new_set in
    set,)
      { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
set to \`$ac_old_val' in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was set to \`$ac_old_val' in the
previous run" >&2;}
      ac_cache_corrupted=: ;;
    ,set)
      { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
not set in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was not set in the previous run"
>&2;}
      ac_cache_corrupted=: ;;
    ,);;
  *)
    if test "x$ac_old_val" != "x$ac_new_val"; then
      # differences in whitespace do not lead to failure.
      ac_old_val_w=`echo x $ac_old_val`
      ac_new_val_w=`echo x $ac_new_val`
      if test "$ac_old_val_w" != "$ac_new_val_w"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' has
changed since the previous run:" >&5
$as_echo "$as_me: error: \`$ac_var' has changed since the previous
run:" >&2;}
        ac_cache_corrupted=:
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: warning: ignoring
whitespace changes in \`$ac_var' since the previous run:" >&5
$as_echo "$as_me: warning: ignoring whitespace changes in \`$ac_var'
since the previous run:" >&2;}
        eval $ac_var=\$ac_old_val
      fi
      { $as_echo "$as_me:${as_lineno-$LINENO}: former value:
\`$ac_old_val'" >&5
$as_echo "$as_me: former value:  \`$ac_old_val'" >&2;}
      { $as_echo "$as_me:${as_lineno-$LINENO}: current value:
\`$ac_new_val'" >&5
$as_echo "$as_me: current value:  \`$ac_new_val'" >&2;}
      fi;;
    esac
  # Pass precious variables to config.status.
  if test "$ac_new_set" = set; then
    case $ac_new_val in
      *\'*) ac_arg=$ac_var=`$as_echo "$ac_new_val" | sed
"s/'/'\|\\\\\\\\\\\\\\\\\\'|/g"` ;;
      *) ac_arg=$ac_var=$ac_new_val ;;
    esac
  fi
done

```

```

    case " $ac_configure_args " in
      *" '$ac_arg' "') ;; # Avoid dups. Use of quotes ensures
accuracy.
      *) as_fn_append ac_configure_args " '$ac_arg'" ;;
    esac
  fi
done
if $ac_cache_corrupted; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "error: in `\$ac_pwd':" >&2;}
  { $as_echo "$as_me:${as_lineno-$LINENO}: error: changes in the
environment can compromise the build" >&5
$as_echo "$as_me: error: changes in the environment can compromise the
build" >&2;}
  as_fn_error $? "run `make distclean' and/or `rm $cache_file' and
start over" "$LINENO" 5
fi
## ----- ##
## Main body of script. ##
## ----- ##

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

ac_aux_dir=
for ac_dir in "$srcdir" "$srcdir/.." "$srcdir/../../.."; do
  if test -f "$ac_dir/install-sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install-sh -c"
    break
  elif test -f "$ac_dir/install.sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install.sh -c"
    break
  elif test -f "$ac_dir/shtool"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/shtool install -c"
    break
  fi
done
if test -z "$ac_aux_dir"; then
  as_fn_error $? "cannot find install-sh, install.sh, or shtool in
`$srcdir` `"$srcdir/.."` `"$srcdir/../../.."`" "$LINENO" 5
fi

# These three variables are undocumented and unsupported,

```

```

# and are intended to be withdrawn in a future Autoconf release.
# They can cause serious problems if a builder's source tree is in a
directory
# whose full name contains unusual characters.
ac_config_guess="$SHELL $ac_aux_dir/config.guess" # Please don't use
this var.
ac_config_sub="$SHELL $ac_aux_dir/config.sub" # Please don't use this
var.
ac_configure="$SHELL $ac_aux_dir/configure" # Please don't use this
var.

# Make sure we can run config.sub.
$SHELL "$ac_aux_dir/config.sub" sun4 >/dev/null 2>&1 ||
  as_fn_error $? "cannot run $SHELL $ac_aux_dir/config.sub" "$LINENO"
5

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking build system type"
>&5
$as_echo_n "checking build system type... " >&6; }
if ${ac_cv_build+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_build_alias=$build_alias
  test "x$ac_build_alias" = x &&
  ac_build_alias=`$SHELL "$ac_aux_dir/config.guess"`
  test "x$ac_build_alias" = x &&
  as_fn_error $? "cannot guess build type; you must specify one"
"$LINENO" 5
  ac_cv_build=`$SHELL "$ac_aux_dir/config.sub" $ac_build_alias` ||
  as_fn_error $? "$SHELL $ac_aux_dir/config.sub $ac_build_alias
failed" "$LINENO" 5
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_build" >&5
$as_echo "$ac_cv_build" >&6; }
case $ac_cv_build in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical build" "$LINENO" 5;;
esac
build=$ac_cv_build
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_build
shift
build_cpu=$1
build_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
build_os=$*
IFS=$ac_save_IFS

```

```
case $build_os in *\ *) build_os=`echo "$build_os" | sed 's/ /-/g'`;;
esac
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking host system type"
>&5
$as_echo_n "checking host system type... " >&6; }
if ${ac_cv_host+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$host_alias" = x; then
    ac_cv_host=$ac_cv_build
  else
    ac_cv_host=`$SHELL "$ac_aux_dir/config.sub" $host_alias` ||
    as_fn_error $? "$SHELL $ac_aux_dir/config.sub $host_alias failed"
"$LINENO" 5
  fi
fi
```

```
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_host" >&5
$as_echo "$ac_cv_host" >&6; }
case $ac_cv_host in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical host" "$LINENO" 5;;
esac
host=$ac_cv_host
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_host
shift
host_cpu=$1
host_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
host_os=$*
IFS=$ac_save_IFS
case $host_os in *\ *) host_os=`echo "$host_os" | sed 's/ /-/g'`;;
esac
```

```
ac_config_headers="$ac_config_headers config.h"
```

```
am__api_version='1.12'
```

```
# Find a good install program. We prefer a C program (faster),
# so one script is as good as another. But avoid the broken or
# incompatible versions:
# SysV /etc/install, /usr/sbin/install
# SunOS /usr/etc/install
```

```

# IRIX /sbin/install
# AIX /bin/install
# AmigaOS /C/install, which installs bootblocks on floppy discs
# AIX 4 /usr/bin/installbsd, which doesn't work without a -g flag
# AFS /usr/afsws/bin/install, which mishandles nonexistent args
# SVR4 /usr/ucb/install, which tries to use the nonexistent group
"staff"
# OS/2's system install, which has a completely different semantic
# ./install, which can be erroneously created by make from
./install.sh.
# Reject install programs that cannot install multiple files.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a BSD-compatible
install" >&5
$as_echo_n "checking for a BSD-compatible install... " >&6; }
if test -z "$INSTALL"; then
if ${ac_cv_path_install+:} false; then :
  $as_echo_n "(cached) " >&6
else
  as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
  for as_dir in $PATH
  do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    # Account for people who put trailing slashes in PATH elements.
case $as_dir/ in @%:@(
./ | ../ | /[cC]/* | \
/etc/* | /usr/sbin/* | /usr/etc/* | /sbin/* | /usr/afsws/bin/* | \
?:[\\/]os2[\\/]install[\\/] * | ?:[\\/]OS2[\\/]INSTALL[\\/] * | \
/usr/ucb/* ) ;;
*)
  # OSF1 and SCO ODT 3.0 have their own names for install.
  # Don't use installbsd from OSF since it installs stuff as root
  # by default.
  for ac_prog in ginstall scoinst install; do
    for ac_exec_ext in ' $ac_executable_extensions; do
      if as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext"; then
        if test $ac_prog = install &&
          grep dspmsg "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
then
          # AIX install. It has an incompatible calling convention.
          :
        elif test $ac_prog = install &&
          grep pwplus "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
then
          # program-specific install script used by HP pwplus--don't
          use.
          :
        else
          rm -rf conftest.one conftest.two conftest.dir
          echo one > conftest.one
          echo two > conftest.two
          mkdir conftest.dir

```



```

        if "$as_dir/$ac_prog$ac_exec_ext" -c conftest.one
conftest.two "`pwd`/conftest.dir" &&
            test -s conftest.one && test -s conftest.two &&
            test -s conftest.dir/conftest.one &&
            test -s conftest.dir/conftest.two
        then
            ac_cv_path_install="$as_dir/$ac_prog$ac_exec_ext -c"
            break 3
        fi
    fi
done
done
;;
esac

done
IFS=$as_save_IFS

rm -rf conftest.one conftest.two conftest.dir

fi
if test "${ac_cv_path_install+set}" = set; then
    INSTALL=$ac_cv_path_install
else
    # As a last resort, use the slow shell script.  Don't cache a
    # value for INSTALL within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    INSTALL=$ac_install_sh
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $INSTALL" >&5
$as_echo "$INSTALL" >&6; }

# Use test -z because SunOS4 sh mishandles braces in ${var-val}.
# It thinks the first close brace ends the variable substitution.
test -z "$INSTALL_PROGRAM" && INSTALL_PROGRAM='${INSTALL}'

test -z "$INSTALL_SCRIPT" && INSTALL_SCRIPT='${INSTALL}'

test -z "$INSTALL_DATA" && INSTALL_DATA='${INSTALL} -m 644'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether build
environment is sane" >&5
$as_echo_n "checking whether build environment is sane... " >&6; }
# Reject unsafe characters in $srcdir or the absolute working
directory
# name.  Accept space and tab only in the latter.
am_lf='
'
case `pwd` in

```

```

*[\|\"#\$\&\'\"$am_lf]*)
    as_fn_error $? "unsafe absolute working directory name" "$LINENO"
5;;
esac
case $srcdir in
*[\|\"#\$\&\'\"$am_lf\ \]*)
    as_fn_error $? "unsafe srcdir value: '$srcdir'" "$LINENO" 5;;
esac

# Do 'set' in a subshell so we don't clobber the current shell's
# arguments.  Must try -L first in case configure is actually a
# symlink; some systems play weird games with the mod time of symlinks
# (eg FreeBSD returns the mod time of the symlink's containing
# directory).
if (
    am_has_slept=no
    for am_try in 1 2; do
        echo "timestamp, slept: $am_has_slept" > conftest.file
        set X `ls -Lt "$srcdir/configure" conftest.file 2> /dev/null`
        if test "$*" = "X"; then
            # -L didn't work.
            set X `ls -t "$srcdir/configure" conftest.file`
            fi
            if test "$*" != "X $srcdir/configure conftest.file" \
                && test "$*" != "X conftest.file $srcdir/configure"; then

                # If neither matched, then we have a broken ls.  This can happen
                # if, for instance, CONFIG_SHELL is bash and it inherits a
                # broken ls alias from the environment.  This has actually
                # happened.  Such a system could not be considered "sane".
                as_fn_error $? "ls -t appears to fail.  Make sure there is not a
broken
alias in your environment" "$LINENO" 5
            fi
            if test "$2" = conftest.file || test $am_try -eq 2; then
                break
            fi
            # Just in case.
            sleep 1
            am_has_slept=yes
        done
        test "$2" = conftest.file
    )
then
    # Ok.
    :
else
    as_fn_error $? "newly created file is older than distributed files!
Check your system clock" "$LINENO" 5
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```

```

# If we didn't sleep, we still need to ensure time stamps of
config.status and
# generated files are strictly newer.
am_sleep_pid=
if grep 'slept: no' conftest.file >/dev/null 2>&1; then
  ( sleep 1 ) &
  am_sleep_pid=$!
fi

rm -f conftest.file

test "$program_prefix" != NONE &&

program_transform_name="s^&${program_prefix}&;$program_transform_name"
# Use a double $ so make ignores it.
test "$program_suffix" != NONE &&

program_transform_name="s\&${program_suffix}&;$program_transform_name"
# Double any \ or $.
# By default was `s,x,x', remove it if useless.
ac_script='s/[\\$]/&&/g;s/;/s,x,x,$//'
program_transform_name=`$as_echo "$program_transform_name" | sed
"$ac_script"`

# expand $ac_aux_dir to an absolute path
am_aux_dir=`cd $ac_aux_dir && pwd`

if test x"${MISSING+set}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      MISSING="\${SHELL} \"$am_aux_dir/missing\"" ;;
    *)
      MISSING="\${SHELL} $am_aux_dir/missing" ;;
  esac
fi
# Use eval to expand $SHELL
if eval "$MISSING --run true"; then
  am_missing_run="$MISSING --run "
else
  am_missing_run=
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: 'missing' script
is too old or missing" >&5
$as_echo "$as_me: WARNING: 'missing' script is too old or missing"
>&2;}
fi

if test x"${install_sh}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      install_sh="\${SHELL} '$am_aux_dir/install-sh'" ;;
    *)
      install_sh="\${SHELL} $am_aux_dir/install-sh"

```

```

    esac
fi

# Installed binaries are usually stripped using 'strip' when the user
# run "make install-strip". However 'strip' might not be the right
# tool to use in cross-compilation environments, therefore Automake
# will honor the 'STRIP' environment variable to overrule this
program.
if test "$cross_compiling" != no; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$STRIP"; then
        ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ''$ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_STRIP="${ac_tool_prefix}strip"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
        IFS=$as_save_IFS
      fi
    fi
    STRIP=$ac_cv_prog_STRIP
    if test -n "$STRIP"; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
      $as_echo "$STRIP" >&6; }
    else
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
      $as_echo "no" >&6; }
    fi
  fi
fi

if test -z "$ac_cv_prog_STRIP"; then
  ac_ct_STRIP=$STRIP

```

```

# Extract the first word of "strip", so it can be a program name
with args.
set dummy strip; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_STRIP"; then
    ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_STRIP="strip"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
if test -n "$ac_ct_STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_STRIP" = x; then
    STRIP=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    STRIP=$ac_ct_STRIP
  fi

```

```

else
  STRIP="$ac_cv_prog_STRIP"
fi

fi

INSTALL_STRIP_PROGRAM="\$(install_sh) -c -s"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a thread-safe
mkdir -p" >&5
$as_echo_n "checking for a thread-safe mkdir -p... " >&6; }
if test -z "$MKDIR_P"; then
  if ${ac_cv_path_mkdir+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH$PATH_SEPARATOR/opt/sfw/bin
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in mkdir gmkdir; do
        for ac_exec_ext in '' $ac_executable_extensions; do
          as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext" || continue
          case `"$as_dir/$ac_prog$ac_exec_ext" --version 2>&1` in #(
            'mkdir (GNU coreutils) '* | \
            'mkdir (coreutils) '* | \
            'mkdir (fileutils) '4.1*)
            ac_cv_path_mkdir=$as_dir/$ac_prog$ac_exec_ext
            break 3;;
          esac
        done
      done
    done
    IFS=$as_save_IFS
  fi

  test -d ./--version && rmdir ./--version
  if test "${ac_cv_path_mkdir+set}" = set; then
    MKDIR_P="$ac_cv_path_mkdir -p"
  else
    # As a last resort, use the slow shell script.  Don't cache a
    # value for MKDIR_P within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    MKDIR_P="$ac_install_sh -d"
  fi
fi

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $MKDIR_P" >&5
$as_echo "$MKDIR_P" >&6; }

for ac_prog in gawk mawk nawk awk
do

```

```

# Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_AWK+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$AWK"; then
    ac_cv_prog_AWK="$AWK" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_AWK="$ac_prog"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
AWK=$ac_cv_prog_AWK
if test -n "$AWK"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $AWK" >&5
$as_echo "$AWK" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

test -n "$AWK" && break
done

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether ${MAKE-make}
sets \$(MAKE)" >&5
$as_echo_n "checking whether ${MAKE-make} sets \$(MAKE)... " >&6; }
set x ${MAKE-make}
ac_make=`$as_echo "$2" | sed 's/+/p/g; s/[^a-zA-Z0-9_]/_/g'`
if eval \${ac_cv_prog_make_${ac_make}_set+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat >conftest.make <<\_ACEOF
SHELL = /bin/sh

```

```

all:
    @echo '@@@@%=%$(MAKE)=@@@@%'
_ACEOF
# GNU make sometimes prints "make[1]: Entering ...", which would
confuse us.
case `${MAKE-make} -f conftest.make 2>/dev/null` in
    *@@@@%=?*=@@@@%*)
        eval ac_cv_prog_make_${ac_make}_set=yes;;
    *)
        eval ac_cv_prog_make_${ac_make}_set=no;;
esac
rm -f conftest.make
fi
if eval test \${ac_cv_prog_make_${ac_make}_set} = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    SET_MAKE=
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    SET_MAKE="MAKE=${MAKE-make}"
fi

rm -rf .tst 2>/dev/null
mkdir .tst 2>/dev/null
if test -d .tst; then
    am__leading_dot=.
else
    am__leading_dot=_
fi
rmdir .tst 2>/dev/null

if test "`cd $srcdir && pwd`" != "`pwd`"; then
    # Use -I$(srcdir) only when $(srcdir) != ., so that make's output
    # is not polluted with repeated "-I."
    am__isrc=' -I$(srcdir)'
    # test to see if srcdir already configured
    if test -f $srcdir/config.status; then
        as_fn_error $? "source directory already configured; run \"make
distclean\" there first" "$LINENO" 5
    fi
fi

# test whether we have cygpath
if test -z "$CYGPATH_W"; then
    if (cygpath --version) >/dev/null 2>/dev/null; then
        CYGPATH_W='cygpath -w'
    else
        CYGPATH_W=echo
    fi
fi

```



```

# Define the identity of the package.
PACKAGE='dbus'
VERSION='1.6.8'

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE "$PACKAGE"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define VERSION "$VERSION"
_ACEOF

# Some tools Automake needs.

ACLOCAL=${ACLOCAL-"${am_missing_run}aclocal-${am__api_version}"}

AUTOCONF=${AUTOCONF-"${am_missing_run}autoconf"}

AUTOMAKE=${AUTOMAKE-"${am_missing_run}automake-${am__api_version}"}

AUTOHEADER=${AUTOHEADER-"${am_missing_run}autoheader"}

MAKEINFO=${MAKEINFO-"${am_missing_run}makeinfo"}

# For better backward compatibility.  To be removed once Automake
# 1.9.x
# dies out for good.  For more background, see:
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00001.html>
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00014.html>
mkdir_p='$(MKDIR_P) '

# We need awk for the "check" target.  The system "awk" is bad on
# some platforms.
# Always define AMTAR for backward compatibility.  Yes, it's still
# used
# in the wild :-( We should find a proper way to deprecate it ...
AMTAR='${TAR-tar}'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to create a
ustar tar archive" >&5
$as_echo_n "checking how to create a ustar tar archive... " >&6; }
# Loop over all known methods to create a tar archive until one works.
_am_tools='gnutar plaintar cpio pax none'
_am_tools=${am_cv_prog_tar_ustar-$_am_tools}

```

```

# Do not fold the above two line into one, because Tru64 sh and
# Solaris sh will not grok spaces in the rhs of '-'.
for _am_tool in $_am_tools
do
  case $_am_tool in
  gnutar)
    for _am_tar in tar gnutar gtar;
    do
      { echo "$as_me:$LINENO: $_am_tar --version" >&5
      ($_am_tar --version) >&5 2>&5
      ac_status=$?
      echo "$as_me:$LINENO: \ $? = $ac_status" >&5
      (exit $ac_status); } && break
    done
    am__tar="$_am_tar --format=ustar -chf - "'"$stardir"'"
    am__tar_="$_am_tar --format=ustar -chf - "'"$stardir"'"
    am__untar="$_am_tar -xf -"
    ;;
  plaintar)
    # Must skip GNU tar: if it does not support --format= it doesn't
create
    # ustar tarball either.
    (tar --version) >/dev/null 2>&1 && continue
    am__tar='tar chf - "'"$stardir"'"
    am__tar_='tar chf - "$stardir"'
    am__untar='tar xf -'
    ;;
  pax)
    am__tar='pax -L -x ustar -w "'"$stardir"'"
    am__tar_='pax -L -x ustar -w "$stardir"'
    am__untar='pax -r'
    ;;
  cpio)
    am__tar='find "'"$stardir"'" -print | cpio -o -H ustar -L'
    am__tar_='find "$stardir" -print | cpio -o -H ustar -L'
    am__untar='cpio -i -H ustar -d'
    ;;
  none)
    am__tar=false
    am__tar_=false
    am__untar=false
    ;;
  esac

# If the value was cached, stop now. We just wanted to have am__tar
# and am__untar set.
test -n "${am_cv_prog_tar_ustar}" && break

# tar/untar a dummy directory, and stop if the command works
rm -rf confptest.dir
mkdir confptest.dir
echo GrepMe > confptest.dir/file

```

```

    { echo "$as_me:$LINENO: tardir=confptest.dir && eval $am__tar_
>confptest.tar" >&5
      (tardir=confptest.dir && eval $am__tar_ >confptest.tar) >&5 2>&5
      ac_status=$?
      echo "$as_me:$LINENO: \ $? = $ac_status" >&5
      (exit $ac_status); }
    rm -rf confptest.dir
    if test -s confptest.tar; then
      { echo "$as_me:$LINENO: $am__untar <confptest.tar" >&5
        ($am__untar <confptest.tar) >&5 2>&5
        ac_status=$?
        echo "$as_me:$LINENO: \ $? = $ac_status" >&5
        (exit $ac_status); }
      grep GrepMe confptest.dir/file >/dev/null 2>&1 && break
    fi
  done
  rm -rf confptest.dir

if ${am_cv_prog_tar_ustar+:} false; then :
  $as_echo_n "(cached) " >&6
else
  am_cv_prog_tar_ustar=$_am_tool
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_prog_tar_ustar" >&5
$as_echo "$am_cv_prog_tar_ustar" >&6; }

```

```
GETTEXT_PACKAGE=dbus-1
```

```

cat >>confdefs.h <<_ACEOF
@%:@define GETTEXT_PACKAGE "$GETTEXT_PACKAGE"
_ACEOF

```

```

# By default, rebuild autotools files on demand; only use ./missing if
the
# user says --disable-maintainer-mode (some distributions like to do
this)

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to enable
maintainer-specific portions of Makefiles" >&5
$as_echo_n "checking whether to enable maintainer-specific portions of
Makefiles... " >&6; }
  @%:@ Check whether --enable-maintainer-mode was given.
if test "${enable_maintainer_mode+set}" = set; then :

```

```

enableval=$enable_maintainer_mode; USE_MAINTAINER_MODE=$enableval
else
  USE_MAINTAINER_MODE=yes
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$USE_MAINTAINER_MODE" >&5
$as_echo "$USE_MAINTAINER_MODE" >&6; }
  if test $USE_MAINTAINER_MODE = yes; then
    MAINTAINER_MODE_TRUE=
    MAINTAINER_MODE_FALSE='#'
else
  MAINTAINER_MODE_TRUE='#'
  MAINTAINER_MODE_FALSE=
fi

MAINT=$MAINTAINER_MODE_TRUE

@%:@ Check whether --enable-silent-rules was given.
if test "${enable_silent_rules+set}" = set; then :
  enableval=$enable_silent_rules;
fi

case $enable_silent_rules in @%:@ (((
  yes) AM_DEFAULT_VERBOSITY=0;;
  no) AM_DEFAULT_VERBOSITY=1;;
  *) AM_DEFAULT_VERBOSITY=0;;
esac
am_make=${MAKE-make}
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $am_make
supports nested variables" >&5
$as_echo_n "checking whether $am_make supports nested variables... "
>&6; }
if ${am_cv_make_support_nested_variables+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if $as_echo 'TRUE=$(BAR$(V))
BAR0=false
BAR1=true
V=1
am__doit:
  @$(TRUE)
.PHONY: am__doit' | $am_make -f - >/dev/null 2>&1; then
  am_cv_make_support_nested_variables=yes
else
  am_cv_make_support_nested_variables=no
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_make_support_nested_variables" >&5

```

```
$as_echo "$am_cv_make_support_nested_variables" >&6; }
if test $am_cv_make_support_nested_variables = yes; then
  AM_V='$ (V) '
  AM_DEFAULT_V='$ (AM_DEFAULT_VERBOSITY) '
else
  AM_V=$AM_DEFAULT_VERBOSITY
  AM_DEFAULT_V=$AM_DEFAULT_VERBOSITY
fi
AM_BACKSLASH='\'
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DAEMON_NAME "dbus-daemon"
_ACEOF
```

```
# libtool versioning - this applies to libdbus
#
# See
http://sources.redhat.com/autobook/autobook/autobook\_91.html#SEC91 for
details
#
```

```
## increment if the interface has additions, changes, removals.
LT_CURRENT=10
```

```
## increment any time the source changes; set to
## 0 if you increment CURRENT
LT_REVISION=2
```

```
## increment if any interfaces have been added; set to 0
## if any interfaces have been changed or removed. removal has
## precedence over adding, so set to 0 if both happened.
LT_AGE=7
```

```
DBUS_MAJOR_VERSION=1
DBUS_MINOR_VERSION=6
DBUS_MICRO_VERSION=8
DBUS_VERSION=1.6.8
```

```
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
```

```

ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}gcc", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$CC"; then
      ac_cv_prog_CC="$CC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="${ac_tool_prefix}gcc"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      CC=$ac_cv_prog_CC
      if test -n "$CC"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
        $as_echo "$CC" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi
      if test -z "$ac_cv_prog_CC"; then
        ac_ct_CC=$CC
        # Extract the first word of "gcc", so it can be a program name with
        args.
        set dummy gcc; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }

```

```

if ${ac_cv_prog_ac_ct_CC+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_CC"; then
    ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
          ac_cv_prog_ac_ct_CC="gcc"
          $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
          break 2
        fi
      done
    done
    IFS=$as_save_IFS

    fi
    fi
    ac_ct_CC=$ac_cv_prog_ac_ct_CC
    if test -n "$ac_ct_CC"; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
      $as_echo "$ac_ct_CC" >&6; }
    else
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
      $as_echo "no" >&6; }
    fi

    if test "x$ac_ct_CC" = x; then
      CC=""
    else
      case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
      CC=$ac_ct_CC
    fi
  else
    CC="$ac_cv_prog_CC"
  fi

  if test -z "$CC"; then
    if test -n "$ac_tool_prefix"; then

```

```

    # Extract the first word of "${ac_tool_prefix}cc", so it can be a
program name with args.
set dummy ${ac_tool_prefix}cc; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$CC"; then
        ac_cv_prog_CC="$CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="${ac_tool_prefix}cc"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
fi
if test -z "$CC"; then
    # Extract the first word of "cc", so it can be a program name with
args.
set dummy cc; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$CC"; then
        ac_cv_prog_CC="$CC" # Let the user override the test.

```



```

else
  ac_prog_rejected=no
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    if test "$as_dir/$ac_word$ac_exec_ext" = "/usr/ucb/cc"; then
      ac_prog_rejected=yes
      continue
    fi
    ac_cv_prog_CC="cc"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

if test $ac_prog_rejected = yes; then
  # We found a bogon in the path, so make sure we never use it.
  set dummy $ac_cv_prog_CC
  shift
  if test $#:@ != 0; then
    # We chose a different compiler from the bogus one.
    # However, it has the same basename, so the bogon will be chosen
    # first if we set CC to just the basename; use the full file name.
    shift
    ac_cv_prog_CC="$as_dir/$ac_word${1+' '}$@"
  fi
fi
fi
fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$CC"; then
  if test -n "$ac_tool_prefix"; then
    for ac_prog in cl.exe
    do

```

```

    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
be a program name with args.
set dummy $ac_tool_prefix$ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$CC"; then
        ac_cv_prog_CC="$CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="$ac_tool_prefix$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$CC" && break
done
fi
if test -z "$CC"; then
    ac_ct_CC=$CC
    for ac_prog in cl.exe
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_CC+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_CC"; then
        ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_CC="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$ac_ct_CC" && break
done

    if test "x$ac_ct_CC" = x; then
        CC=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        CC=$ac_ct_CC
    fi
fi

fi

```

```

test -z "$CC" && { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "no acceptable C compiler found in $PATH
See `config.log' for more details" "$LINENO" 5; }

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\`$ac_try`;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    sed '10a\
... rest of stderr output deleted ...
    10q' conftest.err >conftest.er1
    cat conftest.er1 >&5
  fi
  rm -f conftest.er1 conftest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
  test $ac_status = 0; }
done

cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files a.out a.out.dSYM a.exe b.out"
# Try to create an executable without -o first, disregard a.out.
# It will help us diagnose broken compilers, and finding out an
intuition
# of exeext.

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
compiler works" >&5
$as_echo_n "checking whether the C compiler works... " >&6; }
ac_link_default=`$as_echo "$ac_link" | sed 's/ -o *conftest[^\ ]*//'\`

# The possible output files:
ac_files="a.out conftest.exe conftest a.exe a_out.exe b.out
conftest.*"

ac_rmfiles=
for ac_file in $ac_files
do
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    * ) ac_rmfiles="$ac_rmfiles $ac_file";;
  esac
done
rm -f $ac_rmfiles

if { { ac_try="$ac_link_default"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link_default") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; then :
  # Autoconf-2.13 could set the ac_cv_exeext variable to `no'.
  # So ignore a value of `no', otherwise this would lead to `EXEEXT =
no'
  # in a Makefile.  We should not override ac_cv_exeext if it was
cached,
  # so that the user can short-circuit this test for compilers unknown
to
  # Autoconf.
for ac_file in $ac_files ''
do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj )
      ;;
    [ab].out )
      # We found the default executable, but exeext='' is most
      # certainly right.
      break;;
    *.* )

```

```

        if test "${ac_cv_exeext+set}" = set && test "$ac_cv_exeext" !=
no;
    then ;; else
        ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)'`
    fi
    # We set ac_cv_exeext here because the later test for it is not
    # safe: cross compilers may not add the suffix if given an `-o'
    # argument, so we may need to know it at that point already.
    # Even if this section looks crufty: it has the advantage of
    # actually working.
    break;;
* )
    break;;
esac
done
test "$ac_cv_exeext" = no && ac_cv_exeext=

else
    ac_file=''
fi
if test -z "$ac_file"; then :
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':" >&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "C compiler cannot create executables
See `config.log' for more details" "$LINENO" 5; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
default output file name" >&5
$as_echo_n "checking for C compiler default output file name... " >&6;
}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_file" >&5
$as_echo "$ac_file" >&6; }
ac_exeext=$ac_cv_exeext

rm -f -r a.out a.out.dSYM a.exe conftest$ac_cv_exeext b.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of
executables" >&5
$as_echo_n "checking for suffix of executables... " >&6; }
if { { ac_try="$ac_link"
case "($ac_try" in
*\"* | *`* | *\\*) ac_try_echo=\$ac_try;;
*) ac_try_echo=$ac_try;;
esac

```

```

eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }; then :
  # If both `conftest.exe' and `conftest' are `present' (well,
observable)
# catch `conftest.exe'. For instance with Cygwin, `ls conftest' will
# work properly (i.e., refer to `conftest.exe'), while it won't with
# `rm'.
for ac_file in conftest.exe conftest conftest.*; do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    *.* ) ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)`
      break;;
    * ) break;;
  esac
done
else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \"`$ac_pwd`:"
>&5
$as_echo "$as_me: error: in \"`$ac_pwd`:" >&2;}
as_fn_error $? "cannot compute suffix of executables: cannot compile
and link
See `config.log' for more details" "$LINENO" 5; }
fi
rm -f conftest conftest$ac_cv_exeext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_exeext" >&5
$as_echo "$ac_cv_exeext" >&6; }

rm -f conftest.$ac_ext
EXEEXT=$ac_cv_exeext
ac_exeext=$EXEEXT
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
@%:@include <stdio.h>
int
main ()
{
FILE *f = fopen ("conftest.out", "w");
return ferror (f) || fclose (f) != 0;

;
return 0;
}
_ACEOF
ac_clean_files="$ac_clean_files conftest.out"
# Check that the compiler produces executables we can run. If not,
either

```

```

# the compiler is broken, or we cross compile.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are cross
compiling" >&5
$as_echo_n "checking whether we are cross compiling... " >&6; }
if test "$cross_compiling" != yes; then
  { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }
  if { ac_try='./conftest$ac_cv_exeext'
  { { case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }; }; then
    cross_compiling=no
  else
    if test "$cross_compiling" = maybe; then
      cross_compiling=yes
    else
      { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "cannot run C compiled programs.
If you meant to cross compile, use `--host'.
See `config.log' for more details" "$LINENO" 5; }
      fi
    fi
  fi
}
$as_echo "$as_me:${as_lineno-$LINENO}: result: $cross_compiling" >&5
$as_echo "$cross_compiling" >&6; }

rm -f conftest.$ac_ext conftest$ac_cv_exeext conftest.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of object
files" >&5
$as_echo_n "checking for suffix of object files... " >&6; }
if ${ac_cv_objext+:} false; then :
  $as_echo_n "(cached) " >&6
else

```



```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
rm -f conftest.o conftest.obj
if { { ac_try="$ac_compile"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compile") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }; then :
  for ac_file in conftest.o conftest.obj conftest.*; do
  test -f "$ac_file" || continue;
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM ) ;;
    *) ac_cv_objext=`expr "$ac_file" : '.*\\.\\(.*\\)'`
       break;;
  esac
done
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "cannot compute suffix of object files: cannot compile
See `config.log' for more details" "$LINENO" 5; }
fi
rm -f conftest.$ac_cv_objext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_objext" >&5
$as_echo "$ac_cv_objext" >&6; }
OBJEXT=$ac_cv_objext
ac_objext=${OBJEXT}
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C compiler" >&5
$as_echo_n "checking whether we are using the GNU C compiler... " >&6;
}
if ${ac_cv_c_compiler_gnu+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{
#ifdef __GNUC__
    choke me
#endif

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_compiler_gnu=yes
else
    ac_compiler_gnu=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_c_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_c_compiler_gnu" >&5
$as_echo "$ac_cv_c_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
    GCC=yes
else
    GCC=
fi
ac_test_CFLAGS=${CFLAGS+set}
ac_save_CFLAGS=$CFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC accepts
-g" >&5
$as_echo_n "checking whether $CC accepts -g... " >&6; }
if ${ac_cv_prog_cc_g+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_save_c_werror_flag=$ac_c_werror_flag
    ac_c_werror_flag=yes
    ac_cv_prog_cc_g=no
    CFLAGS="-g"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

```

```

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_g=yes
else
    CFLAGS=""
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :

else
    ac_c_werror_flag=$ac_save_c_werror_flag
    CFLAGS="-g"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
    ac_c_werror_flag=$ac_save_c_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cc_g" >&5
$as_echo "$ac_cv_prog_cc_g" >&6; }
if test "$ac_test_CFLAGS" = set; then
    CFLAGS=$ac_save_CFLAGS
elif test $ac_cv_prog_cc_g = yes; then
    if test "$GCC" = yes; then
        CFLAGS="-g -O2"

```

```

else
    CFLAGS="-g"
fi
else
    if test "$GCC" = yes; then
        CFLAGS="-O2"
    else
        CFLAGS=
    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $CC option to
accept ISO C89" >&5
$as_echo_n "checking for $CC option to accept ISO C89... " >&6; }
if ${ac_cv_prog_cc_c89+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_cv_prog_cc_c89=no
ac_save_CC=$CC
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdio.h>
struct stat;
/* Most of the following tests are stolen from RCS 5.7's src/conf.sh.
*/
struct buf { int x; };
FILE * (*rcsopen) (struct buf *, struct stat *, int);
static char *e (p, i)
    char **p;
    int i;
{
    return p[i];
}
static char *f (char * (*g) (char **, int), char **p, ...)
{
    char *s;
    va_list v;
    va_start (v,p);
    s = g (p, va_arg (v,int));
    va_end (v);
    return s;
}

/* OSF 4.0 Compaq cc is some sort of almost-ANSI by default.  It has
function prototypes and stuff, but not '\xHH' hex character
constants.
These don't provoke an error unfortunately, instead are silently
treated
as 'x'.  The following induces an error, until -std is added to get
proper ANSI mode.  Curiously '\x00'!='x' always comes out true, for
an

```

```

    array size at least.  It's necessary to write '\x00'==0 to get
something
    that's true only with -std.  */
int osf4_cc_array ['\x00' == 0 ? 1 : -1];

/* IBM C 6 for AIX is almost-ANSI by default, but it replaces macro
parameters
    inside strings and character constants.  */
#define FOO(x) 'x'
int xlc6_cc_array[FOO(a) == 'x' ? 1 : -1];

int test (int i, double x);
struct s1 {int (*f) (int a);};
struct s2 {int (*f) (double a);};
int pairnames (int, char **, FILE *(*) (struct buf *, struct stat *,
int), int, int);
int argc;
char **argv;
int
main ()
{
return f (e, argv, 0) != argv[0] || f (e, argv, 1) != argv[1];
;
return 0;
}
__ACEOF
for ac_arg in ' -qlanglvl=extc89 -qlanglvl=ansi -std \
    -Ae "-Aa -D_HPUX_SOURCE" "-Xc -D__EXTENSIONS__"
do
    CC="$ac_save_CC $ac_arg"
    if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_c89=$ac_arg
fi
rm -f core conftest.err conftest.$ac_objext
test "x$ac_cv_prog_cc_c89" != "xno" && break
done
rm -f conftest.$ac_ext
CC=$ac_save_CC

fi
# AC_CACHE_VAL
case "x$ac_cv_prog_cc_c89" in
x)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: none needed" >&5
$as_echo "none needed" >&6; } ;;
xno)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: unsupported" >&5
$as_echo "unsupported" >&6; } ;;
*)
    CC="$CC $ac_cv_prog_cc_c89"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_prog_cc_c89" >&5

```

```

$as_echo "$ac_cv_prog_cc_c89" >&6; } ;;
esac
if test "x$ac_cv_prog_cc_c89" != xno; then :

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
DEPDIR="`${am__leading_dot}deps"

ac_config_commands="$ac_config_commands depfiles"

am_make=${MAKE-make}
cat > confinc << 'END'
am__doit:
    @echo this is the am__doit target
.PHONY: am__doit
END
# If we don't find an include directive, just comment out the code.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for style of include
used by $am_make" >&5
$as_echo_n "checking for style of include used by $am_make... " >&6; }
am__include="#"
am__quote=
_am_result=none
# First try GNU make style include.
echo "include confinc" > confmf
# Ignore all kinds of additional output from 'make'.
case ` $am_make -s -f confmf 2> /dev/null` in #(
*the\ am__doit\ target*)
    am__include=include
    am__quote=
    _am_result=GNU
    ;;
esac
# Now try BSD make style include.
if test "$am__include" = "#"; then
    echo '.include "confinc"' > confmf
    case ` $am_make -s -f confmf 2> /dev/null` in #(
*the\ am__doit\ target*)
        am__include=.include
        am__quote=""
        _am_result=BSD
        ;;
    esac
fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $_am_result" >&5
$sas_echo "$_am_result" >&6; }
rm -f confinc confmf

@%:@ Check whether --enable-dependency-tracking was given.
if test "${enable_dependency_tracking+set}" = set; then :
  enableval=$enable_dependency_tracking;
fi

if test "x$enable_dependency_tracking" != xno; then
  am_depcomp="$ac_aux_dir/depcomp"
  AMDEPBACKSLASH='\'
  am__nodep='_no'
fi

if test "x$enable_dependency_tracking" != xno; then
  AMDEP_TRUE=
  AMDEP_FALSE='#'
else
  AMDEP_TRUE='#'
  AMDEP_FALSE=
fi

depcc="$CC"   am_compiler_list=

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$sas_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CC_dependencies_compiler_type+set} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test -z "$AMDEP_TRUE" && test -f "$am_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf conftest.dir
    mkdir conftest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$am_depcomp" conftest.dir
    cd conftest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.

```

```

mkdir sub

am_cv_CC_dependencies_compiler_type=none
if test "$am_compiler_list" = ""; then
    am_compiler_list=`sed -n 's/^#*\([a-zA-Z0-9]*\))$/\1/p' <
./depcomp`
fi
am__universal=false
case " $depcc " in #(
    *\ -arch\ *\ -arch\ *) am__universal=true ;;
    esac

for depmode in $am_compiler_list; do
    # Setup a source with many dependencies, because some compilers
    # like to wrap large dependency lists on column 80 (with \), and
    # we should not choose a depcomp mode which is confused by this.
    #
    # We need to recreate these files for each test, as the compiler
may
    # overwrite some of them when testing with obscure command lines.
    # This happens at least with the AIX C compiler.
    : > sub/confctest.c
    for i in 1 2 3 4 5 6; do
        echo '#include "conf tst'$i'.h"' >> sub/confctest.c
        # Using ": > sub/conf tst$i.h" creates only sub/conf tst1.h with
        # Solaris 10 /bin/sh.
        echo '/* dummy */' > sub/conf tst$i.h
    done
    echo "${am__include} ${am__quote}sub/confctest.Po${am__quote}" >
confmf

    # We check with '-c' and '-o' for the sake of the "dashmstdout"
    # mode. It turns out that the SunPro C++ compiler does not
properly
    # handle '-M -o', and we need to detect this. Also, some Intel
    # versions had trouble with output in subdirs.
    am__obj=sub/confctest.${OBJEXT-o}
    am__minus_obj="-o $am__obj"
    case $depmode in
gcc)
        # This depmode causes a compiler race in universal mode.
        test "$am__universal" = false || continue
        ;;
nosideeffect)
        # After this tag, mechanisms are not by side-effect, so they'll
        # only be used when explicitly requested.
        if test "x$enable_dependency_tracking" = xyes; then
            continue
        else
            break
        fi
        ;;
    ;;
)

```



```

msvc7 | msvc7msys | msvisualcpp | msvcmsys)
  # This compiler won't grok '-c -o', but also, the minuso test
has
  # not run yet.  These depmodes are late enough in the game, and
  # so weak that their functioning should not be impacted.
  am__obj=confptest.${OBJEXT-o}
  am__minus_obj=
  ;;
none) break ;;
esac
if depmode=$depmode \
  source=sub/confptest.c object=$am__obj \
  depfile=sub/confptest.Po tmpdepfile=sub/confptest.TPo \
  $$SHELL ./depcomp $depcc -c $am__minus_obj sub/confptest.c \
  >/dev/null 2>confptest.err &&
  grep sub/confftst1.h sub/confptest.Po > /dev/null 2>&1 &&
  grep sub/confftst6.h sub/confptest.Po > /dev/null 2>&1 &&
  grep $am__obj sub/confptest.Po > /dev/null 2>&1 &&
  ${MAKE-make} -s -f confmf > /dev/null 2>&1; then
  # icc doesn't choke on unknown options, it will just issue
warnings
  # or remarks (even with -Werror).  So we grep stderr for any
message
  # that says an option was ignored or not supported.
  # When given -MP, icc 7.0 and 7.1 complain thusly:
  #   icc: Command line warning: ignoring option '-M'; no argument
required
  # The diagnosis changed in icc 8.0:
  #   icc: Command line remark: option '-MP' not supported
  if (grep 'ignoring option' confptest.err ||
      grep 'not supported' confptest.err) >/dev/null 2>&1; then ;;
else
  am_cv_CC_dependencies_compiler_type=$depmode
  break
fi
fi
done

  cd ..
  rm -rf confptest.dir
else
  am_cv_CC_dependencies_compiler_type=none
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CC_dependencies_compiler_type" >&5
$as_echo "$am_cv_CC_dependencies_compiler_type" >&6; }
CCDEPMODE=depmode=$am_cv_CC_dependencies_compiler_type

if
  test "x$enable_dependency_tracking" != xno \

```

```

    && test "$am_cv_CC_dependencies_compiler_type" = gcc3; then
    am__fastdepCC_TRUE=
    am__fastdepCC_FALSE='#'
else
    am__fastdepCC_TRUE='#'
    am__fastdepCC_FALSE=
fi

if test "x$CC" != xcc; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC and cc
understand -c and -o together" >&5
$as_echo_n "checking whether $CC and cc understand -c and -o
together... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether cc
understands -c and -o together" >&5
$as_echo_n "checking whether cc understands -c and -o together... "
>&6; }
fi
set dummy $CC; ac_cc=`$as_echo "$2" |
    sed 's/[^a-zA-Z0-9_]/_/g;s/^[0-9]/_/`
if eval \${ac_cv_prog_cc_${ac_cc}_c_o+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
# Make sure it works both with $CC and with simple cc.
# We do the test twice because some compilers refuse to overwrite an
# existing .o file with -o, though they will create one.
ac_try='$CC -c conftest.$ac_ext -o conftest2.$ac_objext >&5'
rm -f conftest2.*
if { { case "($ac_try" in
  *\"* | *`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } &&
  test -f conftest2.$ac_objext && { { case "($ac_try" in

```

```

*\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
*) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; };
then
  eval ac_cv_prog_cc_${ac_cc}_c_o=yes
  if test "x$CC" != xcc; then
    # Test first that cc exists at all.
    if { ac_try='cc -c conftest.$ac_ext >&5'
      { { case "($ac_try" in
        *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
        *) ac_try_echo=$ac_try;;
      esac
      eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
      $as_echo "$ac_try_echo"; } >&5
        (eval "$ac_try") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; }; then
          ac_try='cc -c conftest.$ac_ext -o conftest2.$ac_objext >&5'
          rm -f conftest2.*
          if { { case "($ac_try" in
            *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
            *) ac_try_echo=$ac_try;;
          esac
          eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
          $as_echo "$ac_try_echo"; } >&5
            (eval "$ac_try") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
            test $ac_status = 0; } &&
              test -f conftest2.$ac_objext && { { case "($ac_try" in
                *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
                *) ac_try_echo=$ac_try;;
              esac
              eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
              $as_echo "$ac_try_echo"; } >&5
                (eval "$ac_try") 2>&5
                ac_status=$?
                $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
                test $ac_status = 0; };
                then
                  # cc works too.
                  :
                else
                  # cc exists but doesn't like -o.
                  eval ac_cv_prog_cc_${ac_cc}_c_o=no

```

```

        fi
    fi
    fi
else
    eval ac_cv_prog_cc_${ac_cc}_c_o=no
fi
rm -f core conftest*

fi
if eval test \${ac_cv_prog_cc_${ac_cc}_c_o} = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

$as_echo "@%:@define NO_MINUS_C_MINUS_O 1" >>confdefs.h

fi

# FIXME: we rely on the cache variable name because
# there is no other way.
set dummy $CC
am_cc=`echo $2 | sed 's/[^a-zA-Z0-9_]/_/g;s/^[0-9]//'`
eval am_t=\${ac_cv_prog_cc_${am_cc}_c_o}
if test "$am_t" != yes; then
    # Losing compiler, so override with the script.
    # FIXME: It is wrong to rewrite CC.
    # But if we don't then we get into trouble of one sort or another.
    # A longer-term fix would be to have automake use am__CC in this
case,
    # and then we could set am__CC="\$(top_srcdir)/compile \$(CC)"
    CC="$am_aux_dir/compile $CC"
fi

ac_ext=cpp
ac_cpp='$CXXCPP $CPPFLAGS'
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu
if test -z "$CXX"; then
    if test -n "$CCC"; then
        CXX=$CCC
    else
        if test -n "$ac_tool_prefix"; then
            for ac_prog in g++ c++ gpp aCC CC cxx cc++ cl.exe FCC KCC RCC x1C_r
x1C
            do
                # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
be a program name with args.

```

```

set dummy $ac_tool_prefix$ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CXX+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$CXX"; then
    ac_cv_prog_CXX="$CXX" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_CXX="$ac_tool_prefix$ac_prog"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
CXX=$ac_cv_prog_CXX
if test -n "$CXX"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CXX" >&5
$as_echo "$CXX" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$CXX" && break
done
fi
if test -z "$CXX"; then
  ac_ct_CXX=$CXX
  for ac_prog in g++ c++ gpp aCC CC cxx cc++ cl.exe FCC KCC RCC x1C_r
x1C
do
  # Extract the first word of "$ac_prog", so it can be a program name
with args.
  set dummy $ac_prog; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_CXX+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  if test -n "$ac_ct_CXX"; then
    ac_cv_prog_ac_ct_CXX="$ac_ct_CXX" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_CXX="$ac_prog"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_CXX=$ac_cv_prog_ac_ct_CXX
if test -n "$ac_ct_CXX"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CXX" >&5
$as_echo "$ac_ct_CXX" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_CXX" && break
done

  if test "x$ac_ct_CXX" = x; then
    CXX="g++"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    CXX=$ac_ct_CXX
  fi
fi

fi
fi

```

```

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C++ compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    sed '10a\
... rest of stderr output deleted ...
      10q' conftest.err >conftest.er1
    cat conftest.er1 >&5
  fi
  rm -f conftest.er1 conftest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
  test $ac_status = 0; }
done

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C++ compiler" >&5
$as_echo_n "checking whether we are using the GNU C++ compiler... "
>&6; }
if ${ac_cv_cxx_compiler_gnu+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{
#ifdef __GNUC__
  choke me
#endif

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_compiler_gnu=yes
else
  ac_compiler_gnu=no
fi

```

```

rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_cxx_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_cxx_compiler_gnu" >&5
$as_echo "$ac_cv_cxx_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
  GXX=yes
else
  GXX=
fi
ac_test_CXXFLAGS=${CXXFLAGS+set}
ac_save_CXXFLAGS=$CXXFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CXX accepts
-g" >&5
$as_echo_n "checking whether $CXX accepts -g... " >&6; }
if ${ac_cv_prog_cxx_g+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_save_cxx_werror_flag=$ac_cxx_werror_flag
  ac_cxx_werror_flag=yes
  ac_cv_prog_cxx_g=no
  CXXFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_cv_prog_cxx_g=yes
else
  CXXFLAGS=""
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :

```



```

else
  ac_cxx_werror_flag=$ac_save_cxx_werror_flag
  CXXFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_cv_prog_cxx_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  ac_cxx_werror_flag=$ac_save_cxx_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cxx_g"
>&5
$as_echo "$ac_cv_prog_cxx_g" >&6; }
if test "$ac_test_CXXFLAGS" = set; then
  CXXFLAGS=$ac_save_CXXFLAGS
elif test $ac_cv_prog_cxx_g = yes; then
  if test "$GXX" = yes; then
    CXXFLAGS="-g -O2"
  else
    CXXFLAGS="-g"
  fi
else
  if test "$GXX" = yes; then
    CXXFLAGS="-O2"
  else
    CXXFLAGS=
  fi
fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

depcc="$CXX"  am_compiler_list=

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$sas_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CXX_dependencies_compiler_type+} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test -z "$SAMDEP_TRUE" && test -f "$sam_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf confptest.dir
    mkdir confptest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$sam_depcomp" confptest.dir
    cd confptest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.
    mkdir sub

    am_cv_CXX_dependencies_compiler_type=none
    if test "$sam_compiler_list" = ""; then
      am_compiler_list=`sed -n 's/^#*\([a-zA-Z0-9]*\))$/\1/p' <
./depcomp`
    fi
    am_universal=false
    case " $depcc " in #(
      *\ -arch\ *\ -arch\ *) am_universal=true ;;
    esac

    for depmode in $sam_compiler_list; do
      # Setup a source with many dependencies, because some compilers
      # like to wrap large dependency lists on column 80 (with \), and
      # we should not choose a depcomp mode which is confused by this.
      #
      # We need to recreate these files for each test, as the compiler
may
      # overwrite some of them when testing with obscure command lines.
      # This happens at least with the AIX C compiler.
      : > sub/confptest.c
      for i in 1 2 3 4 5 6; do
        echo '#include "conftst'$i'.h"' >> sub/confptest.c
        # Using ": > sub/conftst$i.h" creates only sub/conftst1.h with
        # Solaris 10 /bin/sh.
        echo '/* dummy */' > sub/conftst$i.h

```

```

done
echo "${am__include} ${am__quote}sub/confptest.Po${am__quote}" >
confmf

# We check with '-c' and '-o' for the sake of the "dashmstdout"
# mode. It turns out that the SunPro C++ compiler does not
properly
# handle '-M -o', and we need to detect this. Also, some Intel
# versions had trouble with output in subdirs.
am__obj=sub/confptest.${OBJEXT-o}
am__minus_obj="-o $am__obj"
case $depmode in
gcc)
# This depmode causes a compiler race in universal mode.
test "$am__universal" = false || continue
;;
nosideeffect)
# After this tag, mechanisms are not by side-effect, so they'll
# only be used when explicitly requested.
if test "x$enable_dependency_tracking" = xyes; then
continue
else
break
fi
;;
msvc7 | msvc7msys | msvisualcpp | msvcmsys)
# This compiler won't grok '-c -o', but also, the minuso test
has
# not run yet. These depmodes are late enough in the game, and
# so weak that their functioning should not be impacted.
am__obj=confptest.${OBJEXT-o}
am__minus_obj=
;;
none) break ;;
esac
if depmode=$depmode \
source=sub/confptest.c object=$am__obj \
depfile=sub/confptest.Po tmpdepfile=sub/confptest.TPo \
$SHELL ./depcomp $depcc -c $am__minus_obj sub/confptest.c \
>/dev/null 2>confptest.err &&
grep sub/conftst1.h sub/confptest.Po > /dev/null 2>&1 &&
grep sub/conftst6.h sub/confptest.Po > /dev/null 2>&1 &&
grep $am__obj sub/confptest.Po > /dev/null 2>&1 &&
${MAKE-make} -s -f confmf > /dev/null 2>&1; then
# icc doesn't choke on unknown options, it will just issue
warnings
# or remarks (even with -Werror). So we grep stderr for any
message
# that says an option was ignored or not supported.
# When given -MP, icc 7.0 and 7.1 complain thusly:
# icc: Command line warning: ignoring option '-M'; no argument
required

```

```

# The diagnosis changed in icc 8.0:
#   icc: Command line remark: option '-MP' not supported
if (grep 'ignoring option' confptest.err ||
    grep 'not supported' confptest.err) >/dev/null 2>&1; then ;;
else
    am_cv_CXX_dependencies_compiler_type=$depmode
    break
fi
done

cd ..
rm -rf confptest.dir
else
    am_cv_CXX_dependencies_compiler_type=none
fi

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CXX_dependencies_compiler_type" >&5
$as_echo "$am_cv_CXX_dependencies_compiler_type" >&6; }
CXXDEPMODE=depmode=$am_cv_CXX_dependencies_compiler_type

if
    test "x$enable_dependency_tracking" != xno \
    && test "$am_cv_CXX_dependencies_compiler_type" = gcc3; then
    am__fastdepCXX_TRUE=
    am__fastdepCXX_FALSE='#'
else
    am__fastdepCXX_TRUE='#'
    am__fastdepCXX_FALSE=
fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS confptest.$ac_ext >&5'
ac_link='$CC -o confptest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
confptest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to run the C
preprocessor" >&5
$as_echo_n "checking how to run the C preprocessor... " >&6; }
# On Suns, sometimes $CPP names a directory.
if test -n "$CPP" && test -d "$CPP"; then
    CPP=
fi
if test -z "$CPP"; then
    if ${ac_cv_prog_CPP+:} false; then :
        $as_echo_n "(cached) " >&6
    else

```

```

        # Double quotes because CPP needs to be expanded
        for CPP in "$CC -E" "$CC -E -traditional-cpp" "/lib/cpp"
        do
            ac_preproc_ok=false
        for ac_c_preproc_warn_flag in ' yes
        do
            # Use a header file that comes with gcc, so configuring glibc
            # with a fresh cross-compiler works.
            # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
            # <limits.h> exists even on freestanding compilers.
            # On the NeXT, cc -E runs the code through the compiler's parser,
            # not just through cpp. "Syntax error" is here to catch this case.
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

                Syntax error

        _ACEOF
        if ac_fn_c_try_cpp "$LINENO"; then :

        else
            # Broken: fails on valid input.
            continue
        fi
        rm -f conftest.err conftest.i conftest.$ac_ext

            # OK, works on sane cases.  Now check whether nonexistent headers
            # can be detected and how.
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
        _ACEOF
        if ac_fn_c_try_cpp "$LINENO"; then :
            # Broken: success on invalid input.
            continue
        else
            # Passes both tests.
            ac_preproc_ok=:
            break
        fi
        rm -f conftest.err conftest.i conftest.$ac_ext

        done
        # Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
        rm -f conftest.i conftest.err conftest.$ac_ext
        if $ac_preproc_ok; then :
            break
        fi

```

```

done
ac_cv_prog_CPP=$CPP

fi
CPP=$ac_cv_prog_CPP
else
ac_cv_prog_CPP=$CPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CPP" >&5
$as_echo "$CPP" >&6; }
ac_preproc_ok=false
for ac_c_preproc_warn_flag in '' yes
do
# Use a header file that comes with gcc, so configuring glibc
# with a fresh cross-compiler works.
# Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
# <limits.h> exists even on freestanding compilers.
# On the NeXT, cc -E runs the code through the compiler's parser,
# not just through cpp. "Syntax error" is here to catch this case.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

Syntax error

_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :

else
# Broken: fails on valid input.
continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext

# OK, works on sane cases. Now check whether nonexistent headers
# can be detected and how.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
# Broken: success on invalid input.
continue
else
# Passes both tests.
ac_preproc_ok=:
break
fi
rm -f conftest.err conftest.i conftest.$ac_ext

```

```

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :

else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `"$ac_pwd`':"
  >&5
  $as_echo "$as_me: error: in `"$ac_pwd`':" >&2;}
  as_fn_error $? "C preprocessor `"$CPP`" fails sanity check
  See `config.log' for more details" "$LINENO" 5; }
  fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS confptest.$ac_ext >&5'
ac_link='$CC -o confptest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
confptest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for grep that
handles long lines and -e" >&5
$as_echo_n "checking for grep that handles long lines and -e... " >&6;
}
if ${ac_cv_path_GREP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$GREP"; then
    ac_path_GREP_found=false
    # Loop through the user's path and test for each of PROGNAMES_PATH
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in grep ggrep; do
        for ac_exec_ext in '' $ac_executable_extensions; do
          ac_path_GREP="$as_dir/$ac_prog$ac_exec_ext"
          as_fn_executable_p "$ac_path_GREP" || continue
        # Check for GNU ac_path_GREP and select it if it is found.
        # Check for GNU $ac_path_GREP
        case `"$ac_path_GREP" --version 2>&1` in
        *GNU*)
          ac_cv_path_GREP="$ac_path_GREP" ac_path_GREP_found=:;
          *)
            ac_count=0
            $as_echo_n 0123456789 >"confptest.in"
            while :
            do
              cat "confptest.in" "confptest.in" >"confptest.tmp"
              mv "confptest.tmp" "confptest.in"

```

```

    cp "confptest.in" "confptest.nl"
    $as_echo 'GREP' >> "confptest.nl"
    "$ac_path_GREP" -e 'GREP$' -e '-(cannot match)-' < "confptest.nl"
>"confptest.out" 2>/dev/null || break
diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
as_fn_arith $ac_count + 1 && ac_count=$as_val
if test $ac_count -gt ${ac_path_GREP_max-0}; then
    # Best one so far, save it but keep looking for a better one
    ac_cv_path_GREP="$ac_path_GREP"
    ac_path_GREP_max=$ac_count
fi
# 10*(2^10) chars as input seems more than enough
test $ac_count -gt 10 && break
done
rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

    $ac_path_GREP_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_GREP"; then
    as_fn_error $? "no acceptable grep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_GREP=$GREP
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_GREP" >&5
$as_echo "$ac_cv_path_GREP" >&6; }
GREP="$ac_cv_path_GREP"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for egrep" >&5
$as_echo_n "checking for egrep... " >&6; }
if ${ac_cv_path_EGREP+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if echo a | $GREP -E '(a|b)' >/dev/null 2>&1
    then ac_cv_path_EGREP="$GREP -E"
    else
        if test -z "$EGREP"; then
            ac_path_EGREP_found=false
            # Loop through the user's path and test for each of PROGRAMME-LIST
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.

```



```

    for ac_prog in egrep; do
      for ac_exec_ext in ` $ac_executable_extensions; do
        ac_path_EGREP="$as_dir/$ac_prog$ac_exec_ext"
        as_fn_executable_p "$ac_path_EGREP" || continue
      # Check for GNU ac_path_EGREP and select it if it is found.
      # Check for GNU $ac_path_EGREP
      case `"$ac_path_EGREP" --version 2>&1` in
      *GNU*)
        ac_cv_path_EGREP="$ac_path_EGREP" ac_path_EGREP_found=;;;
      *)
        ac_count=0
        $as_echo_n 0123456789 >"confptest.in"
        while :
        do
          cat "confptest.in" "confptest.in" >"confptest.tmp"
          mv "confptest.tmp" "confptest.in"
          cp "confptest.in" "confptest.nl"
          $as_echo 'EGREP' >> "confptest.nl"
          "$ac_path_EGREP" 'EGREP$' < "confptest.nl" >"confptest.out"
        2>/dev/null || break
          diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
          as_fn_arith $ac_count + 1 && ac_count=$as_val
          if test $ac_count -gt ${ac_path_EGREP_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_EGREP="$ac_path_EGREP"
            ac_path_EGREP_max=$ac_count
          fi
          # 10*(2^10) chars as input seems more than enough
          test $ac_count -gt 10 && break
        done
        rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
      esac

      $ac_path_EGREP_found && break 3
    done
  done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_EGREP"; then
  as_fn_error $? "no acceptable egrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
  ac_cv_path_EGREP=$EGREP
fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_EGREP"
>&5
$as_echo "$ac_cv_path_EGREP" >&6; }
EGREP="$ac_cv_path_EGREP"

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$sas_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_header_stdcl=yes
else
  ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$sas_objext conftest.$sas_ext

if test $ac_cv_header_stdcl = yes; then
  # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$sas_ext") 2>&5 |
  $EGREP "memchr" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <stdlib.h>

```

```

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "free" >/dev/null 2>&1; then :

else
  ac_cv_header_stdc=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdc = yes; then
  # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
  if test "$cross_compiling" = yes; then :
  :
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0xFF) == 0x20)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
    (('a' <= (c) && (c) <= 'i') \
     || ('j' <= (c) && (c) <= 'r') \
     || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
  int i;
  for (i = 0; i < 256; i++)
    if (XOR (islower (i), ISLOWER (i))
        || toupper (i) != TOUPPER (i))
      return 2;
  return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
  ac_cv_header_stdc=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
  conftest.$ac_objext conftest.beam conftest.$ac_ext

```

```

fi

fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdcl"
>&5
$as_echo "$ac_cv_header_stdcl" >&6; }
if test $ac_cv_header_stdcl = yes; then

$as_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

# On IRIX 5.3, sys/types and inttypes.h are conflicting.
for ac_header in sys/types.h sys/stat.h stdlib.h string.h memory.h
strings.h \
        inttypes.h stdint.h unistd.h
do :
    as_ac_Header=`$as_echo "ac_cv_header_$ac_header" | $as_tr_sh`
    ac_fn_c_check_header_compile "$LINENO" "$ac_header" "$as_ac_Header"
"$ac_includes_default"
    "
if eval test \"x\$$as_ac_Header\" = x\"yes\"; then :
    cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_header" | $as_tr_cpp` 1
_ACEOF
fi

done

    ac_fn_c_check_header_mongrel "$LINENO" "minix/config.h"
"ac_cv_header_minix_config_h" "$ac_includes_default"
if test "x$ac_cv_header_minix_config_h" = xyes; then :
    MINIX=yes
else
    MINIX=
fi

    if test "$MINIX" = yes; then

$as_echo "@%:@define _POSIX_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _POSIX_1_SOURCE 2" >>confdefs.h

$as_echo "@%:@define _MINIX 1" >>confdefs.h

```

```

fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether it is safe
to define __EXTENSIONS__ " >&5
$as_echo_n "checking whether it is safe to define __EXTENSIONS__... "
>&6; }
if ${ac_cv_safe_to_define__extensions__+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#       define __EXTENSIONS__ 1
      $ac_includes_default

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_safe_to_define__extensions__=yes
else
  ac_cv_safe_to_define__extensions__=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_safe_to_define__extensions__ " >&5
$as_echo "$ac_cv_safe_to_define__extensions__ " >&6; }
test $ac_cv_safe_to_define__extensions__ = yes &&
  $as_echo "@%:@define __EXTENSIONS__ 1" >>confdefs.h

$as_echo "@%:@define _ALL_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _GNU_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _POSIX_PTHREAD_SEMANTICS 1" >>confdefs.h

$as_echo "@%:@define _TANDEM_SOURCE 1" >>confdefs.h

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing strerror" >&5
$as_echo_n "checking for library containing strerror... " >&6; }
if ${ac_cv_search_strerror+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_func_search_save_LIBS=$LIBS

```

```

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char strerror ();
int
main ()
{
return strerror ();
    ;
return 0;
}
_ACEOF
for ac_lib in ' cposix; do
if test -z "$ac_lib"; then
ac_res="none required"
else
ac_res=-l$ac_lib
LIBS="-l$ac_lib $ac_func_search_save_LIBS"
fi
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_search_strerror=$ac_res
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext
if ${ac_cv_search_strerror+:} false; then :
break
fi
done
if ${ac_cv_search_strerror+:} false; then :

else
ac_cv_search_strerror=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_strerror" >&5
$as_echo "$ac_cv_search_strerror" >&6; }
ac_res=$ac_cv_search_strerror
if test "$ac_res" != no; then :
test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$sas_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_header_stdcl=yes
else
  ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test $ac_cv_header_stdcl = yes; then
  # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "memchr" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>

_ACEOF

```

```

if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "free" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
  if test "$cross_compiling" = yes; then :
  :
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0xFF) == 0x20)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
    (('a' <= (c) && (c) <= 'i' \
     || ('j' <= (c) && (c) <= 'r' \
     || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
  int i;
  for (i = 0; i < 256; i++)
    if (XOR (islower (i), ISLOWER (i))
        || toupper (i) != TOUPPER (i))
      return 2;
  return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
  ac_cv_header_stdcl=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
  conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

```



```

fi
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdcl"
>&5
$as_echo "$ac_cv_header_stdcl" >&6; }
if test $ac_cv_header_stdcl = yes; then

$as_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for inline" >&5
$as_echo_n "checking for inline... " >&6; }
if ${ac_cv_c_inline+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_cv_c_inline=no
  for ac_kw in inline __inline__ inline; do
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#ifdef __cplusplus
typedef int foo_t;
static $ac_kw foo_t static_foo () {return 0; }
$ac_kw foo_t foo () {return 0; }
#endif

  _ACEOF
  if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_c_inline=$ac_kw
  fi
  rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  test "$ac_cv_c_inline" != no && break
done

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_c_inline" >&5
$as_echo "$ac_cv_c_inline" >&6; }

case $ac_cv_c_inline in
  inline | yes) ;;
  *)
    case $ac_cv_c_inline in
      no) ac_val=;;
      *) ac_val=$ac_cv_c_inline;;
    esac
    cat >>confdefs.h <<_ACEOF
#ifdef __cplusplus
#define inline $ac_val
#endif
  _ACEOF
  ;;
esac

```



```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to print
strings" >&5
$as_echo_n "checking how to print strings... " >&6; }
# Test print first, because it will be a builtin if present.
if test "X`( print -r -- -n ) 2>/dev/null`" = X-n && \
    test "X`print -r -- $ECHO 2>/dev/null`" = "X$ECHO"; then
    ECHO='print -r --'
elif test "X`printf %s $ECHO 2>/dev/null`" = "X$ECHO"; then
    ECHO='printf %s\n'
else
    # Use this function as a fallback that always works.
    func_fallback_echo ()
    {
        eval 'cat <<_LTECHO_EOF
$1
_LTECHO_EOF'
    }
    ECHO='func_fallback_echo'
fi

# func_echo_all arg...
# Invoke $ECHO with all args, space-separated.
func_echo_all ()
{
    $ECHO ""
}

case "$ECHO" in
    printf*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: printf"
>&5
$as_echo "printf" >&6; } ;;
    print*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: print -r"
>&5
$as_echo "print -r" >&6; } ;;
    *) { $as_echo "$as_me:${as_lineno-$LINENO}: result: cat" >&5
$as_echo "cat" >&6; } ;;
esac

```

```
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for a sed that does
not truncate output" >&5
$sas_echo_n "checking for a sed that does not truncate output... " >&6;
}
if ${ac_cv_path_SED+:} false; then :
  $sas_echo_n "(cached) " >&6
else
ac_script=s/aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa/bbbbbbbbbbbbbbbbbbbbbbbbbb
bbbbbbbbbbbb/
  for ac_i in 1 2 3 4 5 6 7; do
    ac_script="$ac_script$sas_nl$ac_script"
  done
  echo "$ac_script" 2>/dev/null | sed 99q >confptest.sed
  { ac_script=; unset ac_script;}
  if test -z "$SED"; then
    ac_path_SED_found=false
    # Loop through the user's path and test for each of PROGNAMES_PATH
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in sed gsed; do
        for ac_exec_ext in '' $ac_executable_extensions; do
          ac_path_SED="$as_dir/$ac_prog$ac_exec_ext"
          as_fn_executable_p "$ac_path_SED" || continue
        # Check for GNU ac_path_SED and select it if it is found.
        # Check for GNU $ac_path_SED
        case `"$ac_path_SED" --version 2>&1` in
        *GNU*)
          ac_cv_path_SED="$ac_path_SED" ac_path_SED_found=:;;
        *)
          ac_count=0
          $sas_echo_n 0123456789 >"confptest.in"
          while :
          do
            cat "confptest.in" "confptest.in" >"confptest.tmp"
            mv "confptest.tmp" "confptest.in"
            cp "confptest.in" "confptest.nl"
            $sas_echo '' >> "confptest.nl"
            "$ac_path_SED" -f confptest.sed < "confptest.nl" >"confptest.out"
            2>/dev/null || break
            diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
            as_fn_arith $ac_count + 1 && ac_count=$as_val
            if test $ac_count -gt ${ac_path_SED_max-0}; then
              # Best one so far, save it but keep looking for a better one
              ac_cv_path_SED="$ac_path_SED"
              ac_path_SED_max=$ac_count
            fi
            # 10*(2^10) chars as input seems more than enough
            test $ac_count -gt 10 && break
          done
        esac
      done
    done
  fi
done
done
done
```

```

done
rm -f conftest.in conftest.tmp conftest.nl conftest.out;;
esac

    $ac_path_SED_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_SED"; then
    as_fn_error $? "no acceptable sed could be found in \$PATH"
"$LINENO" 5
fi
else
    ac_cv_path_SED=$SED
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_SED" >&5
$as_echo "$ac_cv_path_SED" >&6; }
SED="$ac_cv_path_SED"
rm -f conftest.sed

test -z "$SED" && SED=sed
Xsed="$SED -e 1s/^X//"

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for fgrep" >&5
$as_echo_n "checking for fgrep... " >&6; }
if ${ac_cv_path_FGREP+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if echo 'ab*c' | $GREP -F 'ab*c' >/dev/null 2>&1
    then ac_cv_path_FGREP="$GREP -F"
    else
        if test -z "$FGREP"; then
            ac_path_FGREP_found=false
            # Loop through the user's path and test for each of PROGRAMME-LIST
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.

```

```

    for ac_prog in fgrep; do
    for ac_exec_ext in ` $ac_executable_extensions; do
        ac_path_FGREP="$as_dir/$ac_prog$ac_exec_ext"
        as_fn_executable_p "$ac_path_FGREP" || continue
# Check for GNU ac_path_FGREP and select it if it is found.
# Check for GNU $ac_path_FGREP
case `"$ac_path_FGREP" --version 2>&1` in
*GNU*)
    ac_cv_path_FGREP="$ac_path_FGREP" ac_path_FGREP_found=;;;
*)
    ac_count=0
    $as_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $as_echo 'FGREP' >> "confptest.nl"
        "$ac_path_FGREP" FGREP < "confptest.nl" >"confptest.out" 2>/dev/null
    || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_FGREP_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_FGREP="$ac_path_FGREP"
            ac_path_FGREP_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

    $ac_path_FGREP_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_FGREP"; then
    as_fn_error $? "no acceptable fgrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_FGREP=$FGREP
fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_FGREP"
>&5
$as_echo "$ac_cv_path_FGREP" >&6; }
FGREP="$ac_cv_path_FGREP"

```

```
test -z "$GREP" && GREP=grep
```

```
@%:@ Check whether --with-gnu-ld was given.
if test "${with_gnu_ld+set}" = set; then :
  withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes
else
  with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
$CC" >&5
$as_echo_n "checking for ld used by $CC... " >&6; }
  case $host in
    *-*-mingw*)
      # gcc leaves a trailing carriage return which upsets mingw
      ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
    *)
      ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
  esac
  case $ac_prog in
    # Accept absolute paths.
    [[\/*] | ?:[\/*]*)
      re_direlt='[/^[^/][^/]*/\.\./'
      # Canonicalize the pathname of ld
      ac_prog=`$ECHO "$ac_prog"| $SED 's%\\\\\\%/g'`
      while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
        ac_prog=`$ECHO $ac_prog| $SED "s%$re_direlt%/%"`
      done
      test -z "$LD" && LD="$ac_prog"
```

```

    ;;
    "")
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
    *)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
    esac
elif test "$with_gnu_ld" = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.
        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
          *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break
            ;;
          *)
            test "$with_gnu_ld" != yes && break
            ;;
        esac
      fi
    done
    IFS="$lt_save_ifs"
  else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
  fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5

```



```

$as_echo "$LD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \${PATH}
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
  $as_echo_n "(cached) " >&6
else
  # I'd rather use --version here, but apparently some GNU lds only
accept -v.
case `"$LD" -v 2>&1 </dev/null` in
*GNU* | *'with BFD'*)
  lt_cv_prog_gnu_ld=yes
  ;;
*)
  lt_cv_prog_gnu_ld=no
  ;;
esac
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5
$as_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for BSD- or MS-
compatible name lister (nm)" >&5
$as_echo_n "checking for BSD- or MS-compatible name lister (nm)... "
>&6; }
if ${lt_cv_path_NM+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$NM"; then
    # Let the user override the test.
    lt_cv_path_NM="$NM"
  else
    lt_nm_to_check="${ac_tool_prefix}nm"
    if test -n "$ac_tool_prefix" && test "$build" = "$host"; then
      lt_nm_to_check="$lt_nm_to_check nm"
    fi
  fi

```

```

for lt_tmp_nm in $lt_nm_to_check; do
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  for ac_dir in $PATH /usr/ccs/bin/elf /usr/ccs/bin /usr/ucb /bin;
do
  IFS="$lt_save_ifs"
  test -z "$ac_dir" && ac_dir=.
  tmp_nm="$ac_dir/$lt_tmp_nm"
  if test -f "$tmp_nm" || test -f "$tmp_nm$ac_exeext" ; then
# Check to see if the nm accepts a BSD-compatible flag.
# Adding the `sed 1q' prevents false positives on HP-UX, which
says:
#   nm: unknown option "B" ignored
# Tru64's nm complains that /dev/null is an invalid object file
case `"$tmp_nm" -B /dev/null 2>&1 | sed '1q'` in
*/dev/null* | *'Invalid file or object type'*)
  lt_cv_path_NM="$tmp_nm -B"
  break
  ;;
*)
  case `"$tmp_nm" -p /dev/null 2>&1 | sed '1q'` in
*/dev/null*)
  lt_cv_path_NM="$tmp_nm -p"
  break
  ;;
*)
  lt_cv_path_NM=${lt_cv_path_NM="$tmp_nm"} # keep the first
match, but
  continue # so that we can try to find one that supports BSD
flags
  ;;
esac
  ;;
esac
  fi
done
IFS="$lt_save_ifs"
done
: ${lt_cv_path_NM=no}
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_path_NM" >&5
$as_echo "$lt_cv_path_NM" >&6; }
if test "$lt_cv_path_NM" != "no"; then
  NM="$lt_cv_path_NM"
else
# Didn't find any BSD compatible name lister, look for dumpbin.
if test -n "$DUMPBIN"; then :
# Let the user override the test.
else
  if test -n "$ac_tool_prefix"; then
for ac_prog in dumpbin "link -dump"
do

```

```

    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
be a program name with args.
set dummy $ac_tool_prefix$ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_DUMPBIN+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$DUMPBIN"; then
        ac_cv_prog_DUMPBIN="$DUMPBIN" # Let the user override the test.
    else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_exec_ext in ' $ac_executable_extensions; do
                if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                    ac_cv_prog_DUMPBIN="$ac_tool_prefix$ac_prog"
                    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                    break 2
                fi
            done
        done
        IFS=$as_save_IFS

        fi
        fi
        DUMPBIN=$ac_cv_prog_DUMPBIN
        if test -n "$DUMPBIN"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DUMPBIN" >&5
$as_echo "$DUMPBIN" >&6; }
        else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        fi

        test -n "$DUMPBIN" && break
    done
fi
if test -z "$DUMPBIN"; then
    ac_ct_DUMPBIN=$DUMPBIN
    for ac_prog in dumpbin "link -dump"
    do
        # Extract the first word of "$ac_prog", so it can be a program name
with args.
        set dummy $ac_prog; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_ac_ct_DUMPBIN+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_DUMPBIN"; then
        ac_cv_prog_ac_ct_DUMPBIN="$ac_ct_DUMPBIN" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DUMPBIN="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DUMPBIN=$ac_cv_prog_ac_ct_DUMPBIN
if test -n "$ac_ct_DUMPBIN"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DUMPBIN" >&5
$as_echo "$ac_ct_DUMPBIN" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$ac_ct_DUMPBIN" && break
done

    if test "x$ac_ct_DUMPBIN" = x; then
        DUMPBIN=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        DUMPBIN=$ac_ct_DUMPBIN
    fi
fi

```

```

    case `\$DUMPBIN -symbols /dev/null 2>&1 | sed '1q'` in
    *COFF*)
        DUMPBIN="\$DUMPBIN -symbols"
        ;;
    *)
        DUMPBIN=:
        ;;
    esac
fi

if test "\$DUMPBIN" != ":"; then
    NM="\$DUMPBIN"
fi

test -z "\$NM" && NM=nm

{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: checking the name lister
(\$NM) interface" >&5
\$as_echo_n "checking the name lister (\$NM) interface... " >&6; }
if {\$lt_cv_nm_interface+:} false; then :
    \$as_echo_n "(cached) " >&6
else
    lt_cv_nm_interface="BSD nm"
    echo "int some_variable = 0;" > conftest.\$ac_ext
    (eval echo "\"\$as_me:\$LINENO: \$ac_compile\"" >&5)
    (eval "\$ac_compile" 2>conftest.err)
    cat conftest.err >&5
    (eval echo "\"\$as_me:\$LINENO: \$NM \\\"conftest.\$ac_objext\\\"\""
>&5)
    (eval "\$NM \"conftest.\$ac_objext\" 2>conftest.err > conftest.out)
    cat conftest.err >&5
    (eval echo "\"\$as_me:\$LINENO: output\"" >&5)
    cat conftest.out >&5
    if \$GREP 'External.*some_variable' conftest.out > /dev/null; then
        lt_cv_nm_interface="MS dumpbin"
    fi
    rm -f conftest*
fi
{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: result: \$lt_cv_nm_interface"
>&5
\$as_echo "\$lt_cv_nm_interface" >&6; }

{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: checking whether ln -s works"
>&5
\$as_echo_n "checking whether ln -s works... " >&6; }
LN_S=\$as_ln_s
if test "\$LN_S" = "ln -s"; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no, using $LN_S"
>&5
$as_echo "no, using $LN_S" >&6; }
fi

# find the maximum length of command line arguments
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the maximum length
of command line arguments" >&5
$as_echo_n "checking the maximum length of command line arguments... "
>&6; }
if ${lt_cv_sys_max_cmd_len+:} false; then :
    $as_echo_n "(cached) " >&6
else
    i=0
    teststring="ABCD"

    case $build_os in
msdosdjgpp*)
    # On DJGPP, this test can blow up pretty badly due to problems in
libc
    # (any single argument exceeding 2000 bytes causes a buffer
overrun
    # during glob expansion). Even if it were fixed, the result of
this
    # check would be larger than it should be.
    lt_cv_sys_max_cmd_len=12288;    # 12K is about right
    ;;

gnu*)
    # Under GNU Hurd, this test is not required because there is
    # no limit to the length of command line arguments.
    # Libtool will interpret -1 as no limit whatsoever
    lt_cv_sys_max_cmd_len=-1;
    ;;

cygwin* | mingw* | cegcc*)
    # On Win9x/ME, this test blows up -- it succeeds, but takes
    # about 5 minutes as the teststring grows exponentially.
    # Worse, since 9x/ME are not pre-emptively multitasking,
    # you end up with a "frozen" computer, even though with patience
    # the test eventually succeeds (with a max line length of 256k).
    # Instead, let's just punt: use the minimum linelength reported by
    # all of the supported platforms: 8192 (on NT/2K/XP).
    lt_cv_sys_max_cmd_len=8192;
    ;;

mint*)
    # On MiNT this can take a long time and run out of memory.
    lt_cv_sys_max_cmd_len=8192;

```

```

;;

amigaos*)
# On AmigaOS with pdksh, this test takes hours, literally.
# So we just punt and use a minimum line length of 8192.
lt_cv_sys_max_cmd_len=8192;
;;

netbsd* | freebsd* | openbsd* | darwin* | dragonfly*)
# This has been around since 386BSD, at least. Likely further.
if test -x /sbin/sysctl; then
  lt_cv_sys_max_cmd_len=`/sbin/sysctl -n kern.argmax`
elif test -x /usr/sbin/sysctl; then
  lt_cv_sys_max_cmd_len=`/usr/sbin/sysctl -n kern.argmax`
else
  lt_cv_sys_max_cmd_len=65536      # usable default for all BSDs
fi
# And add a safety zone
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
;;

interix*)
# We know the value 262144 and hardcode it with a safety zone
# (like BSD)
lt_cv_sys_max_cmd_len=196608
;;

os2*)
# The test takes a long time on OS/2.
lt_cv_sys_max_cmd_len=8192
;;

osf*)
# Dr. Hans Ekkehard Plesser reports seeing a kernel panic running
configure
# due to this test when exec_disable_arg_limit is 1 on Tru64. It
is not
# nice to cause kernel panics so lets avoid the loop below.
# First set a reasonable default.
lt_cv_sys_max_cmd_len=16384
#
if test -x /sbin/sysconfig; then
  case ` /sbin/sysconfig -q proc exec_disable_arg_limit` in
    *1*) lt_cv_sys_max_cmd_len=-1 ;;
  esac
fi
;;

sco3.2v5*)
  lt_cv_sys_max_cmd_len=102400
  ;;

sysv5* | sco5v6* | sysv4.2uw2*)

```

```

kargmax=`grep ARG_MAX /etc/conf/cf.d/stune 2>/dev/null`
if test -n "$kargmax"; then
    lt_cv_sys_max_cmd_len=`echo $kargmax | sed 's/.*[      ]//'\`
else
    lt_cv_sys_max_cmd_len=32768
fi
;;
*)
lt_cv_sys_max_cmd_len=`(getconf ARG_MAX) 2> /dev/null`
if test -n "$lt_cv_sys_max_cmd_len"; then
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
else
    # Make teststring a little bigger before we do anything with it.
    # a 1K string should be a reasonable start.
    for i in 1 2 3 4 5 6 7 8 ; do
        teststring=$teststring$teststring
    done
    SHELL=${SHELL-${CONFIG_SHELL-/bin/sh}}
    # If test is not a shell built-in, we'll probably end up
computing a
    # maximum length that is only half of the actual maximum length,
but
    # we can't tell.
    while { test "X"`env echo "$teststring$teststring" 2>/dev/null`
\
        = "X$teststring$teststring"; } >/dev/null 2>&1 &&
        test $i != 17 # 1/2 MB should be enough
    do
        i=`expr $i + 1`
        teststring=$teststring$teststring
    done
    # Only check the string length outside the loop.
    lt_cv_sys_max_cmd_len=`env echo "X$teststring" : ".*" 2>&1`
    teststring=
    # Add a significant safety factor because C++ compilers can tack
on
    # massive amounts of additional arguments before passing them to
the
    # linker. It appears as though 1/2 is a usable value.
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 2`
fi
;;
esac

fi

if test -n $lt_cv_sys_max_cmd_len ; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sys_max_cmd_len" >&5
$as_echo "$lt_cv_sys_max_cmd_len" >&6; }
else

```



```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: none" >&5
$as_echo "none" >&6; }
fi
max_cmd_len=$lt_cv_sys_max_cmd_len

: ${CP="cp -f"}
: ${MV="mv -f"}
: ${RM="rm -f"}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands some XSI constructs" >&5
$as_echo_n "checking whether the shell understands some XSI
constructs... " >&6; }
# Try some XSI features
xsi_shell=no
( _lt_dummy="a/b/c"
  test
"$${_lt_dummy##*/},${_lt_dummy%/*},${_lt_dummy#??}"${_lt_dummy%$_lt_du
mmy"} , \
    = c,a/b,b/c, \
    && eval 'test $(( 1 + 1 )) -eq 2 \
    && test "${#_lt_dummy}" -eq 5' ) >/dev/null 2>&1 \
    && xsi_shell=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $xsi_shell" >&5
$as_echo "$xsi_shell" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands \"+=\\"" >&5
$as_echo_n "checking whether the shell understands \"+=\\"... " >&6; }
lt_shell_append=no
( foo=bar; set foo baz; eval "$1+=\$2" && test "$foo" = barbaz ) \
  >/dev/null 2>&1 \
  && lt_shell_append=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_shell_append" >&5
$as_echo "$lt_shell_append" >&6; }

if ( (MAIL=60; unset MAIL) || exit) >/dev/null 2>&1; then
  lt_unset=unset
else
  lt_unset=false
fi

```

```

# test EBCDIC or ASCII
case `echo X|tr X '\101'` in
A) # ASCII based system
    # \n is not interpreted correctly by Solaris 8 /usr/ucb/tr
    lt_SP2NL='tr \040 \012'
    lt_NL2SP='tr \015\012 \040\040'
    ;;
*) # EBCDIC based system
    lt_SP2NL='tr \100 \n'
    lt_NL2SP='tr \r\n \100\100'
    ;;
esac

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to convert
$build file names to $host format" >&5
$sas_echo_n "checking how to convert $build file names to $host
format... " >&6; }
if ${lt_cv_to_host_file_cmd+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  case $host in
  *-*-mingw* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_host_file_cmd=func_convert_file_msys_to_w32
        ;;
      *-*-cygwin* )
        lt_cv_to_host_file_cmd=func_convert_file_cygwin_to_w32
        ;;
      * ) # otherwise, assume *nix
        lt_cv_to_host_file_cmd=func_convert_file_nix_to_w32
        ;;
    esac
  ;;
  *-*-cygwin* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_host_file_cmd=func_convert_file_msys_to_cygwin
        ;;
      *-*-cygwin* )
        lt_cv_to_host_file_cmd=func_convert_file_noop
        ;;
      * ) # otherwise, assume *nix

```

```

        lt_cv_to_host_file_cmd=func_convert_file_nix_to_cygwin
        ;;
    esac
    ;;
* ) # unhandled hosts (and "normal" native builds)
    lt_cv_to_host_file_cmd=func_convert_file_noop
    ;;
esac

fi

to_host_file_cmd=$lt_cv_to_host_file_cmd
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_to_host_file_cmd" >&5
$as_echo "$lt_cv_to_host_file_cmd" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to convert
$build file names to toolchain format" >&5
$as_echo_n "checking how to convert $build file names to toolchain
format... " >&6; }
if ${lt_cv_to_tool_file_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  #assume ordinary cross tools, or native build.
  lt_cv_to_tool_file_cmd=func_convert_file_noop
  case $host in
    *-*-mingw* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_tool_file_cmd=func_convert_file_msys_to_w32
          ;;
        esac
      ;;
    esac
  ;;
esac

fi

to_tool_file_cmd=$lt_cv_to_tool_file_cmd
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_to_tool_file_cmd" >&5
$as_echo "$lt_cv_to_tool_file_cmd" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $LD option to
reload object files" >&5

```

```

$as_echo_n "checking for $LD option to reload object files... " >&6; }
if ${lt_cv_ld_reload_flag+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_reload_flag='-r'
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_reload_flag" >&5
$as_echo "$lt_cv_ld_reload_flag" >&6; }
reload_flag=$lt_cv_ld_reload_flag
case $reload_flag in
"" | " ") ;;
*) reload_flag="$reload_flag" ;;
esac
reload_cmds='$LD$reload_flag -o $output$reload_objs'
case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
  if test "$GCC" != yes; then
    reload_cmds=false
  fi
  ;;
darwin*)
  if test "$GCC" = yes; then
    reload_cmds='$LTCC $LTCFLAGS -nostdlib ${wl}-r -o
$output$reload_objs'
  else
    reload_cmds='$LD$reload_flag -o $output$reload_objs'
  fi
  ;;
esac

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}objdump", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$OBJDUMP"; then
      ac_cv_prog_OBJDUMP="$OBJDUMP" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR

```

```

for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_OBJDUMP="${ac_tool_prefix}objdump"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
OBJDUMP=$ac_cv_prog_OBJDUMP
if test -n "$OBJDUMP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OBJDUMP" >&5
$as_echo "$OBJDUMP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OBJDUMP"; then
  ac_ct_OBJDUMP=$OBJDUMP
  # Extract the first word of "objdump", so it can be a program name
  with args.
  set dummy objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OBJDUMP"; then
      ac_cv_prog_ac_ct_OBJDUMP="$ac_ct_OBJDUMP" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OBJDUMP="objdump"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5

```

```

        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_OBJDUMP=$ac_cv_prog_ac_ct_OBJDUMP
if test -n "$ac_ct_OBJDUMP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OBJDUMP" >&5
$as_echo "$ac_ct_OBJDUMP" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_OBJDUMP" = x; then
        OBJDUMP="false"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        OBJDUMP=$ac_ct_OBJDUMP
    fi
else
    OBJDUMP="$ac_cv_prog_OBJDUMP"
fi

test -z "$OBJDUMP" && OBJDUMP=objdump

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to recognize
dependent libraries" >&5
$as_echo_n "checking how to recognize dependent libraries... " >&6; }
if ${lt_cv_deplibs_check_method+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_file_magic_cmd='$MAGIC_CMD'
lt_cv_file_magic_test_file=

```

```

lt_cv_deplibs_check_method='unknown'
# Need to set the preceding variable on all platforms that support
# interlibrary dependencies.
# 'none' -- dependencies not supported.
# `unknown' -- same as none, but documents that we really don't know.
# 'pass_all' -- all dependencies passed with no checks.
# 'test_compile' -- check by making test program.
# 'file_magic [[regex]]' -- check by looking for files in library path
# which responds to the $file_magic_cmd with a given extended regex.
# If you have `file' or equivalent on your system and you're not sure
# whether `pass_all' will *always* work, you probably want this one.

case $host_os in
aix[4-9]*)
    lt_cv_deplibs_check_method=pass_all
    ;;

beos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

bsdi[45]*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib)'
    lt_cv_file_magic_cmd='/usr/bin/file -L'
    lt_cv_file_magic_test_file=/shlib/libc.so
    ;;

cygwin*)
    # func_win32_libid is a shell function defined in ltmain.sh
    lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86 DLL'
    lt_cv_file_magic_cmd='func_win32_libid'
    ;;

mingw* | pw32*)
    # Base MSYS/MinGW do not provide the 'file' command needed by
    # func_win32_libid shell function, so use a weaker test based on
    'objdump',
    # unless we find 'file', for example because we are cross-compiling.
    # func_win32_libid assumes BSD nm, so disallow it if using MS
    dumpbin.
    if ( test "$lt_cv_nm_interface" = "BSD nm" && file / ) >/dev/null
2>&1; then
        lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86
DLL'
        lt_cv_file_magic_cmd='func_win32_libid'
    else
        # Keep this pattern in sync with the one in func_win32_libid.
        lt_cv_deplibs_check_method='file_magic file format (pei*-
i386(.?architecture: i386)?|pe-arm-wince|pe-x86-64)'
        lt_cv_file_magic_cmd='$OBJDUMP -f'
    fi

```

```

;;

cegcc*)
# use the weaker test based on 'objdump'. See mingw*.
lt_cv_deplibs_check_method='file_magic file format pe-arm-
.*little(.*architecture: arm)?'
lt_cv_file_magic_cmd='$OBJDUMP -f'
;;

darwin* | rhapsody*)
lt_cv_deplibs_check_method=pass_all
;;

freebsd* | dragonfly*)
if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
  case $host_cpu in
    i*86 )
      # Not sure whether the presence of OpenBSD here was a mistake.
      # Let's accept both of them until this is cleared up.
      lt_cv_deplibs_check_method='file_magic
(FreeBSD|OpenBSD|DragonFly)/i[3-9]86 (compact )?demand paged shared
library'
      lt_cv_file_magic_cmd=/usr/bin/file
      lt_cv_file_magic_test_file=`echo /usr/lib/libc.so.*`
      ;;
    esac
  else
    lt_cv_deplibs_check_method=pass_all
  fi
  ;;

gnu*)
lt_cv_deplibs_check_method=pass_all
;;

haiku*)
lt_cv_deplibs_check_method=pass_all
;;

hpux10.20* | hpux11*)
lt_cv_file_magic_cmd=/usr/bin/file
case $host_cpu in
  ia64*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF-[0-
9][0-9]) shared object file - IA64'
    lt_cv_file_magic_test_file=/usr/lib/hpux32/libc.so
    ;;
  hppa*64*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF[ -
][0-9][0-9]) (-bit)?( [LM]SB)? shared object( file)?[, -]* PA-RISC [0-
9]\.[0-9]'
    lt_cv_file_magic_test_file=/usr/lib/pa20_64/libc.sl

```



```

    ;;
*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|PA-
RISC[0-9]\.[0-9]) shared library'
    lt_cv_file_magic_test_file=/usr/lib/libc.sl
    ;;
esac
;;

interix[3-9]*)
# PIC code is broken on Interix 3.x, that's why |\a not |_pic\a
here
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so|\a)$'
    ;;

irix5* | irix6* | nonstopux*)
case $LD in
*-32|*" -32 ") libmagic=32-bit;;
*-n32|*" -n32 ") libmagic=N32;;
*-64|*" -64 ") libmagic=64-bit;;
*) libmagic=never-match;;
esac
lt_cv_deplibs_check_method=pass_all
;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
    lt_cv_deplibs_check_method=pass_all
    ;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|_pic\a)$'
    else
        lt_cv_deplibs_check_method='match_pattern
/lib[^/]+(\.so|_pic\a)$'
    fi
    ;;

newos6*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(executable|dynamic lib)'
    lt_cv_file_magic_cmd=/usr/bin/file
    lt_cv_file_magic_test_file=/usr/lib/libnls.so
    ;;

*nto* | *qnx*)
    lt_cv_deplibs_check_method=pass_all
    ;;

openbsd*)

```

```

    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|\.so|_pic\.a)$'
    else
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|_pic\.a)$'
    fi
    ;;

osf3* | osf4* | osf5*)
    lt_cv_deplibs_check_method=pass_all
    ;;

rdos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

solaris*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv4 | sysv4.3*)
    case $host_vendor in
        motorola)
            lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib) M[0-9][0-9]* Version [0-9]'
            lt_cv_file_magic_test_file=`echo /usr/lib/libc.so*`
            ;;
        ncr)
            lt_cv_deplibs_check_method=pass_all
            ;;
        sequent)
            lt_cv_file_magic_cmd='/bin/file'
            lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [LM]SB
(shared object|dynamic lib )'
            ;;
        sni)
            lt_cv_file_magic_cmd='/bin/file'
            lt_cv_deplibs_check_method="file_magic ELF [0-9][0-9]*-bit [LM]SB
dynamic lib"
            lt_cv_file_magic_test_file=/lib/libc.so
            ;;
        siemens)
            lt_cv_deplibs_check_method=pass_all
            ;;
        pc)
            lt_cv_deplibs_check_method=pass_all
    esac

```

```

        ;;
    esac
    ;;

tpf*)
    lt_cv_deplibs_check_method=pass_all
    ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_deplibs_check_method" >&5
$as_echo "$lt_cv_deplibs_check_method" >&6; }

file_magic_glob=
want_nocaseglob=no
if test "$build" = "$host"; then
    case $host_os in
    mingw* | pw32*)
        if ( shopt | grep nocaseglob ) >/dev/null 2>&1; then
            want_nocaseglob=yes
        else
            file_magic_glob=`echo
aAbBcCdDeEfFgGhHiIjJkKlLmMnNoOpPqQrRsStTuUvVwWxXyYzZ | $SED -e
"s/\(..\) /s\/[\1]\/[\1]\/g;/g"`
        fi
    ;;
    esac
fi

file_magic_cmd=$lt_cv_file_magic_cmd
deplibs_check_method=$lt_cv_deplibs_check_method
test -z "$deplibs_check_method" && deplibs_check_method=unknown

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}dlltool", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}dlltool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_DLLTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$DLLTOOL"; then
      ac_cv_prog_DLLTOOL="$DLLTOOL" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_DLLTOOL="${ac_tool_prefix}dlltool"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      DLLTOOL=$ac_cv_prog_DLLTOOL
      if test -n "$DLLTOOL"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DLLTOOL" >&5
        $as_echo "$DLLTOOL" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi

      if test -z "$ac_cv_prog_DLLTOOL"; then
        ac_ct_DLLTOOL=$DLLTOOL
        # Extract the first word of "dlltool", so it can be a program name
        with args.
        set dummy dlltool; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_ac_ct_DLLTOOL+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_DLLTOOL"; then
        ac_cv_prog_ac_ct_DLLTOOL="$ac_ct_DLLTOOL" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DLLTOOL="dlltool"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DLLTOOL=$ac_cv_prog_ac_ct_DLLTOOL
if test -n "$ac_ct_DLLTOOL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DLLTOOL" >&5
$as_echo "$ac_ct_DLLTOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_DLLTOOL" = x; then
        DLLTOOL="false"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        DLLTOOL=$ac_ct_DLLTOOL
    fi
else
    DLLTOOL="$ac_cv_prog_DLLTOOL"
fi

test -z "$DLLTOOL" && DLLTOOL=dlltool

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to associate
runtime and link libraries" >&5
$as_echo_n "checking how to associate runtime and link libraries... "
>&6; }
if ${lt_cv_sharedlib_from_linklib_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_sharedlib_from_linklib_cmd='unknown'

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
  # two different shell functions defined in ltmain.sh
  # decide which to use based on capabilities of $DLLTOOL
  case ` $DLLTOOL --help 2>&1 ` in
*--identify-strict*)
  lt_cv_sharedlib_from_linklib_cmd=func_cygmimg_dll_for_implib
  ;;
*)
  lt_cv_sharedlib_from_linklib_cmd=func_cygmimg_dll_for_implib_fallback
  ;;
esac
  ;;
*)
  # fallback: assume linklib IS sharedlib
  lt_cv_sharedlib_from_linklib_cmd="$ECHO"
  ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sharedlib_from_linklib_cmd" >&5
$as_echo "$lt_cv_sharedlib_from_linklib_cmd" >&6; }
sharedlib_from_linklib_cmd=$lt_cv_sharedlib_from_linklib_cmd
test -z "$sharedlib_from_linklib_cmd" &&
sharedlib_from_linklib_cmd=$ECHO

```

```

if test -n "$ac_tool_prefix"; then
  for ac_prog in ar
  do
    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
    be a program name with args.
    set dummy $ac_tool_prefix$ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_AR+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$AR"; then
        ac_cv_prog_AR="$AR" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' ' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_AR="$ac_tool_prefix$ac_prog"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
        IFS=$as_save_IFS

        fi
        fi
        AR=$ac_cv_prog_AR
        if test -n "$AR"; then
          { $as_echo "$as_me:${as_lineno-$LINENO}: result: $AR" >&5
          $as_echo "$AR" >&6; }
        else
          { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
          $as_echo "no" >&6; }
        fi

        test -n "$AR" && break
      done
    fi
  if test -z "$AR"; then
    ac_ct_AR=$AR
    for ac_prog in ar
    do
      # Extract the first word of "$ac_prog", so it can be a program name
      with args.
      set dummy $ac_prog; ac_word=$2

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_AR+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_AR"; then
    ac_cv_prog_ac_ct_AR="$ac_ct_AR" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions'; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_AR="$ac_prog"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_AR=$ac_cv_prog_ac_ct_AR
if test -n "$ac_ct_AR"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_AR" >&5
$as_echo "$ac_ct_AR" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_AR" && break
done

  if test "x$ac_ct_AR" = x; then
    AR="false"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    AR=$ac_ct_AR
  fi

```



```

fi

: ${AR=ar}
: ${AR_FLAGS=cru}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for archiver @FILE
support" >&5
$as_echo_n "checking for archiver @FILE support... " >&6; }
if ${lt_cv_ar_at_file+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ar_at_file=no
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  echo conftest.$ac_objext > conftest.lst
  lt_ar_try='$AR $AR_FLAGS libconftest.a @conftest.lst >&5'
  { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}:
\"$lt_ar_try\""; } >&5
  (eval $lt_ar_try) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`${ac_status} = $ac_status" >&5
  test $ac_status = 0; }
  if test "$ac_status" -eq 0; then
    # Ensure the archiver fails upon bogus file names.
    rm -f conftest.$ac_objext libconftest.a
    { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}: \"$lt_ar_try\"";
} >&5
  (eval $lt_ar_try) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`${ac_status} = $ac_status" >&5
  test $ac_status = 0; }
  if test "$ac_status" -ne 0; then

```

```

        lt_cv_ar_at_file=@
    fi
fi
rm -f conftest.* libconftest.a

fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ar_at_file"
>&5
$as_echo "$lt_cv_ar_at_file" >&6; }

if test "x$lt_cv_ar_at_file" = xno; then
    archiver_list_spec=
else
    archiver_list_spec=$lt_cv_ar_at_file
fi

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$STRIP"; then
            ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_STRIP="${ac_tool_prefix}strip"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

```

```

fi
fi
STRIP=$ac_cv_prog_STRIP
if test -n "$STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
$as_echo "$STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_STRIP"; then
  ac_ct_STRIP=$STRIP
  # Extract the first word of "strip", so it can be a program name
  with args.
  set dummy strip; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_STRIP"; then
      ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_STRIP="strip"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS
    fi
  fi
  ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
  if test -n "$ac_ct_STRIP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }
fi

    if test "x$ac_ct_STRIP" = x; then
        STRIP=":"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        STRIP=$ac_ct_STRIP
    fi
else
    STRIP="$ac_cv_prog_STRIP"
fi

test -z "$STRIP" && STRIP=:

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}ranlib", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}ranlib; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_RANLIB+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$RANLIB"; then
            ac_cv_prog_RANLIB="$RANLIB" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_RANLIB="${ac_tool_prefix}ranlib"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
        fi
    fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
RANLIB=$ac_cv_prog_RANLIB
if test -n "$RANLIB"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $RANLIB" >&5
$as_echo "$RANLIB" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_RANLIB"; then
  ac_ct_RANLIB=$RANLIB
  # Extract the first word of "ranlib", so it can be a program name
  with args.
  set dummy ranlib; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_RANLIB+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_RANLIB"; then
      ac_cv_prog_ac_ct_RANLIB="$ac_ct_RANLIB" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_RANLIB="ranlib"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

fi
fi
ac_ct_RANLIB=$ac_cv_prog_ac_ct_RANLIB
if test -n "$ac_ct_RANLIB"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_RANLIB" >&5
$as_echo "$ac_ct_RANLIB" >&6; }

```

```

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_RANLIB" = x; then
    RANLIB=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    RANLIB=$ac_ct_RANLIB
  fi
else
  RANLIB="$ac_cv_prog_RANLIB"
fi

test -z "$RANLIB" && RANLIB=:

```

```

# Determine commands to create old-style static archives.
old_archive_cmds='$AR $AR_FLAGS $oldlib$oldobjs'
old_postinstall_cmds='chmod 644 $oldlib'
old_postuninstall_cmds=

if test -n "$RANLIB"; then
  case $host_os in
  openbsd*)
    old_postinstall_cmds="$old_postinstall_cmds~\ $RANLIB -t
\$tool_oldlib"
    ;;
  *)
    old_postinstall_cmds="$old_postinstall_cmds~\ $RANLIB
\$tool_oldlib"
    ;;
  esac
  old_archive_cmds="$old_archive_cmds~\ $RANLIB \$tool_oldlib"
fi

case $host_os in
darwin*)
  lock_old_archive_extraction=yes ;;
*)

```

```
    lock_old_archive_extraction=no ;;  
esac
```

```
# If no C compiler was specified, use CC.  
LTCC=${LTCC-"$CC"}
```

```
# If no C compiler flags were specified, use CFLAGS.  
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}
```

```
# Allow CC to be a program name with arguments.  
compiler=$CC
```

```

# Check for command to grab the raw symbol name followed by C symbol
from nm.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking command to parse $NM
output from $compiler object" >&5
$as_echo_n "checking command to parse $NM output from $compiler
object... " >&6; }
if ${lt_cv_sys_global_symbol_pipe+:} false; then :
  $as_echo_n "(cached) " >&6
else

# These are sane defaults that work on at least a few old systems.
# [They come from Ultrix.  What could be older than Ultrix?!! ;)]

# Character class describing NM global symbol codes.
symcode=' [BCDEGRST] '

# Regexp to match symbols that can be accessed directly from C.
sympat='\( [_A-Za-z] [_A-Za-z0-9]* \)'

# Define system-specific variables.
case $host_os in
aix*)
  symcode=' [BCDT] '
  ;;
cygwin* | mingw* | pw32* | cegcc*)
  symcode=' [ABCDGISTW] '
  ;;
hpux*)
  if test "$host_cpu" = ia64; then
    symcode=' [ABCDEGRST] '
  fi
  ;;
irix* | nonstopux*)
  symcode=' [BCDEGRST] '
  ;;
osf*)
  symcode=' [BCDEGQRST] '
  ;;
solaris*)
  symcode=' [BDRT] '
  ;;
sco3.2v5*)
  symcode=' [DT] '
  ;;
sysv4.2uw2*)
  symcode=' [DT] '
  ;;
sysv5* | sco5v6* | unixware* | OpenUNIX*)
  symcode=' [ABDT] '
  ;;
sysv4)
  symcode=' [DFNSTU] '

```



```

;;
esac

# If we're using GNU nm, then use its standard symbol codes.
case `\$NM -V 2>&1` in
*GNU* | *'with BFD'*)
    symcode='[ABCDGIRSTW]' ;;
esac

# Transform an extracted symbol line into a proper C declaration.
# Some systems (esp. on ia64) link data and code symbols differently,
# so use this general approach.
lt_cv_sys_global_symbol_to_cdecl="sed -n -e 's/^T .* \(.*\)$/extern
int \1();/p' -e 's/^\$symcode* .* \(.*\)$/extern char \1;/p'"

# Transform an extracted symbol line into symbol name and symbol
address
lt_cv_sys_global_symbol_to_c_name_address="sed -n -e 's/^: \([^ ]*\)[
]*$/ {\\\"\\1\\\", (void *) 0},/p' -e 's/^\$symcode* \([^ ]*\) \([
]*\)$/ {\\\"\\2\\\", (void *) \\&2},/p'"
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix="sed -n -e 's/^:
\([^ ]*\)[ ]*$/ {\\\"\\1\\\", (void *) 0},/p' -e 's/^\$symcode* \([
]*\) \(\lib\[^ ]*\)$/ {\\\"\\2\\\", (void *) \\&2},/p' -e 's/^\$symcode* \([
]*\) \([ ]*\)$/ {\\\"lib\\2\\\", (void *) \\&2},/p'"

# Handle CRLF in mingw tool chain
opt_cr=
case \$build_os in
mingw*)
    opt_cr=`\$ECHO 'x\{0,1\}' | tr x '\015'` # option cr in regexp
    ;;
esac

# Try without a prefix underscore, then with it.
for ac_symprfx in "" "_"; do

    # Transform symcode, sympat, and symprfx into a raw symbol and a C
symbol.
    symxfrm="\\1 \$ac_symprfx\\2 \\2"

    # Write the raw and C identifiers.
    if test "\$lt_cv_nm_interface" = "MS dumpbin"; then
        # Fake it for dumpbin and say T for any non-static function
        # and D for any global variable.
        # Also find C++ and __fastcall symbols from MSVC++,
        # which start with @ or ?.
        lt_cv_sys_global_symbol_pipe="\$AWK '\
{last_section=section; section=\\$ 3};\
/^COFF SYMBOL TABLE/{for(i in hide) delete hide[i]};\
/Section length .*#relocs.*(pick any){hide[last_section]=1};\
\\$ 0!~/External *|/{next};\
/ 0+ UNDEF /{next}; / UNDEF \([^|]\)*()/ {next};\
"
```

```

"      {if(hide[section]) next};"\
"      {f=0}; \${ 0~/\(\).*\|/{f=1}; {printf f ? \ "T \ " : \ "D \ "};"\
"      {split(\$ 0, a, /\|\|r/); split(a[2], s)};"\
"      s[1]~/^[@?]/{print s[1], s[1]; next};"\
"      s[1]~prfx {split(s[1],t,\"@\""); print t[1],
substr(t[1],length(prfx))}"\
"      ' prfx=^$ac_symprfx"
else
    lt_cv_sys_global_symbol_pipe="sed -n -e 's/^[^*
\]($symcode$symcode*)[ \t]*\n$ac_symprfx$sympat$opt_cr$/\$symxfrm/p'"
fi
    lt_cv_sys_global_symbol_pipe="$lt_cv_sys_global_symbol_pipe | sed '/
__gnu_lto/d'"

# Check to see that the pipe works correctly.
pipe_works=no

rm -f conftest*
cat > conftest.$ac_ext <<_LT_EOF
#ifdef __cplusplus
extern "C" {
#endif
char nm_test_var;
void nm_test_func(void);
void nm_test_func(void){}
#ifdef __cplusplus
}
#endif
int main(){nm_test_var='a';nm_test_func();return(0);}
_LT_EOF

if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    # Now try to grab the symbols.
    nlist=conftest.nm
    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}: \"\$NM
conftest.$ac_objext \ | \"$lt_cv_sys_global_symbol_pipe" \> $nlist\""; }
>&5
        (eval $NM conftest.$ac_objext \ | \"$lt_cv_sys_global_symbol_pipe" \>
$nlist) 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; } && test -s "$nlist"; then
            # Try sorting and uniquifying the output.
            if sort "$nlist" | uniq > "$nlist.T"; then
                mv -f "$nlist.T" "$nlist"
            else

```

```

rm -f "$nlist"
fi

# Make sure that we snagged all the symbols we need.
if $GREP ' nm_test_var$' "$nlist" >/dev/null; then
if $GREP ' nm_test_func$' "$nlist" >/dev/null; then
    cat <<_LT_EOF > conftest.$ac_ext
/* Keep this code in sync between libtool.m4, ltmain, lt_system.h, and
tests. */
#if defined(_WIN32) || defined(__CYGWIN__) || defined(_WIN32_WCE)
/* DATA imports from DLLs on WIN32 con't be const, because runtime
relocations are performed -- see ld's documentation on pseudo-
relocs. */
# define LT@&t@_DLSYM_CONST
#elif defined(__osf__)
/* This system does not cope well with relocations in const data. */
# define LT@&t@_DLSYM_CONST
#else
# define LT@&t@_DLSYM_CONST const
#endif

#ifdef __cplusplus
extern "C" {
#endif

_LT_EOF
    # Now generate the symbol file.
    eval "$lt_cv_sys_global_symbol_to_cdecl" < "$nlist" | $GREP -v
main >> conftest.$ac_ext'

    cat <<_LT_EOF >> conftest.$ac_ext

/* The mapping between symbol names and symbols. */
LT@&t@_DLSYM_CONST struct {
    const char *name;
    void *address;
}
lt__PROGRAM__LTX_preloaded_symbols[] =
{
    { "@PROGRAM@", (void *) 0 },
_LT_EOF
    $SED "s/^$symcode$symcode* \(.*\) \(.*)$/ {\\"2\", (void *)
&2},/" < "$nlist" | $GREP -v main >> conftest.$ac_ext
    cat <<\_LT_EOF >> conftest.$ac_ext
    {0, (void *) 0}
};

/* This works around a problem in FreeBSD linker */
#ifdef FREEBSD_WORKAROUND
static const void *lt_preloaded_setup() {
    return lt__PROGRAM__LTX_preloaded_symbols;
}

```

```

#endif

#ifdef __cplusplus
}
#endif
_LT_EOF
    # Now try linking the two files.
    mv conftest.$ac_objext conftstm.$ac_objext
    lt_globsym_save_LIBS=$LIBS
    lt_globsym_save_CFLAGS=$CFLAGS
    LIBS="conftstm.$ac_objext"
    CFLAGS="$CFLAGS$lt_prog_compiler_no_built_in_flag"
    if { { eval echo "\$as_me\":"${as_lineno-$LINENO}:
\"$ac_link\"; } >&5
    (eval $ac_link) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
    test $ac_status = 0; } && test -s conftest${ac_exeext}; then
        pipe_works=yes
    fi
    LIBS=$lt_globsym_save_LIBS
    CFLAGS=$lt_globsym_save_CFLAGS
    else
        echo "cannot find nm_test_func in $nlist" >&5
    fi
    else
        echo "cannot find nm_test_var in $nlist" >&5
    fi
    else
        echo "cannot run $lt_cv_sys_global_symbol_pipe" >&5
    fi
    else
        echo "$progname: failed program was:" >&5
        cat conftest.$ac_ext >&5
    fi
    rm -rf conftest* conftst*

    # Do not use the global_symbol_pipe unless it works.
    if test "$pipe_works" = yes; then
        break
    else
        lt_cv_sys_global_symbol_pipe=
    fi
done

fi

if test -z "$lt_cv_sys_global_symbol_pipe"; then
    lt_cv_sys_global_symbol_to_cdecl=
fi
if test -z
"$lt_cv_sys_global_symbol_pipe$lt_cv_sys_global_symbol_to_cdecl"; then

```

```
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: failed" >&5
  $sas_echo "failed" >&6; }
else
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: ok" >&5
  $sas_echo "ok" >&6; }
fi

# Response file support.
if test "$lt_cv_nm_interface" = "MS dumpbin"; then
  nm_file_list_spec='@'
elif $NM --help 2>/dev/null | grep '[@]FILE' >/dev/null; then
  nm_file_list_spec='@'
fi
```

```
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for sysroot" >&5
  $sas_echo_n "checking for sysroot... " >&6; }
```

```
@%:@ Check whether --with-libtool-sysroot was given.
if test "${with_libtool_sysroot+set}" = set; then :
  withval=$with_libtool_sysroot;
else
  with_libtool_sysroot=no
fi
```

```
lt_sysroot=
```

```

case ${with_libtool_sysroot} in #(
  yes)
    if test "$GCC" = yes; then
      lt_sysroot=`$CC --print-sysroot 2>/dev/null`
    fi
    ;; #(
/*)
  lt_sysroot=`echo "$with_libtool_sysroot" | sed -e
"$sed_quote_subst"`
  ;; #(
no|'')
  ;; #(
*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
${with_libtool_sysroot}" >&5
$as_echo "$${with_libtool_sysroot}" >&6; }
  as_fn_error $? "The sysroot must be an absolute path." "$LINENO" 5
  ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: ${lt_sysroot:-no}"
>&5
$as_echo "$${lt_sysroot:-no}" >&6; }

```

```

@%:@ Check whether --enable-libtool-lock was given.
if test "${enable_libtool_lock+set}" = set; then :
  enableval=$enable_libtool_lock;
fi

```

```

test "x$enable_libtool_lock" != xno && enable_libtool_lock=yes

```

```

# Some flags need to be propagated to the compiler or linker for good
# libtool support.

```

```

case $host in
ia64-*-hpux*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:"
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
test $ac_status = 0; }; then
  case ` /usr/bin/file conftest.$ac_objext` in
    *ELF-32*)
      HPUX_IA64_MODE="32"
    ;;
    *ELF-64*)

```

```

        HPUX_IA64_MODE="64"
        ;;
    esac
fi
rm -rf confptest*
;;
*-*-irix6*)
# Find out which ABI we are using.
echo '#line '$LINENO' "configure"' > confptest.$ac_ext
if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }; then
    if test "$lt_cv_prog_gnu_ld" = yes; then
        case ` /usr/bin/file confptest.$ac_objext ` in
        *32-bit*)
            LD="{LD-ld} -melf32bsmip"
            ;;
        *N32*)
            LD="{LD-ld} -melf32bmipn32"
            ;;
        *64-bit*)
            LD="{LD-ld} -melf64bmip"
            ;;
        ;;
        esac
    else
        case ` /usr/bin/file confptest.$ac_objext ` in
        *32-bit*)
            LD="{LD-ld} -32"
            ;;
        *N32*)
            LD="{LD-ld} -n32"
            ;;
        *64-bit*)
            LD="{LD-ld} -64"
            ;;
        ;;
        esac
    fi
fi
rm -rf confptest*
;;

x86_64-*kfreebsd*-gnu|x86_64-*linux*|ppc*-*linux*|powerpc*-*linux*| \
s390*-*linux*|s390*-*tpf*|sparc*-*linux*)
# Find out which ABI we are using.
echo 'int i;' > confptest.$ac_ext
if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?

```

```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then
  case ` /usr/bin/file conftest.o` in
    *32-bit*)
      case $host in
        x86_64-*kfreebsd*-gnu)
          LD="${LD-ld} -m elf_i386_fbsd"
          ;;
        x86_64-*linux*)
          LD="${LD-ld} -m elf_i386"
          ;;
        ppc64-*linux*|powerpc64-*linux*)
          LD="${LD-ld} -m elf32ppclinux"
          ;;
        s390x-*linux*)
          LD="${LD-ld} -m elf_s390"
          ;;
        sparc64-*linux*)
          LD="${LD-ld} -m elf32_sparc"
          ;;
      esac
    ;;
    *64-bit*)
      case $host in
        x86_64-*kfreebsd*-gnu)
          LD="${LD-ld} -m elf_x86_64_fbsd"
          ;;
        x86_64-*linux*)
          LD="${LD-ld} -m elf_x86_64"
          ;;
        ppc*-*linux*|powerpc*-*linux*)
          LD="${LD-ld} -m elf64ppc"
          ;;
        s390*-*linux*|s390*-*tpf*)
          LD="${LD-ld} -m elf64_s390"
          ;;
        sparc*-*linux*)
          LD="${LD-ld} -m elf64_sparc"
          ;;
      esac
    ;;
  esac
fi
rm -rf conftest*
;;

*-*-sco3.2v5*)
  # On SCO OpenServer 5, we need -belf to get full-featured binaries.
  SAVE_CFLAGS="$CFLAGS"
  CFLAGS="$CFLAGS -belf"
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
  compiler needs -belf" >&5

```



```

$as_echo_n "checking whether the C compiler needs -belf... " >&6; }
if ${lt_cv_cc_needs_belf+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_ext=c
  ac_cpp='$CPP $CPPFLAGS'
  ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
  ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
  ac_compiler_gnu=$ac_cv_c_compiler_gnu

  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_cc_needs_belf=yes
else
  lt_cv_cc_needs_belf=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  ac_ext=c
  ac_cpp='$CPP $CPPFLAGS'
  ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
  ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
  ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_cc_needs_belf"
>&5
$as_echo "$lt_cv_cc_needs_belf" >&6; }
if test x"$lt_cv_cc_needs_belf" != x"yes"; then
  # this is probably gcc 2.8.0, egcs 1.0 or newer; no need for -belf
  CFLAGS="$SAVE_CFLAGS"
fi
;;
*-*solaris*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\$as_me\"":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
  (eval $ac_compile) 2>&5
  ac_status=$?

```

```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then
  case ` /usr/bin/file conftest.o` in
    *64-bit*)
      case $lt_cv_prog_gnu_ld in
        yes*)
          case $host in
            i?86-*-solaris*)
              LD="${LD-ld} -m elf_x86_64"
              ;;
            sparc*-*-solaris*)
              LD="${LD-ld} -m elf64_sparc"
              ;;
          esac
          # GNU ld 2.21 introduced _sol2 emulations. Use them if
available.
          if ${LD-ld} -V | grep _sol2 >/dev/null 2>&1; then
            LD="${LD-ld}_sol2"
          fi
          ;;
        *)
          if ${LD-ld} -64 -r -o conftest2.o conftest.o >/dev/null 2>&1;
then
            LD="${LD-ld} -64"
          fi
          ;;
        esac
      ;;
    esac
  fi
  rm -rf conftest*
  ;;
esac

need_locks="$enable_libtool_lock"

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}mt", so it can be a
program name with args.
  set dummy ${ac_tool_prefix}mt; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$MANIFEST_TOOL"; then
      ac_cv_prog_MANIFEST_TOOL="$MANIFEST_TOOL" # Let the user override
the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_MANIFEST_TOOL="${ac_tool_prefix}mt"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
MANIFEST_TOOL=$ac_cv_prog_MANIFEST_TOOL
if test -n "$MANIFEST_TOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MANIFEST_TOOL" >&5
$as_echo "$MANIFEST_TOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_MANIFEST_TOOL"; then
  ac_ct_MANIFEST_TOOL=$MANIFEST_TOOL
  # Extract the first word of "mt", so it can be a program name with
  args.
  set dummy mt; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_MANIFEST_TOOL"; then
      ac_cv_prog_ac_ct_MANIFEST_TOOL="$ac_ct_MANIFEST_TOOL" # Let the user
      override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_MANIFEST_TOOL="mt"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        fi
      done
    fi
  fi

```

```

done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_MANIFEST_TOOL=$ac_cv_prog_ac_ct_MANIFEST_TOOL
if test -n "$ac_ct_MANIFEST_TOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_ct_MANIFEST_TOOL" >&5
$as_echo "$ac_ct_MANIFEST_TOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_MANIFEST_TOOL" = x; then
    MANIFEST_TOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    MANIFEST_TOOL=$ac_ct_MANIFEST_TOOL
  fi
else
  MANIFEST_TOOL="$ac_cv_prog_MANIFEST_TOOL"
fi

test -z "$MANIFEST_TOOL" && MANIFEST_TOOL=mt
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $MANIFEST_TOOL is
a manifest tool" >&5
$as_echo_n "checking if $MANIFEST_TOOL is a manifest tool... " >&6; }
if ${lt_cv_path_manifest_tool+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_path_manifest_tool=no
  echo "$as_me:$LINENO: $MANIFEST_TOOL '-?'" >&5
  $MANIFEST_TOOL '-?' 2>conftest.err > conftest.out
  cat conftest.err >&5
  if $GREP 'Manifest Tool' conftest.out > /dev/null; then
    lt_cv_path_manifest_tool=yes
  fi
  rm -f conftest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_path_manifest_tool" >&5
$as_echo "$lt_cv_path_manifest_tool" >&6; }

```

```

if test "x$lt_cv_path_manifest_tool" != xyes; then
  MANIFEST_TOOL=:
fi

case $host_os in
  rhapsody* | darwin*)
    if test -n "$ac_tool_prefix"; then
      # Extract the first word of "${ac_tool_prefix}dsymutil", so it can
      be a program name with args.
      set dummy ${ac_tool_prefix}dsymutil; ac_word=$2
      { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
      $as_echo_n "checking for $ac_word... " >&6; }
      if ${ac_cv_prog_DSYMUTIL+:} false; then :
        $as_echo_n "(cached) " >&6
      else
        if test -n "$DSYMUTIL"; then
          ac_cv_prog_DSYMUTIL="$DSYMUTIL" # Let the user override the test.
        else
          as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
          for as_dir in $PATH
          do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_exec_ext in ' $ac_executable_extensions; do
              if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                ac_cv_prog_DSYMUTIL="${ac_tool_prefix}dsymutil"
                $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                break 2
              fi
            done
          done
          IFS=$as_save_IFS

          fi
          fi
          DSYMUTIL=$ac_cv_prog_DSYMUTIL
          if test -n "$DSYMUTIL"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DSYMUTIL" >&5
            $as_echo "$DSYMUTIL" >&6; }
          else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
            $as_echo "no" >&6; }
          fi
        fi
      fi
    fi
  fi

```

```

if test -z "$ac_cv_prog_DSYMUTIL"; then
  ac_ct_DSYMUTIL=$DSYMUTIL
  # Extract the first word of "dsymutil", so it can be a program name
  with args.
  set dummy dsymutil; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_DSYMUTIL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_DSYMUTIL"; then
      ac_cv_prog_ac_ct_DSYMUTIL="$ac_ct_DSYMUTIL" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DSYMUTIL="dsymutil"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      ac_ct_DSYMUTIL=$ac_cv_prog_ac_ct_DSYMUTIL
      if test -n "$ac_ct_DSYMUTIL"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DSYMUTIL"
        >&5
        $as_echo "$ac_ct_DSYMUTIL" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      if test "x$ac_ct_DSYMUTIL" = x; then
        DSYMUTIL=":"
      else
        case $cross_compiling:$ac_tool_warned in
        yes:)
          { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
          not prefixed with host triplet" >&5
          $as_echo "$as_me: WARNING: using cross tools not prefixed with host
          triplet" >&2;}
          ac_tool_warned=yes ;;

```

```

esac
    DSYMUTIL=${ac_ct_DSYMUTIL}
    fi
else
    DSYMUTIL="$ac_cv_prog_DSYMUTIL"
fi

    if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}nmedit", so it can be
a program name with args.
set dummy ${ac_tool_prefix}nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_NMEDIT+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$NMEDIT"; then
        ac_cv_prog_NMEDIT="$NMEDIT" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_NMEDIT="${ac_tool_prefix}nmedit"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

fi
fi
NMEDIT=${ac_cv_prog_NMEDIT}
if test -n "$NMEDIT"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $NMEDIT" >&5
$as_echo "$NMEDIT" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_NMEDIT"; then
    ac_ct_NMEDIT=$NMEDIT
    # Extract the first word of "nmedit", so it can be a program name
with args.

```

```

set dummy nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_NMEDIT+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_NMEDIT"; then
    ac_cv_prog_ac_ct_NMEDIT="$ac_ct_NMEDIT" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_NMEDIT="nmedit"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_NMEDIT=$ac_cv_prog_ac_ct_NMEDIT
if test -n "$ac_ct_NMEDIT"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_NMEDIT" >&5
$as_echo "$ac_ct_NMEDIT" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_NMEDIT" = x; then
    NMEDIT=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    NMEDIT=$ac_ct_NMEDIT
  fi
else
  NMEDIT="$ac_cv_prog_NMEDIT"

```



```

fi

    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}lipo", so it can be a
        program name with args.
        set dummy ${ac_tool_prefix}lipo; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_LIPO+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            if test -n "$LIPO"; then
                ac_cv_prog_LIPO="$LIPO" # Let the user override the test.
            else
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in ' ' $ac_executable_extensions; do
                        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                            ac_cv_prog_LIPO="${ac_tool_prefix}lipo"
                            $as_echo "$as_me:${as_lineno-$LINENO}: found
                            $as_dir/$ac_word$ac_exec_ext" >&5
                            break 2
                        fi
                    done
                done
                IFS=$as_save_IFS

            fi
        fi

        LIPO=$ac_cv_prog_LIPO
        if test -n "$LIPO"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LIPO" >&5
            $as_echo "$LIPO" >&6; }
        else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
            $as_echo "no" >&6; }
        fi
    fi

fi

if test -z "$ac_cv_prog_LIPO"; then
    ac_ct_LIPO=$LIPO
    # Extract the first word of "lipo", so it can be a program name with
    args.
    set dummy lipo; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_LIPO+:} false; then :
        $as_echo_n "(cached) " >&6

```

```

else
  if test -n "$ac_ct_LIPO"; then
    ac_cv_prog_ac_ct_LIPO="$ac_ct_LIPO" # Let the user override the
test.
else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_LIPO="lipo"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_LIPO=$ac_cv_prog_ac_ct_LIPO
if test -n "$ac_ct_LIPO"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_LIPO" >&5
$as_echo "$ac_ct_LIPO" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_LIPO" = x; then
    LIPO=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    LIPO=$ac_ct_LIPO
  fi
else
  LIPO="$ac_cv_prog_LIPO"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool", so it can be a
program name with args.

```

```

set dummy ${ac_tool_prefix}otool; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_OTOOL+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$OTOOL"; then
    ac_cv_prog_OTOOL="$OTOOL" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_OTOOL="${ac_tool_prefix}otool"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
OTOOL=$ac_cv_prog_OTOOL
if test -n "$OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL" >&5
$as_echo "$OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL"; then
  ac_ct_OTOOL=$OTOOL
  # Extract the first word of "otool", so it can be a program name
  with args.
  set dummy otool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL"; then
      ac_cv_prog_ac_ct_OTOOL="$ac_ct_OTOOL" # Let the user override the
      test.
    else

```

```

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_OTOOL="otool"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_OTOOL=$ac_cv_prog_ac_ct_OTOOL
if test -n "$ac_ct_OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL" >&5
$as_echo "$ac_ct_OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_OTOOL" = x; then
    OTOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OTOOL=$ac_ct_OTOOL
  fi
else
  OTOOL="$ac_cv_prog_OTOOL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool64", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}otool64; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_OTOOL64+:} false; then :
      $as_echo_n "(cached) " >&6

```

```

else
  if test -n "$OTOOL64"; then
    ac_cv_prog_OTOOL64="$OTOOL64" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_OTOOL64="{ac_tool_prefix}otool64"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
OTOOL64=$ac_cv_prog_OTOOL64
if test -n "$OTOOL64"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL64" >&5
$as_echo "$OTOOL64" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL64"; then
  ac_ct_OTOOL64=$OTOOL64
  # Extract the first word of "otool64", so it can be a program name
  with args.
  set dummy otool64; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL64+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL64"; then
      ac_cv_prog_ac_ct_OTOOL64="$ac_ct_OTOOL64" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OTOOL64="otool64"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
    done
IFS=$sas_save_IFS

fi
fi
ac_ct_OTOOL64=$ac_cv_prog_ac_ct_OTOOL64
if test -n "$ac_ct_OTOOL64"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL64" >&5
    $sas_echo "$ac_ct_OTOOL64" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $sas_echo "no" >&6; }
fi

    if test "x$ac_ct_OTOOL64" = x; then
        OTOOL64=":"
    else
        case $cross_compiling:$ac_tool_warned in
        yes:)
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
        $sas_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
        ac_tool_warned=yes ;;
        esac
        OTOOL64=$ac_ct_OTOOL64
    fi
else
    OTOOL64="$ac_cv_prog_OTOOL64"
fi

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
single_module linker flag" >&5
$as_echo_n "checking for -single_module linker flag... " >&6; }
if ${lt_cv_apple_cc_single_mod+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_apple_cc_single_mod=no
  if test -z "${LT_MULTI_MODULE}"; then
    # By default we will add the -single_module flag. You can
override
    # by either setting the environment variable LT_MULTI_MODULE
    # non-empty at configure time, or by adding -multi_module to the
    # link flags.
    rm -rf libconfptest.dylib*
    echo "int foo(void){return 1;}" > confptest.c
    echo "$LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
-dynamiclib -Wl,-single_module confptest.c" >&5
    $LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
    -dynamiclib -Wl,-single_module confptest.c 2>confptest.err
    _lt_result=$?
    # If there is a non-empty error log, and "single_module"
    # appears in it, assume the flag caused a linker warning
    if test -s confptest.err && $GREP single_module confptest.err;
then
      cat confptest.err >&5
      # Otherwise, if the output was created with a 0 exit code from
      # the compiler, it worked.
      elif test -f libconfptest.dylib && test $_lt_result -eq 0; then
        lt_cv_apple_cc_single_mod=yes
      else
        cat confptest.err >&5
      fi
      rm -rf libconfptest.dylib*
      rm -f confptest.*
    fi
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_apple_cc_single_mod" >&5
$as_echo "$lt_cv_apple_cc_single_mod" >&6; }

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
exported_symbols_list linker flag" >&5
$as_echo_n "checking for -exported_symbols_list linker flag... " >&6;
}
if ${lt_cv_ld_exported_symbols_list+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_exported_symbols_list=no
  save_LDFLAGS=$LDFLAGS
  echo "_main" > conftest.sym
  LDFLAGS="$LDFLAGS -Wl,-exported_symbols_list,conftest.sym"
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_ld_exported_symbols_list=yes
else
  lt_cv_ld_exported_symbols_list=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_exported_symbols_list" >&5
$as_echo "$lt_cv_ld_exported_symbols_list" >&6; }

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -force_load
linker flag" >&5
$as_echo_n "checking for -force_load linker flag... " >&6; }
if ${lt_cv_ld_force_load+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_force_load=no
  cat > conftest.c << _LT_EOF
int forced_loaded() { return 2;}
_LT_EOF
  echo "$LTCC $LTCFLAGS -c -o conftest.o conftest.c" >&5
  $LTCC $LTCFLAGS -c -o conftest.o conftest.c 2>&5
  echo "$AR cru libconftest.a conftest.o" >&5
  $AR cru libconftest.a conftest.o 2>&5
  echo "$RANLIB libconftest.a" >&5

```



```

        $RANLIB libconfptest.a 2>&5
        cat > confptest.c << _LT_EOF
int main() { return 0;}
_LT_EOF
        echo "$LTCC $LTCFLAGS $LDFLAGS -o confptest confptest.c -Wl,-
force_load,./libconfptest.a" >&5
        $LTCC $LTCFLAGS $LDFLAGS -o confptest confptest.c -Wl,-
force_load,./libconfptest.a 2>confptest.err
        _lt_result=$?
        if test -s confptest.err && $GREP force_load confptest.err; then
            cat confptest.err >&5
        elif test -f confptest && test $_lt_result -eq 0 && $GREP
forced_load confptest >/dev/null 2>&1 ; then
            lt_cv_ld_force_load=yes
        else
            cat confptest.err >&5
        fi
        rm -f confptest.err libconfptest.a confptest confptest.c
        rm -rf confptest.dSYM

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ld_force_load"
>&5
$as_echo "$lt_cv_ld_force_load" >&6; }
        case $host_os in
            rhapsody* | darwin1.[012])
                _lt_dar_allow_undefined='${wl}-undefined ${wl}suppress' ;;
            darwin1.*)
                _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
            darwin*) # darwin 5.x on
                # if running on 10.5 or later, the deployment target defaults
                # to the OS version, if on x86, and 10.4, the deployment
                # target defaults to 10.4. Don't you love it?
                case ${MACOSX_DEPLOYMENT_TARGET-10.0},$host in
                    10.0,*86*-darwin8*|10.0,*-darwin[91]*)
                        _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
                ;;
                    10.[012]*)
                        _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
                    10.*)
                        _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
                ;;
                esac
        ;;
        esac
        ;;
esac
        if test "$lt_cv_apple_cc_single_mod" = "yes"; then
            _lt_dar_single_mod='$single_module'
        fi
        if test "$lt_cv_ld_exported_symbols_list" = "yes"; then

```

```

        _lt_dar_export_syms=' ${wl}-
exported_symbols_list,$output_objdir/${libname}-symbols.expsym'
    else
        _lt_dar_export_syms='~$NMEDIT -s $output_objdir/${libname}-
symbols.expsym ${lib}'
    fi
    if test "$DSYMUTIL" != ":" && test "$lt_cv_ld_force_load" = "no";
then
        _lt_dsymutil='~$DSYMUTIL $lib || :'
    else
        _lt_dsymutil=
    fi
    ;;
esac

```

```

for ac_header in dlfcn.h
do :
    ac_fn_c_check_header_compile "$LINENO" "dlfcn.h"
"ac_cv_header_dlfcn_h" "$ac_includes_default
"
    if test "x$ac_cv_header_dlfcn_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DLFCN_H 1
_ACEOF
    fi
done

```

```

func_stripname_cnf ()
{
    case ${2} in
        .*) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%\\\\\\$2\\$%"`;;
        *) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%$2\\$%"`;;
    esac
} # func_stripname_cnf

```

```

# Set options

```

```

    enable_dlopen=no

```

```
enable_win32_dll=no
```

```
    @%:@ Check whether --enable-shared was given.
if test "${enable_shared+set}" = set; then :
  enableval=$enable_shared; p=${PACKAGE-default}
  case $enableval in
    yes) enable_shared=yes ;;
    no) enable_shared=no ;;
    *)
      enable_shared=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_shared=yes
        fi
      done
      IFS="$lt_save_ifs"
      ;;
  esac
else
  enable_shared=yes
fi
```

```
    @%:@ Check whether --enable-static was given.
if test "${enable_static+set}" = set; then :
  enableval=$enable_static; p=${PACKAGE-default}
  case $enableval in
    yes) enable_static=yes ;;
    no) enable_static=no ;;
    *)
      enable_static=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_static=yes
        fi
      done
    fi
```

```

        done
        IFS="$lt_save_ifs"
        ;;
    esac
else
    enable_static=yes
fi

```

```

@%:@ Check whether --with-pic was given.
if test "${with_pic+set}" = set; then :
    withval=$with_pic; lt_p=${PACKAGE-default}
    case $withval in
        yes|no) pic_mode=$withval ;;
        *)
            pic_mode=default
            # Look at the argument we got.  We use all the common list
            separators.
            lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
            for lt_pkg in $withval; do
                IFS="$lt_save_ifs"
                if test "X$lt_pkg" = "X$lt_p"; then
                    pic_mode=yes
                fi
            done
            IFS="$lt_save_ifs"
            ;;
    esac
else
    pic_mode=default
fi

```

```

test -z "$pic_mode" && pic_mode=default

```

```

@%:@ Check whether --enable-fast-install was given.
if test "${enable_fast_install+set}" = set; then :
    enableval=$enable_fast_install; p=${PACKAGE-default}

```

```
case $enableval in
yes) enable_fast_install=yes ;;
no) enable_fast_install=no ;;
*)
    enable_fast_install=no
    # Look at the argument we got. We use all the common list
separators.
    lt_save_ifs="$IFS"; IFS="{IFS}$PATH_SEPARATOR,"
    for pkg in $enableval; do
IFS="$lt_save_ifs"
if test "X$pkg" = "X$p"; then
    enable_fast_install=yes
fi
done
IFS="$lt_save_ifs"
;;
esac
else
    enable_fast_install=yes
fi
```

```
# This can be used to rebuild libtool when needed
LIBTOOL_DEPS="$ltmain"
```

```
# Always use our own libtool.
LIBTOOL='$(top_builddir)'
LIBTOOL="$LIBTOOL/${host_alias}-libtool"
```

```
test -z "$LN_S" && LN_S="ln -s"
```

```
if test -n "${ZSH_VERSION+set}" ; then  
  setopt NO_GLOB_SUBST  
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for objdir" >&5  
$as_echo_n "checking for objdir... " >&6; }  
if ${lt_cv_objdir+:} false; then :  
  $as_echo_n "(cached) " >&6  
else  
  rm -f .libs 2>/dev/null  
  mkdir .libs 2>/dev/null  
  if test -d .libs; then  
    lt_cv_objdir=.libs  
  else  
    # MS-DOS does not allow filenames that begin with a dot.  
    lt_cv_objdir=_libs  
  fi  
  rmdir .libs 2>/dev/null  
fi  
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_objdir" >&5  
$as_echo "$lt_cv_objdir" >&6; }  
objdir=$lt_cv_objdir
```

```

cat >>confdefs.h <<_ACEOF
@%:@define LT_OBJDIR "$lt_cv_objdir/"
_ACEOF

case $host_os in
aix3*)
  # AIX sometimes has problems with the GCC collect2 program.  For
  some
  # reason, if we set the COLLECT_NAMES environment variable, the
  problems
  # vanish in a puff of smoke.
  if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
  fi
  ;;
esac

# Global variables:
ofile=${host_alias}-libtool
can_build_shared=yes

# All known linkers require a `.a' archive for static linking (except
MSVC,
# which needs '.lib').
libext=a

with_gnu_ld="$lt_cv_prog_gnu_ld"

old_CC="$CC"
old_CFLAGS="$CFLAGS"

# Set sane defaults for various variables
test -z "$CC" && CC=cc
test -z "$LTCC" && LTCC=$CC
test -z "$LTCFLAGS" && LTCFLAGS=$CFLAGS
test -z "$LD" && LD=ld
test -z "$ac_objext" && ac_objext=o

for cc_temp in $compiler""; do
  case $cc_temp in
    compile | *[\//]compile | ccache | *[\//]ccache ) ;;
    distcc | *[\//]distcc | purify | *[\//]purify ) ;;
    \-*) ;;
  esac
done

```

```

    *) break;;
  esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^$host_alias-%%"`

# Only perform the check for file, if the check method requires it
test -z "$MAGIC_CMD" && MAGIC_CMD=file
case $deplibs_check_method in
file_magic*)
  if test "$file_magic_cmd" = '$MAGIC_CMD'; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
${ac_tool_prefix}file" >&5
$as_echo_n "checking for ${ac_tool_prefix}file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
[\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
    lt_save_MAGIC_CMD="$MAGIC_CMD"
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
    for ac_dir in $ac_dummy; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f $ac_dir/${ac_tool_prefix}file; then
        lt_cv_path_MAGIC_CMD="$ac_dir/${ac_tool_prefix}file"
        if test -n "$file_magic_test_file"; then
          case $deplibs_check_method in
"file_magic" *)
            file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
            MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
            if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
              $EGREP "$file_magic_regex" > /dev/null; then
              :
            else
              cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

```



```

_LT_EOF
    fi ;;
    esac
    fi
    break
fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test -z "$lt_cv_path_MAGIC_CMD"; then
  if test -n "$ac_tool_prefix"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for file" >&5
$as_echo_n "checking for file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
[\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
    lt_save_MAGIC_CMD="$MAGIC_CMD"
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
    for ac_dir in $ac_dummy; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f $ac_dir/file; then
        lt_cv_path_MAGIC_CMD="$ac_dir/file"
        if test -n "$file_magic_test_file"; then
          case $deplibs_check_method in
"file_magic" *)
            file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`

```

```

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if eval `file_magic_cmd` \$file_magic_test_file 2> /dev/null |
  $EGREP "$file_magic_regex" > /dev/null; then
  :
else
  cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

_LT_EOF
  fi ;;
esac
fi
break
fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

else
  MAGIC_CMD=:
fi
fi

fi
;;
esac

# Use C for the default configuration in the libtool script

lt_save_CC="$CC"
ac_ext=c

```

```

ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

# Source file extension for C test sources.
ac_ext=c

# Object file extension for compiled C test sources.
objext=o
objext=$objext

# Code to be used in simple compile tests
lt_simple_compile_test_code="int some_variable = 0;"

# Code to be used in simple link tests
lt_simple_link_test_code='int main(){return(0);}'

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Save the default compiler, since it gets overwritten when the other
# tags are being tested, and _LT_TAGVAR(compiler, []) is a NOP.
compiler_DEFAULT=$CC

# save warnings/boilerplate of simple test code
ac_outfile=conftest.$ac_objext
echo "$lt_simple_compile_test_code" >conftest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>conftest.err
_lt_compiler_boilerplate=`cat conftest.err`
$RM conftest*

ac_outfile=conftest.$ac_objext
echo "$lt_simple_link_test_code" >conftest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >conftest.err
_lt_linker_boilerplate=`cat conftest.err`
$RM -r conftest*

```

```

if test -n "$compiler"; then

lt_prog_compiler_no_builtin_flag=

if test "$GCC" = yes; then
  case $cc_basename in
  nvcc*)
    lt_prog_compiler_no_builtin_flag=' -Xcompiler -fno-builtin' ;;
  *)
    lt_prog_compiler_no_builtin_flag=' -fno-builtin' ;;
  esac

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -fno-rtti -fno-exceptions" >&5
$as_echo_n "checking if $compiler supports -fno-rtti -fno-
exceptions... " >&6; }
if ${lt_cv_prog_compiler_rtti_exceptions+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_rtti_exceptions=no
  ac_outfile=confptest.$ac_objext
  echo "$lt_simple_compile_test_code" > confptest.$ac_ext
  lt_compiler_flag="-fno-rtti -fno-exceptions"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "confptest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*confptest\. : $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\`$as_me:$LINENO: $lt_compile\`\"" >&5)
  (eval "$lt_compile" 2>confptest.err)
  ac_status=$?
  cat confptest.err >&5
  echo "$as_me:$LINENO: \ $? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
    $SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
    if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
      lt_cv_prog_compiler_rtti_exceptions=yes
    fi
  fi
fi

```

```

$RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_rtti_exceptions" >&5
$as_echo "$lt_cv_prog_compiler_rtti_exceptions" >&6; }

if test x"$lt_cv_prog_compiler_rtti_exceptions" = xyes; then

lt_prog_compiler_no_builtin_flag="$lt_prog_compiler_no_builtin_flag -
fno-rtti -fno-exceptions"
else
:
fi

fi

lt_prog_compiler_wl=
lt_prog_compiler_pic=
lt_prog_compiler_static=

if test "$GCC" = yes; then
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_static='-static'

  case $host_os in
    aix*)
      # All AIX code is PIC.
      if test "$host_cpu" = ia64; then
        # AIX 5 now supports IA64 processor
        lt_prog_compiler_static='-Bstatic'
      fi
      ;;

    amigaos*)
      case $host_cpu in
        powerpc)
          # see comment about AmigaOS4 .so support
          lt_prog_compiler_pic='-fPIC'
          ;;
        m68k)
          # FIXME: we need at least 68020 code to build shared
          libraries, but
          # adding the '-m68020' flag to GCC prevents building
          anything better,
          # like '-m68040'.

```

```

        lt_prog_compiler_pic='-m68020 -resident32 -malways-
restore-a4'
        ;;
    esac
    ;;

    beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)
        # PIC is the default for these OSes.
        ;;

    mingw* | cygwin* | pw32* | os2* | cegcc*)
        # This hack is so that the source file can tell whether it is
being
        # built for inclusion in a dll (and should export symbols for
example).
        # Although the cygwin gcc ignores -fPIC, still need this for
old-style
        # (--disable-auto-import) libraries
        lt_prog_compiler_pic='-DLL_EXPORT'
        ;;

    darwin* | rhapsody*)
        # PIC is the default on this platform
        # Common symbols not allowed in MH_DYLIB files
        lt_prog_compiler_pic='-fno-common'
        ;;

    haiku*)
        # PIC is the default for Haiku.
        # The "-static" flag exists, but is broken.
        lt_prog_compiler_static=
        ;;

    hpux*)
        # PIC is the default for 64-bit PA HP-UX, but not for 32-bit
        # PA HP-UX.  On IA64 HP-UX, PIC is the default but the pic flag
        # sets the default TLS model and affects inlining.
        case $host_cpu in
            hppa*64*)
                # +Z the default
                ;;
            *)
                lt_prog_compiler_pic='-fPIC'
                ;;
        esac
        ;;

    interix[3-9]*)
        # Interix 3.x gcc -fpic/-fPIC options generate broken code.
        # Instead, we relocate shared libraries at runtime.
        ;;

```

```

msdosdjgpp*)
    # Just because we use GCC doesn't mean we suddenly get shared
libraries
    # on systems that don't support them.
    lt_prog_compiler_can_build_shared=no
    enable_shared=no
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'
    ;;

sysv4*MP*)
    if test -d /usr/nec; then
        lt_prog_compiler_pic=-Kconform_pic
    fi
    ;;

*)
    lt_prog_compiler_pic='-fPIC'
    ;;
esac

case $cc_basename in
nvcc*) # Cuda Compiler Driver 2.2
    lt_prog_compiler_wl='-Xlinker '
    if test -n "$lt_prog_compiler_pic"; then
        lt_prog_compiler_pic="-Xcompiler $lt_prog_compiler_pic"
    fi
    ;;
esac
else
    # PORTME Check for flag to pass linker flags through the system
compiler.
    case $host_os in
aix*)
        lt_prog_compiler_wl='-Wl,'
        if test "$host_cpu" = ia64; then
            # AIX 5 now supports IA64 processor
            lt_prog_compiler_static='-Bstatic'
        else
            lt_prog_compiler_static='-bnso -bI:/lib/syscalls.exp'
        fi
        ;;
mingw* | cygwin* | pw32* | os2* | cegcc*)
        # This hack is so that the source file can tell whether it is
being

```

```

    # built for inclusion in a dll (and should export symbols for
example).
    lt_prog_compiler_pic='-DDLL_EXPORT'
    ;;

hpux9* | hpux10* | hpux11*)
    lt_prog_compiler_wl='-Wl,'
    # PIC is the default for IA64 HP-UX and 64-bit HP-UX, but
    # not for PA HP-UX.
    case $host_cpu in
    hppa*64*|ia64*)
        # +Z the default
        ;;
    *)
        lt_prog_compiler_pic='+Z'
        ;;
    esac
    # Is there a better lt_prog_compiler_static that works with the
bundled CC?
    lt_prog_compiler_static='${wl}-a ${wl}archive'
    ;;

irix5* | irix6* | nonstopux*)
    lt_prog_compiler_wl='-Wl,'
    # PIC (with -KPIC) is the default.
    lt_prog_compiler_static='-non_shared'
    ;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
    case $cc_basename in
    # old Intel for x86_64 which still supported -KPIC.
    ecc*)
        lt_prog_compiler_wl='-Wl,'
        lt_prog_compiler_pic='-KPIC'
        lt_prog_compiler_static='-static'
        ;;
    # icc used to be incompatible with GCC.
    # ICC 10 doesn't accept -KPIC any more.
    icc* | ifort*)
        lt_prog_compiler_wl='-Wl,'
        lt_prog_compiler_pic='-fPIC'
        lt_prog_compiler_static='-static'
        ;;
    # Lahey Fortran 8.1.
    lf95*)
        lt_prog_compiler_wl='-Wl,'
        lt_prog_compiler_pic='--shared'
        lt_prog_compiler_static='--static'
        ;;
    nagfor*)
        # NAG Fortran compiler
        lt_prog_compiler_wl='-Wl,-Wl,,'

```



```

lt_prog_compiler_pic='-PIC'
lt_prog_compiler_static='-Bstatic'
;;
pgcc* | pgf77* | pgf90* | pgf95* | pgfortran*)
  # Portland Group compilers (*not* the Pentium gcc compiler,
  # which looks to be a dead project)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fpic'
lt_prog_compiler_static='-Bstatic'
  ;;
ccc*)
  lt_prog_compiler_wl='-Wl,'
  # All Alpha code is PIC.
  lt_prog_compiler_static='-non_shared'
  ;;
xl* | bgxl* | bgf* | mpixl*)
  # IBM XL C 8.0/Fortran 10.1, 11.1 on PPC and BlueGene
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-qpik'
lt_prog_compiler_static='-qstaticlink'
  ;;
*)
case `\$CC -V 2>&1 | sed 5q` in
8.[0-3]*)
  # Sun Fortran 8.3 passes all unrecognized flags to the linker
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl=''
  ;;
*Sun\ F* | *Sun*Fortran*)
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl='-Qoption ld '
  ;;
*Sun\ C*)
  # Sun C 5.9
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl='-Wl,'
  ;;
*Intel*\ [CF]*Compiler*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-fPIC'
  lt_prog_compiler_static='-static'
  ;;
*Portland\ Group*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-fpic'
  lt_prog_compiler_static='-Bstatic'
  ;;
esac

```

```

;;
esac
;;

newsos6)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'
    ;;

osf3* | osf4* | osf5*)
    lt_prog_compiler_wl='-Wl,'
    # All OSF/1 code is PIC.
    lt_prog_compiler_static='-non_shared'
    ;;

rdos*)
    lt_prog_compiler_static='-non_shared'
    ;;

solaris*)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    case $cc_basename in
    f77* | f90* | f95* | sunf77* | sunf90* | sunf95*)
    lt_prog_compiler_wl='-Qoption ld ';;
    *)
    lt_prog_compiler_wl='-Wl, ';;
    esac
    ;;

sunos4*)
    lt_prog_compiler_wl='-Qoption ld '
    lt_prog_compiler_pic='-PIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4 | sysv4.2uw2* | sysv4.3*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4*MP*)
    if test -d /usr/nec ;then
    lt_prog_compiler_pic='-Kconform_pic'

```

```

    lt_prog_compiler_static='-Bstatic'
    fi
    ;;

sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

unicos*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_can_build_shared=no
    ;;

uts4*)
    lt_prog_compiler_pic='-pic'
    lt_prog_compiler_static='-Bstatic'
    ;;

*)
    lt_prog_compiler_can_build_shared=no
    ;;
esac
fi

case $host_os in
  # For platforms which do not support PIC, -DPIC is meaningless:
  *djgpp*)
    lt_prog_compiler_pic=
    ;;
  *)
    lt_prog_compiler_pic="$lt_prog_compiler_pic@&t@ -DPIC"
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_pic=$lt_prog_compiler_pic
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic" >&5
$as_echo "$lt_cv_prog_compiler_pic" >&6; }
lt_prog_compiler_pic=$lt_cv_prog_compiler_pic

#
# Check to make sure the PIC flag actually works.
#

```

```

if test -n "$lt_prog_compiler_pic"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_pic_works=no
  ac_outfile=confptest.$ac_objext
  echo "$lt_simple_compile_test_code" > confptest.$ac_ext
  lt_compiler_flag="$lt_prog_compiler_pic@&t@ -DPIC"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "confptest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>confptest.err)
  ac_status=$?
  cat confptest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
    $SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
    if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
      lt_cv_prog_compiler_pic_works=yes
    fi
  fi
  $RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works" >&5
$as_echo "$lt_cv_prog_compiler_pic_works" >&6; }

if test x"$lt_cv_prog_compiler_pic_works" = xyes; then
  case $lt_prog_compiler_pic in
    "" | " *") ;;
    *) lt_prog_compiler_pic="$lt_prog_compiler_pic" ;;
  esac
else

```

```

    lt_prog_compiler_pic=
    lt_prog_compiler_can_build_shared=no
fi

fi

#
# Check to make sure the static flag actually works.
#
wl=$lt_prog_compiler_wl eval
lt_tmp_static_flag="\$lt_prog_compiler_static\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_static_works=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
  # The linker can only warn and ignore the option if not
  recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&5
    $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_static_works=yes
    fi
  else
    lt_cv_prog_compiler_static_works=yes
  fi
fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

```

```

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works" >&5
$sas_echo "$lt_cv_prog_compiler_static_works" >&6; }

if test x"$lt_cv_prog_compiler_static_works" = xyes; then
:
else
    lt_prog_compiler_static=
fi

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$sas_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o=no
    $RM -r confptest 2>/dev/null
    mkdir confptest
    cd confptest
    mkdir out
    echo "$lt_simple_compile_test_code" > confptest.$ac_ext

    lt_compiler_flag="-o out/confptest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confptest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
    (eval echo "\"$sas_me:$LINENO: $lt_compile\"" >&5)
    (eval "$lt_compile" 2>out/confptest.err)
    ac_status=$?
    cat out/confptest.err >&5
    echo "$sas_me:$LINENO: \$? = $ac_status" >&5
    if (exit $ac_status) && test -s out/confptest2.$ac_objext
    then
        # The compiler can only warn and ignore the option if not
recognized
        # So say no if there are warnings

```

```

    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confctest.exp
    $SED '/^$/d; /^ *+/d' out/confctest.err >out/confctest.er2
    if test ! -s out/confctest.er2 || diff out/confctest.exp
out/confctest.er2 >/dev/null; then
        lt_cv_prog_compiler_c_o=yes
    fi
fi
chmod u+w . 2>&5
$RM confctest*
# SGI C++ compiler will create directory out/ii_files/ for
# template instantiation
test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r confctest
$RM confctest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o=no
    $RM -r confctest 2>/dev/null
    mkdir confctest
    cd confctest
    mkdir out
    echo "$lt_simple_compile_test_code" > confctest.$ac_ext

    lt_compiler_flag="-o out/confctest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confctest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*confctest\.: $lt_compiler_flag&; t' \

```

```

-e 's:$: $lt_compiler_flag:'`
(eval echo "\\"$as_me:$LINENO: $lt_compile\"" >&5)
(eval "$lt_compile" 2>out/confptest.err)
ac_status=$?
cat out/confptest.err >&5
echo "$as_me:$LINENO: \$? = $ac_status" >&5
if (exit $ac_status) && test -s out/confptest2.$ac_objext
then
  # The compiler can only warn and ignore the option if not
recognized
  # So say no if there are warnings
  $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
  $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
  if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
    lt_cv_prog_compiler_c_o=yes
  fi
fi
chmod u+w . 2>&5
$RM confptest*
# SGI C++ compiler will create directory out/ii_files/ for
# template instantiation
test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r confptest
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o" = no && test "$need_locks" != no;
then
  # do not overwrite the value of need_locks provided by the user
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
  hard_links=yes
  $RM confptest*
  ln confptest.a confptest.b 2>/dev/null && hard_links=no
  touch confptest.a
  ln confptest.a confptest.b 2>&5 || hard_links=no
  ln confptest.a confptest.b 2>/dev/null && hard_links=no
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }

```



```

if test "$hard_links" = no; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: \`$CC' does not
support \`-c -o', so \`make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: \`$CC' does not support \`-c -o', so \`make
-j' may be unsafe" >&2;}
    need_locks=warn
fi
else
    need_locks=no
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }

```

```

runpath_var=
allow_undefined_flag=
always_export_symbols=no
archive_cmds=
archive_expsym_cmds=
compiler_needs_object=no
enable_shared_with_static_runtimes=no
export_dynamic_flag_spec=
export_symbols_cmds='$NM $libobjs $convenience | $global_symbol_pipe
| $SED '\''s/.* //' | sort | uniq > $export_symbols'
hardcode_automatic=no
hardcode_direct=no
hardcode_direct_absolute=no
hardcode_libdir_flag_spec=
hardcode_libdir_separator=
hardcode_minus_L=no
hardcode_shlibpath_var=unsupported
inherit_rpath=no
link_all_deplibs=unknown
module_cmds=
module_expsym_cmds=
old_archive_from_new_cmds=
old_archive_from_expsyms_cmds=
thread_safe_flag_spec=
whole_archive_flag_spec=
# include_expsyms should be a list of space-separated symbols to be
*always*
# included in the symbol list
include_expsyms=
# exclude_expsyms can be an extended regexp of symbols to exclude

```

```

# it will be wrapped by ` (' and `)$', so one must not match
beginning or
# end of line. Example: `a|bc|.*d.*' will exclude the symbols `a'
and `bc',
# as well as any symbol that contains `d'.
exclude_expsyms='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'
# Although _GLOBAL_OFFSET_TABLE_ is a valid symbol C name, most
a.out
# platforms (ab)use it in PIC code, but their linkers get confused
if
# the symbol is explicitly referenced. Since portable code cannot
# rely on this symbol name, it's probably fine to never include it
in
# preloaded symbol tables.
# Exclude shared library initialization/finalization symbols.
extract_expsyms_cmds=

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
# FIXME: the MSVC++ port hasn't been tested in a loooong time
# When not using gcc, we currently assume that we are using
# Microsoft Visual C++.
if test "$GCC" != yes; then
with_gnu_ld=no
fi
;;
interix*)
# we just hope/assume this is gcc and not c89 (= MSVC++)
with_gnu_ld=yes
;;
openbsd*)
with_gnu_ld=no
;;
esac

ld_shlibs=yes

# On some targets, GNU ld is compatible enough with the native
linker
# that we're better off using the native interface for both.
lt_use_gnu_ld_interface=no
if test "$with_gnu_ld" = yes; then
case $host_os in
aix*)
# The AIX port of GNU ld has always aspired to compatibility
# with the native linker. However, as the warning in the GNU ld
# block says, versions before 2.19.5* couldn't really create
working
# shared libraries, regardless of the interface used.
case ` $LD -v 2>&1 ` in
*\ (GNU\ Binutils\)\ 2.19.5*) ;;
*\ (GNU\ Binutils\)\ 2.[2-9]*) ;;

```

```

        *\ (GNU\ Binutils)\ [3-9]*) ;;
    *)
        lt_use_gnu_ld_interface=yes
        ;;
    esac
    ;;
    *)
        lt_use_gnu_ld_interface=yes
        ;;
    esac
fi

if test "$lt_use_gnu_ld_interface" = yes; then
# If archive_cmds runs LD, not CC, wlarc should be empty
wlarc='${wl}'

# Set some defaults for GNU ld with shared library support. These
# are reset later if shared libraries are not supported. Putting
them
# here allows them to be overridden if necessary.
runpath_var=LD_RUN_PATH
hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
export_dynamic_flag_spec='${wl}--export-dynamic'
# ancient GNU ld didn't support --whole-archive et. al.
if $LD --help 2>&1 | $GREP 'no-whole-archive' > /dev/null; then
    whole_archive_flag_spec="$wlarc"--whole-archive$convenience
    "$wlarc"--no-whole-archive'
else
    whole_archive_flag_spec=
fi
supports_anon_versioning=no
case ` $LD -v 2>&1 ` in
    *GNU\ gold*) supports_anon_versioning=yes ;;
    *\ [01].* | *\ 2.[0-9].* | *\ 2.10.*) ;; # catch versions < 2.11
    *\ 2.11.93.0.2\ *) supports_anon_versioning=yes ;; # RH7.3 ...
    *\ 2.11.92.0.12\ *) supports_anon_versioning=yes ;; # Mandrake
8.2 ...
    *\ 2.11.*) ;; # other 2.11 versions
    *) supports_anon_versioning=yes ;;
    esac

# See if GNU ld supports shared libraries.
case $host_os in
aix[3-9]*)
    # On AIX/PPC, the GNU linker is very broken
    if test "$host_cpu" != ia64; then
        ld_shlibs=no
        cat <<_LT_EOF 1>&2
*** Warning: the GNU linker, at least up to release 2.19, is reported
*** to be unable to reliably create shared libraries on AIX.
*** Therefore, libtool is disabling shared libraries support.  If you

```

*** really care for shared libraries, you may want to install binutils
*** 2.20 or above, or modify your PATH so that a non-GNU linker is
found.
*** You will then need to restart the configuration process.

```
_LT_EOF
  fi
  ;;

  amigaos*)
    case $host_cpu in
      powerpc)
        # see comment about AmigaOS4 .so support
        archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds=''
        ;;
      m68k)
        archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_minus_L=yes
        ;;
    esac
  ;;

  beos*)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
      allow_undefined_flag=unsupported
      # Joseph Beckenbach <jrb3@best.com> says some releases of gcc
      # support --undefined. This deserves some investigation.  FIXME
      archive_cmds='$CC -nostart $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    else
      ld_shlibs=no
    fi
  ;;

  cygwin* | mingw* | pw32* | cegcc*)
    # _LT_TAGVAR(hardcode_libdir_flag_spec, ) is actually
    meaningless,
    # as there is no search path for DLLs.
    hardcode_libdir_flag_spec='-L$libdir'
    export_dynamic_flag_spec='${wl}--export-all-symbols'
    allow_undefined_flag=unsupported
    always_export_symbols=no
```

```

enable_shared_with_static_runtimes=yes
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\ ]*\)/\1
DATA;/s/^\.*[ ]__nm__\([^\ ]*\)\[ ]\^[^\ ]*/\1 DATA;/^\I[ ]/d;/^[AITW][
]/s/.* //'\' | sort | uniq > $export_symbols'

exclude_expsyms='[_]+GLOBAL_OFFSET_TABLE_|[_]+GLOBAL__[FID]_.*|[_]+hea
d_[A-Za-z0-9_]+_dll|[A-Za-z0-9_]+_dll_iname'

if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
    # If the export-symbols file already is a .def file (1st line
    # is EXPORTS), use it as is; otherwise, prepend...
    archive_expsym_cmds='if test "x$SED lq $export_symbols`" =
xEXPORTS; then
        cp $export_symbols $output_objdir/$soname.def;
    else
        echo EXPORTS > $output_objdir/$soname.def;
        cat $export_symbols >> $output_objdir/$soname.def;
    fi~
    $CC -shared $output_objdir/$soname.def $libobjs $deplibs
$compiler_flags -o $output_objdir/$soname ${wl}--enable-auto-image-
base -Xlinker --out-implib -Xlinker $lib'
    else
        ld_shlibs=no
    fi
;;

haiku*)
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    link_all_deplibs=yes
;;

interix[3-9]*)
    hardcode_direct=no
    hardcode_shlibpath_var=no
    hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
    export_dynamic_flag_spec='${wl}-E'
    # Hack: On Interix 3.x, we cannot compile PIC because of a
broken gcc.
    # Instead, shared libraries are loaded at an image base
(0x10000000 by
    # default) and relocated if they conflict, which is a slow very
memory
    # consuming and fragmenting process. To avoid this, we pick a
random,
    # 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000
at link

```

```

# time. Moving up from 0x10000000 also allows more sbrk(2)
space.
archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,`expr ${RANDOM-$$} %
4096 / 2 \* 262144 + 1342177280` -o $lib'
archive_expsym_cmds='sed "s,^,_,," $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,`expr ${RANDOM-
$$} % 4096 / 2 \* 262144 + 1342177280` -o $lib'
;;

gnu* | linux* | tpf* | k*bsd*-gnu | kopensolaris*-gnu)
tmp_diet=no
if test "$host_os" = linux-dietlibc; then
case $cc_basename in
diet\ *) tmp_diet=yes;; # linux-dietlibc with static linking
(!diet-dyn)
esac
fi
if $LD --help 2>&1 | $EGREP ': supported targets:.* elf' >
/dev/null \
&& test "$tmp_diet" = no
then
tmp_addflag=' $pic_flag'
tmp_sharedflag='-shared'
case $cc_basename,$host_cpu in
pgcc*) # Portland Group C compiler
whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\"` ${wl}--no-whole-archive'
tmp_addflag=' $pic_flag'
;;
pgf77* | pgf90* | pgf95* | pgfortran*)
# Portland Group f77 and f90 compilers
whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\"` ${wl}--no-whole-archive'
tmp_addflag=' $pic_flag -Mnomain' ;;
ecc*,ia64* | icc*,ia64*) # Intel C compiler on ia64
tmp_addflag=' -i_dynamic' ;;
efc*,ia64* | ifort*,ia64*) # Intel Fortran compiler on ia64
tmp_addflag=' -i_dynamic -nofor_main' ;;
ifc* | ifort*) # Intel Fortran compiler
tmp_addflag=' -nofor_main' ;;
lf95*) # Lahey Fortran 8.1
whole_archive_flag_spec=
tmp_sharedflag='--shared' ;;
xl[cC]* | bgxl[cC]* | mpixl[cC]*) # IBM XL C 8.0 on PPC (deal
with xlf below)

```

```

    tmp_sharedflag='-qmkshrojb'
    tmp_addflag= ;;
    nvcc*)      # Cuda Compiler Driver 2.2
        whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`\`; do test -n \"$conv\" &&
new_convenience=\"\${new_convenience},$conv\"; done; func_echo_all
\`\${new_convenience}\`\` \`${wl}--no-whole-archive'
        compiler_needs_object=yes
        ;;
    esac
    case ` $CC -V 2>&1 | sed 5q` in
    *Sun\ C*)      # Sun C 5.9
        whole_archive_flag_spec='${wl}--whole-archive`new_convenience=;
for conv in $convenience\`\`; do test -z \"$conv\" ||
new_convenience=\"\${new_convenience},$conv\"; done; func_echo_all
\`\${new_convenience}\`\` \`${wl}--no-whole-archive'
        compiler_needs_object=yes
        tmp_sharedflag='-G' ;;
    *Sun\ F*)      # Sun Fortran 8.3
        tmp_sharedflag='-G' ;;
    esac
    archive_cmds='$CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname -o $lib'

    if test "x$supports_anon_versioning" = xyes; then
        archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
        cat $export_symbols | sed -e "s/\(.*\)/\1;/\" >>
$output_objdir/$libname.ver~
        echo "local: *; };" >> $output_objdir/$libname.ver~
        $CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-version-script
${wl}$output_objdir/$libname.ver -o $lib'
    fi

    case $cc_basename in
    xlf* | bgf* | bgxlf* | mpixlf*)
        # IBM XL Fortran 10.1 on PPC cannot create shared libs itself
        whole_archive_flag_spec='--whole-archive$convenience --no-
whole-archive'
        hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
        archive_cmds='$LD -shared $libobjs $deplibs $linker_flags -
soname $soname -o $lib'
        if test "x$supports_anon_versioning" = xyes; then
            archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
            cat $export_symbols | sed -e "s/\(.*\)/\1;/\" >>
$output_objdir/$libname.ver~
            echo "local: *; };" >> $output_objdir/$libname.ver~
            $LD -shared $libobjs $deplibs $linker_flags -soname $soname
-version-script $output_objdir/$libname.ver -o $lib'
        fi
    esac

```

```

        ;;
    esac
    else
        ld_shlibs=no
    fi
    ;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable $libobjs $deplibs $linker_flags -o
$lib'
        wlarc=
    else
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    fi
    ;;

solaris*)
    if $LD -v 2>&1 | $GREP 'BFD 2\.8' > /dev/null; then
        ld_shlibs=no
        cat <<_LT_EOF 1>&2

*** Warning: The releases 2.8.* of the GNU linker cannot reliably
*** create shared libraries on Solaris systems.  Therefore, libtool
*** is disabling shared libraries support.  We urge you to upgrade GNU
*** binutils to release 2.9.1 or newer.  Another option is to modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

_LT_EOF
        elif $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
            archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
        else
            ld_shlibs=no
        fi
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX*)
    case ` $LD -v 2>&1 ` in
        *\ [01].* | *\ 2.[0-9].* | *\ 2.1[0-5].*)
            ld_shlibs=no
            cat <<_LT_EOF 1>&2

```


*** Warning: Releases of the GNU linker prior to 2.16.91.0.3 can not
 *** reliably create shared libraries on SCO systems. Therefore,
 libtool
 *** is disabling shared libraries support. We urge you to upgrade GNU
 *** binutils to release 2.16.91.0.3 or newer. Another option is to
 modify
 *** your PATH or compiler configuration so that the native linker is
 *** used, and then restart.

```

_LT_EOF
;;
*)
  # For security reasons, it is highly recommended that you
always
  # use absolute paths for naming shared libraries, and exclude
the
  # DT_RUNPATH tag from executables and libraries. But doing so
  # requires that you compile everything twice, which is a pain.
  if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    else
      ld_shlibs=no
    fi
  ;;
esac
;;

sunos4*)
  archive_cmds='$LD -assert pure-text -Bshareable -o $lib $libobjs
$deplibs $linker_flags'
  wlarc=
  hardcode_direct=yes
  hardcode_shlibpath_var=no
  ;;

*)
  if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
    archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    else
      ld_shlibs=no
    fi
  ;;

```

```

    ;;
esac

if test "$ld_shlibs" = no; then
    runpath_var=
    hardcode_libdir_flag_spec=
    export_dynamic_flag_spec=
    whole_archive_flag_spec=
fi
else
# PORTME fill in a description of your system's linker (not GNU
ld)
case $host_os in
aix3*)
    allow_undefined_flag=unsupported
    always_export_symbols=yes
    archive_expsym_cmds='$LD -o $output_objdir/$soname $libobjs
$deplibs $linker_flags -bE:$export_symbols -T512 -H512 -bM:SRE~$AR
$AR_FLAGS $lib $output_objdir/$soname'
    # Note: this linker hardcodes the directories in LIBPATH if
there
    # are no directories specified by -L.
    hardcode_minus_L=yes
    if test "$GCC" = yes && test -z "$lt_prog_compiler_static"; then
# Neither direct hardcoding nor static linking is supported with
a
        # broken collect2.
        hardcode_direct=unsupported
        fi
        ;;
aix[4-9]*)
    if test "$host_cpu" = ia64; then
        # On IA64, the linker does run time linking by default, so we
don't
        # have to do anything special.
        aix_use_runtimelinking=no
        exp_sym_flag='-Bexport'
        no_entry_flag=""
        else
        # If we're using GNU nm, then we don't want the "-C" option.
        # -C means demangle to AIX nm, but means don't demangle with GNU
nm
        # Also, AIX nm treats weak defined symbols like other global
        # defined symbols, whereas GNU nm marks them as "W".
        if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then
            export_symbols_cmds='$NM -Bpg $libobjs $convenience | awk '\''{
if ((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B") || (\ $ 2 == "W"))
&& (substr(\ $ 3,1,1) != ".") { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
        else

```

```

        export_symbols_cmds='$NM -BCpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B")) &&
(substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
    fi
    aix_use_runtimelinking=no

    # Test if we are trying to use run time linking or normal
    # AIX style linking. If -brtl is somewhere in LDFLAGS, we
    # need to do runtime linking.
    case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)
        for ld_flag in $LDFLAGS; do
            if (test $ld_flag = "-brtl" || test $ld_flag = "-Wl,-brtl");
then
                aix_use_runtimelinking=yes
                break
            fi
        done
    ;;
    esac

    exp_sym_flag='-bexport'
    no_entry_flag='-bnoentry'
    fi

    # When large executables or shared objects are built, AIX ld can
    # have problems creating the table of contents. If linking a
library
    # or program results in "error TOC overflow" add -mminimal-toc
to
    # CXXFLAGS/CFLAGS for g++/gcc. In the cases where that is not
    # enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

    archive_cmds=''
    hardcode_direct=yes
    hardcode_direct_absolute=yes
    hardcode_libdir_separator=':'
    link_all_deplibs=yes
    file_list_spec='${wl}-f,'

    if test "$GCC" = yes; then
    case $host_os in aix4.[012]|aix4.[012].*)
        # We only want to do this on AIX 4.2 and lower, the check
        # below for broken collect2 doesn't work under 4.3+
        collect2name=`${CC} -print-prog-name=collect2`
        if test -f "$collect2name" &&
            strings "$collect2name" | $GREP resolve_lib_name >/dev/null
        then
            # We have reworked collect2
            :
        else
            # We have old collect2

```

```

hardcode_direct=unsupported
# It fails to find uninstalled libraries when the uninstalled
# path is not listed in the libpath.  Setting hardcode_minus_L
# to unsupported forces relinking
hardcode_minus_L=yes
hardcode_libdir_flag_spec='-L$libdir'
hardcode_libdir_separator=
fi
;;
esac
shared_flag='-shared'
if test "$aix_use_runtimelinking" = yes; then
  shared_flag="$shared_flag "'${wl}-G'
fi
else
# not using gcc
if test "$host_cpu" = ia64; then
# VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3 Release
# chokes on -Wl,-G. The following line is correct:
  shared_flag='-G'
else
  if test "$aix_use_runtimelinking" = yes; then
    shared_flag='${wl}-G'
  else
    shared_flag='${wl}-bM:SRE'
  fi
fi
fi

export_dynamic_flag_spec='${wl}-bexpall'
# It seems that -bexpall does not export symbols beginning with
# underscore (_), so it is better to generate a list of symbols
to export.
always_export_symbols=yes
if test "$aix_use_runtimelinking" = yes; then
# Warning - without using the other runtime loading flags (-
brtl),
# -berok will link without error, but may produce a broken
library.
  allow_undefined_flag='-berok'
  # Determine the default libpath from the value encoded in an
  # empty executable.
  if test "${lt_cv_aix_libpath+set}" = set; then
    aix_libpath=$lt_cv_aix_libpath
  else
    if ${lt_cv_aix_libpath_+set} false; then :
      $as_echo_n "(cached) " >&6
    else
      cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int

```

```

main ()
{
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0  *\([^ ]*\) *$/\1/
                P
            }
        }'

    lt_cv_aix_libpath_=`dump -H conftest$sac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_
fi

    hardcode_libdir_flag_spec='${wl}-
bldirpath:$libdir:""$aix_libpath"
    archive_expsym_cmds='$CC -o $output_objdir/$soname $libobjs
$deplibs '"\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else ;; fi`
'"\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
    else
    if test "$host_cpu" = ia64; then
        hardcode_libdir_flag_spec='${wl}-R $libdir:/usr/lib:/lib'
        allow_undefined_flag="-z nodefs"
        archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs '"\${wl}$no_entry_flag"'
$compiler_flags ${wl}${allow_undefined_flag}
'"\${wl}$exp_sym_flag:\$export_symbols"
    else
        # Determine the default libpath from the value encoded in an

```

```

        # empty executable.
        if test "${lt_cv_aix_libpath+set}" = set; then
            aix_libpath=$lt_cv_aix_libpath
        else
            if ${lt_cv_aix_libpath_+} false; then :
                $as_echo_n "(cached) " >&6
            else
                cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0 *\[^\]*\)* *$/\1/
                p
            }
        }'
    lt_cv_aix_libpath_=`dump -H conftest$ac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$ac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_
fi

hardcode_libdir_flag_spec='${wl}-
bllibpath:$libdir:'"$aix_libpath"
# Warning - without using the other run time loading flags,
# -berok will link without error, but may produce a broken
library.
no_undefined_flag=' ${wl}-bernotok'
```

```

    allow_undefined_flag=' ${wl}-berok'
    if test "$with_gnu_ld" = yes; then
        # We only use this code for GNU lds that support --whole-
archive.
        whole_archive_flag_spec='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
    else
        # Exported symbols can be pulled into shared objects from
archives
        whole_archive_flag_spec='$convenience'
    fi
    archive_cmds_need_lc=yes
    # This is similar to how AIX traditionally builds its shared
libraries.
    archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
    fi
    fi
    ;;

amigaos*)
    case $host_cpu in
    powerpc)
        # see comment about AmigaOS4 .so support
        archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds=''
        ;;
    m68k)
        archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_minus_L=yes
        ;;
    ;;
    esac
    ;;

bsdi[45]*)
    export_dynamic_flag_spec=-rdynamic
    ;;

cygwin* | mingw* | pw32* | cegcc*)
    # When not using gcc, we currently assume that we are using
    # Microsoft Visual C++.
    # hardcode_libdir_flag_spec is actually meaningless, as there is

```

```

# no search path for DLLs.
case $cc_basename in
cl*)
# Native MSVC
hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
always_export_symbols=yes
file_list_spec='@'
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
archive_expsym_cmds='if test "x`$SED lq $export_symbols`" =
xEXPORTS; then
    sed -n -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' -
e '1\\\\\\\\!p' < $export_symbols > $output_objdir/$soname.exp;
else
    sed -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
$export_symbols > $output_objdir/$soname.exp;
fi~
$CC -o $tool_output_objdir$soname $libobjs $compiler_flags
$deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
IMPLIB:"$tool_output_objdir$libname.dll.lib"~
linknames='
# The linker will not automatically build a static lib if we
build a DLL.
# _LT_TAGVAR(old_archive_from_new_cmds, )='true'
enable_shared_with_static_runtimes=yes
exclude_expsyms='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_.*'
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\\'/^[BCDGRS][ ]/s/.*[ ]\\([^\
]*\\)/\1,DATA/' | $SED -e '\\'/^[AITW][ ]/s/.*[ ]//'\'' | sort |
uniq > $export_symbols'
# Don't use ranlib
old_postinstall_cmds='chmod 644 $oldlib'
postlink_cmds='lt_outputfile="@OUTPUT@"~
lt_tool_outputfile="@TOOL_OUTPUT@"~
case $lt_outputfile in
*.exe|*.EXE) ;;
*)
    lt_outputfile="$lt_outputfile.exe"
    lt_tool_outputfile="$lt_tool_outputfile.exe"
;;
esac~
if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
    $MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
    $RM "$lt_outputfile.manifest";

```



```

    fi'
;;
*)
# Assume MSVC wrapper
hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $lib $libobjs $compiler_flags `func_echo_all
"$deplibs" | $SED '\''s/ -lc$//'\''` -link -dll~linknames='
# The linker will automatically build a .lib file if we build a
DLL.
old_archive_from_new_cmds='true'
# FIXME: Should let the user specify the lib program.
old_archive_cmds='lib -OUT:$oldlib$oldobjs$old_deplibs'
enable_shared_with_static_runtimes=yes
;;
esac
;;

darwin* | rhapsody*)

```

```

archive_cmds_need_lc=no
hardcode_direct=no
hardcode_automatic=yes
hardcode_shlibpath_var=unsupported
if test "$lt_cv_ld_force_load" = "yes"; then
  whole_archive_flag_spec='`for conv in $convenience\""; do test -
n \"$conv\" && new_convenience=\"$new_convenience ${wl}-
force_load,$conv\""; done; func_echo_all \"$new_convenience\"`'
else
  whole_archive_flag_spec=''
fi
link_all_deplibs=yes
allow_undefined_flag="$lt_dar_allow_undefined"
case $cc_basename in
  ifort*) _lt_dar_can_shared=yes ;;
  *) _lt_dar_can_shared=$GCC ;;
esac
if test "$lt_dar_can_shared" = "yes"; then
  output_verbose_link_cmd=func_echo_all
  archive_cmds="\$CC -dynamiclib \$allow_undefined_flag -o \$lib
\$libobjs \$deplibs \$compiler_flags -install_name \$rpath/\$soname
\$verstring $lt_dar_single_mod${_lt_dsymutil}"
  module_cmds="\$CC \$allow_undefined_flag -o \$lib -bundle
\$libobjs \$deplibs \$compiler_flags${_lt_dsymutil}"

```

```

        archive_expsym_cmds="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -dynamiclib
\$allow_undefined_flag -o \$lib \$libobjs \$deplibs \$compiler_flags -
install_name \$rpath/\$soname \$verstring
\${_lt_dar_single_mod}\${_lt_dar_export_syms}\${_lt_dsymutil}"
        module_expsym_cmds="sed -e 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC \$allow_undefined_flag
-o \$lib -bundle \$libobjs \$deplibs
\$compiler_flags\${_lt_dar_export_syms}\${_lt_dsymutil}"

else
ld_shlibs=no
fi

;;

dgux*)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_shlibpath_var=no
        ;;

# FreeBSD 2.2.[012] allows us to include c++rt0.o to get C++
constructor
# support.  Future versions do this automatically, but an explicit
c++rt0.o
# does not break anything, and helps significantly (at the cost of
a little
# extra space).
freebsd2.2*)
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags /usr/lib/c++rt0.o'
        hardcode_libdir_flag_spec='-R$libdir'
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        ;;

# Unfortunately, older versions of FreeBSD 2 do not have this
feature.
freebsd2.*)
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=yes
        hardcode_minus_L=yes
        hardcode_shlibpath_var=no
        ;;

# FreeBSD 3 and greater uses gcc -shared to do shared libraries.
freebsd* | dragonfly*)
        archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'

```

```

hardcode_libdir_flag_spec='-R$libdir'
hardcode_direct=yes
hardcode_shlibpath_var=no
;;

hpux9*)
  if test "$GCC" = yes; then
    archive_cmds='$RM $output_objdir/$soname~$CC -shared $pic_flag
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $libobjs
$deplibs $compiler_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
  else
    archive_cmds='$RM $output_objdir/$soname~$LD -b +b
$install_libdir -o $output_objdir/$soname $libobjs $deplibs
$linker_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
  fi
  hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
  hardcode_libdir_separator=:
  hardcode_direct=yes

  # hardcode_minus_L: Not really in the search PATH,
  # but as the default location of the library.
  hardcode_minus_L=yes
  export_dynamic_flag_spec='${wl}-E'
  ;;

hpux10*)
  if test "$GCC" = yes && test "$with_gnu_ld" = no; then
    archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
  else
    archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
  fi
  if test "$with_gnu_ld" = no; then
    hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_direct=yes
    hardcode_direct_absolute=yes
    export_dynamic_flag_spec='${wl}-E'
    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
  fi
  ;;

hpux11*)
  if test "$GCC" = yes && test "$with_gnu_ld" = no; then
    case $host_cpu in
      hppa*64*)

```

```

        archive_cmds='$CC -shared ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
        ;;
        ia64*)
        archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $libobjs $deplibs $compiler_flags'
        ;;
        *)
        archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+b ${wl}$install_libdir -o $lib $libobjs $deplibs
$compiler_flags'
        ;;
    esac
    else
    case $host_cpu in
    hppa*64*)
        archive_cmds='$CC -b ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
        ;;
        ia64*)
        archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+nodefaulttrpath
-o $lib $libobjs $deplibs $compiler_flags'
        ;;
        *)
        # Older versions of the 11.00 compiler do not understand -b yet
        # (HP92453-01 A.11.01.20 doesn't, HP92453-01 B.11.X.35175-
35176.GP does)
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $CC
understands -b" >&5
$as_echo_n "checking if $CC understands -b... " >&6; }
if ${lt_cv_prog_compiler_b+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_b=no
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -b"
    echo "$lt_simple_link_test_code" > conftest.$ac_ext
    if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
        # The linker can only warn and ignore the option if not
recognized
        # So say no if there are warnings
        if test -s conftest.err; then
            # Append any errors to the config.log.
            cat conftest.err 1>&5
            $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
            $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
            if diff conftest.exp conftest.er2 >/dev/null; then
                lt_cv_prog_compiler_b=yes
            fi
        else
            else

```

```

        lt_cv_prog_compiler__b=yes
    fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler__b" >&5
$as_echo "$lt_cv_prog_compiler__b" >&6; }

if test x"$lt_cv_prog_compiler__b" = xyes; then
    archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
else
    archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
fi

;;
esac
fi
if test "$with_gnu_ld" = no; then
hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
hardcode_libdir_separator=:

case $host_cpu in
hppa*64*|ia64*)
    hardcode_direct=no
    hardcode_shlibpath_var=no
    ;;
*)
    hardcode_direct=yes
    hardcode_direct_absolute=yes
    export_dynamic_flag_spec='${wl}-E'

    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
    ;;
;;
esac
fi

;;

irix5* | irix6* | nonstopux*)
    if test "$GCC" = yes; then
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations -o $lib'
        # Try to use the -exported_symbol ld option, if it does not
        # work, assume that -exports_file does not work either and

```

```

    # implicitly export all symbols.
    # This should be the same for all languages, so no per-tag cache
variable.
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$host_os linker accepts -exported_symbol" >&5
$as_echo_n "checking whether the $host_os linker accepts -
exported_symbol... " >&6; }
if ${lt_cv_irix_exported_symbol+:} false; then :
  $as_echo_n "(cached) " >&6
else
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS -shared ${wl}-exported_symbol ${wl}foo
${wl}-update_registry ${wl}/dev/null"
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
int foo (void) { return 0; }
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_irix_exported_symbol=yes
else
  lt_cv_irix_exported_symbol=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
  LDFLAGS="$save_LDFLAGS"
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_irix_exported_symbol" >&5
$as_echo "$lt_cv_irix_exported_symbol" >&6; }
  if test "$lt_cv_irix_exported_symbol" = yes; then
    archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations ${wl}-exports_file
${wl}$export_symbols -o $lib'
  fi
  else
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -
soname $soname `test -n "$verstring" && func_echo_all "-set_version
$verstring"` -update_registry ${output_objdir}/so_locations -o $lib'
    archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags -soname $soname `test -n "$verstring" && func_echo_all
"-set_version $verstring"` -update_registry
${output_objdir}/so_locations -exports_file $export_symbols -o $lib'
  fi
  archive_cmds_need_lc='no'
  hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
  hardcode_libdir_separator=:
  inherit_rpath=yes
  link_all_deplibs=yes
;;

```

```

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags' # a.out
    else
        archive_cmds='$LD -shared -o $lib $libobjs $deplibs
$linker_flags' # ELF
    fi
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

newsos6)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_direct=yes
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_shlibpath_var=no
    ;;

*nto* | *qnx*)
    ;;

openbsd*)
    if test -f /usr/libexec/ld.so; then
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        hardcode_direct_absolute=yes
        if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
            archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
            archive_expsym_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags ${wl}-retain-symbols-file,$export_symbols'
            hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
            export_dynamic_flag_spec='${wl}-E'
        else
            case $host_os in
                openbsd[01].* | openbsd2.[0-7] | openbsd2.[0-7].*)
                    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
                    hardcode_libdir_flag_spec='-R$libdir'
                    ;;
                *)
                    archive_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags'
                    hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
                    ;;
            esac
        fi
    fi

```

```

else
ld_shlibs=no
fi
;;

os2*)
hardcode_libdir_flag_spec='-L$libdir'
hardcode_minus_L=yes
allow_undefined_flag=unsupported
archive_cmds='$ECHO "LIBRARY $libname INITINSTANCE" >
$output_objdir/$libname.def~$ECHO "DESCRIPTION \"$libname\"" >>
$output_objdir/$libname.def~echo DATA >>
$output_objdir/$libname.def~echo " SINGLE NONSHARED" >>
$output_objdir/$libname.def~echo EXPORTS >>
$output_objdir/$libname.def~emxexp $libobjs >>
$output_objdir/$libname.def~$CC -Zdll -Zcrtdll -o $lib $libobjs
$deplibs $compiler_flags $output_objdir/$libname.def'
old_archive_from_new_cmds='emximp -o $output_objdir/$libname.a
$output_objdir/$libname.def'
;;

osf3*)
if test "$GCC" = yes; then
allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$verstring" && func_echo_all "${wl}-set_version ${wl}$verstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
else
allow_undefined_flag=' -expect_unresolved \*'
archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -soname $soname `test -n "$verstring" &&
func_echo_all "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
fi
archive_cmds_need_lc='no'
hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
hardcode_libdir_separator=:
;;

osf4* | osf5*) # as osf3* with the addition of -msym flag
if test "$GCC" = yes; then
allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
archive_cmds='$CC -shared${allow_undefined_flag} $pic_flag
$libobjs $deplibs $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$verstring" && func_echo_all "${wl}-set_version
${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
else
allow_undefined_flag=' -expect_unresolved \*'

```



```

        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -msym -soname $soname `test -n "$verstring"
&& func_echo_all "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
        archive_expsym_cmds='for i in `cat $export_symbols`; do printf
"%s %s\n" -exported_symbol "\$i" >> $lib.exp; done; printf "%s\n" "-
hidden">> $lib.exp~
        $CC -shared${allow_undefined_flag} ${wl}-input ${wl}$lib.exp
$compiler_flags $libobjs $deplibs -soname $soname `test -n
"$verstring" && $ECHO "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib~$RM $lib.exp'

# Both c and cxx compiler support -rpath directly
hardcode_libdir_flag_spec='-rpath $libdir'
fi
archive_cmds_need_lc='no'
hardcode_libdir_separator=:
;;

solaris*)
    no_undefined_flag=' -z defs'
    if test "$GCC" = yes; then
        wlarc='${wl}'
        archive_cmds='$CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-h
${wl}$soname -o $lib $libobjs $deplibs $compiler_flags'
        archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/>" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
        $CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-M ${wl}$lib.exp
${wl}-h ${wl}$soname -o $lib $libobjs $deplibs $compiler_flags~$RM
$lib.exp'
    else
        case ` $CC -V 2>&1 ` in
            *"Compilers 5.0"*)
                wlarc=''
                archive_cmds='$LD -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $linker_flags'
                archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/>" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
                $LD -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $linker_flags~$RM $lib.exp'
            ;;
        *)
            wlarc='${wl}'
            archive_cmds='$CC -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $compiler_flags'
            archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/>" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
            $CC -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $compiler_flags~$RM $lib.exp'
        ;;
    esac

```

```

        ;;
    esac
    fi
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_shlibpath_var=no
    case $host_os in
    solaris2.[0-5] | solaris2.[0-5].*) ;;
    *)
        # The compiler driver will combine and reorder linker options,
        # but understands '-z linker_flag'. GCC discards it without
`$wl',
        # but is careful enough not to reorder.
        # Supported since Solaris 2.6 (maybe 2.5.1?)
        if test "$GCC" = yes; then
            whole_archive_flag_spec='${wl}-z ${wl}allextract$convenience
`${wl}-z ${wl}defaultextract'
        else
            whole_archive_flag_spec='-z allextract$convenience -z
defaultextract'
        fi
    ;;
    esac
    link_all_deplibs=yes
    ;;

sunos4*)
    if test "x$host_vendor" = xsequent; then
        # Use $CC to link under sequent, because it throws in some extra
.o
        # files that make .init and .fini sections work.
        archive_cmds='$CC -G ${wl}-h $soname -o $lib $libobjs $deplibs
$compiler_flags'
    else
        archive_cmds='$LD -assert pure-text -Bstatic -o $lib $libobjs
$deplibs $linker_flags'
    fi
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_direct=yes
    hardcode_minus_L=yes
    hardcode_shlibpath_var=no
    ;;

sysv4)
    case $host_vendor in
    sni)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=yes # is this really true???
    ;;
    siemens)
        ## LD is ld it makes a PLAMLIB
        ## CC just makes a GrossModule.

```

```

        archive_cmds='$LD -G -o $lib $libobjs $deplibs $linker_flags'
        reload_cmds='$CC -r -o $output$reload_objs'
        hardcode_direct=no
        ;;
    motorola)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=no #Motorola manual says yes, but my tests say
they lie
        ;;
    esac
    runpath_var='LD_RUN_PATH'
    hardcode_shlibpath_var=no
    ;;

sysv4.3*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_shlibpath_var=no
    export_dynamic_flag_spec='-Bexport'
    ;;

sysv4*MP*)
    if test -d /usr/nec; then
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_shlibpath_var=no
        runpath_var=LD_RUN_PATH
        hardcode_runpath_var=yes
        ld_shlibs=yes
    fi
    ;;

sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
    no_undefined_flag='${wl}-z,text'
    archive_cmds_need_lc=no
    hardcode_shlibpath_var=no
    runpath_var='LD_RUN_PATH'

    if test "$GCC" = yes; then
        archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
        archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    else
        archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
        archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    fi
    ;;

```

```

sysv5* | sco3.2v5* | sco5v6*)
    # Note: We can NOT use -z defs as we might desire, because we do
not
    # link with -lc, and that would cause any symbols used from libc
to
    # always be unresolved, which means just about no library would
    # ever link correctly.  If we're not using GNU ld we use -z text
    # though, which does catch some bad symbols but isn't as heavy-
handed
    # as -z defs.
    no_undefined_flag='${wl}-z,text'
    allow_undefined_flag='${wl}-z,nodefs'
    archive_cmds_need_lc=no
    hardcode_shlibpath_var=no
    hardcode_libdir_flag_spec='${wl}-R,$libdir'
    hardcode_libdir_separator=':'
    link_all_deplibs=yes
    export_dynamic_flag_spec='${wl}-Bexport'
    runpath_var='LD_RUN_PATH'

    if test "$GCC" = yes; then
        archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
        archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    else
        archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
        archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    fi
    ;;

uts4*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_shlibpath_var=no
    ;;

*)
    ld_shlibs=no
    ;;
esac

if test x$host_vendor = xsni; then
    case $host in
        sysv4 | sysv4.2uw2* | sysv4.3* | sysv5*)
            export_dynamic_flag_spec='${wl}-Blargedynsym'
            ;;
    esac

```

```

    fi
fi

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ld_shlibs" >&5
$sas_echo "$ld_shlibs" >&6; }
test "$ld_shlibs" = no && can_build_shared=no

with_gnu_ld=$with_gnu_ld

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc" in
x|xyes)
    # Assume -lc should be added
    archive_cmds_need_lc=yes

    if test "$enable_shared" = yes && test "$GCC" = yes; then
        case $archive_cmds in
        *'~'*)
            # FIXME: we may have to deal with multi-command sequences.
            ;;
        '$CC '**)
            # Test whether the compiler implicitly links with -lc since on
some
            # systems, -lgcc has to come before -lc. If gcc already passes -
lc
            # to ld, don't add -lc before -lgcc.
            { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$sas_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }
if ${lt_cv_archive_cmds_need_lc+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    $RM conftest*
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

```

```

        if { { eval echo "\"\$as_me\":"${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
        (eval $ac_compile) 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; } 2>confptest.err; then
            soname=confptest
            lib=confptest
            libobjs=confptest.$ac_objext
            deplibs=
            wl=$lt_prog_compiler_wl
            pic_flag=$lt_prog_compiler_pic
            compiler_flags=-v
            linker_flags=-v
            verstring=
            output_objdir=.
            libname=confptest
            lt_save_allow_undefined_flag=$allow_undefined_flag
            allow_undefined_flag=
            if { { eval echo "\"\$as_me\":"${as_lineno-$LINENO}:
\"$archive_cmds 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1\""; } >&5
            (eval $archive_cmds 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1)
            2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
            test $ac_status = 0; }
            then
                lt_cv_archive_cmds_need_lc=no
            else
                lt_cv_archive_cmds_need_lc=yes
            fi
            allow_undefined_flag=$lt_save_allow_undefined_flag
        else
            cat confptest.err 1>&5
        fi
        $RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc" >&5
$as_echo "$lt_cv_archive_cmds_need_lc" >&6; }
    archive_cmds_need_lc=$lt_cv_archive_cmds_need_lc
;;
esac
fi
;;
esac

```



```
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }

if test "$GCC" = yes; then
  case $host_os in
    darwin*) lt_awk_arg="/^libraries:/,/LR/" ;;
    *) lt_awk_arg="/^libraries:/" ;;
  esac
fi
```

```

case $host_os in
  mingw* | cegcc*) lt_sed_strip_eq="s,=\([A-Za-z]:\),\1,g" ;;
  *) lt_sed_strip_eq="s,=/,/,g" ;;
esac
lt_search_path_spec=`$CC -print-search-dirs | awk $lt_awk_arg | $SED
-e "s/^libraries:/" -e $lt_sed_strip_eq`
case $lt_search_path_spec in
*\;* )
  # if the path contains ";" then we assume it to be the separator
  # otherwise default to the standard path separator (i.e. ":") - it
  is
  # assumed that no part of a normal pathname contains ";" but that
  should
  # okay in the real world where ";" in dirpaths is itself
  problematic.
  lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED 's/;/ /g'`
  ;;
*)
  lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED
"s/$PATH_SEPARATOR/ /g"`
  ;;
esac
# Ok, now we have the path, separated by spaces, we can step through
it
# and add multilib dir if necessary.
lt_tmp_lt_search_path_spec=
lt_multi_os_dir=`$CC $CPPFLAGS $CFLAGS $LDFLAGS -print-multi-os-
directory 2>/dev/null`
for lt_sys_path in $lt_search_path_spec; do
  if test -d "$lt_sys_path/$lt_multi_os_dir"; then
    lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path/$lt_multi_os_dir"
  else
    test -d "$lt_sys_path" && \
    lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path"
  fi
done
lt_search_path_spec=`$ECHO "$lt_tmp_lt_search_path_spec" | awk '
BEGIN {RS=" "; FS="|\n";} {
lt_foo="";
lt_count=0;
for (lt_i = NF; lt_i > 0; lt_i--) {
  if ($lt_i != "" && $lt_i != ".") {
    if ($lt_i == "..") {
      lt_count++;
    } else {
      if (lt_count == 0) {
        lt_foo="/" $lt_i lt_foo;
      } else {
        lt_count--;

```

```

    }
  }
}
if (lt_foo != "") { lt_freq[lt_foo]++; }
if (lt_freq[lt_foo] == 1) { print lt_foo; }
}'`
# AWK program above erroneously prepends '/' to C:/dos/paths
# for these hosts.
case $host_os in
mingw* | cegcc*) lt_search_path_spec=`$ECHO "$lt_search_path_spec"
|\
    $SED 's,/\/([A-Za-z]:\),\1,g'` ;;
esac
sys_lib_search_path_spec=`$ECHO "$lt_search_path_spec" | $lt_NL2SP`
else
sys_lib_search_path_spec="/lib /usr/lib /usr/local/lib"
fi
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
finish_eval=
shlibpath_var=
shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
aix3*)
version_type=linux # correct to gnu/linux during the next big
refactor
library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
shlibpath_var=LIBPATH

# AIX 3 has no versioning support, so we append a major version to
the name.
soname_spec='${libname}${release}${shared_ext}$major'
;;

```

```

aix[4-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    hardcode_into_libs=yes
    if test "$host_cpu" = ia64; then
        # AIX 5 supports IA64
        library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'
        shlibpath_var=LD_LIBRARY_PATH
    else
        # With GCC up to 2.95.x, collect2 would create an import file
        # for dependence libraries. The import file would start with
        # the line `#! .'. This would cause the generated library to
        # depend on `.', always an invalid library. This was fixed in
        # development snapshots of GCC prior to 3.0.
        case $host_os in
            aix4 | aix4.[01] | aix4.[01].*)
                if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)'
                    echo ' yes '
                    echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
                    :
                else
                    can_build_shared=no
                fi
            ;;
        esac
        # AIX (on Power*) has no versioning support, so currently we can
not hardcode correct
        # soname into executable. Probably we can add versioning support
to
        # collect2, so additional links can be useful in future.
        if test "$aix_use_runtimelinking" = yes; then
            # If using run time linking (on AIX 4.2 or later) use
lib<name>.so
            # instead of lib<name>.a to let people know that these are not
            # typical AIX shared libraries.
            library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        else
            # We preserve .a as extension for shared libraries through
AIX4.2
            # and later when we are not doing run time linking.
            library_names_spec='${libname}${release}.a $libname.a'
            soname_spec='${libname}${release}${shared_ext}$major'
        fi
        shlibpath_var=LIBPATH
    fi
;;

```

```

amigaos*)
  case $host_cpu in
  powerpc)
    # Since July 2007 AmigaOS4 officially supports .so libraries.
    # When compiling the executable, add -use-dynld -Lsobjs: to the
    compileline.
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    ;;
  m68k)
    library_names_spec='$libname.ixlibrary $libname.a'
    # Create ${libname}_ixlibrary.a entries in /sys/libs.
    finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
'\''s%^.*\/\([^\/]*\)\.ixlibrary$%\1%\''`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
    ;;
  esac
  ;;

beos*)
  library_names_spec='${libname}${shared_ext}'
  dynamic_linker="$host_os ld.so"
  shlibpath_var=LIBRARY_PATH
  ;;

bsdi[45]*)
  version_type=linux # correct to gnu/linux during the next big
refactor
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  finish_cmds='PATH="\$PATH:/sbin" ldconfig $libdir'
  shlibpath_var=LD_LIBRARY_PATH
  sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
  sys_lib_dldsearch_path_spec="/shlib /usr/lib /usr/local/lib"
  # the default ld.so.conf also contains /usr/contrib/lib and
  # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
  # libtool to hard-code these into programs
  ;;

cygwin* | mingw* | pw32* | cegcc*)
  version_type=windows
  shrext_cmds=".dll"
  need_version=no
  need_lib_prefix=no

```

```

case $GCC,$cc_basename in
yes,*)
# gcc
library_names_spec='$libname.dll.a'
# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\''i; echo
\${dlname}'\''`~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dlname} \${dldir}/\${dlname}~
chmod a+x \${dldir}/\${dlname}~
if test -n '\''$striplib'\'' && test -n '\''$striplib'\''; then
eval '\''$striplib \${dldir}/\${dlname}'\'' || exit \ $?;
fi'
postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\''`~
dlpath=$dir/\${dldll}~
$RM \${dlpath}'
shlibpath_overrides_runpath=yes

case $host_os in
cygwin*)
# Cygwin DLLs use 'cyg' prefix rather than 'lib'
soname_spec=`echo \${libname} | sed -e 's/^lib/cyg/'``echo
\${release} | $SED -e 's/[.]/-/g'`\${versuffix}\${shared_ext}'

sys_lib_search_path_spec="$sys_lib_search_path_spec
/usr/lib/w32api"
;;
mingw* | cegcc*)
# MinGW DLLs use traditional 'lib' prefix
soname_spec='\${libname}`echo \${release} | $SED -e 's/[.]/-
/g'`\${versuffix}\${shared_ext}'
;;
pw32*)
# pw32 DLLs use 'pw' prefix rather than 'lib'
library_names_spec=`echo \${libname} | sed -e 's/^lib/pw/'``echo
\${release} | $SED -e 's/[.]/-/g'`\${versuffix}\${shared_ext}'
;;
esac
dynamic_linker='Win32 ld.exe'
;;

*,cl*)
# Native MSVC
libname_spec='$name'
soname_spec='\${libname}`echo \${release} | $SED -e 's/[.]/-
/g'`\${versuffix}\${shared_ext}'
library_names_spec='\${libname}.dll.lib'

case $build_os in

```

```

mingw*)
    sys_lib_search_path_spec=
    lt_save_ifs=$IFS
    IFS=';'
    for lt_path in $LIB
    do
        IFS=$lt_save_ifs
        # Let DOS variable expansion print the short 8.3 style file
name.
        lt_path=`cd "$lt_path" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si"`
        sys_lib_search_path_spec="$sys_lib_search_path_spec $lt_path"
    done
    IFS=$lt_save_ifs
    # Convert to MSYS style.
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\\\\\\\|/|g' -e 's| \\([a-zA-Z]\\\\):| /\\1|g' -e 's|^| |`
    ;;
cygwin*)
    # Convert to unix form, then to dos form, then back to unix form
    # but this time dos style (no spaces!) so that the unix form
looks
    # like /cygdrive/c/PROGRA~1:/cygdr...
    sys_lib_search_path_spec=`cygpath --path --unix "$LIB"`
    sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null`
    sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g"`
    ;;
*)
    sys_lib_search_path_spec="$LIB"
    if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zA-Z]:/'
>/dev/null; then
        # It is most probably a Windows format PATH.
        sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's;/;/ /g'`
    else
        sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g"`
    fi
    # FIXME: find the short name or the path components, as spaces
are
    # common. (e.g. "Program Files" -> "PROGRA~1")
    ;;
esac

# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\\'. $dir/\\'\${base_file}'\\'i; echo
\\$dlname'\\'~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~

```

```

        $install_prog $dir/$dlname \${dldir}/$dlname'
    postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\``'. $file; echo
\${dlname}'\``~
        dlpath=$dir/\${dldll}~
        $RM \${dlpath}'
    shlibpath_overrides_runpath=yes
    dynamic_linker='Win32 link.exe'
    ;;

*)
    # Assume MSVC wrapper
    library_names_spec='${libname}`echo ${release} | $SED -e 's/[.]/-
/g`${versuffix}${shared_ext} $libname.lib'
    dynamic_linker='Win32 ld.exe'
    ;;
esac
# FIXME: first we should search . and the directory the executable
is in
shlibpath_var=PATH
;;

darwin* | rhapsody*)
    dynamic_linker="$host_os dyld"
    version_type=darwin
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${major}${shared_ext}
${libname}${shared_ext}'
    soname_spec='${libname}${release}${major}${shared_ext}'
    shlibpath_overrides_runpath=yes
    shlibpath_var=DYLD_LIBRARY_PATH
    shrext_cmds='`test $.module = .yes && echo .so || echo .dylib`'

    sys_lib_search_path_spec="$sys_lib_search_path_spec /usr/local/lib"
    sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
    ;;

dgux*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}${versuffix}
${libname}${release}${shared_ext}${major} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}${major}'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

freebsd* | dragonfly*)
    # DragonFly does not have aout.  When/if they implement a new
    # versioning mechanism, adjust this.
    if test -x /usr/bin/objformat; then

```



```

    objformat=`/usr/bin/objformat`
else
    case $host_os in
        freebsd[23].*) objformat=aout ;;
        *) objformat=elf ;;
    esac
fi
version_type=freebsd-$objformat
case $version_type in
    freebsd-elf*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
        need_version=no
        need_lib_prefix=no
        ;;
    freebsd-*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname${shared_ext}$versuffix'
        need_version=yes
        ;;
esac
shlibpath_var=LD_LIBRARY_PATH
case $host_os in
    freebsd2.*)
        shlibpath_overrides_runpath=yes
        ;;
    freebsd3.[01]* | freebsdelf3.[01]*)
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
    freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
    freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
        shlibpath_overrides_runpath=no
        hardcode_into_libs=yes
        ;;
    *) # from 4.6 on, and DragonFly
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
esac
;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no

```

```

hardcode_into_libs=yes
;;

haiku*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in
    ia64*)
        shrext_cmds='.so'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.so"
        shlibpath_var=LD_LIBRARY_PATH
        shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        if test "X$HPUX_IA64_MODE" = X32; then
            sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
        else
            sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
        fi
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
    ;;
    hppa*64*)
        shrext_cmds='.sl'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.sl"
        shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'

```

```

soname_spec='${libname}${release}${shared_ext}$major'
sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
*)
shrext_cmds='.sl'
dynamic_linker="$host_os dld.sl"
shlibpath_var=SHLIB_PATH
shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=no
hardcode_into_libs=yes
;;

irix5* | irix6* | nonstopux*)
case $host_os in
nonstopux*) version_type=nonstopux ;;
*)
if test "$lt_cv_prog_gnu_ld" = yes; then
version_type=linux # correct to gnu/linux during the next
big refactor
else
version_type=irix
fi ;;
esac
need_lib_prefix=no
need_version=no
soname_spec='${libname}${release}${shared_ext}$major'

```

```

library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext} $libname${shared_ext}'
case $host_os in
  irix5* | nonstopux*)
    libsuff= shlibsuff=
    ;;
  *)
    case $LD in # libtool.m4 will add one of these switches to LD
      *-32|*" -32 " | *-melf32bsmip|*" -melf32bsmip ")
        libsuff= shlibsuff= libmagic=32-bit;;
      *-n32|*" -n32 " | *-melf32bmipn32|*" -melf32bmipn32 ")
        libsuff=32 shlibsuff=N32 libmagic=N32;;
      *-64|*" -64 " | *-melf64bmip|*" -melf64bmip ")
        libsuff=64 shlibsuff=64 libmagic=64-bit;;
    *) libsuff= shlibsuff= libmagic=never-match;;
    esac
    ;;
  esac
shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
shlibpath_overrides_runpath=no
sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
/usr/local/lib${libsuff}"
sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
hardcode_into_libs=yes
;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)
  dynamic_linker=no
  ;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
  version_type=linux # correct to gnu/linux during the next big
refactor
  need_lib_prefix=no
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
  shlibpath_var=LD_LIBRARY_PATH
  shlibpath_overrides_runpath=no

  # Some binutils ld are patched to set DT_RUNPATH
  if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    lt_cv_shlibpath_overrides_runpath=no
    save_LDFLAGS=$LDFLAGS
    save_libdir=$libdir

```

```

eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl\"; \
    LDFLAGS=\"\${LDFLAGS} \$hardcode_libdir_flag_spec\"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    if ($OBJDUMP -p conftest$ac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
        lt_cv_shlibpath_overrides_runpath=yes
    fi
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS=$save_LDFLAGS
    libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.
# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
    lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \$2)); skip = 1; } { if (!skip) print \$0; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ \t]*hwcap[ \t]*/d;s/[:, ]/
/g;s/=[^=]*$/;/s/=[^= ]* / /g;s/"//g;/^$/d' | tr '\n' ' '`
    sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker. Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.
dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)

```



```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        case $host_os in
            openbsd2.[89] | openbsd2.[89].*)
                shlibpath_overrides_runpath=no
                ;;
            *)
                shlibpath_overrides_runpath=yes
                ;;
        esac
    else
        shlibpath_overrides_runpath=yes
    fi
    ;;

os2*)
    libname_spec='$name'
    shrext_cmds=".dll"
    need_lib_prefix=no
    library_names_spec='$libname${shared_ext} $libname.a'
    dynamic_linker='OS/2 ld.exe'
    shlibpath_var=LIBPATH
    ;;

osf3* | osf4* | osf5*)
    version_type=osf
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
    sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
    ;;

rdos*)
    dynamic_linker=no
    ;;

solaris*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'

```

```

soname_spec='${libname}${release}${shared_ext}$major'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
# ldd complains unless libraries are executable
postinstall_cmds='chmod +x $lib'
;;

sunos4*)
    version_type=sunos
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
    ;;

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)
            shlibpath_overrides_runpath=no
            need_lib_prefix=no
            runpath_var=LD_RUN_PATH
            ;;
        siemens)
            need_lib_prefix=no
            ;;
        motorola)
            need_lib_prefix=no
            need_version=no
            shlibpath_overrides_runpath=no
            sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
            ;;
    esac
    ;;

sysv4*MP*)
    if test -d /usr/nec ;then
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='$libname${shared_ext}.$versuffix
$libname${shared_ext}.$major $libname${shared_ext}'

```



```

        soname_spec='${libname}${shared_ext}.$major'
        shlibpath_var=LD_LIBRARY_PATH
    fi
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
            ;;
        esac
    fi
    sys_lib_dlsearch_path_spec='/usr/lib'
    ;;

tpf*)
    # TPF is a cross-target only. Preferred cross-host = GNU/Linux.
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

uts4*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

*)

```

```
dynamic_linker=no
;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then
  variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec}" = set; then
  sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec}" = set; then
  sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi
```



```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking how to hardcode
library paths into programs" >&5
$as_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action=
if test -n "$hardcode_libdir_flag_spec" ||
    test -n "$runpath_var" ||
    test "X$hardcode_automatic" = "Xyes" ; then

    # We can hardcode non-existent directories.
    if test "$hardcode_direct" != no &&
        # If the only mechanism to avoid hardcoding is shlibpath_var, we
        # have to relink, otherwise we might link with an installed
library
        # when we should be linking with a yet-to-be-installed one
        ## test "$_LT_TAGVAR(hardcode_shlibpath_var, )" != no &&
        test "$hardcode_minus_L" != no; then
        # Linking always hardcodes the temporary library directory.
        hardcode_action=relink
    else
        # We can link without hardcoding, and we can hardcode nonexistent
dirs.
        hardcode_action=immediate
    fi
else
    # We cannot hardcode anything, or else we can only hardcode existing
# directories.
    hardcode_action=unsupported
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hardcode_action" >&5
$as_echo "$hardcode_action" >&6; }

if test "$hardcode_action" = relink ||
    test "$inherit_rpath" = yes; then
    # Fast installation is not supported
    enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
    test "$enable_shared" = no; then
    # Fast installation is not necessary
    enable_fast_install=needless
fi

```

```

if test "x$enable_dlopen" != xyes; then
enable_dlopen=unknown
enable_dlopen_self=unknown
enable_dlopen_self_static=unknown
else
lt_cv_dlopen=no
lt_cv_dlopen_libs=

case $host_os in
beos*)
lt_cv_dlopen="load_add_on"
lt_cv_dlopen_libs=
lt_cv_dlopen_self=yes
;;

mingw* | pw32* | cegcc*)
lt_cv_dlopen="LoadLibrary"
lt_cv_dlopen_libs=
;;

cygwin*)
lt_cv_dlopen="dlopen"
lt_cv_dlopen_libs=
;;

darwin*)
# if libdl is installed we need to link against it
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else

    lt_cv_dlopen="dyld"
    lt_cv_dlopen_libs=
    lt_cv_dlopen_self=yes

fi

;;

*)
    ac_fn_c_check_func "$LINENO" "shl_load" "ac_cv_func_shl_load"
if test "x$ac_cv_func_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for shl_load in -
ldld" >&5
$as_echo_n "checking for shl_load in -ldld... " >&6; }
if ${ac_cv_lib_dld_shl_load+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char shl_load ();
int
main ()

```

```

{
return shl_load ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dld_shl_load=yes
else
    ac_cv_lib_dld_shl_load=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_shl_load" >&5
$as_echo "$ac_cv_lib_dld_shl_load" >&6; }
if test "x$ac_cv_lib_dld_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load" lt_cv_dlopen_libs="-ldld"
else
    ac_fn_c_check_func "$LINENO" "dlopen" "ac_cv_func_dlopen"
if test "x$ac_cv_func_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

```

```

    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
lsvld" >&5
$as_echo_n "checking for dlopen in -lsvld... " >&6; }
if ${ac_cv_lib_svld_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lsvld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
;
return 0;
}
ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_svld_dlopen=yes
else
    ac_cv_lib_svld_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_svld_dlopen" >&5
$as_echo "$ac_cv_lib_svld_dlopen" >&6; }

```



```

if test "x$ac_cv_lib_svld_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-lsvld"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dld_link in -
ldld" >&5
$as_echo_n "checking for dld_link in -ldld... " >&6; }
if ${ac_cv_lib_dld_dld_link+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dld_link ();
int
main ()
{
return dld_link ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_dld_dld_link=yes
else
  ac_cv_lib_dld_dld_link=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest.$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_dld_link" >&5
$as_echo "$ac_cv_lib_dld_dld_link" >&6; }
if test "x$ac_cv_lib_dld_dld_link" = xyes; then :
  lt_cv_dlopen="dld_link" lt_cv_dlopen_libs="-ldld"
fi

fi

fi

```

```

fi

fi

fi

;;
esac

if test "x$lt_cv_dlopen" != xno; then
  enable_dlopen=yes
else
  enable_dlopen=no
fi

case $lt_cv_dlopen in
dlopen)
  save_CPPFLAGS="$CPPFLAGS"
  test "x$ac_cv_header_dlfcn_h" = xyes && CPPFLAGS="$CPPFLAGS -
DHAVE_DLFCN_H"

  save_LDFLAGS="$LDFLAGS"
  wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$export_dynamic_flag_spec\`"

  save_LIBS="$LIBS"
  LIBS="$lt_cv_dlopen_libs $LIBS"

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
program can dlopen itself" >&5
$as_echo_n "checking whether a program can dlopen itself... " >&6; }
if ${lt_cv_dlopen_self+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    lt_cv_dlopen_self=cross
  else
    lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
    lt_status=$lt_dlunknown
    cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

#ifdef RTLD_GLOBAL

```

```

# define LT_DLGLOBAL          RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL          DL_GLOBAL
# else
#   define LT_DLGLOBAL          0
# endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
# ifdef RTLD_LAZY
#   define LT_DLLAZY_OR_NOW          RTLD_LAZY
# else
#   ifdef DL_LAZY
#     define LT_DLLAZY_OR_NOW          DL_LAZY
#   else
#     ifdef RTLD_NOW
#       define LT_DLLAZY_OR_NOW RTLD_NOW
#     else
#       ifdef DL_NOW
#         define LT_DLLAZY_OR_NOW          DL_NOW
#       else
#         define LT_DLLAZY_OR_NOW          0
#       endif
#     endif
#   endif
# endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#ifdef __GNUC__ && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else
        {
          if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
          else puts (dlerror ());
        }
    }
}

```

```

        /* dlclose (self); */
    }
else
    puts (dlerror ());

return status;
}
_LT_EOF
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"\$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self=no ;;
    esac
else :
    # compilation failed
    lt_cv_dlopen_self=no
fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_dlopen_self"
>&5
$as_echo "$lt_cv_dlopen_self" >&6; }

    if test "x$lt_cv_dlopen_self" = xyes; then
        wl=$lt_prog_compiler_wl eval LDFLAGS="\$LDFLAGS
$lt_prog_compiler_static\"
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
statically linked program can dlopen itself" >&5
$as_echo_n "checking whether a statically linked program can dlopen
itself... " >&6; }
if ${lt_cv_dlopen_self_static+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test "$cross_compiling" = yes; then :
        lt_cv_dlopen_self_static=cross
    else
        lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
        lt_status=$lt_dlunknown
        cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"

```

```

#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

#ifdef RTLD_GLOBAL
# define LT_DLGLOBAL      RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL      DL_GLOBAL
# else
#   define LT_DLGLOBAL      0
# endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
# ifdef RTLD_LAZY
#   define LT_DLLAZY_OR_NOW      RTLD_LAZY
# else
#   ifdef DL_LAZY
#     define LT_DLLAZY_OR_NOW      DL_LAZY
#   else
#     ifdef RTLD_NOW
#       define LT_DLLAZY_OR_NOW RTLD_NOW
#     else
#       ifdef DL_NOW
#         define LT_DLLAZY_OR_NOW      DL_NOW
#       else
#         define LT_DLLAZY_OR_NOW      0
#       endif
#     endif
#   endif
# endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#if defined(__GNUC__) && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
    void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
    int status = $lt_dlunknown;

```

```

if (self)
{
    if (dlsym (self,"fnord"))          status = $lt_dlno_uscore;
    else
    {
        if (dlsym( self,"_fnord"))    status = $lt_dlneed_uscore;
        else puts (dlerror ());
    }
    /* dlclose (self); */
}
else
    puts (dlerror ());

return status;
}
_LT_EOF
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self_static=no ;;
    esac
else :
    # compilation failed
    lt_cv_dlopen_self_static=no
fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_dlopen_self_static" >&5
$as_echo "$lt_cv_dlopen_self_static" >&6; }
fi

    CPPFLAGS="$save_CPPFLAGS"
    LDFLAGS="$save_LDFLAGS"
    LIBS="$save_LIBS"
    ;;
esac

case $lt_cv_dlopen_self in

```

```

yes|no) enable_dlopen_self=$lt_cv_dlopen_self ;;
*) enable_dlopen_self=unknown ;;
esac

case $lt_cv_dlopen_self_static in
yes|no) enable_dlopen_self_static=$lt_cv_dlopen_self_static ;;
*) enable_dlopen_self_static=unknown ;;
esac
fi

striplib=
old_striplib=
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether stripping
libraries is possible" >&5
$as_echo_n "checking whether stripping libraries is possible... " >&6;
}
if test -n "$STRIP" && $STRIP -V 2>&1 | $GREP "GNU strip" >/dev/null;
then
  test -z "$old_striplib" && old_striplib="$STRIP --strip-debug"
  test -z "$striplib" && striplib="$STRIP --strip-unnneeded"
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
# FIXME - insert some real tests, host_os isn't really good enough
case $host_os in
darwin*)
  if test -n "$STRIP" ; then
    striplib="$STRIP -x"
    old_striplib="$STRIP -S"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi
;;

```

```

*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  ;;
esac
fi

# Report which library types will actually be built
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if libtool
supports shared libraries" >&5
$as_echo_n "checking if libtool supports shared libraries... " >&6; }
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $scan_build_shared"
>&5
$as_echo "$scan_build_shared" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
shared libraries" >&5
$as_echo_n "checking whether to build shared libraries... " >&6; }
test "$scan_build_shared" = "no" && enable_shared=no

# On AIX, shared libraries and static libraries use the same
namespace, and
# are all built from PIC.
case $host_os in
aix3*)
  test "$enable_shared" = yes && enable_static=no
  if test -n "$RANLIB"; then
    archive_cmds="$archive_cmds~\${RANLIB} \$lib"
    postinstall_cmds='${RANLIB} $lib'
  fi
  ;;

aix[4-9]*)
  if test "$host_cpu" != ia64 && test "$aix_use_runtimelinking" = no
; then
    test "$enable_shared" = yes && enable_static=no
  fi
  ;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_shared" >&5
$as_echo "$enable_shared" >&6; }

```



```

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build
static libraries" >&5
$sas_echo_n "checking whether to build static libraries... " >&6; }
    # Make sure either enable_shared or enable_static is yes.
    test "$enable_shared" = yes || enable_static=yes
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $enable_static" >&5
$sas_echo "$enable_static" >&6; }

```

```

fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

CC="$lt_save_CC"

    if test -n "$CXX" && ( test "X$CXX" != "Xno" &&
    ( (test "X$CXX" = "Xg++" && `g++ -v >/dev/null 2>&1` ) ||
    (test "X$CXX" != "Xg++")) ) ; then
    ac_ext=cpp
ac_cpp='$CXXCPP $CPPFLAGS'
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to run the C++
preprocessor" >&5
$sas_echo_n "checking how to run the C++ preprocessor... " >&6; }
if test -z "$CXXCPP"; then
    if ${ac_cv_prog_CXXCPP+:} false; then :
        $sas_echo_n "(cached) " >&6
    else
        # Double quotes because CXXCPP needs to be expanded
        for CXXCPP in "$CXX -E" "/lib/cpp"
        do
            ac_preproc_ok=false
            for ac_cxx_preproc_warn_flag in ' yes
            do
                # Use a header file that comes with gcc, so configuring glibc
                # with a fresh cross-compiler works.
                # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
                # <limits.h> exists even on freestanding compilers.
                # On the NeXT, cc -E runs the code through the compiler's parser,
                # not just through cpp. "Syntax error" is here to catch this case.
                cat confdefs.h - <<_ACEOF >conftest.$ac_ext
                /* end confdefs.h. */

```

```

@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

                Syntax error

_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :

else
    # Broken: fails on valid input.
    continue
fi
rm -f confptest.err confptest.i confptest.$ac_ext

    # OK, works on sane cases.  Now check whether nonexistent headers
    # can be detected and how.
    cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :
    # Broken: success on invalid input.
    continue
else
    # Passes both tests.
    ac_preproc_ok=:
    break
fi
rm -f confptest.err confptest.i confptest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :
    break
fi

    done
    ac_cv_prog_CXXCPP=$CXXCPP

fi
    CXXCPP=$ac_cv_prog_CXXCPP
else
    ac_cv_prog_CXXCPP=$CXXCPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CXXCPP" >&5
$as_echo "$CXXCPP" >&6; }
ac_preproc_ok=false
for ac_cxx_preproc_warn_flag in ' yes
do
    # Use a header file that comes with gcc, so configuring glibc

```

```

# with a fresh cross-compiler works.
# Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
# <limits.h> exists even on freestanding compilers.
# On the NeXT, cc -E runs the code through the compiler's parser,
# not just through cpp. "Syntax error" is here to catch this case.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

                Syntax error

_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :

else
    # Broken: fails on valid input.
    continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext

    # OK, works on sane cases. Now check whether nonexistent headers
    # can be detected and how.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :
    # Broken: success on invalid input.
    continue
else
    # Passes both tests.
    ac_preproc_ok=:
    break
fi
rm -f conftest.err conftest.i conftest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f conftest.i conftest.err conftest.$ac_ext
if $ac_preproc_ok; then :

else
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
    >&5
    $as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
    as_fn_error $? "C++ preprocessor `'$CXXCPP'" fails sanity check
    See `config.log' for more details" "$LINENO" 5; }
fi

ac_ext=c

```

```

ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

else
  _lt_caught_CXX_error=yes
fi

ac_ext=cpp
ac_cpp='$CXXCPP $CPPFLAGS'
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu

archive_cmds_need_lc_CXX=no
allow_undefined_flag_CXX=
always_export_symbols_CXX=no
archive_expsym_cmds_CXX=
compiler_needs_object_CXX=no
export_dynamic_flag_spec_CXX=
hardcode_direct_CXX=no
hardcode_direct_absolute_CXX=no
hardcode_libdir_flag_spec_CXX=
hardcode_libdir_separator_CXX=
hardcode_minus_L_CXX=no
hardcode_shlibpath_var_CXX=unsupported
hardcode_automatic_CXX=no
inherit_rpath_CXX=no
module_cmds_CXX=
module_expsym_cmds_CXX=
link_all_deplibs_CXX=unknown
old_archive_cmds_CXX=$old_archive_cmds
reload_flag_CXX=$reload_flag
reload_cmds_CXX=$reload_cmds
no_undefined_flag_CXX=
whole_archive_flag_spec_CXX=
enable_shared_with_static_runtimes_CXX=no

# Source file extension for C++ test sources.
ac_ext=cpp

# Object file extension for compiled C++ test sources.
objext=o
objext_CXX=$objext

# No sense in running all these tests if we already determined that
# the CXX compiler isn't working.  Some variables (like enable_shared)
# are currently assumed to apply to all compilers on this platform,

```

```

# and will be corrupted by setting them based on a non-working
compiler.
if test "$lt_caught_CXX_error" != yes; then
  # Code to be used in simple compile tests
  lt_simple_compile_test_code="int some_variable = 0;"

  # Code to be used in simple link tests
  lt_simple_link_test_code='int main(int, char *[]) { return(0); }'

  # ltmain only uses $CC for tagged configurations so make sure $CC is
  set.

```

```

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

```

```

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

```

```

# Allow CC to be a program name with arguments.
compiler=$CC

```

```

# save warnings/boilerplate of simple test code
ac_outfile=conftest.$ac_objext
echo "$lt_simple_compile_test_code" >conftest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>conftest.err
_lt_compiler_boilerplate=`cat conftest.err`
$RM conftest*

```

```

ac_outfile=conftest.$ac_objext
echo "$lt_simple_link_test_code" >conftest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >conftest.err
_lt_linker_boilerplate=`cat conftest.err`
$RM -r conftest*

```

```

# Allow CC to be a program name with arguments.
lt_save_CC=$CC
lt_save_CFLAGS=$CFLAGS
lt_save_LD=$LD
lt_save_GCC=$GCC
GCC=$GXX
lt_save_with_gnu_ld=$with_gnu_ld
lt_save_path_LD=$lt_cv_path_LD
if test -n "${lt_cv_prog_gnu_ldcxx+set}"; then
  lt_cv_prog_gnu_ld=$lt_cv_prog_gnu_ldcxx

```

```

else
  $as_unset lt_cv_prog_gnu_ld
fi
if test -n "${lt_cv_path_LDCXX+set}"; then
  lt_cv_path_LD=$lt_cv_path_LDCXX
else
  $as_unset lt_cv_path_LD
fi
test -z "${LDCXX+set}" || LD=$LDCXX
CC=${CXX-"c++"}
CFLAGS=$CXXFLAGS
compiler=$CC
compiler_CXX=$CC
for cc_temp in $compiler""; do
case $cc_temp in
  compile | *[\//]compile | ccache | *[\//]ccache ) ;;
  distcc | *[\//]distcc | purify | *[\//]purify ) ;;
  \-*) ;;
  *) break;;
esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^\$host_alias-%%"`

if test -n "$compiler"; then
  # We don't want -fno-exception when compiling C++ code, so set the
  # no_builtin_flag separately
  if test "$GXX" = yes; then
    lt_prog_compiler_no_builtin_flag_CXX=' -fno-builtin'
  else
    lt_prog_compiler_no_builtin_flag_CXX=
  fi

  if test "$GXX" = yes; then
    # Set up default GNU C++ configuration

```

@%:@ Check whether --with-gnu-ld was given.

```

if test "${with_gnu_ld+set}" = set; then :
  withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes
else
  with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
$CC" >&5
$as_echo_n "checking for ld used by $CC... " >&6; }
  case $host in

```

```

*-*-mingw*)
  # gcc leaves a trailing carriage return which upsets mingw
  ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
*)
  ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
esac
case $ac_prog in
  # Accept absolute paths.
  [\\/] * | ?:[\\/] *)
    re_direlt=' /^[^/][^/]* /\.\./ '
    # Canonicalize the pathname of ld
    ac_prog=`$ECHO "$ac_prog" | $SED 's%\\\\\%/g'`
    while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
      ac_prog=`$ECHO $ac_prog | $SED "s%$re_direlt%/"`
    done
    test -z "$LD" && LD="$ac_prog"
    ;;
  "")
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
  *)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
esac
elif test "$with_gnu_ld" = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.
        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
          *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break

```

```

        ;;
        *)
        test "$with_gnu_ld" != yes && break
        ;;
    esac
fi
done
IFS="$lt_save_ifs"
else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5
$as_echo "$LD" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \$PATH"
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
    $as_echo_n "(cached) " >&6
else
    # I'd rather use --version here, but apparently some GNU lds only
    accept -v.
    case ` $LD -v 2>&1 </dev/null` in
    *GNU* | *'with BFD'*)
        lt_cv_prog_gnu_ld=yes
        ;;
    *)
        lt_cv_prog_gnu_ld=no
        ;;
    esac
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5
$as_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld

```



```

# Check if GNU C++ uses GNU ld as the underlying linker, since
the
# archiving commands below assume that GNU ld is being used.
if test "$with_gnu_ld" = yes; then
    archive_cmds_CXX='$CC $pic_flag -shared -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds_CXX='$CC $pic_flag -shared -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $wl$soname ${wl}-retain-symbols-file $wl$export_symbols -
o $lib'

    hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
    export_dynamic_flag_spec_CXX='${wl}--export-dynamic'

# If archive_cmds runs LD, not CC, wlarc should be empty
# XXX I think wlarc can be eliminated in ltcf-cxx, but I need
to
#     investigate it a little bit more. (MM)
wlarc='${wl}'

# ancient GNU ld didn't support --whole-archive et. al.
if eval "`$CC -print-prog-name=ld` --help 2>&1" |
$GREP 'no-whole-archive' > /dev/null; then
    whole_archive_flag_spec_CXX="$wlarc"'--whole-
archive$convenience "'$wlarc"'--no-whole-archive'
    else
        whole_archive_flag_spec_CXX=
    fi
else
    with_gnu_ld=no
    wlarc=

# A generic and very simple default shared library creation
# command for GNU C++ for the case where it uses the native
# linker, instead of GNU ld.  If possible, this setting should
# be overridden to take advantage of the native linker features
on
# the platform it is being used on.
archive_cmds_CXX='$CC -shared -nostdlib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o $lib'
fi

# Commands to make compiler produce verbose output that lists
# what "hidden" libraries, object files and flags are used when
# linking a shared library.
output_verbose_link_cmd='$CC -shared $CFLAGS -v conftest.$objext
2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'

else
    GXX=no
    with_gnu_ld=no

```

```

    wlarc=
fi

# PORTME: fill in a description of your system's C++ link
characteristics
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }
ld_shlibs_CXX=yes
case $host_os in
aix3*)
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
;;
aix[4-9]*)
if test "$host_cpu" = ia64; then
# On IA64, the linker does run time linking by default, so
we don't
# have to do anything special.
aix_use_runtimelinking=no
exp_sym_flag='-Bexport'
no_entry_flag=""
else
aix_use_runtimelinking=no

# Test if we are trying to use run time linking or normal
# AIX style linking. If -brtl is somewhere in LDFLAGS, we
# need to do runtime linking.
case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)
for ld_flag in $LDFLAGS; do
case $ld_flag in
*-brtl*)
aix_use_runtimelinking=yes
break
;;
esac
done
;;
esac

exp_sym_flag='-bexport'
no_entry_flag='-bnoentry'
fi

# When large executables or shared objects are built, AIX ld
can
# have problems creating the table of contents. If linking a
library
# or program results in "error TOC overflow" add -mminimal-toc
to
# CXXFLAGS/CFLAGS for g++/gcc. In the cases where that is not

```

```

# enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

archive_cmds_CXX=''
hardcode_direct_CXX=yes
hardcode_direct_absolute_CXX=yes
hardcode_libdir_separator_CXX=':'
link_all_deplibs_CXX=yes
file_list_spec_CXX='${wl}-f,'

if test "$GXX" = yes; then
  case $host_os in aix4.[012]|aix4.[012].*)
    # We only want to do this on AIX 4.2 and lower, the check
    # below for broken collect2 doesn't work under 4.3+
    collect2name=`${CC} -print-prog-name=collect2`
    if test -f "$collect2name" &&
       strings "$collect2name" | $GREP resolve_lib_name >/dev/null
    then
      # We have reworked collect2
      :
    else
      # We have old collect2
      hardcode_direct_CXX=unsupported
      # It fails to find uninstalled libraries when the uninstalled
      # path is not listed in the libpath.  Setting
hardcode_minus_L
      # to unsupported forces relinking
      hardcode_minus_L_CXX=yes
      hardcode_libdir_flag_spec_CXX='-L$libdir'
      hardcode_libdir_separator_CXX=
    fi
  esac
  shared_flag='-shared'
  if test "$aix_use_runtimelinking" = yes; then
    shared_flag="$shared_flag "'${wl}-G'
  fi
  else
    # not using gcc
    if test "$host_cpu" = ia64; then
      # VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3
Release
      # chokes on -Wl,-G. The following line is correct:
      shared_flag='-G'
    else
      if test "$aix_use_runtimelinking" = yes; then
        shared_flag='${wl}-G'
      else
        shared_flag='${wl}-bM:SRE'
      fi
    fi
  fi

  fi

  export_dynamic_flag_spec_CXX='${wl}-bexpall'

```

```

        # It seems that -bexpall does not export symbols beginning
with
        # underscore (_), so it is better to generate a list of
symbols to
        # export.
        always_export_symbols_CXX=yes
        if test "$aix_use_runtimelinking" = yes; then
            # Warning - without using the other runtime loading flags (-
brtl),
            # -berok will link without error, but may produce a broken
library.
            allow_undefined_flag_CXX='-berok'
            # Determine the default libpath from the value encoded in an
empty
            # executable.
            if test "${lt_cv_aix_libpath+set}" = set; then
                aix_libpath=$lt_cv_aix_libpath
            else
                if ${lt_cv_aix_libpath__CXX+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0 *\[^\]*\)* *$/\1/
                p
            }
        }'
    lt_cv_aix_libpath__CXX=`dump -H conftest$ac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath__CXX"; then
        lt_cv_aix_libpath__CXX=`dump -HX64 conftest$ac_exeext 2>/dev/null
| $SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
if test -z "$lt_cv_aix_libpath__CXX"; then

```

```

    lt_cv_aix_libpath__CXX="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath__CXX
fi

    hardcode_libdir_flag_spec_CXX='${wl}-
bllibpath:$libdir:'"$aix_libpath"

    archive_expsym_cmds_CXX='$CC -o $output_objdir/$soname
$libobjs $deplibs '"'\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else ;; fi`
'"'\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
    else
        if test "$host_cpu" = ia64; then
            hardcode_libdir_flag_spec_CXX='${wl}-R $libdir:/usr/lib:/lib'
            allow_undefined_flag_CXX="-z nodefs"
            archive_expsym_cmds_CXX="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs '"'\${wl}$no_entry_flag"'
$compiler_flags ${wl}${allow_undefined_flag}
'"'\${wl}$exp_sym_flag:\$export_symbols"
        else
            # Determine the default libpath from the value encoded in an
            # empty executable.
            if test "${lt_cv_aix_libpath+set}" = set; then
                aix_libpath=$lt_cv_aix_libpath
            else
                if ${lt_cv_aix_libpath__CXX+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
    /Import File Strings/,/^$/ {
        /^0/ {
            s/^0 *\[^\]*\ *$/\1/
            p
        }
    }

```

```

    }'
    lt_cv_aix_libpath_CXX=`dump -H conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_CXX"; then
        lt_cv_aix_libpath_CXX=`dump -HX64 conftest$sac_exeext 2>/dev/null
| $SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_CXX"; then
    lt_cv_aix_libpath_CXX="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_CXX
fi

    hardcode_libdir_flag_spec_CXX='${wl}-
bllibpath:$libdir:"$aix_libpath"
    # Warning - without using the other run time loading flags,
    # -berok will link without error, but may produce a broken
library.
    no_undefined_flag_CXX=' ${wl}-bernotok'
    allow_undefined_flag_CXX=' ${wl}-berok'
    if test "$with_gnu_ld" = yes; then
        # We only use this code for GNU lds that support --whole-
archive.
        whole_archive_flag_spec_CXX='${wl}--whole-
archive$convenience ${wl}--no-whole-archive'
    else
        # Exported symbols can be pulled into shared objects from
archives
        whole_archive_flag_spec_CXX='$convenience'
    fi
    archive_cmds_need_lc_CXX=yes
    # This is similar to how AIX traditionally builds its shared
# libraries.
    archive_expsym_cmds_CXX="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
    fi
fi
;;

beos*)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
        allow_undefined_flag_CXX=unsupported

```

```

        # Joseph Beckenbach <jrb3@best.com> says some releases of gcc
        # support --undefined. This deserves some investigation.
FIXME
    archive_cmds_CXX='$CC -nostart $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    else
        ld_shlibs_CXX=no
    fi
;;

chorus*)
    case $cc_basename in
        *)
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
        ;;
    esac
    ;;

cygwin* | mingw* | pw32* | cegcc*)
case $GXX,$cc_basename in
,cl* | no,cl*)
    # Native MSVC
    # hardcode_libdir_flag_spec is actually meaningless, as there
is
    # no search path for DLLs.
    hardcode_libdir_flag_spec_CXX=' '
    allow_undefined_flag_CXX=unsupported
    always_export_symbols_CXX=yes
    file_list_spec_CXX='@'
    # Tell ltmain to make .lib files, not .a files.
    libext=lib
    # Tell ltmain to make .dll files, not .so files.
    shrext_cmds=".dll"
    # FIXME: Setting linknames here is a bad hack.
    archive_cmds_CXX='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
    archive_expsym_cmds_CXX='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
        $SED -n -e 's/\\\\\\\\\\\\\\\\(.*)\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -
EXPORT:\\\\\\\\\\\\\\\\1/' -e '1\\\\\\\\!p' < $export_symbols >
$output_objdir/$soname.exp;
    else
        $SED -e 's/\\\\\\\\\\\\\\\\(.*)\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
$export_symbols > $output_objdir/$soname.exp;
    fi~
    $CC -o $tool_output_objdir$soname $libobjs $compiler_flags
$deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
IMPLIB:"$tool_output_objdir$libname.dll.lib"~
    linknames='
    # The linker will not automatically build a static lib if we
    build a DLL.

```

```

# _LT_TAGVAR(old_archive_from_new_cmds, CXX)='true'
enable_shared_with_static_runtimes_CXX=yes
# Don't use ranlib
old_postinstall_cmds_CXX='chmod 644 $oldlib'
postlink_cmds_CXX='lt_outputfile="@OUTPUT@"~
  lt_tool_outputfile="@TOOL_OUTPUT@"~
  case $lt_outputfile in
    *.exe|*.EXE) ;;
    *)
      lt_outputfile="$lt_outputfile.exe"
      lt_tool_outputfile="$lt_tool_outputfile.exe"
    ;;
  esac~
  func_to_tool_file "$lt_outputfile"~
  if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
    $MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
    $RM "$lt_outputfile.manifest";
  fi'
;;
*)
# g++
# _LT_TAGVAR(hardcode_libdir_flag_spec, CXX) is actually
meaningless,
# as there is no search path for DLLs.
hardcode_libdir_flag_spec_CXX='-L$libdir'
export_dynamic_flag_spec_CXX='${wl}--export-all-symbols'
allow_undefined_flag_CXX=unsupported
always_export_symbols_CXX=no
enable_shared_with_static_runtimes_CXX=yes

if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then
  archive_cmds_CXX='$CC -shared -nostdlib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
  # If the export-symbols file already is a .def file (1st line
  # is EXPORTS), use it as is; otherwise, prepend...
  archive_expsym_cmds_CXX='if test "x`$SED 1q $export_symbols`"
= xEXPORTS; then
    cp $export_symbols $output_objdir/$soname.def;
  else
    echo EXPORTS > $output_objdir/$soname.def;
    cat $export_symbols >> $output_objdir/$soname.def;
  fi~
  $CC -shared -nostdlib $output_objdir/$soname.def
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
else
  ld_shlibs_CXX=no

```



```

        fi
        ;;
    esac
    ;;
    darwin* | rhapsody*)

    archive_cmds_need_lc_CXX=no
    hardcode_direct_CXX=no
    hardcode_automatic_CXX=yes
    hardcode_shlibpath_var_CXX=unsupported
    if test "$lt_cv_ld_force_load" = "yes"; then
        whole_archive_flag_spec_CXX='`for conv in $convenience\`; do
test -n \"\$conv\" && new_convenience=\"\$new_convenience ${wl}-
force_load,\"$conv\"; done; func_echo_all \"\$new_convenience\` ``'
    else
        whole_archive_flag_spec_CXX=''
    fi
    link_all_deplibs_CXX=yes
    allow_undefined_flag_CXX=\"$lt_dar_allow_undefined\"
    case $cc_basename in
        ifort*) _lt_dar_can_shared=yes ;;
        *) _lt_dar_can_shared=$GCC ;;
    esac
    if test "$lt_dar_can_shared" = "yes"; then
        output_verbose_link_cmd=func_echo_all
        archive_cmds_CXX="\$CC -dynamiclib \$allow_undefined_flag -o \$lib
\$libobjs \$deplibs \$compiler_flags -install_name \$rpath/\$soname
\$verstring $lt_dar_single_mod${lt_dsymutil}"
        module_cmds_CXX="\$CC \$allow_undefined_flag -o \$lib -bundle
\$libobjs \$deplibs \$compiler_flags${lt_dsymutil}"
        archive_expsym_cmds_CXX="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -dynamiclib
\$allow_undefined_flag -o \$lib \$libobjs \$deplibs \$compiler_flags -
install_name \$rpath/\$soname \$verstring
\${lt_dar_single_mod}\${lt_dar_export_syms}\${lt_dsymutil}"
        module_expsym_cmds_CXX="sed -e 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC \$allow_undefined_flag
-o \$lib -bundle \$libobjs \$deplibs
\$compiler_flags\${lt_dar_export_syms}\${lt_dsymutil}"
        if test "$lt_cv_apple_cc_single_mod" != "yes"; then
            archive_cmds_CXX="\$CC -r -keep_private_externs -nostdlib -o
\${lib}-master.o \$libobjs~\$CC -dynamiclib \$allow_undefined_flag -o
\$lib \${lib}-master.o \$deplibs \$compiler_flags -install_name
\$rpath/\$soname \$verstring\${lt_dsymutil}"
            archive_expsym_cmds_CXX="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -r -
keep_private_externs -nostdlib -o \${lib}-master.o \$libobjs~\$CC -
dynamiclib \$allow_undefined_flag -o \$lib \${lib}-master.o \$deplibs
\$compiler_flags -install_name \$rpath/\$soname
\$verstring\${lt_dar_export_syms}\${lt_dsymutil}"
        fi
    fi

```

```

fi

else
ld_shlibs_CXX=no
fi

;;

dgux*)
case $cc_basename in
ec+*)
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
;;
ghcx*)
# Green Hills C++ Compiler
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
;;
*)
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
;;
esac
;;

freebsd2.*)
# C++ shared libraries reported to be fairly broken before
# switch to ELF
ld_shlibs_CXX=no
;;

freebsd-elf*)
archive_cmds_need_lc_CXX=no
;;

freebsd* | dragonfly*)
# FreeBSD 3 and later use GNU C++ and GNU ld with standard ELF
# conventions
ld_shlibs_CXX=yes
;;

gnu*)
;;

haiku*)
archive_cmds_CXX='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
link_all_deplibs_CXX=yes
;;

hpux9*)

```

```

hardcode_libdir_flag_spec_CXX='${wl}+b ${wl}$libdir'
hardcode_libdir_separator_CXX=:
export_dynamic_flag_spec_CXX='${wl}-E'
hardcode_direct_CXX=yes
hardcode_minus_L_CXX=yes # Not in the search PATH,
                          # but as the default
                          # location of the library.

case $cc_basename in
  CC*)
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
  aCC*)
    archive_cmds_CXX='$RM $output_objdir/$soname~$CC -b
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags~test
$output_objdir/$soname = $lib || mv $output_objdir/$soname $lib'
    # Commands to make compiler produce verbose output that
lists
    # what "hidden" libraries, object files and flags are used
when
    # linking a shared library.
    #
    # There doesn't appear to be a way to prevent this
compiler from
    # explicitly linking system object files so we need to
strip them
    # from the output so that they don't get included in the
library
    # dependencies.
    output_verbose_link_cmd='templist=`($CC -b $CFLAGS -v
conftest.$objext 2>&1) | $EGREP "\-L" `; list=""; for z in $templist;
do case $z in conftest.$objext) list="$list $z";; *.objext);; *)
list="$list $z";; esac; done; func_echo_all "$list"'
    ;;
  *)
    if test "$GXX" = yes; then
      archive_cmds_CXX='$RM $output_objdir/$soname~$CC -shared
-nostdlib $pic_flag ${wl}+b ${wl}$install_libdir -o
$output_objdir/$soname $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags~test $output_objdir/$soname = $lib ||
mv $output_objdir/$soname $lib'
    else
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
    fi
    ;;
  esac
;;
)

hpux10*|hpux11*)

```

```

if test $with_gnu_ld = no; then
hardcode_libdir_flag_spec_CXX='${wl}+b ${wl}$libdir'
hardcode_libdir_separator_CXX=:

    case $host_cpu in
        hppa*64*|ia64*)
            ;;
        *)
            export_dynamic_flag_spec_CXX='${wl}-E'
            ;;
    esac
fi
case $host_cpu in
    hppa*64*|ia64*)
        hardcode_direct_CXX=no
        hardcode_shlibpath_var_CXX=no
        ;;
    *)
        hardcode_direct_CXX=yes
        hardcode_direct_absolute_CXX=yes
        hardcode_minus_L_CXX=yes # Not in the search PATH,
                                # but as the default
                                # location of the library.
        ;;
esac

case $cc_basename in
    CC*)
        # FIXME: insert proper C++ library support
        ld_shlibs_CXX=no
        ;;
    aCC*)
        case $host_cpu in
            hppa*64*)
                archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname -o $lib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags'
                ;;
            ia64*)
                archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
                ;;
            *)
                archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
                ;;
        esac
        # Commands to make compiler produce verbose output that lists
        # what "hidden" libraries, object files and flags are used
when
        # linking a shared library.

```

```

#
# There doesn't appear to be a way to prevent this compiler
from
# explicitly linking system object files so we need to strip
them
# from the output so that they don't get included in the
library
# dependencies.
output_verbose_link_cmd='templist=`($CC -b $CFLAGS -v
conftest.$objext 2>&1) | $GREP "\-L" `; list=""; for z in $templist; do
case $z in conftest.$objext) list="$list $z";; *. $objext);; *)
list="$list $z";; esac; done; func_echo_all "$list"
;;
*)
if test "$GXX" = yes; then
if test $with_gnu_ld = no; then
case $host_cpu in
hppa*64*)
archive_cmds_CXX='$CC -shared -nostdlib -fPIC ${wl}+h
${wl}$soname -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
;;
ia64*)
archive_cmds_CXX='$CC -shared -nostdlib $pic_flag
${wl}+h ${wl}$soname ${wl}+nodefaulttrpath -o $lib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags'
;;
*)
archive_cmds_CXX='$CC -shared -nostdlib $pic_flag
${wl}+h ${wl}$soname ${wl}+b ${wl}$install_libdir -o $lib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags'
;;
esac
fi
else
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
fi
;;
esac
;;

interix[3-9]*)
hardcode_direct_CXX=no
hardcode_shlibpath_var_CXX=no
hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
export_dynamic_flag_spec_CXX='${wl}-E'
# Hack: On Interix 3.x, we cannot compile PIC because of a broken
gcc.
# Instead, shared libraries are loaded at an image base
(0x10000000 by

```

```

# default) and relocated if they conflict, which is a slow very
memory
# consuming and fragmenting process. To avoid this, we pick a
random,
# 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000 at
link
# time. Moving up from 0x10000000 also allows more sbrk(2)
space.
archive_cmds_CXX='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,`expr ${RANDOM-$$} %
4096 / 2 \* 262144 + 1342177280` -o $lib'
archive_expsym_cmds_CXX='sed "s,^,_" $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,`expr ${RANDOM-
$$} % 4096 / 2 \* 262144 + 1342177280` -o $lib'
;;
irix5* | irix6*)
case $cc_basename in
CC*)
# SGI C++
archive_cmds_CXX='$CC -shared -all -multigot $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -soname $soname
`test -n "$verstring" && func_echo_all "--set_version $verstring"` -
update_registry ${output_objdir}/so_locations -o $lib'

# Archives containing C++ object files must be created using
# "CC -ar", where "CC" is the IRIX C++ compiler. This is
# necessary to make sure instantiated templates are included
# in the archive.
old_archive_cmds_CXX='$CC -ar -WR,-u -o $oldlib $oldobjs'
;;
*)
if test "$GXX" = yes; then
if test "$with_gnu_ld" = no; then
archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname `test -n "$verstring" && func_echo_all
"${wl}-set_version ${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
else
archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname `test -n "$verstring" && func_echo_all
"${wl}-set_version ${wl}$verstring"` -o $lib'
fi
fi
link_all_deplibs_CXX=yes
;;
esac
hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
hardcode_libdir_separator_CXX=:

```

```

inherit_rpath_CXX=yes
;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
case $cc_basename in
  KCC*)
    # Kuck and Associates, Inc. (KAI) C++ Compiler

    # KCC will only create a shared library if the output file
    # ends with ".so" (or ".sl" for HP-UX), so rename the library
    # to its proper name (with version) after linking.
    archive_cmds_CXX='tempext=`echo $shared_ext | $SED -e
\'\'\'s/\([^\()0-9A-Za-z{\}]\)/\\\\\\\\1/g\'\'\''; templib=`echo $lib | $SED -e
"s/\${tempext}\.*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib}; mv
\${templib} $lib'

    archive_expsym_cmds_CXX='tempext=`echo $shared_ext | $SED -e
\'\'\'s/\([^\()0-9A-Za-z{\}]\)/\\\\\\\\1/g\'\'\''; templib=`echo $lib | $SED -e
"s/\${tempext}\.*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib} ${wl}-
retain-symbols-file,$export_symbols; mv \${templib} $lib'
    # Commands to make compiler produce verbose output that lists
    # what "hidden" libraries, object files and flags are used
when
    # linking a shared library.
    #
    # There doesn't appear to be a way to prevent this compiler
from
    # explicitly linking system object files so we need to strip
them
    # from the output so that they don't get included in the
library
    # dependencies.
    output_verbose_link_cmd='templist=`$CC $CFLAGS -v
conftest.$objext -o libconftest$shared_ext 2>&1 | $GREP "ld" `; rm -f
libconftest$shared_ext; list=""; for z in $templist; do case $z in
conftest.$objext) list="$list $z";; *.objext);; *) list="$list
$z";; esac; done; func_echo_all "$list"'

    hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
    export_dynamic_flag_spec_CXX='${wl}--export-dynamic'

    # Archives containing C++ object files must be created using
    # "CC -Bstatic", where "CC" is the KAI C++ compiler.
    old_archive_cmds_CXX='$CC -Bstatic -o $oldlib $oldobjs'
;;
icpc* | ecpc* )
    # Intel C++
    with_gnu_ld=yes
    # version 8.0 and above of icpc choke on multiply defined
symbols

```

```

and
    # if we add $predep_objects and $postdep_objects, however 7.1
    # earlier do not add the objects themselves.
    case ` $CC -V 2>&1 ` in
        *"Version 7."*)
            archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib'
            archive_expsym_cmds_CXX='$CC -shared $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags ${wl}-soname
$wl$soname ${wl}-retain-symbols-file $wl$export_symbols -o $lib'
            ;;
        *) # Version 8.0 or newer
            tmp_idyn=
            case $host_cpu in
                ia64*) tmp_idyn=' -i_dynamic';;
            esac
            archive_cmds_CXX='$CC -shared"$tmp_idyn"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds_CXX='$CC -shared"$tmp_idyn"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-
file $wl$export_symbols -o $lib'
            ;;
        esac
            archive_cmds_need_lc_CXX=no
            hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
            export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
            whole_archive_flag_spec_CXX='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
            ;;
        pgCC* | pgcpp*)
            # Portland Group C++ compiler
            case ` $CC -V ` in
                *pgCC\ [1-5].* | *pgcpp\ [1-5].*)
                    prelink_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir $objs
$libobjs $compile_deplibs~
compile_command="$compile_command `find $tpldir -name \*.o
| sort | $NL2SP`"'
                    old_archive_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir
$oldobjs$old_deplibs~
$AR $AR_FLAGS $oldlib$oldobjs$old_deplibs `find $tpldir -
name \*.o | sort | $NL2SP`~
$RANLIB $oldlib'
                    archive_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir
$predep_objects $libobjs $deplibs $convenience $postdep_objects~

```



```

        $CC -shared $pic_flag $predep_objects $libobjs $deplibs
`find $tpldir -name \*.o | sort | $NL2SP` $postdep_objects
$compiler_flags ${wl}-soname ${wl}$soname -o $lib'
        archive_expsym_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir
$predep_objects $libobjs $deplibs $convenience $postdep_objects~
$CC -shared $pic_flag $predep_objects $libobjs $deplibs
`find $tpldir -name \*.o | sort | $NL2SP` $postdep_objects
$compiler_flags ${wl}-soname ${wl}$soname ${wl}-retain-symbols-file
${wl}$export_symbols -o $lib'
        ;;
*) # Version 6 and above use weak symbols
        archive_cmds_CXX='$CC -shared $pic_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags ${wl}-soname
${wl}$soname -o $lib'
        archive_expsym_cmds_CXX='$CC -shared $pic_flag
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname ${wl}-retain-symbols-file
${wl}$export_symbols -o $lib'
        ;;
esac

        hardcode_libdir_flag_spec_CXX='${wl}--rpath ${wl}$libdir'
        export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
        whole_archive_flag_spec_CXX='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\" $new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` $wl}--no-whole-archive'
        ;;
cxx*)
        # Compaq C++
        archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib'
        archive_expsym_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib ${wl}-retain-symbols-file $wl$export_symbols'

        runpath_var=LD_RUN_PATH
        hardcode_libdir_flag_spec_CXX='--rpath $libdir'
        hardcode_libdir_separator_CXX=:

        # Commands to make compiler produce verbose output that lists
        # what "hidden" libraries, object files and flags are used
when
        # linking a shared library.
        #
        # There doesn't appear to be a way to prevent this compiler
from
        # explicitly linking system object files so we need to strip
them

```

```

        # from the output so that they don't get included in the
library
        # dependencies.
        output_verbose_link_cmd='templist=`$CC -shared $CFLAGS -v
confstest.$objext 2>&1 | $GREP "ld"`; templist=`func_echo_all
"$templist" | $SED "s/\(^.*ld.*\)\( .*ld .*$\)/\1/"`; list=""; for z
in $templist; do case $z in confstest.$objext) list="$list $z";;
*.$objext);; *) list="$list $z";;esac; done; func_echo_all "X$list" |
$Xsed'

;;
xl* | mpixl* | bgxl*)
# IBM XL 8.0 on PPC, with GNU ld
hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
archive_cmds_CXX='$CC -qmksrobj $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
if test "x$supports_anon_versioning" = xyes; then
    archive_expsym_cmds_CXX='echo "{ global:" >
$output_objdir/$libname.ver~
cat $export_symbols | sed -e "s/\(.*\)/\1;/" >>
$output_objdir/$libname.ver~
echo "local: *; };" >> $output_objdir/$libname.ver~
$CC -qmksrobj $libobjs $deplibs $compiler_flags ${wl}-
soname $wl$soname ${wl}-version-script
${wl}$output_objdir/$libname.ver -o $lib'
fi
;;
*)
case ` $CC -V 2>&1 | sed 5q ` in
*Sun\ C*)
    # Sun C++ 5.9
    no_undefined_flag_CXX=' -zdefs'
    archive_cmds_CXX='$CC -G${allow_undefined_flag} -h$soname -
o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags'
    archive_expsym_cmds_CXX='$CC -G${allow_undefined_flag} -
h$soname -o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags ${wl}-retain-symbols-file ${wl}$export_symbols'
    hardcode_libdir_flag_spec_CXX='-R$libdir'
    whole_archive_flag_spec_CXX='${wl}--whole-
archive`new_convenience=; for conv in $convenience\`; do test -z
\"$conv\" || new_convenience=\"$new_convenience,$conv\"; done;
func_echo_all \"$new_convenience\"` ${wl}--no-whole-archive'
    compiler_needs_object_CXX=yes

# Not sure whether something based on
# $CC $CFLAGS -v confstest.$objext -o libconfstest$shared_ext
2>&1

# would be better.
output_verbose_link_cmd='func_echo_all'

```

```

using          # Archives containing C++ object files must be created

                # "CC -xar", where "CC" is the Sun C++ compiler.  This is
included       # necessary to make sure instantiated templates are

                # in the archive.
                old_archive_cmds_CXX='$CC -xar -o $oldlib $oldobjs'
                ;;
            esac
            ;;
        esac
        ;;

        lynxos*)
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
            ;;

        m88k*)
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
            ;;

        mvs*)
            case $cc_basename in
                cxx*)
                    # FIXME: insert proper C++ library support
                    ld_shlibs_CXX=no
                    ;;
                *)
                    # FIXME: insert proper C++ library support
                    ld_shlibs_CXX=no
                    ;;
            esac
            ;;

        netbsd*)
            if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
                archive_cmds_CXX='$LD -Bshareable -o $lib $predep_objects
$libobjs $deplibs $postdep_objects $linker_flags'
                wlarc=
                hardcode_libdir_flag_spec_CXX='-R$libdir'
                hardcode_direct_CXX=yes
                hardcode_shlibpath_var_CXX=no
            fi
            # Workaround some broken pre-1.5 toolchains
            output_verbose_link_cmd='$CC -shared $CFLAGS -v conftest.$objext
2>&1 | $GREP conftest.$objext | $SED -e "s:-lgcc -lc -lgcc::"'
            ;;

        *nto* | *qnx*)
            ld_shlibs_CXX=yes

```

```

;;

openbsd2*)
    # C++ shared libraries are fairly broken
    ld_shlibs_CXX=no
;;

openbsd*)
if test -f /usr/libexec/ld.so; then
    hardcode_direct_CXX=yes
    hardcode_shlibpath_var_CXX=no
    hardcode_direct_absolute_CXX=yes
    archive_cmds_CXX='$CC -shared $pic_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o $lib'
    hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
    if test -z "`echo __ELF__ | $CC -E - | grep __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        archive_expsym_cmds_CXX='$CC -shared $pic_flag
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-retain-symbols-file,$export_symbols -o $lib'
        export_dynamic_flag_spec_CXX='${wl}-E'
        whole_archive_flag_spec_CXX="$wlarc" '--whole-
archive$convenience "'$wlarc"' --no-whole-archive'
    fi
    output_verbose_link_cmd=func_echo_all
else
    ld_shlibs_CXX=no
fi
;;

osf3* | osf4* | osf5*)
    case $cc_basename in
        KCC*)
            # Kuck and Associates, Inc. (KAI) C++ Compiler

            # KCC will only create a shared library if the output file
            # ends with ".so" (or ".sl" for HP-UX), so rename the library
            # to its proper name (with version) after linking.
            archive_cmds_CXX='tempext=`echo $shared_ext | $SED -e
'\''s/\([^\()0-9A-Za-z{\}]\)/\\\\\\1/g'\''`; templib=`echo "$lib" | $SED
-e "s/\${tempext}\.*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib}; mv
\${templib} $lib'

            hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
            hardcode_libdir_separator_CXX=:

            # Archives containing C++ object files must be created using
            # the KAI C++ compiler.
            case $host in
                osf3*) old_archive_cmds_CXX='$CC -Bstatic -o $oldlib
$oldobjs' ;;

```

```

        *) old_archive_cmds_CXX='$CC -o $oldlib $oldobjs' ;;
    esac
    ;;
    RCC*)
    # Rational C++ 2.4.1
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
    cxx*)
    case $host in
        osf3*)
            allow_undefined_flag_CXX=' ${wl}-expect_unresolved
${wl}\*'
            archive_cmds_CXX='$CC -shared${allow_undefined_flag}
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $soname `test -n "$verstring" && func_echo_all "${wl}-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
            hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
            ;;
        *)
            allow_undefined_flag_CXX=' -expect_unresolved \*'
            archive_cmds_CXX='$CC -shared${allow_undefined_flag}
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags -
msym -soname $soname `test -n "$verstring" && func_echo_all "-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
            archive_expsym_cmds_CXX='for i in `cat $export_symbols`;
do printf "%s %s\n" -exported_symbol "\$i" >> $lib.exp; done~
            echo "-hidden">> $lib.exp~
            $CC -shared$allow_undefined_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -msym -soname
$soname ${wl}-input ${wl}$lib.exp `test -n "$verstring" && $ECHO "-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib~
            $RM $lib.exp'
            hardcode_libdir_flag_spec_CXX='-rpath $libdir'
            ;;
    esac

    hardcode_libdir_separator_CXX=:

    # Commands to make compiler produce verbose output that lists
    # what "hidden" libraries, object files and flags are used
when
    # linking a shared library.
    #
    # There doesn't appear to be a way to prevent this compiler
from
    # explicitly linking system object files so we need to strip
them

```

```

        # from the output so that they don't get included in the
library
        # dependencies.
        output_verbose_link_cmd='templist=`$CC -shared $CFLAGS -v
confptest.$objext 2>&1 | $GREP "ld" | $GREP -v "ld:"`;
templist=`func_echo_all "$templist" | $SED "s/\(^.*ld.*\)\(
.*ld.*$\)/\1/"`; list=""; for z in $templist; do case $z in
confptest.$objext) list="$list $z";; *.$objext);; *) list="$list
$z";;esac; done; func_echo_all "$list"
        ;;
*)
    if test "$GXX" = yes && test "$with_gnu_ld" = no; then
        allow_undefined_flag_CXX=' ${wl}-expect_unresolved ${wl}\*'
        case $host in
            osf3*)
                archive_cmds_CXX='$CC -shared -nostdlib
${allow_undefined_flag} $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$verstring" && func_echo_all "${wl}-set_version ${wl}$verstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
                ;;
            *)
                archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
${allow_undefined_flag} $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$verstring" && func_echo_all "${wl}-set_version
${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
                ;;
        esac

        hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
        hardcode_libdir_separator_CXX=:

        # Commands to make compiler produce verbose output that
lists
        # what "hidden" libraries, object files and flags are used
when
        # linking a shared library.
        output_verbose_link_cmd='$CC -shared $CFLAGS -v
confptest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'

    else
        # FIXME: insert proper C++ library support
        ld_shlibs_CXX=no
    fi
    ;;
esac
;;

psos*)
    # FIXME: insert proper C++ library support

```

```

ld_shlibs_CXX=no
;;

sunos4*)
case $cc_basename in
  CC*)
    # Sun C++ 4.x
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
  lcc*)
    # Lucid
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
  *)
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
esac
;;

solaris*)
case $cc_basename in
  CC* | sunCC*)
    # Sun C++ 4.2, 5.x and Centerline C++
    archive_cmds_need_lc_CXX=yes
    no_undefined_flag_CXX='-zdefs'
    archive_cmds_CXX='$CC -G${allow_undefined_flag} -h$soname -o
$lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags'
    archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -G${allow_undefined_flag} ${wl}-M ${wl}$lib.exp -
h$soname -o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags~$RM $lib.exp'

    hardcode_libdir_flag_spec_CXX='-R$libdir'
    hardcode_shlibpath_var_CXX=no
    case $host_os in
      solaris2.[0-5] | solaris2.[0-5].*) ;;
      *)
        # The compiler driver will combine and reorder linker
options,
        # but understands '-z linker_flag'.
        # Supported since Solaris 2.6 (maybe 2.5.1?)
        whole_archive_flag_spec_CXX='-z alleextract$convenience -z
defaultextract'
        ;;
    esac
    link_all_deplibs_CXX=yes

```

```

output_verbose_link_cmd='func_echo_all'

# Archives containing C++ object files must be created using
# "CC -xar", where "CC" is the Sun C++ compiler. This is
# necessary to make sure instantiated templates are included
# in the archive.
old_archive_cmds_CXX='$CC -xar -o $oldlib $oldobjs'
;;
gcx*)
# Green Hills C++ Compiler
archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$dreplibs $postdep_objects $compiler_flags ${wl}-h $wl$soname -o $lib'

# The C++ compiler must be used to create the archive.
old_archive_cmds_CXX='$CC $LDFLAGS -archive -o $oldlib
$doldobjs'
;;
*)
# GNU C++ compiler with Solaris linker
if test "$GXX" = yes && test "$with_gnu_ld" = no; then
no_undefined_flag_CXX=' ${wl}-z ${wl}defs'
if $CC --version | $GREP -v '^2\.7' > /dev/null; then
archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$LDFLAGS $predep_objects $libobjs $dreplibs $postdep_objects
$compiler_flags ${wl}-h $wl$soname -o $lib'
archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -shared $pic_flag -nostdlib ${wl}-M $wl$lib.exp -o
$lib $predep_objects $libobjs $dreplibs $postdep_objects
$compiler_flags~$RM $lib.exp'

# Commands to make compiler produce verbose output that
lists
# what "hidden" libraries, object files and flags are
used when
# linking a shared library.
output_verbose_link_cmd='$CC -shared $CFLAGS -v
conftest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'
else
# g++ 2.7 appears to require '-G' NOT '-shared' on this
# platform.
archive_cmds_CXX='$CC -G -nostdlib $LDFLAGS
$predep_objects $libobjs $dreplibs $postdep_objects $compiler_flags
${wl}-h $wl$soname -o $lib'
archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -G -nostdlib ${wl}-M $wl$lib.exp -o $lib
$predep_objects $libobjs $dreplibs $postdep_objects $compiler_flags~$RM
$lib.exp'

```



```

        # Commands to make compiler produce verbose output that
lists      # what "hidden" libraries, object files and flags are
used when  # linking a shared library.
           output_verbose_link_cmd='$CC -G $CFLAGS -v
conftest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"
           fi

           hardcode_libdir_flag_spec_CXX='${wl}-R $wl$libdir'
           case $host_os in
solaris2.[0-5] | solaris2.[0-5].*) ;;
*)
           whole_archive_flag_spec_CXX='${wl}-z
${wl}allextract$convenience ${wl}-z ${wl}defaultextract'
           ;;
           esac
           fi
           ;;
           esac
           ;;

sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
no_undefined_flag_CXX='${wl}-z,text'
archive_cmds_need_lc_CXX=no
hardcode_shlibpath_var_CXX=no
runpath_var='LD_RUN_PATH'

case $cc_basename in
CC*)
archive_cmds_CXX='$CC -G ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
archive_expsym_cmds_CXX='$CC -G ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
           ;;
*)
archive_cmds_CXX='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
archive_expsym_cmds_CXX='$CC -shared ${wl}-
Bexport:$export_symbols ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
           ;;
           esac
           ;;

sysv5* | sco3.2v5* | sco5v6*)
# Note: We can NOT use -z defs as we might desire, because we do
not
# link with -lc, and that would cause any symbols used from libc
to

```

```

# always be unresolved, which means just about no library would
# ever link correctly.  If we're not using GNU ld we use -z text
# though, which does catch some bad symbols but isn't as heavy-
handed
# as -z defs.
no_undefined_flag_CXX='${wl}-z,text'
allow_undefined_flag_CXX='${wl}-z,nodefs'
archive_cmds_need_lc_CXX=no
hardcode_shlibpath_var_CXX=no
hardcode_libdir_flag_spec_CXX='${wl}-R,$libdir'
hardcode_libdir_separator_CXX=':'
link_all_deplibs_CXX=yes
export_dynamic_flag_spec_CXX='${wl}-Bexport'
runpath_var='LD_RUN_PATH'

case $cc_basename in
  CC*)
    archive_cmds_CXX='$CC -G ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
    archive_expsym_cmds_CXX='$CC -G ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    old_archive_cmds_CXX='$CC -Tprelink_objects $oldobjs~
'"$old_archive_cmds_CXX"
    reload_cmds_CXX='$CC -Tprelink_objects $reload_objs~
'"$reload_cmds_CXX"
    ;;
  *)
    archive_cmds_CXX='$CC -shared ${wl}-h,$soname -o $lib
$libobjs $deplibs $compiler_flags'
    archive_expsym_cmds_CXX='$CC -shared ${wl}-
Bexport:$export_symbols ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
    ;;
esac
;;

tandem*)
  case $cc_basename in
    NCC*)
      # NonStop-UX NCC 3.20
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
    *)
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
  esac
;;

vxworks*)
  # FIXME: insert proper C++ library support

```

```

        ld_shlibs_CXX=no
        ;;

    *)
        # FIXME: insert proper C++ library support
        ld_shlibs_CXX=no
        ;;
esac

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs_CXX"
>&5
$as_echo "$ld_shlibs_CXX" >&6; }
    test "$ld_shlibs_CXX" = no && can_build_shared=no

    GCC_CXX="$GXX"
    LD_CXX="$LD"

    ## CAVEAT EMPTOR:
    ## There is no encapsulation within the following macros, do not
change
    ## the running order or otherwise move them around unless you know
exactly
    ## what you are doing...
    # Dependencies to place before and after the object being linked:
predep_objects_CXX=
postdep_objects_CXX=
predeps_CXX=
postdeps_CXX=
compiler_lib_search_path_CXX=

cat > conftest.$ac_ext <<_LT_EOF
class Foo
{
public:
    Foo (void) { a = 0; }
private:
    int a;
};
_LT_EOF

_lt_libdeps_save_CFLAGS=$CFLAGS
case "$CC $CFLAGS" in
*\ -flto*\ *) CFLAGS="$CFLAGS -fno-lto" ;;
*\ -fwhopr*\ *) CFLAGS="$CFLAGS -fno-whopr" ;;
*\ -fuse-linker-plugin*\ *) CFLAGS="$CFLAGS -fno-use-linker-plugin" ;;
esac

if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"\$ac_compile\"";
} >&5
    (eval $ac_compile) 2>&5
    ac_status=$?

```

```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then
# Parse the compiler output and extract the necessary
# objects, libraries and library flags.

# Sentinel used to keep track of whether or not we are before
# the conftest object file.
pre_test_object_deps_done=no

for p in `eval "$output_verbose_link_cmd"`; do
  case ${prev}${p} in

    -L* | -R* | -l*)
      # Some compilers place space between "-{L,R}" and the path.
      # Remove the space.
      if test $p = "-L" ||
         test $p = "-R"; then
        prev=$p
        continue
      fi

      # Expand the sysroot to ease extracting the directories later.
      if test -z "$prev"; then
        case $p in
          -L*) func_stripname_cnf '-L' '' "$p"; prev=-L;
p=$func_stripname_result ;;
          -R*) func_stripname_cnf '-R' '' "$p"; prev=-R;
p=$func_stripname_result ;;
          -l*) func_stripname_cnf '-l' '' "$p"; prev=-l;
p=$func_stripname_result ;;
        esac
      fi
      case $p in
        =*) func_stripname_cnf '=' '' "$p";
p=$lt_sysroot$func_stripname_result ;;
      esac
      if test "$pre_test_object_deps_done" = no; then
        case ${prev} in
          -L | -R)
            # Internal compiler library paths should come after those
            # provided the user. The postdeps already come after the
            # user supplied libs so there is no need to process them.
            if test -z "$compiler_lib_search_path_CXX"; then
              compiler_lib_search_path_CXX="${prev}${p}"
            else
              compiler_lib_search_path_CXX="$func_stripname_cnf "${prev} "${p}"
            fi
          ;;
        esac
      fi
      ;;
    # The "-l" case would never come before the object being
    # linked, so don't bother handling this case.
  esac
done

```

```

    esac
    else
    if test -z "$postdeps_CXX"; then
        postdeps_CXX="${prev}${p}"
    else
        postdeps_CXX="${postdeps_CXX} ${prev}${p}"
    fi
    fi
    prev=
    ;;

*.lto.$objext) ;; # Ignore GCC LTO objects
*.$objext)
    # This assumes that the test object file only shows up
    # once in the compiler output.
    if test "$p" = "confest.$objext"; then
    pre_test_object_deps_done=yes
    continue
    fi

    if test "$pre_test_object_deps_done" = no; then
    if test -z "$predep_objects_CXX"; then
        predep_objects_CXX="$p"
    else
        predep_objects_CXX="$predep_objects_CXX $p"
    fi
    else
    if test -z "$postdep_objects_CXX"; then
        postdep_objects_CXX="$p"
    else
        postdep_objects_CXX="$postdep_objects_CXX $p"
    fi
    fi
    ;;

*) ;; # Ignore the rest.

    esac
done

# Clean up.
rm -f a.out a.exe
else
echo "libtool.m4: error: problem compiling CXX test program"
fi

$RM -f confest.$objext
CFLAGS=$_lt_libdeps_save_CFLAGS

# PORTME: override above test on systems where it is broken
case $host_os in
interix[3-9]*)

```

```

# Interix 3.5 installs completely hosed .la files for C++, so rather
than
# hack all around it, let's just trust "g++" to DTRT.
predep_objects_CXX=
postdep_objects_CXX=
postdeps_CXX=
;;

linux*)
case ` $CC -V 2>&1 | sed 5q ` in
*Sun\ C*)
# Sun C++ 5.9

# The more standards-conforming stlport4 library is
# incompatible with the Cstd library. Avoid specifying
# it if it's in CXXFLAGS. Ignore libCrun as
# -library=stlport4 depends on it.
case " $CXX $CXXFLAGS " in
*" -library=stlport4 ")
solaris_use_stlport4=yes
;;
esac

if test "$solaris_use_stlport4" != yes; then
postdeps_CXX='-library=Cstd -library=Crun'
fi
;;
esac
;;

solaris*)
case $cc_basename in
CC* | sunCC*)
# The more standards-conforming stlport4 library is
# incompatible with the Cstd library. Avoid specifying
# it if it's in CXXFLAGS. Ignore libCrun as
# -library=stlport4 depends on it.
case " $CXX $CXXFLAGS " in
*" -library=stlport4 ")
solaris_use_stlport4=yes
;;
esac

# Adding this requires a known-good setup of shared libraries for
# Sun compiler versions before 5.6, else PIC objects from an old
# archive will be linked into the output, leading to subtle bugs.
if test "$solaris_use_stlport4" != yes; then
postdeps_CXX='-library=Cstd -library=Crun'
fi
;;
esac
;;

```

```
esac
```

```
case " $postdeps_CXX " in
*" -lc "*) archive_cmds_need_lc_CXX=no ;;
esac
  compiler_lib_search_dirs_CXX=
if test -n "${compiler_lib_search_path_CXX}"; then
  compiler_lib_search_dirs_CXX=`echo " ${compiler_lib_search_path_CXX}"
| ${SED} -e 's! -L! !g' -e 's!^ !!'`
fi
```

```
  lt_prog_compiler_wl_CXX=
lt_prog_compiler_pic_CXX=
lt_prog_compiler_static_CXX=
```

```
# C++ specific cases for pic, static, wl, etc.
if test "$GXX" = yes; then
  lt_prog_compiler_wl_CXX='-Wl,'
  lt_prog_compiler_static_CXX='-static'
```

```

case $host_os in
aix*)
    # All AIX code is PIC.
    if test "$host_cpu" = ia64; then
    # AIX 5 now supports IA64 processor
    lt_prog_compiler_static_CXX='-Bstatic'
    fi
    ;;

amigaos*)
    case $host_cpu in
    powerpc)
        # see comment about AmigaOS4 .so support
        lt_prog_compiler_pic_CXX='-fPIC'
        ;;
    m68k)
        # FIXME: we need at least 68020 code to build shared
libraries, but
        # adding the '-m68020' flag to GCC prevents building
anything better,
        # like '-m68040'.
        lt_prog_compiler_pic_CXX='-m68020 -resident32 -malways-
restore-a4'
        ;;
    esac
    ;;

beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)
    # PIC is the default for these OSes.
    ;;

mingw* | cygwin* | os2* | pw32* | cegcc*)
    # This hack is so that the source file can tell whether it is
being
    # built for inclusion in a dll (and should export symbols for
example).
    # Although the cygwin gcc ignores -fPIC, still need this for
old-style
    # (--disable-auto-import) libraries
    lt_prog_compiler_pic_CXX='-DDLL_EXPORT'
    ;;

darwin* | rhapsody*)
    # PIC is the default on this platform
    # Common symbols not allowed in MH_DYLIB files
    lt_prog_compiler_pic_CXX='-fno-common'
    ;;

*djgpp*)
    # DJGPP does not support shared libraries at all
    lt_prog_compiler_pic_CXX=
    ;;

haiku*)
    # PIC is the default for Haiku.
    # The "-static" flag exists, but is broken.

```



```

    lt_prog_compiler_static_CXX=
    ;;
interix[3-9]*)
    # Interix 3.x gcc -fpic/-fPIC options generate broken code.
    # Instead, we relocate shared libraries at runtime.
    ;;
sysv4*MP*)
    if test -d /usr/nec; then
    lt_prog_compiler_pic_CXX=-Kconform_pic
    fi
    ;;
hpux*)
    # PIC is the default for 64-bit PA HP-UX, but not for 32-bit
    # PA HP-UX. On IA64 HP-UX, PIC is the default but the pic flag
    # sets the default TLS model and affects inlining.
    case $host_cpu in
    hppa*64*)
    ;;
    *)
    lt_prog_compiler_pic_CXX='-fPIC'
    ;;
    esac
    ;;
*qnx* | *nto*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic_CXX='-fPIC -shared'
    ;;
*)
    lt_prog_compiler_pic_CXX='-fPIC'
    ;;
    esac
else
    case $host_os in
    aix[4-9]*)
    # All AIX code is PIC.
    if test "$host_cpu" = ia64; then
    # AIX 5 now supports IA64 processor
    lt_prog_compiler_static_CXX='-Bstatic'
    else
    lt_prog_compiler_static_CXX='-bnso -bI:/lib/syscalls.exp'
    fi
    ;;
    chorus*)
    case $cc_basename in
    cxch68*)
    # Green Hills C++ Compiler
    # _LT_TAGVAR(lt_prog_compiler_static, CXX)="--
no_auto_instantiation -u __main -u __premain -u __abort -r
$COOL_DIR/lib/libOrb.a $MVME_DIR/lib/CC/libC.a
$MVME_DIR/lib/classix/libcx.s.a"

```

```

        ;;
    esac
    ;;
    mingw* | cygwin* | os2* | pw32* | cegcc*)
# This hack is so that the source file can tell whether it is
being
# built for inclusion in a dll (and should export symbols for
example).
lt_prog_compiler_pic_CXX='-DDLL_EXPORT'
    ;;
    dgux*)
case $cc_basename in
    ec++*)
        lt_prog_compiler_pic_CXX='-KPIC'
            ;;
    ghcx*)
        # Green Hills C++ Compiler
        lt_prog_compiler_pic_CXX='-pic'
            ;;
    *)
        ;;
esac
    ;;
    freebsd* | dragonfly*)
# FreeBSD uses GNU C++
    ;;
    hpux9* | hpux10* | hpux11*)
case $cc_basename in
    CC*)
        lt_prog_compiler_wl_CXX='-Wl,'
        lt_prog_compiler_static_CXX='${wl}-a ${wl}archive'
        if test "$host_cpu" != ia64; then
            lt_prog_compiler_pic_CXX='+Z'
        fi
            ;;
    aCC*)
        lt_prog_compiler_wl_CXX='-Wl,'
        lt_prog_compiler_static_CXX='${wl}-a ${wl}archive'
        case $host_cpu in
            hppa*64*|ia64*)
                # +Z the default
                ;;
            *)
                lt_prog_compiler_pic_CXX='+Z'
                ;;
        esac
            ;;
    *)
        ;;
esac
    ;;
interix*)

```

```

# This is c89, which is MS Visual C++ (no shared libs)
# Anyone wants to do a port?
;;
irix5* | irix6* | nonstopux*)
case $cc_basename in
  CC*)
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_static_CXX='-non_shared'
    # CC pic flag -KPIC is the default.
    ;;
  *)
    ;;
esac
;;
linux* | k*bsd*-gnu | kopensolaris*-gnu)
case $cc_basename in
  KCC*)
    # KAI C++ Compiler
    lt_prog_compiler_wl_CXX='--backend -Wl,'
    lt_prog_compiler_pic_CXX='-fPIC'
    ;;
  ecpc* )
    # old Intel C++ for x86_64 which still supported -KPIC.
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_pic_CXX='-KPIC'
    lt_prog_compiler_static_CXX='-static'
    ;;
  icpc* )
    # Intel C++, used to be incompatible with GCC.
    # ICC 10 doesn't accept -KPIC any more.
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_pic_CXX='-fPIC'
    lt_prog_compiler_static_CXX='-static'
    ;;
  pgCC* | pgc++*)
    # Portland Group C++ compiler
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_pic_CXX='-fpic'
    lt_prog_compiler_static_CXX='-Bstatic'
    ;;
  cxx*)
    # Compaq C++
    # Make sure the PIC flag is empty. It appears that all Alpha
    # Linux and Compaq Tru64 Unix objects are PIC.
    lt_prog_compiler_pic_CXX=
    lt_prog_compiler_static_CXX='-non_shared'
    ;;
  xlc* | xlC* | bgxl[cC]* | mpixl[cC]*)
    # IBM XL 8.0, 9.0 on PPC and BlueGene
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_pic_CXX='-qpik'
    lt_prog_compiler_static_CXX='-qstaticlink'

```

```

    ;;
*)
  case `\$CC -V 2>&1 | sed 5q` in
  *Sun\ C*)
    # Sun C++ 5.9
    lt_prog_compiler_pic_CXX='-KPIC'
    lt_prog_compiler_static_CXX='-Bstatic'
    lt_prog_compiler_wl_CXX='-Qoption ld '
    ;;
  esac
  ;;
esac
;;
lynxos*)
;;
m88k*)
;;
mvs*)
case \$cc_basename in
  cxx*)
    lt_prog_compiler_pic_CXX='-W c,exportall'
    ;;
*)
  ;;
esac
;;
netbsd*)
;;
*qnx* | *nto*)
  # QNX uses GNU C++, but need to define -shared option too,
otherwise
  # it will coredump.
  lt_prog_compiler_pic_CXX='-fPIC -shared'
  ;;
osf3* | osf4* | osf5*)
case \$cc_basename in
  KCC*)
    lt_prog_compiler_wl_CXX='--backend -Wl,'
    ;;
  RCC*)
    # Rational C++ 2.4.1
    lt_prog_compiler_pic_CXX='-pic'
    ;;
  cxx*)
    # Digital/Compaq C++
    lt_prog_compiler_wl_CXX='-Wl,'
    # Make sure the PIC flag is empty.  It appears that all Alpha
    # Linux and Compaq Tru64 Unix objects are PIC.
    lt_prog_compiler_pic_CXX=
    lt_prog_compiler_static_CXX='-non_shared'
    ;;
*)

```

```

        ;;
    esac
    ;;
    psos*)
    ;;
    solaris*)
    case $cc_basename in
        CC* | sunCC*)
            # Sun C++ 4.2, 5.x and Centerline C++
            lt_prog_compiler_pic_CXX='-KPIC'
            lt_prog_compiler_static_CXX='-Bstatic'
            lt_prog_compiler_wl_CXX='-Qoption ld '
            ;;
        gcx*)
            # Green Hills C++ Compiler
            lt_prog_compiler_pic_CXX='-PIC'
            ;;
        *)
            ;;
    esac
    ;;
    sunos4*)
    case $cc_basename in
        CC*)
            # Sun C++ 4.x
            lt_prog_compiler_pic_CXX='-pic'
            lt_prog_compiler_static_CXX='-Bstatic'
            ;;
        lcc*)
            # Lucid
            lt_prog_compiler_pic_CXX='-pic'
            ;;
        *)
            ;;
    esac
    ;;
    sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
    case $cc_basename in
        CC*)
            lt_prog_compiler_wl_CXX='-Wl,'
            lt_prog_compiler_pic_CXX='-KPIC'
            lt_prog_compiler_static_CXX='-Bstatic'
            ;;
    esac
    ;;
    tandem*)
    case $cc_basename in
        NCC*)
            # NonStop-UX NCC 3.20
            lt_prog_compiler_pic_CXX='-KPIC'
            ;;
        *)

```

```

        ;;
    esac
    ;;
    vxworks*)
    ;;
    *)
    lt_prog_compiler_can_build_shared_CXX=no
    ;;
esac
fi

case $host_os in
# For platforms which do not support PIC, -DPIC is meaningless:
*djgpp*)
    lt_prog_compiler_pic_CXX=
    ;;
*)
    lt_prog_compiler_pic_CXX="$lt_prog_compiler_pic_CXX@&t@ -DPIC"
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_CXX=$lt_prog_compiler_pic_CXX
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_CXX" >&5
$as_echo "$lt_cv_prog_compiler_pic_CXX" >&6; }
lt_prog_compiler_pic_CXX=$lt_cv_prog_compiler_pic_CXX

#
# Check to make sure the PIC flag actually works.
#
if test -n "$lt_prog_compiler_pic_CXX"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic_CXX works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic_CXX
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_works_CXX=no
    ac_outfile=conftest.$ac_objext
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext
    lt_compiler_flag="$lt_prog_compiler_pic_CXX@&t@ -DPIC"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "conftest.", or (3) at the end.

```

```

# Note that $ac_compile itself does not contain backslashes and
begins
# with a dollar sign (not a hyphen), so the echo should work
correctly.
# The option is referenced via a variable to avoid confusing sed.
lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's$: $lt_compiler_flag:'`
(eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
(eval "$lt_compile" 2>confptest.err)
ac_status=$?
cat confptest.err >&5
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
if (exit $ac_status) && test -s "$ac_outfile"; then
# The compiler can only warn and ignore the option if not
recognized
# So say no if there are warnings other than the usual output.
$ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
$SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
lt_cv_prog_compiler_pic_works_CXX=yes
fi
fi
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works_CXX" >&5
$as_echo "$lt_cv_prog_compiler_pic_works_CXX" >&6; }

if test x"$lt_cv_prog_compiler_pic_works_CXX" = xyes; then
case $lt_prog_compiler_pic_CXX in
"" | " *") ;;
*) lt_prog_compiler_pic_CXX="$lt_prog_compiler_pic_CXX" ;;
esac
else
lt_prog_compiler_pic_CXX=
lt_prog_compiler_can_build_shared_CXX=no
fi
fi

#
# Check to make sure the static flag actually works.
#

```

```

wl=$lt_prog_compiler_wl_CXX eval
lt_tmp_static_flag="\$lt_prog_compiler_static_CXX\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works_CXX+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_static_works_CXX=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
  # The linker can only warn and ignore the option if not
recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&5
    $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_static_works_CXX=yes
    fi
  else
    lt_cv_prog_compiler_static_works_CXX=yes
  fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works_CXX" >&5
$as_echo "$lt_cv_prog_compiler_static_works_CXX" >&6; }

if test x"$lt_cv_prog_compiler_static_works_CXX" = xyes; then
:
else
  lt_prog_compiler_static_CXX=
fi

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o_CXX+:} false; then :

```



```

    $sas_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o_CXX=no
    $RM -r confptest 2>/dev/null
    mkdir confptest
    cd confptest
    mkdir out
    echo "$lt_simple_compile_test_code" > confptest.$ac_ext

    lt_compiler_flag="-o out/confptest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confptest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
    (eval echo "\"\`$as_me:$LINENO: $lt_compile\`" >&5)
    (eval "$lt_compile" 2>out/confptest.err)
    ac_status=$?
    cat out/confptest.err >&5
    echo "$as_me:$LINENO: \`${ac_status} = $ac_status" >&5
    if (exit $ac_status) && test -s out/confptest2.$ac_objext
    then
        # The compiler can only warn and ignore the option if not
recognized
        # So say no if there are warnings
        $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
        $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
        if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
            lt_cv_prog_compiler_c_o_CXX=yes
        fi
    fi
    chmod u+w . 2>&5
    $RM confptest*
    # SGI C++ compiler will create directory out/ii_files/ for
    # template instantiation
    test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
    $RM out/* && rmdir out
    cd ..
    $RM -r confptest
    $RM confptest*

fi
{ $sas_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o_CXX" >&5
$sas_echo "$lt_cv_prog_compiler_c_o_CXX" >&6; }

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$sas_objext" >&5
$sas_echo_n "checking if $compiler supports -c -o file.$sas_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o_CXX+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o_CXX=no
  $RM -r conftest 2>/dev/null
  mkdir conftest
  cd conftest
  mkdir out
  echo "$lt_simple_compile_test_code" > conftest.$sas_ext

  lt_compiler_flag="-o out/conftest2.$sas_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $sas_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  lt_compile=`echo "$sas_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\ :&$lt_compiler_flag :; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"$sas_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>out/conftest.err)
  ac_status=$?
  cat out/conftest.err >&5
  echo "$sas_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s out/conftest2.$sas_objext
  then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings
    $ECHO "$lt_compiler_boilerplate" | $SED '/^$/d' >
out/conftest.exp
    $SED '/^$/d; /^ *+/d' out/conftest.err >out/conftest.er2
    if test ! -s out/conftest.er2 || diff out/conftest.exp
out/conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_c_o_CXX=yes
    fi
  fi
  chmod u+w . 2>&5
  $RM conftest*
  # SGI C++ compiler will create directory out/ii_files/ for
  # template instantiation
  test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
  $RM out/* && rmdir out

```

```

    cd ..
    $RM -r conftest
    $RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o_CXX" >&5
$as_echo "$lt_cv_prog_compiler_c_o_CXX" >&6; }

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o_CXX" = no && test "$need_locks" !=
no; then
    # do not overwrite the value of need_locks provided by the user
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
    hard_links=yes
    $RM conftest*
    ln conftest.a conftest.b 2>/dev/null && hard_links=no
    touch conftest.a
    ln conftest.a conftest.b 2>&5 || hard_links=no
    ln conftest.a conftest.b 2>/dev/null && hard_links=no
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }
    if test "$hard_links" = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: `\$CC' does not
support \'-c -o', so `make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: `\$CC' does not support \'-c -o', so `make
-j' may be unsafe" >&2;}
        need_locks=warn
    fi
else
    need_locks=no
fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }

    export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED '\''s/.* //'\' | sort | uniq >
$export_symbols'
    exclude_expsyms_CXX='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'
    case $host_os in
aix[4-9]*)
        # If we're using GNU nm, then we don't want the "-C" option.

```

```

# -C means demangle to AIX nm, but means don't demangle with GNU
nm
# Also, AIX nm treats weak defined symbols like other global
defined
# symbols, whereas GNU nm marks them as "W".
if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then
    export_symbols_cmds_CXX='$NM -Bpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B") || (\ $ 2 ==
"W")) && (substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
else
    export_symbols_cmds_CXX='$NM -BCpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B")) &&
(substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
fi
;;
pw32*)
    export_symbols_cmds_CXX="$ltdll_cmds"
    ;;
cygwin* | mingw* | cegcc*)
    case $cc_basename in
    cl*)

exclude_expsyms_CXX='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_.*'
        ;;
    *)
        export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^ ]*\)/\1
DATA;/s/^\.*[ ]__nm__\([^ ]*\)[ ]\^[^ ]*/\1 DATA;/^I[ ]/d;/^[AITW][
]/s/.*/\1'\'' | sort | uniq > $export_symbols'

exclude_expsyms_CXX='[_]+GLOBAL_OFFSET_TABLE_|[_]+GLOBAL__[FID]_.*|[_]
+head_[A-Za-z0-9_]+_dll|[A-Za-z0-9_]+_dll_iname'
        ;;
    esac
    ;;
    *)
        export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED '\''s/.* //''\'' | sort | uniq >
$export_symbols'
        ;;
    esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs_CXX" >&5
$as_echo "$ld_shlibs_CXX" >&6; }
test "$ld_shlibs_CXX" = no && can_build_shared=no

with_gnu_ld_CXX=$with_gnu_ld

```

```

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc_CXX" in
x|xyes)
    # Assume -lc should be added
    archive_cmds_need_lc_CXX=yes

    if test "$enable_shared" = yes && test "$GCC" = yes; then
        case $archive_cmds_CXX in
        *'~'*)
            # FIXME: we may have to deal with multi-command sequences.
            ;;
        '$CC '* )
            # Test whether the compiler implicitly links with -lc since on
some
            # systems, -lgcc has to come before -lc. If gcc already passes -
lc
            # to ld, don't add -lc before -lgcc.
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$as_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }
if ${lt_cv_archive_cmds_need_lc_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    $RM conftest*
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

    if { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
test $ac_status = 0; } 2>conftest.err; then
    soname=conftest
    lib=conftest
    libobjs=conftest.$ac_objext
    deplibs=
    wl=$lt_prog_compiler_wl_CXX
    pic_flag=$lt_prog_compiler_pic_CXX
    compiler_flags=-v
    linker_flags=-v
    verstring=
    output_objdir=.
    libname=conftest
    lt_save_allow_undefined_flag=$allow_undefined_flag_CXX
    allow_undefined_flag_CXX=

```

```

        if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$archive_cmds_CXX 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1\""; }
>&5
    (eval $archive_cmds_CXX 2\>\&1 \|| $GREP \" -lc \" \>/dev/null
2\>\&1) 2>&5
    ac_status=$?
    $as_echo \"$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
    test $ac_status = 0; }
    then
        lt_cv_archive_cmds_need_lc_CXX=no
    else
        lt_cv_archive_cmds_need_lc_CXX=yes
    fi
    allow_undefined_flag_CXX=$lt_save_allow_undefined_flag
else
    cat conftest.err 1>&5
fi
$RM conftest*

fi
{ $as_echo \"$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc_CXX" >&5
$as_echo \"$lt_cv_archive_cmds_need_lc_CXX" >&6; }
    archive_cmds_need_lc_CXX=$lt_cv_archive_cmds_need_lc_CXX
    ;;
esac
fi
;;
esac

```

```
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }
```

```
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
finish_eval=
shlibpath_var=
```

```

shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
# set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
aix3*)
    version_type=linux # correct to gnu/linux during the next big
    refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
    shlibpath_var=LIBPATH

    # AIX 3 has no versioning support, so we append a major version to
    # the name.
    soname_spec='${libname}${release}${shared_ext}$major'
    ;;

aix[4-9]*)
    version_type=linux # correct to gnu/linux during the next big
    refactor
    need_lib_prefix=no
    need_version=no
    hardcode_into_libs=yes
    if test "$host_cpu" = ia64; then
        # AIX 5 supports IA64
        library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'
        shlibpath_var=LD_LIBRARY_PATH
    else
        # With GCC up to 2.95.x, collect2 would create an import file
        # for dependence libraries. The import file would start with
        # the line `#! .'. This would cause the generated library to
        # depend on `.', always an invalid library. This was fixed in
        # development snapshots of GCC prior to 3.0.
        case $host_os in
            aix4 | aix4.[01] | aix4.[01].*)
                if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)';
                    echo ' yes '
                    echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
                    :
                else
                    can_build_shared=no
                fi
            *)

```



```

        ;;
    esac
    # AIX (on Power*) has no versioning support, so currently we can
not hardcode correct
    # soname into executable. Probably we can add versioning support
to
    # collect2, so additional links can be useful in future.
    if test "$aix_use_runtimelinking" = yes; then
        # If using run time linking (on AIX 4.2 or later) use
lib<name>.so
        # instead of lib<name>.a to let people know that these are not
        # typical AIX shared libraries.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    else
        # We preserve .a as extension for shared libraries through
AIX4.2
        # and later when we are not doing run time linking.
        library_names_spec='${libname}${release}.a $libname.a'
        soname_spec='${libname}${release}${shared_ext}$major'
    fi
    shlibpath_var=LIBPATH
fi
;;

amigaos*)
    case $host_cpu in
    powerpc)
        # Since July 2007 AmigaOS4 officially supports .so libraries.
        # When compiling the executable, add -use-dynld -Lsobjs: to the
compileline.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        ;;
    m68k)
        library_names_spec='$libname.ixlibrary $libname.a'
        # Create ${libname}_ixlibrary.a entries in /sys/libs.
        finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
'\''s%^\./\([^/]*\)\.ixlibrary$%\1%\''`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
        ;;
    esac
;;

beos*)
    library_names_spec='${libname}${shared_ext}'
    dynamic_linker="$host_os ld.so"
    shlibpath_var=LIBRARY_PATH
;;

```

```

bsdi[45]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
    sys_lib_dlsearch_path_spec="/shlib /usr/lib /usr/local/lib"
    # the default ld.so.conf also contains /usr/contrib/lib and
    # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
    # libtool to hard-code these into programs
    ;;

cygwin* | mingw* | pw32* | cegcc*)
    version_type=windows
    shrext_cmds=".dll"
    need_version=no
    need_lib_prefix=no

    case $GCC,$cc_basename in
    yes,*)
        # gcc
        library_names_spec='$libname.dll.a'
        # DLL is installed to $(libdir)/../bin by postinstall_cmds
        postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\''i; echo
\${dlname}'\''`~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dlname} \${dldir}/\${dlname}~
chmod a+x \${dldir}/\${dlname}~
if test -n '\''$striplib'\'' && test -n '\''$striplib'\''; then
    eval '\''$striplib \${dldir}/\${dlname}'\'' || exit \${?};
fi'
        postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\''`~
dlpath=$dir/\${dldll}~
$RM \${dlpath}'
        shlibpath_overrides_runpath=yes

    case $host_os in
    cygwin*)
        # Cygwin DLLs use 'cyg' prefix rather than 'lib'
        soname_spec=`echo ${libname} | sed -e 's/^lib/cyg/'``echo
${release} | $SED -e 's/[.]/-/g'`${versuffix}${shared_ext}'

```

```

;;
mingw* | cegcc*)
  # MinGW DLLs use traditional 'lib' prefix
  soname_spec='${libname}`echo ${release} | $SED -e 's/[.]/-/
/g'`${versuffix}${shared_ext}'
  ;;
pw32*)
  # pw32 DLLs use 'pw' prefix rather than 'lib'
  library_names_spec=`echo ${libname} | sed -e 's/^lib/pw/'``echo
${release} | $SED -e 's/[.]/-/g'`${versuffix}${shared_ext}'
  ;;
esac
dynamic_linker='Win32 ld.exe'
;;

*,cl*)
  # Native MSVC
  libname_spec='$name'
  soname_spec='${libname}`echo ${release} | $SED -e 's/[.]/-
/g'`${versuffix}${shared_ext}'
  library_names_spec='${libname}.dll.lib'

case $build_os in
mingw*)
  sys_lib_search_path_spec=
  lt_save_ifs=$IFS
  IFS=';'
  for lt_path in $LIB
  do
    IFS=$lt_save_ifs
    # Let DOS variable expansion print the short 8.3 style file
name.
    lt_path=`cd "$lt_path" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si"`
    sys_lib_search_path_spec="$sys_lib_search_path_spec $lt_path"
  done
  IFS=$lt_save_ifs
  # Convert to MSYS style.
  sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\|/|g' -e 's| |\\([a-zA-Z])|/\\1|g' -e 's|^|/|'`
  ;;
cygwin*)
  # Convert to unix form, then to dos form, then back to unix form
  # but this time dos style (no spaces!) so that the unix form
looks
  # like /cygdrive/c/PROGRA~1:/cygdr...
  sys_lib_search_path_spec=`cygpath --path --unix "$LIB"`
  sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null`
  sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g"`
  ;;

```

```

*)
  sys_lib_search_path_spec="$LIB"
  if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zA-Z]:/'
>/dev/null; then
    # It is most probably a Windows format PATH.
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's/;/ /g'`
  else
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g"`
  fi
  # FIXME: find the short name or the path components, as spaces
are
  # common. (e.g. "Program Files" -> "PROGRA~1")
  ;;
esac

# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\'''\`i; echo
\${dlname}'\'''\~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dlname} \${dldir}/\${dlname}'
postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\'''\~
dlpath=$dir/\${dldll}~
$RM \${dlpath}'
shlibpath_overrides_runpath=yes
dynamic_linker='Win32 link.exe'
;;

*)
# Assume MSVC wrapper
library_names_spec='${libname}`echo ${release} | $SED -e 's/[.]*/-
/g'`${versuffix}${shared_ext} $libname.lib'
dynamic_linker='Win32 ld.exe'
;;
esac
# FIXME: first we should search . and the directory the executable
is in
shlibpath_var=PATH
;;

darwin* | rhapsody*)
dynamic_linker="$host_os dyld"
version_type=darwin
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${major}${shared_ext}
${libname}${shared_ext}'
soname_spec='${libname}${release}${major}${shared_ext}'

```

```

shlibpath_overrides_runpath=yes
shlibpath_var=DYLD_LIBRARY_PATH
shrext_cmds='`test .$module = .yes && echo .so || echo .dylib`'

sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
;;

dgux*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname$shared_ext'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

freebsd* | dragonfly*)
    # DragonFly does not have a.out.  When/if they implement a new
    # versioning mechanism, adjust this.
    if test -x /usr/bin/objformat; then
        objformat=`/usr/bin/objformat`
    else
        case $host_os in
            freebsd[23].*) objformat=aout ;;
            *) objformat=elf ;;
        esac
    fi
    version_type=freebsd-$objformat
    case $version_type in
        freebsd-elf*)
            library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
            need_version=no
            need_lib_prefix=no
            ;;
        freebsd-*)
            library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname${shared_ext}$versuffix'
            need_version=yes
            ;;
    esac
    shlibpath_var=LD_LIBRARY_PATH
    case $host_os in
        freebsd2.*)
            shlibpath_overrides_runpath=yes
            ;;
        freebsd3.[01]* | freebsdelf3.[01]*)
            shlibpath_overrides_runpath=yes
            hardcode_into_libs=yes
            ;;
    esac

```

```

freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;
*) # from 4.6 on, and DragonFly
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    ;;
esac
;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

haiku*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
    ;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in
    ia64*)
        shrext_cmds='.so'
        hardcode_into_libs=yes

```

```

dynamic_linker="$host_os dld.so"
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
if test "X$HPUX_IA64_MODE" = X32; then
    sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
else
    sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
fi
sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
hppa*64*)
shrext_cmds='.sl'
hardcode_into_libs=yes
dynamic_linker="$host_os dld.sl"
shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
*)
shrext_cmds='.sl'
dynamic_linker="$host_os dld.sl"
shlibpath_var=SHLIB_PATH
shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'

```

```

dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=no
hardcode_into_libs=yes
;;

irix5* | irix6* | nonstopux*)
  case $host_os in
    nonstopux*) version_type=nonstopux ;;
    *)
      if test "$lt_cv_prog_gnu_ld" = yes; then
        version_type=linux # correct to gnu/linux during the next
big refactor
      else
        version_type=irix
      fi ;;
  esac
  need_lib_prefix=no
  need_version=no
  soname_spec='${libname}${release}${shared_ext}$major'
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext} $libname${shared_ext}'
  case $host_os in
    irix5* | nonstopux*)
      libsuff= shlibsuff=
    ;;
    *)
      case $LD in # libtool.m4 will add one of these switches to LD
*-32|*" -32 " | *-melf32bsmip|*" -melf32bsmip ")
        libsuff= shlibsuff= libmagic=32-bit;;
*-n32|*" -n32 " | *-melf32bmipn32|*" -melf32bmipn32 ")
        libsuff=32 shlibsuff=N32 libmagic=N32;;
*-64|*" -64 " | *-melf64bmip|*" -melf64bmip ")
        libsuff=64 shlibsuff=64 libmagic=64-bit;;
*) libsuff= shlibsuff= libmagic=never-match;;
      esac
    ;;
  esac
  shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
  shlibpath_overrides_runpath=no
  sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
/usr/local/lib${libsuff}"
  sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
  hardcode_into_libs=yes
  ;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)
  dynamic_linker=no
  ;;

```



```

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
  version_type=linux # correct to gnu/linux during the next big
refactor
  need_lib_prefix=no
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
  shlibpath_var=LD_LIBRARY_PATH
  shlibpath_overrides_runpath=no

  # Some binutils ld are patched to set DT_RUNPATH
  if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    lt_cv_shlibpath_overrides_runpath=no
    save_LDFLAGS=$LDFLAGS
    save_libdir=$libdir
    eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl_CXX\"; \
      LDFLAGS=\"\$LDFLAGS \$hardcode_libdir_flag_spec_CXX\""
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :
  if ($OBJDUMP -p conftest$ac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
    lt_cv_shlibpath_overrides_runpath=yes
  fi
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  LDFLAGS=$save_LDFLAGS
  libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.
# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

```

```

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
    lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \2)); skip = 1; } { if (!skip) print \$0; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ ]*hwcap[ ]/d;s/[: , ]/
/g;s/[^=]*$//;s/[^= ]* / /g;s/"//g;/^$/d' | tr '\n' ' '`
    sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker. Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.
dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)
version_type=sunos
need_lib_prefix=no
need_version=no
if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="$PATH:/sbin" ldconfig -m $libdir'
    dynamic_linker='NetBSD (a.out) ld.so'
else
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='NetBSD ld.elf_so'
fi
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
;;

newsos6)
version_type=linux # correct to gnu/linux during the next big
refactor
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
;;

*nto* | *qnx*)
version_type=qnx
need_lib_prefix=no
need_version=no

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    dynamic_linker='ldqnx.so'
    ;;

openbsd*)
    version_type=sunos
    sys_lib_dlsearch_path_spec="/usr/lib"
    need_lib_prefix=no
    # Some older versions of OpenBSD (3.3 at least) *do* need versioned
libs.
    case $host_os in
        openbsd3.3 | openbsd3.3.*)    need_version=yes ;;
        *)                            need_version=no  ;;
    esac
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        case $host_os in
            openbsd2.[89] | openbsd2.[89].*)
                shlibpath_overrides_runpath=no
                ;;
            *)
                shlibpath_overrides_runpath=yes
                ;;
        esac
    else
        shlibpath_overrides_runpath=yes
    fi
    ;;

os2*)
    libname_spec='$name'
    shrext_cmds=".dll"
    need_lib_prefix=no
    library_names_spec='$libname${shared_ext} $libname.a'
    dynamic_linker='OS/2 ld.exe'
    shlibpath_var=LIBPATH
    ;;

osf3* | osf4* | osf5*)
    version_type=osf
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
    sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
    ;;

rdos*)
    dynamic_linker=no
    ;;

solaris*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    # ldd complains unless libraries are executable
    postinstall_cmds='chmod +x $lib'
    ;;

sunos4*)
    version_type=sunos
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
    ;;

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)
            shlibpath_overrides_runpath=no
            need_lib_prefix=no
            runpath_var=LD_RUN_PATH

```

```

        ;;
siemens)
    need_lib_prefix=no
    ;;
motorola)
    need_lib_prefix=no
    need_version=no
    shlibpath_overrides_runpath=no
    sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
    ;;
esac
;;

sysv4*MP*)
    if test -d /usr/nec ;then
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='$libname${shared_ext}.$versuffix
$libname${shared_ext}.$major $libname${shared_ext}'
        soname_spec='$libname${shared_ext}.$major'
        shlibpath_var=LD_LIBRARY_PATH
    fi
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
            ;;
        esac
    fi
    sys_lib_dlsearch_path_spec='/usr/lib'
    ;;

tpf*)
    # TPF is a cross-target only. Preferred cross-host = GNU/Linux.
    version_type=linux # correct to gnu/linux during the next big
refactor

```

```

    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

uts4*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

*)
    dynamic_linker=no
    ;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then
    variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec+set}" = set; then
    sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec+set}" = set; then
    sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking how to hardcode
library paths into programs" >&5
$as_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action_CXX=
if test -n "$hardcode_libdir_flag_spec_CXX" ||
    test -n "$runpath_var_CXX" ||
    test "X$hardcode_automatic_CXX" = "Xyes" ; then

# We can hardcode non-existent directories.
if test "$hardcode_direct_CXX" != no &&
    # If the only mechanism to avoid hardcoding is shlibpath_var, we
    # have to relink, otherwise we might link with an installed
library
    # when we should be linking with a yet-to-be-installed one
    ## test "$_LT_TAGVAR(hardcode_shlibpath_var, CXX)" != no &&
    test "$hardcode_minus_L_CXX" != no; then
    # Linking always hardcodes the temporary library directory.
    hardcode_action_CXX=relink
else
    # We can link without hardcoding, and we can hardcode nonexisting
dirs.
    hardcode_action_CXX=immediate
fi
else
# We cannot hardcode anything, or else we can only hardcode existing
# directories.
hardcode_action_CXX=unsupported

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hardcode_action_CXX"
>&5
$as_echo "$hardcode_action_CXX" >&6; }

if test "$hardcode_action_CXX" = relink ||
    test "$inherit_rpath_CXX" = yes; then
    # Fast installation is not supported
    enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
    test "$enable_shared" = no; then
    # Fast installation is not necessary
    enable_fast_install=needless
fi

fi # test -n "$compiler"

CC=$lt_save_CC
CFLAGS=$lt_save_CFLAGS
LDCXX=$LD
LD=$lt_save_LD
GCC=$lt_save_GCC
with_gnu_ld=$lt_save_with_gnu_ld
lt_cv_path_LDCXX=$lt_cv_path_LD
lt_cv_path_LD=$lt_save_path_LD
lt_cv_prog_gnu_ldcxx=$lt_cv_prog_gnu_ld
lt_cv_prog_gnu_ld=$lt_save_with_gnu_ld
fi # test "$_lt_caught_CXX_error" != yes

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

```



```

ac_config_commands="$ac_config_commands libtool"

# Only expand once:

@%:@ Check whether --enable-compiler-coverage was given.
if test "${enable_compiler_coverage+set}" = set; then :
  enableval=$enable_compiler_coverage; if test
"x$enable_compiler_coverage" = "xyes"; then
    if test "x$GCC" = "xyes"; then
      CFLAGS="$CFLAGS -fprofile-arcs -ftest-coverage"
    fi
  fi
fi

@%:@ Check whether --enable-compiler-optimisations was given.
if test "${enable_compiler_optimisations+set}" = set; then :
  enableval=$enable_compiler_optimisations; if test
"x$enable_compiler_optimisations" = "xno"; then
    CFLAGS=`echo "$CFLAGS" | sed -e "s/ -O[1-9]*\b/ -O0/g"`
  fi
fi

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
    be a program name with args.
    set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_PKG_CONFIG+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      case $PKG_CONFIG in
      [\\/]*)
        ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
        with a path.
        ;;
      *)
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
  ac_pt_PKG_CONFIG=$PKG_CONFIG
  # Extract the first word of "pkg-config", so it can be a program
  name with args.
  set dummy pkg-config; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    case $ac_pt_PKG_CONFIG in
    [\\/] * | ?:[\\/] *)
      ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
      override the test with a path.
    ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_path_ac_pt_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
>&5
$as_echo "$ac_pt_PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_pt_PKG_CONFIG" = x; then
        PKG_CONFIG=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        PKG_CONFIG=$ac_pt_PKG_CONFIG
    fi
else
    PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=0.9.0
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
$as_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }
    if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    fi
fi

```

```

        PKG_CONFIG=""
    fi

fi

# Initialize libtool

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}windres", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}windres; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_RC+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$RC"; then
            ac_cv_prog_RC="$RC" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_RC="${ac_tool_prefix}windres"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

        fi
    fi
    RC=$ac_cv_prog_RC
    if test -n "$RC"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $RC" >&5
        $as_echo "$RC" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
    fi

fi

fi

if test -z "$ac_cv_prog_RC"; then
    ac_ct_RC=$RC
    # Extract the first word of "windres", so it can be a program name
    with args.

```

```

set dummy windres; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_RC+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_RC"; then
    ac_cv_prog_ac_ct_RC="$ac_ct_RC" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_RC="windres"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_RC=$ac_cv_prog_ac_ct_RC
if test -n "$ac_ct_RC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_RC" >&5
$as_echo "$ac_ct_RC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_RC" = x; then
    RC=""
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    RC=$ac_ct_RC
  fi
else
  RC="$ac_cv_prog_RC"
fi

```

```

# Source file extension for RC test sources.
ac_ext=rc

# Object file extension for compiled RC test sources.
objext=o
objext_RC=$objext

# Code to be used in simple compile tests
lt_simple_compile_test_code='sample MENU { MENUITEM "&Soup", 100,
CHECKED }'

# Code to be used in simple link tests
lt_simple_link_test_code="$lt_simple_compile_test_code"

# ltmain only uses $CC for tagged configurations so make sure $CC is
set.

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# save warnings/boilerplate of simple test code
ac_outfile=conftest.$ac_objext
echo "$lt_simple_compile_test_code" >conftest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>conftest.err
_lt_compiler_boilerplate=`cat conftest.err`
$RM conftest*

ac_outfile=conftest.$ac_objext
echo "$lt_simple_link_test_code" >conftest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >conftest.err
_lt_linker_boilerplate=`cat conftest.err`
$RM -r conftest*

# Allow CC to be a program name with arguments.

```

```

lt_save_CC="$CC"
lt_save_CFLAGS=$CFLAGS
lt_save_GCC=$GCC
GCC=
CC=${RC-"windres"}
CFLAGS=
compiler=$CC
compiler_RC=$CC
for cc_temp in $compiler""; do
  case $cc_temp in
    compile | *[\//]compile | ccache | *[\//]ccache ) ;;
    distcc | *[\//]distcc | purify | *[\//]purify ) ;;
    \-*) ;;
    *) break;;
  esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^\$host_alias-%%"`

lt_cv_prog_compiler_c_o_RC=yes

if test -n "$compiler"; then
  :

fi

GCC=$lt_save_GCC
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

CC=$lt_save_CC
CFLAGS=$lt_save_CFLAGS

# Set some internal variables depending on the platform for later use.
dbus_win=no
dbus_cygwin=no
dbus_unix=no
case "${host}" in
  *-mingw32ce*)
    dbus_win=yes
    dbus_wince=yes
    ;;
  *-mingw32*)
    dbus_win=yes
    ;;
  *-cygwin*)

```

```

        dbus_cygwin=yes
        dbus_unix=yes
    ;;
*)
    dbus_unix=yes
    ;;
esac

# Special defines for certain platforms
if test "$dbus_win" = yes; then

$as_echo "@%:@define DBUS_WIN 1" >>confdefs.h

    BUILD_TIMESTAMP=`date --iso-8601=minutes`

    # Assume DBUS_VERSION is always three numbers
    BUILD_FILEVERSION=`echo "$DBUS_VERSION" | sed -e 's/\./,/g'`,0

    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}windres", so it can be
        a program name with args.
        set dummy ${ac_tool_prefix}windres; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_WINDRES+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            if test -n "$WINDRES"; then
                ac_cv_prog_WINDRES="$WINDRES" # Let the user override the test.
            else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_WINDRES="${ac_tool_prefix}windres"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
WINDRES=$ac_cv_prog_WINDRES
if test -n "$WINDRES"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $WINDRES" >&5
$as_echo "$WINDRES" >&6; }

```



```

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_WINDRES"; then
  ac_ct_WINDRES=$WINDRES
  # Extract the first word of "windres", so it can be a program name
  with args.
  set dummy windres; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_WINDRES+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_WINDRES"; then
      ac_cv_prog_ac_ct_WINDRES="$ac_ct_WINDRES" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_WINDRES="windres"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

    fi
  fi
  ac_ct_WINDRES=$ac_cv_prog_ac_ct_WINDRES
  if test -n "$ac_ct_WINDRES"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_WINDRES" >&5
$as_echo "$ac_ct_WINDRES" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi

  if test "x$ac_ct_WINDRES" = x; then
    WINDRES="no"
  else
    case $cross_compiling:$ac_tool_warned in

```

```

yes:)
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$sas_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    WINDRES=$ac_ct_WINDRES
    fi
else
    WINDRES="$ac_cv_prog_WINDRES"
fi

    if test "$WINDRES" = no; then
        as_fn_error $? "*** Could not find an implementation of windres
in your PATH." "$LINENO" 5
    fi
    if test "$dbus_wince" = yes; then

$sas_echo "@%:@define DBUS_WINCE 1" >>confdefs.h

$sas_echo "@%:@define _WIN32_WCE 0x0502" >>confdefs.h

    fi
else

$sas_echo "@%:@define DBUS_UNIX 1" >>confdefs.h

fi
if test "$dbus_cygwin" = yes; then

$sas_echo "@%:@define DBUS_CYGWIN 1" >>confdefs.h

fi

    if test "$dbus_win" = yes; then
        DBUS_WIN_TRUE=
        DBUS_WIN_FALSE='#'
    else
        DBUS_WIN_TRUE='#'
        DBUS_WIN_FALSE=
    fi

    if test "$dbus_wince" = yes; then
        DBUS_WINCE_TRUE=
        DBUS_WINCE_FALSE='#'
    else
        DBUS_WINCE_TRUE='#'
        DBUS_WINCE_FALSE=
    fi
fi

```

```

if test "$dbus_unix" = yes; then
    DBUS_UNIX_TRUE=
    DBUS_UNIX_FALSE='#'
else
    DBUS_UNIX_TRUE='#'
    DBUS_UNIX_FALSE=
fi

if test "$dbus_cygwin" = yes; then
    DBUS_CYGWIN_TRUE=
    DBUS_CYGWIN_FALSE='#'
else
    DBUS_CYGWIN_TRUE='#'
    DBUS_CYGWIN_FALSE=
fi

# this must come first: other options use this to set their defaults
@%:@ Check whether --enable-developer was given.
if test "${enable_developer+set}" = set; then :
    enableval=$enable_developer;
else
    enable_developer=no
fi

DBUS_STATIC_BUILD_CPPFLAGS=
if test "x$enable_shared" = xno; then
    # On Windows, linking against the static library requires special
    effort
    # to turn off DLL import/export processing. We normally link some
    things
    # against the dynamic library, but if we're not building that,
    we'll
    # have to link everything statically.
    DBUS_STATIC_BUILD_CPPFLAGS=-DDBUS_STATIC_BUILD
fi

@%:@ Check whether --enable-ansi was given.
if test "${enable_ansi+set}" = set; then :
    enableval=$enable_ansi; enable_ansi=$enableval
else
    enable_ansi=no
fi

@%:@ Check whether --enable-verbose-mode was given.
if test "${enable_verbose_mode+set}" = set; then :
    enableval=$enable_verbose_mode; enable_verbose_mode=$enableval
else
    enable_verbose_mode=$enable_developer
fi

```

```
@%:@ Check whether --enable-asserts was given.
if test "${enable_asserts+set}" = set; then :
    enableval=$enable_asserts; enable_asserts=$enableval
else
    enable_asserts=$enable_developer
fi

@%:@ Check whether --enable-checks was given.
if test "${enable_checks+set}" = set; then :
    enableval=$enable_checks; enable_checks=$enableval
else
    enable_checks=yes
fi

@%:@ Check whether --enable-xml-docs was given.
if test "${enable_xml_docs+set}" = set; then :
    enableval=$enable_xml_docs; enable_xml_docs=$enableval
else
    enable_xml_docs=auto
fi

@%:@ Check whether --enable-doxygen-docs was given.
if test "${enable_doxygen_docs+set}" = set; then :
    enableval=$enable_doxygen_docs; enable_doxygen_docs=$enableval
else
    enable_doxygen_docs=auto
fi

@%:@ Check whether --enable-abstract-sockets was given.
if test "${enable_abstract_sockets+set}" = set; then :
    enableval=$enable_abstract_sockets;
enable_abstract_sockets=$enableval
else
    enable_abstract_sockets=auto
fi

@%:@ Check whether --enable-selinux was given.
if test "${enable_selinux+set}" = set; then :
    enableval=$enable_selinux; enable_selinux=$enableval
else
    enable_selinux=auto
fi

@%:@ Check whether --enable-libaudit was given.
if test "${enable_libaudit+set}" = set; then :
    enableval=$enable_libaudit; enable_libaudit=$enableval
else
    enable_libaudit=auto
fi

@%:@ Check whether --enable-dnotify was given.
```

```
if test "${enable_dnotify+set}" = set; then :
    enableval=$enable_dnotify; enable_dnotify=$enableval
else
    enable_dnotify=auto
fi

@%:@ Check whether --enable-inotify was given.
if test "${enable_inotify+set}" = set; then :
    enableval=$enable_inotify; enable_inotify=$enableval
else
    enable_inotify=auto
fi

@%:@ Check whether --enable-kqueue was given.
if test "${enable_kqueue+set}" = set; then :
    enableval=$enable_kqueue; enable_kqueue=$enableval
else
    enable_kqueue=auto
fi

@%:@ Check whether --enable-console-owner-file was given.
if test "${enable_console_owner_file+set}" = set; then :
    enableval=$enable_console_owner_file;
enable_console_owner_file=$enableval
else
    enable_console_owner_file=auto
fi

@%:@ Check whether --enable-userdb-cache was given.
if test "${enable_userdb_cache+set}" = set; then :
    enableval=$enable_userdb_cache; enable_userdb_cache=$enableval
else
    enable_userdb_cache=yes
fi

@%:@ Check whether --enable-launchd was given.
if test "${enable_launchd+set}" = set; then :
    enableval=$enable_launchd; enable_launchd=$enableval
else
    enable_launchd=auto
fi

@%:@ Check whether --enable-systemd was given.
if test "${enable_systemd+set}" = set; then :
    enableval=$enable_systemd; enable_systemd=$enableval
else
    enable_systemd=auto
fi

@%:@ Check whether --with-xml was given.
```

```
if test "${with_xml+set}" = set; then :
    withval=$with_xml;
fi
```

```
@%:@ Check whether --with-init-scripts was given.
if test "${with_init_scripts+set}" = set; then :
    withval=$with_init_scripts;
fi
```

```
@%:@ Check whether --with-session-socket-dir was given.
if test "${with_session_socket_dir+set}" = set; then :
    withval=$with_session_socket_dir;
fi
```

```
@%:@ Check whether --with-test-socket-dir was given.
if test "${with_test_socket_dir+set}" = set; then :
    withval=$with_test_socket_dir;
fi
```

```
@%:@ Check whether --with-system-pid-file was given.
if test "${with_system_pid_file+set}" = set; then :
    withval=$with_system_pid_file;
fi
```

```
@%:@ Check whether --with-system-socket was given.
if test "${with_system_socket+set}" = set; then :
    withval=$with_system_socket;
fi
```

```
@%:@ Check whether --with-console-auth-dir was given.
if test "${with_console_auth_dir+set}" = set; then :
    withval=$with_console_auth_dir;
fi
```

```
@%:@ Check whether --with-console-owner-file was given.
if test "${with_console_owner_file+set}" = set; then :
    withval=$with_console_owner_file;
fi
```

```
@%:@ Check whether --with-launchd-agent-dir was given.
if test "${with_launchd_agent_dir+set}" = set; then :
    withval=$with_launchd_agent_dir;
fi
```

```

@%:@ Check whether --with-dbus_user was given.
if test "${with_dbus_user+set}" = set; then :
  withval=$with_dbus_user;
fi

@%:@ Check whether --with-dbus_daemon_dir was given.
if test "${with_dbus_daemon_dir+set}" = set; then :
  withval=$with_dbus_daemon_dir;
fi

@%:@ Check whether --with-dbus_session_bus_default_address was given.
if test "${with_dbus_session_bus_default_address+set}" = set; then :
  withval=$with_dbus_session_bus_default_address;
with_dbus_session_bus_default_address=$withval
else
  with_dbus_session_bus_default_address=nonce-tcp:
fi

@%:@ Check whether --enable-embedded-tests was given.
if test "${enable_embedded_tests+set}" = set; then :
  enableval=$enable_embedded_tests;
else
  enable_embedded_tests=$enable_developer
fi

@%:@ Check whether --enable-modular-tests was given.
if test "${enable_modular_tests+set}" = set; then :
  enableval=$enable_modular_tests;
else
  enable_modular_tests=auto
fi

# --enable-tests overrides both --enable-embedded-tests and
# --enable-modular-tests
@%:@ Check whether --enable-tests was given.
if test "${enable_tests+set}" = set; then :
  enableval=$enable_tests;
  if test "x$enableval" = xyes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage was
requested with --enable-tests=yes" >&5
$as_echo "$as_me: Full test coverage was requested with --enable-
tests=yes" >&6;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: This has many
dependencies (GLib, dbus-glib, Python)" >&5
$as_echo "$as_me: This has many dependencies (GLib, dbus-glib,
Python)" >&6;}
  fi
  enable_embedded_tests=$enableval

```

```

    enable_modular_tests=$enableval
fi

# DBUS_ENABLE_EMBEDDED_TESTS controls unit tests built in to .c files
# and also some stuff in the test/ subdir. DBUS_BUILD_TESTS was an
older
# name for this.
if test "x$enable_embedded_tests" = xyes; then
    DBUS_BUILD_TESTS_TRUE=
    DBUS_BUILD_TESTS_FALSE='#'
else
    DBUS_BUILD_TESTS_TRUE='#'
    DBUS_BUILD_TESTS_FALSE=
fi

if test "x$enable_embedded_tests" = xyes; then
    DBUS_ENABLE_EMBEDDED_TESTS_TRUE=
    DBUS_ENABLE_EMBEDDED_TESTS_FALSE='#'
else
    DBUS_ENABLE_EMBEDDED_TESTS_TRUE='#'
    DBUS_ENABLE_EMBEDDED_TESTS_FALSE=
fi

if test "x$enable_embedded_tests" = xyes; then

$as_echo "@%:@define DBUS_ENABLE_EMBEDDED_TESTS 1" >>confdefs.h

$as_echo "@%:@define DBUS_BUILD_TESTS 1" >>confdefs.h

fi

# DBUS_ENABLE_MODULAR_TESTS controls tests that work based on public
API.
# These use GTest, from GLib, because life's too short. They're
enabled by
# default (unless you don't have GLib), because they don't bloat the
library
# or binaries.

with_glib=yes

if test "x$enable_modular_tests" != xno; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GLIB" >&5
$as_echo_n "checking for GLIB... " >&6; }

if test -n "$GLIB_CFLAGS"; then
    pkg_cv_GLIB_CFLAGS="$GLIB_CFLAGS"

```



```

elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"glib-2.0 >= 2.24, gio-2.0 >= 2.24\""; } >&5
        ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.24, gio-2.0 >=
2.24") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = \${ac_status}" >&5
        test $ac_status = 0; }; then
        pkg_cv_GLIB_CFLAGS=`$PKG_CONFIG --cflags "glib-2.0 >= 2.24, gio-2.0
>= 2.24" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
if test -n "$GLIB_LIBS"; then
    pkg_cv_GLIB_LIBS="$GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"glib-2.0 >= 2.24, gio-2.0 >= 2.24\""; } >&5
        ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.24, gio-2.0 >=
2.24") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = \${ac_status}" >&5
        test $ac_status = 0; }; then
        pkg_cv_GLIB_LIBS=`$PKG_CONFIG --libs "glib-2.0 >= 2.24, gio-2.0 >=
2.24" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "glib-2.0 >= 2.24, gio-2.0 >= 2.24" 2>&1`
    else
        GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors "glib-2.0 >=
2.24, gio-2.0 >= 2.24" 2>&1`

```

```

        fi
        # Put the nasty error message in config.log where it belongs
        echo "$GLIB_PKG_ERRORS" >&5

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
            if test "x$enable_modular_tests" = xyes; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires GLib" >&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires GLib" >&6;}
                as_fn_error $? "$GLIB_ERRORS" "$LINENO" 5
            else # assumed to be "auto"
                with_glib=no
            fi
        elif test $pkg_failed = untried; then
            if test "x$enable_modular_tests" = xyes; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires GLib" >&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires GLib" >&6;}
                as_fn_error $? "$GLIB_ERRORS" "$LINENO" 5
            else # assumed to be "auto"
                with_glib=no
            fi
        else
            GLIB_CFLAGS=$pkg_cv_GLIB_CFLAGS
            GLIB_LIBS=$pkg_cv_GLIB_LIBS
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
            :
        fi
        # If dbus-gmain.[ch] returned to libdbus then we wouldn't need this

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS_GLIB" >&5
$as_echo_n "checking for DBUS_GLIB... " >&6; }

if test -n "$DBUS_GLIB_CFLAGS"; then
    pkg_cv_DBUS_GLIB_CFLAGS="$DBUS_GLIB_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
--print-errors \"dbus-glib-1\""; } >&5
        ($PKG_CONFIG --exists --print-errors "dbus-glib-1") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_CFLAGS=`$PKG_CONFIG --cflags "dbus-glib-1"
2>/dev/null`
    else
        pkg_failed=yes

```

```

fi
else
    pkg_failed=untried
fi
if test -n "$DBUS_GLIB_LIBS"; then
    pkg_cv_DBUS_GLIB_LIBS="$DBUS_GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-glib-1\""; } >&5
        ($PKG_CONFIG --exists --print-errors "dbus-glib-1") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_LIBS=`$PKG_CONFIG --libs "dbus-glib-1" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "dbus-glib-1" 2>&1`
    else
        DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors "dbus-
glib-1" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$DBUS_GLIB_PKG_ERRORS" >&5

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        if test "x$enable_modular_tests" = xyes; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib"
>&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires dbus-glib" >&6;}
            as_fn_error $? "$DBUS_GLIB_ERRORS" "$LINENO" 5
        else # assumed to be "auto"
            with_glib=no

```

```

    fi
elif test $pkg_failed = untried; then
    if test "x$enable_modular_tests" = xyes; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib"
        >&5
        $as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib" >&6;}
        as_fn_error $? "$DBUS_GLIB_ERRORS" "$LINENO" 5
    else # assumed to be "auto"
        with_glib=no
    fi
else
    DBUS_GLIB_CFLAGS=$pkg_cv_DBUS_GLIB_CFLAGS
    DBUS_GLIB_LIBS=$pkg_cv_DBUS_GLIB_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
    $as_echo "yes" >&6; }
    :
fi
fi
if test "x$enable_modular_tests" != xno; then

$as_echo "@%:@define DBUS_ENABLE_MODULAR_TESTS 1" >>confdefs.h

fi
    if test "x$enable_modular_tests" != xno; then
        DBUS_ENABLE_MODULAR_TESTS_TRUE=
        DBUS_ENABLE_MODULAR_TESTS_FALSE='#'
    else
        DBUS_ENABLE_MODULAR_TESTS_TRUE='#'
        DBUS_ENABLE_MODULAR_TESTS_FALSE=
    fi
fi

if test "x$with_glib" != xno; then

$as_echo "@%:@define DBUS_WITH_GLIB 1" >>confdefs.h

fi
    if test "x$with_glib" != xno; then
        DBUS_WITH_GLIB_TRUE=
        DBUS_WITH_GLIB_FALSE='#'
    else
        DBUS_WITH_GLIB_TRUE='#'
        DBUS_WITH_GLIB_FALSE=
    fi
fi

@%:@ Check whether --enable-installed-tests was given.
if test "${enable_installed_tests+set}" = set; then :
    enableval=$enable_installed_tests;
else

```

```

    enable_installed_tests=no
fi

if test "x$enable_installed_tests" = xyes; then
    DBUS_ENABLE_INSTALLED_TESTS_TRUE=
    DBUS_ENABLE_INSTALLED_TESTS_FALSE='#'
else
    DBUS_ENABLE_INSTALLED_TESTS_TRUE='#'
    DBUS_ENABLE_INSTALLED_TESTS_FALSE=
fi

if test "x$enable_tests" = xyes; then
    # full test coverage is required, Python is a hard dependency
    { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--enable-tests=yes) requires Python, dbus-python, pygobject" >&5
    $as_echo "$as_me: Full test coverage (--enable-tests=yes) requires Python, dbus-python, pygobject" >&6;}

    if test -n "$PYTHON"; then
        # If the user set $PYTHON, use it and don't search something
    else.
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $PYTHON version is >= 2.6" >&5
        $as_echo_n "checking whether $PYTHON version is >= 2.6... " >&6; }
        prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
        if { echo "$as_me:$LINENO: $PYTHON -c "$prog"" >&5
            ($PYTHON -c "$prog") >&5 2>&5
            ac_status=$?
            echo "$as_me:$LINENO: \ $? = $ac_status" >&5
            (exit $ac_status); }; then :
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
            $as_echo "yes" >&6; }
        else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
            $as_echo "no" >&6; }
            as_fn_error $? "Python interpreter is too old"
"$LINENO" 5
        fi
    fi

```

```

    am_display_PYTHON=$PYTHON
else
    # Otherwise, try each interpreter until we find one that
satisfies
    # VERSION.
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for a Python
interpreter with version >= 2.6" >&5
$sas_echo_n "checking for a Python interpreter with version >= 2.6... "
>&6; }
if ${am_cv_pathless_PYTHON+:} false; then :
    $sas_echo_n "(cached) " >&6
else

    for am_cv_pathless_PYTHON in python python2 python3 python3.3
python3.2 python3.1 python3.0 python2.7 python2.6 python2.5 python2.4
python2.3 python2.2 python2.1 python2.0 none; do
        test "$am_cv_pathless_PYTHON" = none && break
        prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
        if { echo "$sas_me:$LINENO: $am_cv_pathless_PYTHON -c "$prog"" >&5
($am_cv_pathless_PYTHON -c "$prog") >&5 2>&5
        ac_status=$?
        echo "$sas_me:$LINENO: \ $? = $ac_status" >&5
        (exit $ac_status); }; then :
            break
        fi
    done
fi
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_pathless_PYTHON" >&5
$sas_echo "$am_cv_pathless_PYTHON" >&6; }
    # Set $PYTHON to the absolute path of $am_cv_pathless_PYTHON.
    if test "$am_cv_pathless_PYTHON" = none; then
        PYTHON=:
    else
        # Extract the first word of "$am_cv_pathless_PYTHON", so it
can be a program name with args.
        set dummy $am_cv_pathless_PYTHON; ac_word=$2
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$sas_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_path_PYTHON+:} false; then :
            $sas_echo_n "(cached) " >&6
        else
            case $PYTHON in
                [\\/]*)

```

```

    ac_cv_path_PYTHON="$PYTHON" # Let the user override the test with a
path.
    ;;
*)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_PYTHON="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

    ;;
esac
fi
PYTHON=$ac_cv_path_PYTHON
if test -n "$PYTHON"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PYTHON" >&5
$as_echo "$PYTHON" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    fi
    am_display_PYTHON=$am_cv_pathless_PYTHON
fi

if test "$PYTHON" = :; then
    as_fn_error $? "no suitable Python interpreter found" "$LINENO"
5
else

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON version" >&5
$as_echo_n "checking for $am_display_PYTHON version... " >&6; }
if ${am_cv_python_version+:} false; then :
    $as_echo_n "(cached) " >&6
else
    am_cv_python_version=`$PYTHON -c "import sys;
sys.stdout.write(sys.version[:3])"`

```

```

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_version" >&5
$sas_echo "$am_cv_python_version" >&6; }
PYTHON_VERSION=$am_cv_python_version

PYTHON_PREFIX='${prefix}'

PYTHON_LIB_PREFIX='${libdir}'

PYTHON_EXEC_PREFIX='${exec_prefix}'

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON platform" >&5
$sas_echo_n "checking for $am_display_PYTHON platform... " >&6; }
if ${am_cv_python_platform+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  am_cv_python_platform=`$PYTHON -c "import sys;
sys.stdout.write(sys.platform) "`
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_platform" >&5
$sas_echo "$am_cv_python_platform" >&6; }
PYTHON_PLATFORM=$am_cv_python_platform

# Just factor out some code duplication.
am_python_setup_sysconfig="\
import sys
# Prefer sysconfig over distutils.sysconfig, for better compatibility
# with python 3.x. See automake bug#10227.
try:
    import sysconfig
except ImportError:
    can_use_sysconfig = 0
else:
    can_use_sysconfig = 1
# Can't use sysconfig in CPython 2.7, since it's broken in
virtualenvs:
# <https://github.com/pypa/virtualenv/issues/118>
try:
    from platform import python_implementation
    if python_implementation() == 'CPython' and sys.version[:3] ==
'2.7':
        can_use_sysconfig = 0
except ImportError:
    pass"

```



```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON script directory" >&5
$sas_echo_n "checking for $am_display_PYTHON script directory... " >&6;
}
if ${am_cv_python_pythondir+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test "x$prefix" = xNONE
  then
    am_py_prefix=$ac_default_prefix
  else
    am_py_prefix=$prefix
  fi
  am_cv_python_pythondir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('purelib',
vars={'base': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(0, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
  case $am_cv_python_pythondir in
  $am_py_prefix*)
    am__strip_prefix=`echo "$am_py_prefix" | sed 's|.|.|g'`
    am_cv_python_pythondir=`echo "$am_cv_python_pythondir" | sed
"s,^$am__strip_prefix,$PYTHON_PREFIX,"`
    ;;
  *)
    case $am_py_prefix in
    /usr|/System*) ;;
    *)
      am_cv_python_pythondir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
      ;;
    esac
  ;;
  esac
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_pythondir" >&5
$sas_echo "$am_cv_python_pythondir" >&6; }
pythondir=$am_cv_python_pythondir

pkgpythondir=\${pythondir}/$PACKAGE

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON extension module directory" >&5
$sas_echo_n "checking for $am_display_PYTHON extension module
directory... " >&6; }
if ${am_cv_python_pyexecdir+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test "x$exec_prefix" = xNONE
  then
    am_py_exec_prefix=$am_py_prefix
  else
    am_py_exec_prefix=$exec_prefix
  fi
  am_cv_python_pyexecdir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('platlib',
vars={'platbase': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(1, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
  case $am_cv_python_pyexecdir in
  $am_py_exec_prefix*)
    am__strip_prefix=`echo "$am_py_exec_prefix" | sed 's|.|.|g'`
    am_cv_python_pyexecdir=`echo "$am_cv_python_pyexecdir" | sed
"s,^$am__strip_prefix,$PYTHON_EXEC_PREFIX,"`
    ;;
  *)
    case $am_py_exec_prefix in
    /usr|/System*) ;;
    *)
am_cv_python_pyexecdir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
        ;;
    esac
        ;;
    esac
  fi
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_pyexecdir" >&5
$sas_echo "$am_cv_python_pyexecdir" >&6; }
  pyexecdir=$am_cv_python_pyexecdir

pkgpyexecdir=\${pyexecdir}/$PACKAGE

```

```

fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for Python modules
for full test coverage" >&5
$as_echo_n "checking for Python modules for full test coverage... "
>&6; }
    if "$PYTHON" -c "import dbus, gobject, dbus.mainloop.glib"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        as_fn_error $? "cannot import dbus, gobject, dbus.mainloop.glib
Python modules" "$LINENO" 5
    fi
else
    # --enable-tests not given: do not abort if Python is missing

        if test -n "$PYTHON"; then
            # If the user set $PYTHON, use it and don't search something
            else.
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether
$PYTHON version is >= 2.6" >&5
$as_echo_n "checking whether $PYTHON version is >= 2.6... " >&6; }
                prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
                if { echo "$as_me:$LINENO: $PYTHON -c "$prog"" >&5
($PYTHON -c "$prog") >&5 2>&5
                ac_status=$?
                echo "$as_me:$LINENO: \$? = $ac_status" >&5
                (exit $ac_status); }; then :
                    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
                else
                    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

```

```

                                as_fn_error $? "Python interpreter is too old"
"$LINENO" 5
fi
    am_display_PYTHON=$PYTHON
else
    # Otherwise, try each interpreter until we find one that
satisfies
    # VERSION.
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for a Python
interpreter with version >= 2.6" >&5
$as_echo_n "checking for a Python interpreter with version >= 2.6... "
>&6; }
if ${am_cv_pathless_PYTHON+:} false; then :
    $as_echo_n "(cached) " >&6
else

    for am_cv_pathless_PYTHON in python python2 python3 python3.3
python3.2 python3.1 python3.0 python2.7 python2.6 python2.5 python2.4
python2.3 python2.2 python2.1 python2.0 none; do
        test "$am_cv_pathless_PYTHON" = none && break
        prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
        if { echo "$as_me:$LINENO: $am_cv_pathless_PYTHON -c "$prog"" >&5
($am_cv_pathless_PYTHON -c "$prog") >&5 2>&5
ac_status=$?
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
(exit $ac_status); }; then :
            break
        fi
    done
fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_pathless_PYTHON" >&5
$as_echo "$am_cv_pathless_PYTHON" >&6; }
    # Set $PYTHON to the absolute path of $am_cv_pathless_PYTHON.
    if test "$am_cv_pathless_PYTHON" = none; then
        PYTHON=:
    else
        # Extract the first word of "$am_cv_pathless_PYTHON", so it
can be a program name with args.
set dummy $am_cv_pathless_PYTHON; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_PYTHON+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  case $PYTHON in
    [\\/* | ?:[\\/*]*)
      ac_cv_path_PYTHON="$PYTHON" # Let the user override the test with a
path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_PYTHON="$as_dir/$ac_word$ac_exec_ext"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

  ;;
esac
fi
PYTHON=$ac_cv_path_PYTHON
if test -n "$PYTHON"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PYTHON" >&5
$as_echo "$PYTHON" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  fi
  am_display_PYTHON=$am_cv_pathless_PYTHON
fi

if test "$PYTHON" = :; then
  :
else

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON version" >&5
$as_echo_n "checking for $am_display_PYTHON version... " >&6; }
if ${am_cv_python_version+:} false; then :
  $as_echo_n "(cached) " >&6
else

```

```

    am_cv_python_version=`$PYTHON -c "import sys;
sys.stdout.write(sys.version[:3])"`
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_version" >&5
$as_echo "$am_cv_python_version" >&6; }
PYTHON_VERSION=$am_cv_python_version

PYTHON_PREFIX='${prefix}'

PYTHON_LIB_PREFIX='${libdir}'

PYTHON_EXEC_PREFIX='${exec_prefix}'

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON platform" >&5
$as_echo_n "checking for $am_display_PYTHON platform... " >&6; }
if ${am_cv_python_platform+:} false; then :
  $as_echo_n "(cached) " >&6
else
  am_cv_python_platform=`$PYTHON -c "import sys;
sys.stdout.write(sys.platform)"`
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_platform" >&5
$as_echo "$am_cv_python_platform" >&6; }
PYTHON_PLATFORM=$am_cv_python_platform

# Just factor out some code duplication.
am_python_setup_sysconfig="\
import sys
# Prefer sysconfig over distutils.sysconfig, for better compatibility
# with python 3.x. See automake bug#10227.
try:
    import sysconfig
except ImportError:
    can_use_sysconfig = 0
else:
    can_use_sysconfig = 1
# Can't use sysconfig in CPython 2.7, since it's broken in
virtualenvs:
# <https://github.com/pypa/virtualenv/issues/118>
try:
    from platform import python_implementation
    if python_implementation() == 'CPython' and sys.version[:3] ==
'2.7':
        can_use_sysconfig = 0

```

```

except ImportError:
    pass"

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON script directory" >&5
$as_echo_n "checking for $am_display_PYTHON script directory... " >&6;
}
if ${am_cv_python_pythondir+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$prefix" = xNONE
  then
    am_py_prefix=$ac_default_prefix
  else
    am_py_prefix=$prefix
  fi
  am_cv_python_pythondir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('purelib',
vars={'base': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(0, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages"
case $am_cv_python_pythondir in
$am_py_prefix*)
  am__strip_prefix=`echo "$am_py_prefix" | sed 's|.|.|g'`
  am_cv_python_pythondir=`echo "$am_cv_python_pythondir" | sed
"s,^$am__strip_prefix,$PYTHON_PREFIX,"`
  ;;
*)
  case $am_py_prefix in
  /usr|/System*) ;;
  *)
am_cv_python_pythondir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
  ;;
  esac
  ;;
  esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_pythondir" >&5
$as_echo "$am_cv_python_pythondir" >&6; }
pythondir=$am_cv_python_pythondir

```

```
pkgpythondir=\${pythondir}/$PACKAGE
```

```
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON extension module directory" >&5
$as_echo_n "checking for $am_display_PYTHON extension module
directory... " >&6; }
if ${am_cv_python_pyexecdir+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$exec_prefix" = xNONE
  then
    am_py_exec_prefix=$am_py_prefix
  else
    am_py_exec_prefix=$exec_prefix
  fi
  am_cv_python_pyexecdir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('platlib',
vars={'platbase': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(1, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
  case $am_cv_python_pyexecdir in
  $am_py_exec_prefix*)
    am__strip_prefix=`echo "$am_py_exec_prefix" | sed 's|.|.|g'`
    am_cv_python_pyexecdir=`echo "$am_cv_python_pyexecdir" | sed
"s,^$am__strip_prefix,$PYTHON_EXEC_PREFIX,"`
    ;;
  *)
    case $am_py_exec_prefix in
    /usr|/System*) ;;
    *)
am_cv_python_pyexecdir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
      ;;
    esac
      ;;
    esac
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_pyexecdir" >&5
$as_echo "$am_cv_python_pyexecdir" >&6; }
pyexecdir=$am_cv_python_pyexecdir
```



```

pkgpyexecdir=\${pyexecdir}/$PACKAGE

fi

fi

if test x$enable_verbose_mode = xyes; then
$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h
fi

if test x$enable_asserts = xno; then
$as_echo "@%:@define DBUS_DISABLE_ASSERT 1" >>confdefs.h

    DISABLE_UNUSED_WARNINGS="unused-label"
    R_DYNAMIC_LDFLAG=""
else
    # -rdynamic is needed for glibc's backtrace_symbols to work.
    # No clue how much overhead this adds, but it's useful
    # to do this on any assertion failure,
    # so for now it's enabled anytime asserts are (currently not
    # in production builds).

    # To get -rdynamic you pass -export-dynamic to libtool.

$as_echo "@%:@define DBUS_BUILT_R_DYNAMIC 1" >>confdefs.h

    R_DYNAMIC_LDFLAG=-export-dynamic
fi

if test x$enable_checks = xno; then
$as_echo "@%:@define DBUS_DISABLE_CHECKS 1" >>confdefs.h

$as_echo "@%:@define G_DISABLE_CHECKS 1" >>confdefs.h

    DISABLE_UNUSED_WARNINGS="unused-label"
fi

if test x$enable_userdb_cache = xyes; then
$as_echo "@%:@define DBUS_ENABLE_USERDB_CACHE 1" >>confdefs.h

fi

```

```

if test x$enable_compiler_coverage = xyes; then
    ## so that config.h changes when you toggle gcov support

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_GCOV_ENABLED 1
_ACEOF

fi

# glibc21.m4 serial 3

# Test for the GNU C Library, version 2.1 or newer.
# From Bruno Haible.

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C Library 2.1 or newer" >&5
$as_echo_n "checking whether we are using the GNU C Library 2.1 or
newer... " >&6; }
if ${ac_cv_gnu_library_2_1+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <features.h>
#ifdef __GNU_LIBRARY__
  #if ((__GLIBC__ == 2 && __GLIBC_MINOR__ >= 1) || (__GLIBC__ > 2))
    Lucky GNU user
  #endif
#endif

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "Lucky GNU user" >/dev/null 2>&1; then :
  ac_cv_gnu_library_2_1=yes
else
  ac_cv_gnu_library_2_1=no
fi
rm -f conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_gnu_library_2_1" >&5
$as_echo "$ac_cv_gnu_library_2_1" >&6; }

#### Integer sizes

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects

```

```

# declarations like `int a3[sizeof (unsigned char) >= 0];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of char" >&5
$as_echo_n "checking size of char... " >&6; }
if ${ac_cv_sizeof_char+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (char))"
"ac_cv_sizeof_char" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_char" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
>&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (char)
See \`config.log' for more details" "$LINENO" 5; }
    else
      ac_cv_sizeof_char=0
    fi
  fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_char"
>&5
$as_echo "$ac_cv_sizeof_char" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_CHAR $ac_cv_sizeof_char
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[sizeof (unsigned char) >= 0];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of short" >&5
$as_echo_n "checking size of short... " >&6; }
if ${ac_cv_sizeof_short+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (short))"
"ac_cv_sizeof_short" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_short" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
>&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (short)

```

```

See `config.log' for more details" "$LINENO" 5; }
    else
        ac_cv_sizeof_short=0
    fi
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_short"
>&5
$as_echo "$ac_cv_sizeof_short" >&6; }

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_SHORT $ac_cv_sizeof_short
_ACEOF

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of long" >&5
$as_echo_n "checking size of long... " >&6; }
if ${ac_cv_sizeof_long+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (long))"
"ac_cv_sizeof_long" "$ac_includes_default"; then :

else
    if test "$ac_cv_type_long" = yes; then
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (long)
See `config.log' for more details" "$LINENO" 5; }
        else
            ac_cv_sizeof_long=0
        fi
    fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_long"
>&5
$as_echo "$ac_cv_sizeof_long" >&6; }

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_LONG $ac_cv_sizeof_long
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of int" >&5
$as_echo_n "checking size of int... " >&6; }
if ${ac_cv_sizeof_int+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (int))"
"ac_cv_sizeof_int" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_int" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (int)
See `config.log' for more details" "$LINENO" 5; }
    else
      ac_cv_sizeof_int=0
    fi
  fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_int"
>&5
$as_echo "$ac_cv_sizeof_int" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_INT $ac_cv_sizeof_int
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of void *" >&5
$as_echo_n "checking size of void *... " >&6; }
if ${ac_cv_sizeof_void_p+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (void *))"
"ac_cv_sizeof_void_p" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_void_p" = yes; then

```

```

        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (void *)
See `config.log' for more details" "$LINENO" 5; }
    else
        ac_cv_sizeof_void_p=0
    fi
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_void_p"
>&5
$as_echo "$ac_cv_sizeof_void_p" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_VOID_P $ac_cv_sizeof_void_p
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of long long"
>&5
$as_echo_n "checking size of long long... " >&6; }
if ${ac_cv_sizeof_long_long+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (long long))"
"ac_cv_sizeof_long_long" "$ac_includes_default"; then :

else
    if test "$ac_cv_type_long_long" = yes; then
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (long long)
See `config.log' for more details" "$LINENO" 5; }
        else
            ac_cv_sizeof_long_long=0
        fi
    fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_sizeof_long_long" >&5
$as_echo "$ac_cv_sizeof_long_long" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_LONG_LONG $ac_cv_sizeof_long_long
_ACEOF

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of __int64" >&5
$as_echo_n "checking size of __int64... " >&6; }
if ${ac_cv_sizeof__int64+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (__int64))"
"ac_cv_sizeof__int64" "$ac_includes_default"; then :

else
  if test "$ac_cv_type__int64" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (__int64)
See `config.log' for more details" "$LINENO" 5; }
    else
      ac_cv_sizeof__int64=0
    fi
  fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_sizeof__int64" >&5
$as_echo "$ac_cv_sizeof__int64" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF___INT64 $ac_cv_sizeof__int64
_ACEOF

```

```

@%:@ Check whether --with-64-bit was given.
if test "${with_64_bit+set}" = set; then :
  withval=$with_64_bit;
else
  with_64_bit=yes
fi

```

```

### See what our 64 bit type is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 64-bit integer type"
>&5
$as_echo_n "checking 64-bit integer type... " >&6; }

case 8 in
$ac_cv_sizeof_int)
  dbusint64=int
  dbusint64_constant='(val) '
  dbusuint64_constant='(val) '
  dbusint64_printf_modifier='""'
  ;;
$ac_cv_sizeof_long)
  dbusint64=long
  dbusint64_constant='(val##L) '
  dbusuint64_constant='(val##UL) '
  dbusint64_printf_modifier='"l"'
  ;;
$ac_cv_sizeof_long_long)
  dbusint64='long long'
  dbusint64_constant='(val##LL) '
  dbusuint64_constant='(val##ULL) '
  # Ideally we discover what the format is, but this is
  # only used in verbose mode, so eh...
  if test x"$ac_cv_gnu_library_2_1" = xyes; then
    dbusint64_printf_modifier='"ll"'
  fi
  ;;
$ac_cv_sizeof__int64)
  dbusint64=__int64
  dbusint64_constant='(val##i64) '
  dbusuint64_constant='(val##ui64) '
  # See above case
  if test x"$ac_cv_gnu_library_2_1" = xyes; then
    dbusint64_printf_modifier='"ll"'
  fi
  ;;
esac

if test "x$with_64_bit" = xno; then :

    DBUS_INT64_TYPE="no_int64_type_detected"
    DBUS_HAVE_INT64=0
    DBUS_INT64_CONSTANT=
    DBUS_UINT64_CONSTANT=
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: disabled via
--without-64-bit" >&5
$as_echo "disabled via --without-64-bit" >&6; }

elif test -z "$dbusint64"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not found" >&5

```



```
$as_echo "not found" >&6; }
  as_fn_error $? "Could not find a 64-bit integer type.
```

Please report a bug here with details of your platform and compiler:

http://bugs.freedesktop.org/enter_bug.cgi?product=DBus&component=core

To compile D-Bus with all 64-bit integer types removed (not recommended), use the option `"--without-64-bit"`.

This option is likely to be removed in future, unless you report that your platform needs it." "\$LINENO" 5

```
else
```

```
    DBUS_INT64_TYPE="$dbusint64"
    DBUS_HAVE_INT64=1
    DBUS_INT64_CONSTANT="$dbusint64_constant"
    DBUS_UINT64_CONSTANT="$dbusuint64_constant"
    if test x"$dbusint64_printf_modifier" != x; then
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_INT64_PRINTF_MODIFIER $dbusint64_printf_modifier
_ACEOF
```

```
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT64_TYPE" >&5
$as_echo "$DBUS_INT64_TYPE" >&6; }
```

```
fi
```

```
### see what 32-bit int is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 32-bit integer type"
>&5
$as_echo_n "checking 32-bit integer type... " >&6; }
```

```
case 4 in
$ac_cv_sizeof_short)
  dbusint32=short
  ;;
$ac_cv_sizeof_int)
  dbusint32=int
  ;;
```

```

$ac_cv_sizeof_long)
    dbusint32=long
    ;;
esac

if test -z "$dbusint32" ; then
    DBUS_INT32_TYPE="no_int32_type_detected"
    as_fn_error $? "No 32-bit integer type found" "$LINENO" 5
else
    DBUS_INT32_TYPE="$dbusint32"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT32_TYPE" >&5
$as_echo "$DBUS_INT32_TYPE" >&6; }
fi

### see what 16-bit int is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 16-bit integer type"
>&5
$as_echo_n "checking 16-bit integer type... " >&6; }

case 2 in
$ac_cv_sizeof_short)
    dbusint16=short
    ;;
$ac_cv_sizeof_int)
    dbusint16=int
    ;;
esac

if test -z "$dbusint16" ; then
    DBUS_INT16_TYPE="no_int16_type_detected"
    as_fn_error $? "No 16-bit integer type found" "$LINENO" 5
else
    DBUS_INT16_TYPE="$dbusint16"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT16_TYPE" >&5
$as_echo "$DBUS_INT16_TYPE" >&6; }
fi

## byte order
case $host_os in
darwin*)
    # check at compile-time, so that it is possible to build
universal
    # (with multiple architectures at once on the compile line)

    ;;
*)

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether
byte ordering is bigendian" >&5
$as_echo_n "checking whether byte ordering is bigendian... " >&6; }
if ${ac_cv_c_bigendian+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_cv_c_bigendian=unknown
  # See if we're dealing with a universal compiler.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#ifdef __APPLE_CC__
  not a universal capable compiler
#else
  typedef int dummy;

_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :

  # Check for potential -arch flags.  It is not universal unless
  # there are at least two -arch flags with different values.
  ac_arch=
  ac_prev=
  for ac_word in $CC $CFLAGS $CPPFLAGS $LDFLAGS; do
    if test -n "$ac_prev"; then
      case $ac_word in
        i?86 | x86_64 | ppc | ppc64)
          if test -z "$ac_arch" || test "$ac_arch" = "$ac_word";
then
            ac_arch=$ac_word
          else
            ac_cv_c_bigendian=universal
            break
          fi
        ;;
      esac
      ac_prev=
    elif test "x$ac_word" = "x-arch"; then
      ac_prev=arch
    fi
  done

fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
if test $ac_cv_c_bigendian = unknown; then
  # See if sys/param.h defines the BYTE_ORDER macro.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <sys/types.h>
#include <sys/param.h>

int
main ()
{

```

```

#if ! (defined BYTE_ORDER && defined BIG_ENDIAN \
      && defined LITTLE_ENDIAN && BYTE_ORDER && BIG_ENDIAN \
      && LITTLE_ENDIAN)
    bogus endian macros
#endif

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    # It does; now see whether it defined to BIG_ENDIAN or not.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <sys/types.h>
    #include <sys/param.h>

int
main ()
{
#if BYTE_ORDER != BIG_ENDIAN
    not big endian
#endif

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_c_bigendian=yes
else
    ac_cv_c_bigendian=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
if test $ac_cv_c_bigendian = unknown; then
    # See if <limits.h> defines _LITTLE_ENDIAN or _BIG_ENDIAN (e.g.,
Solaris).
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <limits.h>

int
main ()
{
#if ! (defined _LITTLE_ENDIAN || defined _BIG_ENDIAN)
    bogus endian macros
#endif

;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    # It does; now see whether it defined to _BIG_ENDIAN or not.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <limits.h>

int
main ()
{
#ifdef _BIG_ENDIAN
    not big endian
#endif

;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_c_bigendian=yes
else
    ac_cv_c_bigendian=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
    if test $ac_cv_c_bigendian = unknown; then
        # Compile a test program.
        if test "$cross_compiling" = yes; then :
            # Try to guess by grepping values from an object file.
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
short int ascii_mm[] =
    { 0x4249, 0x4765, 0x6E44, 0x6961, 0x6E53, 0x7953, 0 };
short int ascii_ii[] =
    { 0x694C, 0x5454, 0x656C, 0x6E45, 0x6944, 0x6E61, 0 };
int use_ascii (int i) {
    return ascii_mm[i] + ascii_ii[i];
}
short int ebcdic_ii[] =
    { 0x89D3, 0xE3E3, 0x8593, 0x95C5, 0x89C4, 0x9581, 0 };
short int ebcdic_mm[] =
    { 0xC2C9, 0xC785, 0x95C4, 0x8981, 0x95E2, 0xA8E2, 0 };
int use_ebcdic (int i) {
    return ebcdic_mm[i] + ebcdic_ii[i];
}
extern int foo;

int

```

```

main ()
{
return use_ascii (foo) == use_ebcdic (foo);
;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
if grep BIGenDianSyS conftest.$ac_objext >/dev/null; then
ac_cv_c_bigendian=yes
fi
if grep LiTTleEnDian conftest.$ac_objext >/dev/null ; then
if test "$ac_cv_c_bigendian" = unknown; then
ac_cv_c_bigendian=no
else
# finding both strings is unlikely to happen, but who
knows?
ac_cv_c_bigendian=unknown
fi
fi
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
else
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$ac_includes_default
int
main ()
{

/* Are we little or big endian? From Harbison&Steele. */
union
{
long int l;
char c[sizeof (long int)];
} u;
u.l = 1;
return u.c[sizeof (long int) - 1] == 1;

;
return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
ac_cv_c_bigendian=no
else
ac_cv_c_bigendian=yes
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

```

```

        fi
    fi
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_c_bigendian"
    >&5
    $sas_echo "$ac_cv_c_bigendian" >&6; }
    case $ac_cv_c_bigendian in #(
        yes)
            $sas_echo "@%:@define WORDS_BIGENDIAN 1" >>confdefs.h
    ;; #(
        no)
            ;; #(
        universal)

$sas_echo "@%:@define AC_APPLE_UNIVERSAL_BUILD 1" >>confdefs.h

        ;; #(
        *)
            as_fn_error $? "unknown endianness
    presetting ac_cv_c_bigendian=no (or yes) will help" "$LINENO" 5 ;;
    esac

        ;;

esac

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for an
implementation of va_copy()" >&5
$sas_echo_n "checking for an implementation of va_copy()... " >&6; }
if ${dbus_cv_va_copy+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdlib.h>
    static void f (int i, ...) {
        va_list args1, args2;
        va_start (args1, i);
        va_copy (args2, args1);
        if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
            exit (1);
        va_end (args1); va_end (args2);
    }
    int main() {
        f (0, 42);
        return 0;
    }
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_cv_va_copy=yes
else
    dbus_cv_va_copy=no

```

```

fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv_va_copy" >&5
$as_echo "$dbus_cv_va_copy" >&6; }
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for an
implementation of __va_copy()" >&5
$as_echo_n "checking for an implementation of __va_copy()... " >&6; }
if ${dbus_cv__va_copy+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdlib.h>
static void f (int i, ...) {
  va_list args1, args2;
  va_start (args1, i);
  __va_copy (args2, args1);
  if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
    exit (1);
  va_end (args1); va_end (args2);
}
int main() {
  f (0, 42);
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  dbus_cv__va_copy=yes
else
  dbus_cv__va_copy=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv__va_copy"
>&5
$as_echo "$dbus_cv__va_copy" >&6; }

if test "x$dbus_cv_va_copy" = "xyes"; then
  dbus_va_copy_func=va_copy
else if test "x$dbus_cv__va_copy" = "xyes"; then
  dbus_va_copy_func=__va_copy
fi
fi

if test -n "$dbus_va_copy_func"; then

```



```

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_VA_COPY $dbus_va_copy_func
_ACEOF

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether va_lists can
be copied by value" >&5
$as_echo_n "checking whether va_lists can be copied by value... " >&6;
}
if ${dbus_cv_va_val_copy+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    dbus_cv_va_val_copy=yes
  else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

    #include <stdarg.h>
    #include <stdlib.h>

int
main ()
{

    static void f (int i, ...) {
    va_list args1, args2;
    va_start (args1, i);
    args2 = args1;
    if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
        exit (1);
    va_end (args1); va_end (args2);
    }

    int main() {
        f (0, 42);
        return 0;
    }

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

```

```

    dbus_cv_va_val_copy=yes
else
    dbus_cv_va_val_copy=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv_va_val_copy"
>&5
$as_echo "$dbus_cv_va_val_copy" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$sac_ext >&5'
ac_link='$CC -o conftest$sac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$sac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test "x$dbus_cv_va_val_copy" = "xno"; then

$as_echo "@%:@define DBUS_VA_COPY_AS_ARRAY 1" >>confdefs.h

fi

#### Atomic integers

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC knows
__sync_sub_and_fetch()" >&5
$as_echo_n "checking whether $CC knows __sync_sub_and_fetch()... "
>&6; }
if ${dbus_cv_sync_sub_and_fetch+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$sac_ext
/* end confdefs.h. */

int
main ()
{
int a = 4; int b = __sync_sub_and_fetch(&a, 4); exit(b);
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_cv_sync_sub_and_fetch=yes
else

```

```

    dbus_cv_sync_sub_and_fetch=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_cv_sync_sub_and_fetch" >&5
$as_echo "$dbus_cv_sync_sub_and_fetch" >&6; }

if test "x$dbus_cv_sync_sub_and_fetch" = "xyes" ; then
    have_sync=1
else
    have_sync=0
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_USE_SYNC $have_sync
_ACEOF

#### Various functions
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing socket" >&5
$as_echo_n "checking for library containing socket... " >&6; }
if ${ac_cv_search_socket+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char socket ();
int
main ()
{
return socket ();
    ;
    return 0;
}
_ACEOF
for ac_lib in ' socket network; do
    if test -z "$ac_lib"; then
        ac_res="none required"
    else

```

```

        ac_res=-l$ac_lib
        LIBS="-l$ac_lib $ac_func_search_save_LIBS"
    fi
    if ac_fn_c_try_link "$LINENO"; then :
        ac_cv_search_socket=$ac_res
    fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
    if ${ac_cv_search_socket+:} false; then :
        break
    fi
done
if ${ac_cv_search_socket+:} false; then :

else
    ac_cv_search_socket=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_search_socket"
>&5
$as_echo "$ac_cv_search_socket" >&6; }
ac_res=$ac_cv_search_socket
if test "$ac_res" != no; then :
    test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

ac_fn_c_check_func "$LINENO" "gethostbyname"
"ac_cv_func_gethostbyname"
if test "x$ac_cv_func_gethostbyname" = xyes; then :

else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for gethostbyname
in -lnsl" >&5
$as_echo_n "checking for gethostbyname in -lnsl... " >&6; }
    if ${ac_cv_lib_nsl_gethostbyname+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        ac_check_lib_save_LIBS=$LIBS
        LIBS="-lnsl $LIBS"
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
        /* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();

```

```

int
main ()
{
return gethostbyname ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_nsl_gethostbyname=yes
else
ac_cv_lib_nsl_gethostbyname=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_nsl_gethostbyname" >&5
$as_echo "$ac_cv_lib_nsl_gethostbyname" >&6; }
if test "x$ac_cv_lib_nsl_gethostbyname" = xyes; then :
cat >>confdefs.h <<_ACEOF
@%:@define HAVE_LIBNSL 1
_ACEOF

LIBS="-lnsl $LIBS"

fi

fi

for ac_func in vsnprintf vasprintf nanosleep usleep setenv clearenv
unsetenv socketpair getgrouplist fpathconf setrlimit poll setlocale
localeconv strtoll strtoull issetugid getresuid
do :
as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\${$as_ac_var}\" = x\"yes\"; then :
cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1
_ACEOF

fi
done

for ac_header in syslog.h
do :
ac_fn_c_check_header_mongrel "$LINENO" "syslog.h"
"ac_cv_header_syslog_h" "$ac_includes_default"
if test "x$ac_cv_header_syslog_h" = xyes; then :

```

```

    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYSLOG_H 1
    _ACEOF

fi

done

if test "x$ac_cv_header_syslog_h" = "xyes"; then
    ac_fn_c_check_decl "$LINENO" "LOG_PERROR"
"ac_cv_have_decl_LOG_PERROR" "#include <syslog.h>
"
if test "x$ac_cv_have_decl_LOG_PERROR" = xyes; then :
    ac_have_decl=1
else
    ac_have_decl=0
fi

cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DECL_LOG_PERROR $ac_have_decl
    _ACEOF

fi

#### Check for broken poll; taken from Glib's configure

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for broken poll" >&5
$as_echo_n "checking for broken poll... " >&6; }
if test "$cross_compiling" = yes; then :
    broken_poll="no (cross compiling)"
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

#include <stdlib.h>
#include <fcntl.h>
#include <poll.h>
#ifdef HAVE_SYS_POLL_H
#include <sys/poll.h>
#endif
int main(void) {
    struct pollfd fds[1];
    int fd;
    fd = open("/dev/null", 1);
    fds[0].fd = fd;
    fds[0].events = POLLIN;
    fds[0].revents = 0;
    if (poll(fds, 1, 0) < 0 || (fds[0].revents & POLLNVAL) != 0) {
        exit(1); /* Does not work for devices -- fail */
    }
    exit(0);
}

```

```

_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    broken_poll=no
else
    broken_poll=yes

$as_echo "@%:@define BROKEN_POLL 1" >>confdefs.h

fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $broken_poll" >&5
$as_echo "$broken_poll" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for dirfd" >&5
$as_echo_n "checking for dirfd... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$sac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <dirent.h>

int
main ()
{

DIR *dirp;
dirp = opendir(".");
dirfd(dirp);
closedir(dirp);

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_have_dirfd=yes
else
    dbus_have_dirfd=no
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_dirfd" >&5
$as_echo "$dbus_have_dirfd" >&6; }
if test "$dbus_have_dirfd" = yes; then

$as_echo "@%:@define HAVE_DIRFD 1" >>confdefs.h

else

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for DIR *dirp-
>dd_fd" >&5
$as_echo_n "checking for DIR *dirp->dd_fd... " >&6; }
        cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <dirent.h>

int
main ()
{

DIR *dirp;
int fd;
dirp = opendir(".");
fd = dirp->dd_fd;
closedir(dirp);

        ;
        return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_have_ddfd=yes
else
    dbus_have_ddfd=no
fi
rm -f core confptest.err confptest.$ac_objext \
    confptest.$ac_exeext confptest.$ac_ext
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $dbus_have_ddfd"
>&5
$as_echo "$dbus_have_ddfd" >&6; }
    if test "$dbus_have_ddfd" = yes; then

$as_echo "@%:@define HAVE_DDFD 1" >>confdefs.h

        fi
fi

for ac_header in sys/resource.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "sys/resource.h"
"ac_cv_header_sys_resource_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_resource_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_RESOURCE_H 1
_ACEOF

fi

done

```



```

for ac_header in dirent.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "dirent.h"
"ac_cv_header_dirent_h" "$ac_includes_default"
if test "x$ac_cv_header_dirent_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DIRENT_H 1
_ACEOF

fi

done

for ac_header in execinfo.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "execinfo.h"
"ac_cv_header_execinfo_h" "$ac_includes_default"
if test "x$ac_cv_header_execinfo_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXECINFO_H 1
_ACEOF
    for ac_func in backtrace
do :
    ac_fn_c_check_func "$LINENO" "backtrace" "ac_cv_func_backtrace"
if test "x$ac_cv_func_backtrace" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_BACKTRACE 1
_ACEOF

fi
done

fi

done

for ac_header in errno.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "errno.h"
"ac_cv_header_errno_h" "$ac_includes_default"
if test "x$ac_cv_header_errno_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_ERRNO_H 1
_ACEOF

fi

done

```

```

for ac_header in signal.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "signal.h"
"ac_cv_header_signal_h" "$ac_includes_default"
if test "x$ac_cv_header_signal_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SIGNAL_H 1
_ACEOF

fi

done

for ac_header in locale.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "locale.h"
"ac_cv_header_locale_h" "$ac_includes_default"
if test "x$ac_cv_header_locale_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_LOCALE_H 1
_ACEOF

fi

done

for ac_header in byteswap.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "byteswap.h"
"ac_cv_header_byteswap_h" "$ac_includes_default"
if test "x$ac_cv_header_byteswap_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_BYTESWAP_H 1
_ACEOF

fi

done

for ac_header in unistd.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "unistd.h"
"ac_cv_header_unistd_h" "$ac_includes_default"
if test "x$ac_cv_header_unistd_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_UNISTD_H 1
_ACEOF

```

```

fi

done

for ac_header in ws2tcpip.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "ws2tcpip.h"
    "ac_cv_header_ws2tcpip_h" "$ac_includes_default"
    if test "x$ac_cv_header_ws2tcpip_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_WS2TCPIP_H 1
    _ACEOF

fi

done

for ac_header in wsapi.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "wsapi.h"
    "ac_cv_header_wsapi_h" "$ac_includes_default"
    if test "x$ac_cv_header_wsapi_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_WSAPI_H 1
    _ACEOF

fi

done

# Add -D_POSIX_PTHREAD_SEMANTICS if on Solaris
#
case $host_os in
    solaris*)
        CFLAGS="$CFLAGS -D_POSIX_PTHREAD_SEMANTICS" ;;
esac

# checking for a posix version of getpwnam_r
# if we are cross compiling and can not run the test
# assume getpwnam_r is the posix version
# it is up to the person cross compiling to change
# this behavior if desired
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for posix
getpwnam_r" >&5
$as_echo_n "checking for posix getpwnam_r... " >&6; }
if ${ac_cv_func_posix_getpwnam_r+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    ac_cv_func_posix_getpwnam_r=yes

else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <errno.h>
#include <pwd.h>

int
main ()
{

    char buffer[10000];
    struct passwd pwd, *pwptr = &pwd;
    int error;
    errno = 0;
    error = getpwnam_r ("", &pwd, buffer,
                      sizeof (buffer), &pwptr);
    return (error < 0 && errno == ENOSYS)
        || error == ENOSYS;

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
  ac_cv_func_posix_getpwnam_r=yes
else
  ac_cv_func_posix_getpwnam_r=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_func_posix_getpwnam_r" >&5
$as_echo "$ac_cv_func_posix_getpwnam_r" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'

```

```

ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test "$ac_cv_func_posix_getpwnam_r" = yes; then

$as_echo "@%:@define HAVE_POSIX_GETPWNAM_R 1" >>confdefs.h

else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for nonposix
getpwnam_r" >&5
$as_echo_n "checking for nonposix getpwnam_r... " >&6; }
if ${ac_cv_func_nonposix_getpwnam_r+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <pwd.h>
int
main ()
{
char buffer[10000];

        struct passwd pwd;
        getpwnam_r ("", &pwd, buffer,
                    sizeof (buffer));

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_func_nonposix_getpwnam_r=yes
else
    ac_cv_func_nonposix_getpwnam_r=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_func_nonposix_getpwnam_r" >&5
$as_echo "$ac_cv_func_nonposix_getpwnam_r" >&6; }
    if test "$ac_cv_func_nonposix_getpwnam_r" = yes; then

$as_echo "@%:@define HAVE_NONPOSIX_GETPWNAM_R 1" >>confdefs.h

        fi
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether socklen_t is
defined" >&5
$as_echo_n "checking whether socklen_t is defined... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

```

```

#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>

int
main ()
{

socklen_t foo;
foo = 1;

    ;
    return 0;
}
__ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    dbus_have_socklen_t=yes
else
    dbus_have_socklen_t=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_socklen_t"
>&5
$as_echo "$dbus_have_socklen_t" >&6; }

if test "x$dbus_have_socklen_t" = "xyes"; then

$as_echo "@%:@define HAVE_SOCKLEN_T 1" >>confdefs.h

fi

for ac_header in sys/uio.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "sys/uio.h"
"ac_cv_header_sys_uio_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_uio_h" = xyes; then :
    cat >>confdefs.h <<__ACEOF
@%:@define HAVE_SYS_UIO_H 1
__ACEOF
    for ac_func in writev
do :
    ac_fn_c_check_func "$LINENO" "writev" "ac_cv_func_writev"
if test "x$ac_cv_func_writev" = xyes; then :
    cat >>confdefs.h <<__ACEOF
@%:@define HAVE_WRITEV 1
__ACEOF

fi
done

fi

```

done

```
for ac_header in sys/syslimits.h
do :
  ac_fn_c_check_header_mongrel "$LINENO" "sys/syslimits.h"
"ac_cv_header_sys_syslimits_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_syslimits_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_SYSLIMITS_H 1
_ACEOF
```

fi

done

```
ac_fn_c_check_decl "$LINENO" "MSG_NOSIGNAL"
"ac_cv_have_decl_MSG_NOSIGNAL" " #include <sys/types.h>
#include <sys/socket.h>
"
if test "x$ac_cv_have_decl_MSG_NOSIGNAL" = xyes; then :
  ac_have_decl=1
else
  ac_have_decl=0
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DECL_MSG_NOSIGNAL $ac_have_decl
_ACEOF
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for ISO C99 varargs
macros in C" >&5
$as_echo_n "checking for ISO C99 varargs macros in C... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
```

```
int
main ()
{

int a(int p1, int p2, int p3);
#define call_a(...) a(1, __VA_ARGS__)
call_a(2,3);

;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  dbus_have_iso_c_varargs=yes
```

```

else
  dbus_have_iso_c_varargs=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_iso_c_varargs" >&5
$as_echo "$dbus_have_iso_c_varargs" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNUC varargs
macros" >&5
$as_echo_n "checking for GNUC varargs macros... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

int a(int p1, int p2, int p3);
#define call_a(params...) a(1,params)
call_a(2,3);

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  dbus_have_gnuc_varargs=yes
else
  dbus_have_gnuc_varargs=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_gnuc_varargs" >&5
$as_echo "$dbus_have_gnuc_varargs" >&6; }

if test x$dbus_have_iso_c_varargs = xyes; then

$as_echo "@%:@define HAVE_ISO_VARARGS 1" >>confdefs.h

fi
if test x$dbus_have_gnuc_varargs = xyes; then

$as_echo "@%:@define HAVE_GNUC_VARARGS 1" >>confdefs.h

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for struct msgcred"
>&5
$as_echo_n "checking for struct msgcred... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

```



```

#include <sys/types.h>
#include <sys/socket.h>

int
main ()
{

struct cmsgcred cred;

cred.cmcred_pid = 0;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    dbus_have_struct_cmsgcred=yes
else
    dbus_have_struct_cmsgcred=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_struct_cmsgcred" >&5
$as_echo "$dbus_have_struct_cmsgcred" >&6; }

if test x$dbus_have_struct_cmsgcred = xyes; then

$as_echo "@%:@define HAVE_CMSGCRED 1" >>confdefs.h

fi

for ac_func in getpeerucred getpeereid
do :
    as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\$$as_ac_var\" = x\"yes\"; then :
    cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1
_ACEOF

fi
done

for ac_func in pipe2 accept4
do :
    as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\$$as_ac_var\" = x\"yes\"; then :
    cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1

```

```

 ACEOF

fi
done

#### Abstract sockets

if test x$enable_abstract_sockets = xauto; then
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

warn_on_xcompile=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking abstract socket
namespace" >&5
$as_echo_n "checking abstract socket namespace... " >&6; }
if ${ac_cv_have_abstract_sockets+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :

      ac_cv_have_abstract_sockets=no
      warn_on_xcompile=yes

  else
    cat confdefs.h - << ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <stdlib.h>
#include <string.h>
#include <stdio.h>
#include <sys/socket.h>
#include <sys/un.h>
#include <errno.h>

int
main ()
{

  size_t slen;
  int listen_fd;
  struct sockaddr_un addr;

  listen_fd = socket (PF_UNIX, SOCK_STREAM, 0);

  if (listen_fd < 0)

```

```

    {
        fprintf (stderr, "socket() failed: %s\n", strerror (errno));
        exit (1);
    }

    memset (&addr, '\0', sizeof (addr));
    addr.sun_family = AF_UNIX;
    strcpy (addr.sun_path, "X/tmp/dbus-fake-socket-path-used-in-
configure-test");
    /* SUN_LEN uses strlen() so need to calculate it before adding \0 at
the
* beginning.
*/
    slen = SUN_LEN(&addr);
    addr.sun_path[0] = '\0'; /* this is what makes it abstract */

    if (bind (listen_fd, (struct sockaddr*) &addr, slen) < 0)
    {
        fprintf (stderr, "Abstract socket namespace bind() failed:
%s\n",
                strerror (errno));
        exit (1);
    }
    else
        exit (0);

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    ac_cv_have_abstract_sockets=yes
else
    ac_cv_have_abstract_sockets=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$sac_cv_have_abstract_sockets" >&5
$as_echo "$ac_cv_have_abstract_sockets" >&6; }
if test x$warn_on_xcompile = xyes ; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Cannot check for
abstract sockets when cross-compiling, please use --enable-abstract-
sockets" >&5
$as_echo "$as_me: WARNING: Cannot check for abstract sockets when
cross-compiling, please use --enable-abstract-sockets" >&2;}
fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'

```

```

ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi

if test x$enable_abstract_sockets = xyes; then
  if test x$ac_cv_have_abstract_sockets = xno; then
    as_fn_error $? "Abstract sockets explicitly required, and support
not detected." "$LINENO" 5
  fi
fi

if test x$enable_abstract_sockets = xno; then
  ac_cv_have_abstract_sockets=no;
fi

if test x$ac_cv_have_abstract_sockets = xyes ; then
  DBUS_PATH_OR_ABSTRACT=abstract

$as_echo "@%:@define HAVE_ABSTRACT_SOCKETS 1" >>confdefs.h

else
  DBUS_PATH_OR_ABSTRACT=path
fi

# this is used in addresses to prefer abstract, e.g.
# unix:path=/foo or unix:abstract=/foo

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
    be a program name with args.
    set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_PKG_CONFIG+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      case $PKG_CONFIG in
        [\\/]*)
          ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
          with a path.
          ;;
        *)
          as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
          for as_dir in $PATH
          do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
  ac_pt_PKG_CONFIG=$PKG_CONFIG
  # Extract the first word of "pkg-config", so it can be a program
name with args.
set dummy pkg-config; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $ac_pt_PKG_CONFIG in
  [\\/] * | ?:[\\/] *)
    ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
override the test with a path.
    ;;
  *)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_ac_pt_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
>&5
$as_echo "$ac_pt_PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_pt_PKG_CONFIG" = x; then
        PKG_CONFIG=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        PKG_CONFIG=$ac_pt_PKG_CONFIG
    fi
else
    PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=0.9.0
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
$as_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }
    if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    fi
fi

```

```

        PKG_CONFIG=""
    fi

fi

#### Sort out XML library

# see what we have
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
XML_ParserCreate_MM in -lexpat" >&5
$as_echo_n "checking for XML_ParserCreate_MM in -lexpat... " >&6; }
if ${ac_cv_lib_expat_XML_ParserCreate_MM+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lexpat $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char XML_ParserCreate_MM ();
int
main ()
{
return XML_ParserCreate_MM ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_expat_XML_ParserCreate_MM=yes
else
    ac_cv_lib_expat_XML_ParserCreate_MM=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_expat_XML_ParserCreate_MM" >&5
$as_echo "$ac_cv_lib_expat_XML_ParserCreate_MM" >&6; }
if test "x$ac_cv_lib_expat_XML_ParserCreate_MM" = xyes; then :
    for ac_header in expat.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "expat.h"
"ac_cv_header_expat_h" "$ac_includes_default"
if test "x$ac_cv_header_expat_h" = xyes; then :

```

```

    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXPAT_H 1
_ACEOF
    have_expat=true
else
    have_expat=false
fi

done

else
    have_expat=false
fi

# see what we want to use
dbus_use_libxml=false
dbus_use_expat=false
if test x$with_xml = xexpat; then
    if ! $have_expat ; then
        as_fn_error $? "Explicitly requested expat but expat not
found" "$LINENO" 5
    fi
    dbus_use_expat=true
elif test x$with_xml = xlibxml; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for LIBXML" >&5
$as_echo_n "checking for LIBXML... " >&6; }

if test -n "$LIBXML_CFLAGS"; then
    pkg_cv_LIBXML_CFLAGS="$LIBXML_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"libxml-2.0 >= 2.6.0\""; } >&5
        ($PKG_CONFIG --exists --print-errors "libxml-2.0 >= 2.6.0") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_LIBXML_CFLAGS=`$PKG_CONFIG --cflags "libxml-2.0 >= 2.6.0"
2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test -n "$LIBXML_LIBS"; then
    pkg_cv_LIBXML_LIBS="$LIBXML_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \

```



```

    { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG --exists -
-print-errors \"libxml-2.0 >= 2.6.0\""; } >&5
    ($PKG_CONFIG --exists --print-errors "libxml-2.0 >= 2.6.0") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${? = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_LIBXML_LIBS=`$PKG_CONFIG --libs "libxml-2.0 >= 2.6.0"
2>/dev/null`
else
    pkg_failed=yes
fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        LIBXML_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "libxml-2.0 >= 2.6.0" 2>&1`
    else
        LIBXML_PKG_ERRORS=`$PKG_CONFIG --print-errors "libxml-2.0
>= 2.6.0" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$LIBXML_PKG_ERRORS" >&5

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        have_libxml=false
elif test $pkg_failed = untried; then
    have_libxml=false
else
    LIBXML_CFLAGS=$pkg_cv_LIBXML_CFLAGS
    LIBXML_LIBS=$pkg_cv_LIBXML_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    have_libxml=true
fi
    if ! $have_libxml ; then
        as_fn_error $? "Explicitly requested libxml but libxml not
found" "$LINENO" 5
    fi
    dbus_use_libxml=true
else

```

```

        ### expat is the default because libxml can't currently
survive
        ### our brutal OOM-handling unit test setup.
        ### http://bugzilla.gnome.org/show_bug.cgi?id=109368
        if test x$have_expat = xfalse; then
            as_fn_error $? "Could not find expat.h, check
config.log for failed attempts" "$LINENO" 5
        fi
        ### By default, only use Expat since it's tested and known to
work. If you're a
        ### general-purpose OS vendor, please don't enable libxml. For
embedded use
        ### if your OS is built around libxml, that's another case.
        dbus_use_expat=true
fi

    if $dbus_use_expat; then
        DBUS_USE_EXPAT_TRUE=
        DBUS_USE_EXPAT_FALSE='#'
    else
        DBUS_USE_EXPAT_TRUE='#'
        DBUS_USE_EXPAT_FALSE=
    fi

    if $dbus_use_libxml; then
        DBUS_USE_LIBXML_TRUE=
        DBUS_USE_LIBXML_FALSE='#'
    else
        DBUS_USE_LIBXML_TRUE='#'
        DBUS_USE_LIBXML_FALSE=
    fi

    if $dbus_use_expat; then
        XML_LIBS=-lexpat
        XML_CFLAGS=
    fi
    if $dbus_use_libxml; then
        XML_LIBS=$LIBXML_LIBS
        XML_CFLAGS=$LIBXML_CFLAGS
    fi

# Thread lib detection
ac_fn_c_check_func "$LINENO" "pthread_cond_timedwait"
"ac_cv_func_pthread_cond_timedwait"
if test "x$ac_cv_func_pthread_cond_timedwait" = xyes; then :
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
pthread_cond_timedwait in -lpthread" >&5
$as_echo_n "checking for pthread_cond_timedwait in -lpthread... " >&6;
}

```

```

if ${ac_cv_lib_pthread_pthread_cond_timedwait+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lpthread $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char pthread_cond_timedwait ();
int
main ()
{
return pthread_cond_timedwait ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_pthread_pthread_cond_timedwait=yes
else
  ac_cv_lib_pthread_pthread_cond_timedwait=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_pthread_pthread_cond_timedwait" >&5
$as_echo "$ac_cv_lib_pthread_pthread_cond_timedwait" >&6; }
if test "x$ac_cv_lib_pthread_pthread_cond_timedwait" = xyes; then :
  THREAD_LIBS="-lpthread"
fi

fi

save_libs="$LIBS"
LIBS="$LIBS $THREAD_LIBS"
ac_fn_c_check_func "$LINENO" "pthread_condattr_setclock"
"ac_cv_func_pthread_condattr_setclock"
if test "x$ac_cv_func_pthread_condattr_setclock" = xyes; then :
  have_pthread_condattr_setclock=true
else
  have_pthread_condattr_setclock=false
fi

if test x$have_pthread_condattr_setclock = xtrue; then

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing clock_getres" >&5
$as_echo_n "checking for library containing clock_getres... " >&6; }
if ${ac_cv_search_clock_getres+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char clock_getres ();
int
main ()
{
return clock_getres ();
  ;
  return 0;
}
_ACEOF
for ac_lib in ' ' rt; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_clock_getres=$ac_res
  fi
  rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
  if ${ac_cv_search_clock_getres+:} false; then :
    break
  fi
done
if ${ac_cv_search_clock_getres+:} false; then :

else
  ac_cv_search_clock_getres=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_clock_getres" >&5
$as_echo "$ac_cv_search_clock_getres" >&6; }

```

```

ac_res=$ac_cv_search_clock_getres
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"
  THREAD_LIBS="$THREAD_LIBS -lrt"
fi

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
CLOCK_MONOTONIC" >&5
$as_echo_n "checking for CLOCK_MONOTONIC... " >&6; }
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <time.h>
#include <pthread.h>

int
main ()
{

struct timespec monotonic_timer;
pthread_condattr_t attr;
pthread_condattr_init (&attr);
pthread_condattr_setclock (&attr, CLOCK_MONOTONIC);
clock_getres (CLOCK_MONOTONIC,&monotonic_timer);

;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  have_clock_monotonic=true
else
  have_clock_monotonic=false
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
if test x$have_clock_monotonic = xtrue; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: found" >&5
$as_echo "found" >&6; }

$as_echo "@%:@define HAVE_MONOTONIC_CLOCK 1" >>confdefs.h

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not found" >&5
$as_echo "not found" >&6; }
fi
fi
LIBS="$save_libs"

# SELinux detection
if test x$enable_selinux = xno ; then
  have_selinux=no;

```

```

else
    # See if we have SELinux library
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
is_selinux_enabled in -lselinux" >&5
$as_echo_n "checking for is_selinux_enabled in -lselinux... " >&6; }
if ${ac_cv_lib_selinux_is_selinux_enabled+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lselinux $LIBS"
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char is_selinux_enabled ();
int
main ()
{
return is_selinux_enabled ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_selinux_is_selinux_enabled=yes
else
    ac_cv_lib_selinux_is_selinux_enabled=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_selinux_is_selinux_enabled" >&5
$as_echo "$ac_cv_lib_selinux_is_selinux_enabled" >&6; }
if test "x$ac_cv_lib_selinux_is_selinux_enabled" = xyes; then :
    have_selinux=yes
else
    have_selinux=no
fi

    # see if we have the SELinux header with the new D-Bus stuff in it
    if test x$have_selinux = xyes ; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS
Flask permissions in selinux/av_permissions.h" >&5

```

```

$as_echo_n "checking for DBUS Flask permissions in
selinux/av_permissions.h... " >&6; }
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <selinux/av_permissions.h>
int
main ()
{
#ifdef DBUS__ACQUIRE_SVC return 0;
    #else
    #error DBUS__ACQUIRE_SVC not defined
    #endif

;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    have_selinux=yes
else
    have_selinux=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $have_selinux"
>&5
$as_echo "$have_selinux" >&6; }
    fi

    if test x$enable_selinux = xauto ; then
        if test x$have_selinux = xno ; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING:
Sufficiently new SELinux library not found" >&5
$as_echo "$as_me: WARNING: Sufficiently new SELinux library not found"
>&2;}
        fi
    else
        if test x$have_selinux = xno ; then
            as_fn_error $? "SELinux explicitly required, and
SELinux library not found" "$LINENO" 5
        fi
    fi
fi

    if test x$have_selinux = xyes; then
        HAVE_SELINUX_TRUE=
        HAVE_SELINUX_FALSE='#'
    else
        HAVE_SELINUX_TRUE='#'
        HAVE_SELINUX_FALSE=
    fi

    if test x$have_selinux = xyes ; then

```

```

    # the selinux code creates threads
    # which requires libpthread even on linux
    ac_fn_c_check_func "$LINENO" "pthread_create"
"ac_cv_func_pthread_create"
if test "x$ac_cv_func_pthread_create" = xyes; then :

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for pthread_create
in -lpthread" >&5
$as_echo_n "checking for pthread_create in -lpthread... " >&6; }
if ${ac_cv_lib_pthread_pthread_create+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lpthread $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char pthread_create ();
int
main ()
{
return pthread_create ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_pthread_pthread_create=yes
else
  ac_cv_lib_pthread_pthread_create=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_pthread_pthread_create" >&5
$as_echo "$ac_cv_lib_pthread_pthread_create" >&6; }
if test "x$ac_cv_lib_pthread_pthread_create" = xyes; then :
  SELINUX_THREAD_LIBS="-lpthread"
fi

fi

```



```

        SELINUX_LIBS="-lselinux $SELINUX_THREAD_LIBS"

$as_echo "@%:@define HAVE_SELINUX 1" >>confdefs.h

else
    SELINUX_LIBS=
fi

# inotify checks
if test x$enable_inotify = xno ; then
    have_inotify=no;
else
    for ac_header in sys/inotify.h
    do :
        ac_fn_c_check_header_mongrel "$LINENO" "sys/inotify.h"
"ac_cv_header_sys_inotify_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_inotify_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_INOTIFY_H 1
_ACEOF
    have_inotify=yes
else
    have_inotify=no
fi

done

fi

if test x$have_inotify = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_INOTIFY 1" >>confdefs.h

    for ac_func in inotify_init1
    do :
        ac_fn_c_check_func "$LINENO" "inotify_init1"
"ac_cv_func_inotify_init1"
if test "x$ac_cv_func_inotify_init1" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_INOTIFY_INIT1 1
_ACEOF

fi

done

fi

if test x$have_inotify = xyes; then
    DBUS_BUS_ENABLE_INOTIFY_TRUE=
    DBUS_BUS_ENABLE_INOTIFY_FALSE='#'
else
    DBUS_BUS_ENABLE_INOTIFY_TRUE='#'

```

```

    DBUS_BUS_ENABLE_INOTIFY_FALSE=
fi

# dnotify checks
if test x$enable_dnotify = xno ; then
    have_dnotify=no;
else
    if test x$have_inotify = xno -a x$host_os = xlinux-gnu -o
x$host_os = xlinux; then
        have_dnotify=yes;
    else
        have_dnotify=no;
    fi
fi

if test x$have_dnotify = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX 1" >>confdefs.h

fi

    if test x$have_dnotify = xyes; then
        DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE=
        DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE='#'
    else
        DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE='#'
        DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE=
    fi

# For simplicity, we require the userland API for epoll_create1 at
# compile-time (glibc 2.9), but we'll run on kernels that turn out
# not to have it at runtime.
@%:@ Check whether --enable-epoll was given.
if test "${enable_epoll+set}" = set; then :
    enableval=$enable_epoll; enable_epoll=$enableval
else
    enable_epoll=auto
fi

if test x$enable_epoll = xno; then
    have_linux_epoll=no
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for Linux
epoll(4)" >&5
$as_echo_n "checking for Linux epoll(4)... " >&6; }
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

    #ifndef __linux__
    #error This is not Linux

```

```

        #endif
        #include <sys/epoll.h>

int
main ()
{
    epoll_create1 (EPOLL_CLOEXEC);
    ;
    return 0;
}
_EOF
if ac_fn_c_try_link "$LINENO"; then :
    have_linux_epoll=yes
else
    have_linux_epoll=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$have_linux_epoll" >&5
$as_echo "$have_linux_epoll" >&6; }
fi
if test x$enable_epoll,$have_linux_epoll = xyes,no; then
    as_fn_error $? "epoll support explicitly enabled but not
available" "$LINENO" 5
fi
if test x$have_linux_epoll = xyes; then

$as_echo "@%:@define DBUS_HAVE_LINUX_EPOLL 1" >>confdefs.h

fi
    if test x$have_linux_epoll = xyes; then
        HAVE_LINUX_EPOLL_TRUE=
        HAVE_LINUX_EPOLL_FALSE='#'
    else
        HAVE_LINUX_EPOLL_TRUE='#'
        HAVE_LINUX_EPOLL_FALSE=
    fi

# kqueue checks
if test x$enable_kqueue = xno ; then
    have_kqueue=no
else
    have_kqueue=yes
    ac_fn_c_check_header_mongrel "$LINENO" "sys/event.h"
"ac_cv_header_sys_event_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_event_h" = xyes; then :

else
    have_kqueue=no
fi

```

```

    ac_fn_c_check_func "$LINENO" "kqueue" "ac_cv_func_kqueue"
if test "x$ac_cv_func_kqueue" = xyes; then :

else
    have_kqueue=no
fi

    if test x$enable_kqueue = xyes -a x$have_kqueue = xno; then
        as_fn_error $? "kqueue support explicitly enabled but not
available" "$LINENO" 5
    fi
fi

if test x$have_kqueue = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_KQUEUE 1" >>confdefs.h

fi

    if test x$have_kqueue = xyes; then
        DBUS_BUS_ENABLE_KQUEUE_TRUE=
        DBUS_BUS_ENABLE_KQUEUE_FALSE='#'
    else
        DBUS_BUS_ENABLE_KQUEUE_TRUE='#'
        DBUS_BUS_ENABLE_KQUEUE_FALSE=
    fi
fi

# launchd checks
if test x$enable_launchd = xno ; then
    have_launchd=no
else
    have_launchd=yes
    ac_fn_c_check_header_mongrel "$LINENO" "launch.h"
"ac_cv_header_launch_h" "$ac_includes_default"
if test "x$ac_cv_header_launch_h" = xyes; then :

else
    have_launchd=no
fi

    # Extract the first word of "launchctl", so it can be a program
name with args.
set dummy launchctl; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_LAUNCHCTL+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  case $LAUNCHCTL in
    [\\/* | ?:[\\/*]*)
      ac_cv_path_LAUNCHCTL="$LAUNCHCTL" # Let the user override the test
      with a path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_path_LAUNCHCTL="$as_dir/$ac_word$ac_exec_ext"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      ;;
    esac
  fi
  LAUNCHCTL=$ac_cv_path_LAUNCHCTL
  if test -n "$LAUNCHCTL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LAUNCHCTL" >&5
$as_echo "$LAUNCHCTL" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi

  if test "x$LAUNCHCTL" = "x"; then
    have_launchd=no
  fi

  if test x$enable_launchd = xyes && test x$have_launchd = xno ;
then
    as_fn_error $? "launchd support explicitly enabled but not
available" "$LINENO" 5
  fi
fi

if test x$have_launchd = xyes; then

$as_echo "@%:@define DBUS_ENABLE_LAUNCHD 1" >>confdefs.h

fi

```

```

if test x$have_launchd = xyes; then
    DBUS_ENABLE_LAUNCHD_TRUE=
    DBUS_ENABLE_LAUNCHD_FALSE='#'
else
    DBUS_ENABLE_LAUNCHD_TRUE='#'
    DBUS_ENABLE_LAUNCHD_FALSE=
fi

#### Directory to place launchd agent file
if test "x$with_launchd_agent_dir" = "x"; then
    LAUNCHD_AGENT_DIR="/Library/LaunchAgents"
else
    LAUNCHD_AGENT_DIR="$with_launchd_agent_dir"
fi

if test x$enable_console_owner_file = xno ; then
    have_console_owner_file=no;
else
    case $host_os in
        solaris*)
            have_console_owner_file=yes;
    esac

$as_echo "@%:@define HAVE_CONSOLE_OWNER_FILE 1" >>confdefs.h

    ;;
*)
    have_console_owner_file=no;;
esac
fi

if test x$have_console_owner_file = xyes; then
    HAVE_CONSOLE_OWNER_FILE_TRUE=
    HAVE_CONSOLE_OWNER_FILE_FALSE='#'
else
    HAVE_CONSOLE_OWNER_FILE_TRUE='#'
    HAVE_CONSOLE_OWNER_FILE_FALSE=
fi

if test x$enable_systemd = xno ; then
    have_systemd=no;
else

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for SYSTEMD" >&5
$as_echo_n "checking for SYSTEMD... " >&6; }

if test -n "$SYSTEMD_CFLAGS"; then

```

```

    pkg_cv_SYSTEMD_CFLAGS="$SYSTEMD_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"libsystemd-login >= 32, libsystemd-daemon >= 32\""; }
>&5
        ($PKG_CONFIG --exists --print-errors "libsystemd-login >= 32,
libsystemd-daemon >= 32") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = \${ac_status}" >&5
        test $ac_status = 0; }; then
        pkg_cv_SYSTEMD_CFLAGS=`$PKG_CONFIG --cflags "libsystemd-login >= 32,
libsystemd-daemon >= 32" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
if test -n "$SYSTEMD_LIBS"; then
    pkg_cv_SYSTEMD_LIBS="$SYSTEMD_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"libsystemd-login >= 32, libsystemd-daemon >= 32\""; }
>&5
        ($PKG_CONFIG --exists --print-errors "libsystemd-login >= 32,
libsystemd-daemon >= 32") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = \${ac_status}" >&5
        test $ac_status = 0; }; then
        pkg_cv_SYSTEMD_LIBS=`$PKG_CONFIG --libs "libsystemd-login >= 32,
libsystemd-daemon >= 32" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi

    if test $_pkg_short_errors_supported = yes; then
        SYSTEMD_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "libsystemd-login >= 32, libsystemd-daemon >= 32" 2>&1`

```

```

        else
            SYSTEMD_PKG_ERRORS=`$PKG_CONFIG --print-errors
"libsystemd-login >= 32, libsystemd-daemon >= 32" 2>&1`
            fi
            # Put the nasty error message in config.log where it belongs
            echo "$SYSTEMD_PKG_ERRORS" >&5

            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
                have_systemd=no
            elif test $pkg_failed = untried; then
                have_systemd=no
            else
                SYSTEMD_CFLAGS=$pkg_cv_SYSTEMD_CFLAGS
                SYSTEMD_LIBS=$pkg_cv_SYSTEMD_LIBS
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
                    have_systemd=yes
            fi
            fi

            if test x$have_systemd = xyes; then

                $as_echo "@%:@define HAVE_SYSTEMD 1" >>confdefs.h

            fi

            if test x$enable_systemd = xyes -a x$have_systemd != xyes ; then
                as_fn_error $? "Explicitly requested systemd support, but systemd
not found" "$LINENO" 5
            fi

            # libaudit detection
            if test x$enable_libaudit = xno ; then
                have_libaudit=no;
            else
                # See if we have audit daemon & capabilities library
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
audit_log_user_avc_message in -laudit" >&5
$as_echo_n "checking for audit_log_user_avc_message in -laudit... "
>&6; }
                if ${ac_cv_lib_audit_audit_log_user_avc_message+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    ac_check_lib_save_LIBS=$LIBS
                    LIBS="-laudit $LIBS"
                    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
                    /* end confdefs.h. */

                    /* Override any GCC internal prototype to avoid an error.
                    Use char because int might match the return type of a GCC
                    builtin and then its argument prototype would still apply. */

```



```

#ifdef __cplusplus
extern "C"
#endif
char audit_log_user_avc_message ();
int
main ()
{
return audit_log_user_avc_message ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_audit_audit_log_user_avc_message=yes
else
ac_cv_lib_audit_audit_log_user_avc_message=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_audit_audit_log_user_avc_message" >&5
$as_echo "$ac_cv_lib_audit_audit_log_user_avc_message" >&6; }
if test "x$ac_cv_lib_audit_audit_log_user_avc_message" = xyes; then :
have_libaudit=yes
else
have_libaudit=no
fi

if test x$have_libaudit = xyes ; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
capng_clear in -lcap-ng" >&5
$as_echo_n "checking for capng_clear in -lcap-ng... " >&6; }
if ${ac_cv_lib_capng_capng_clear+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-lcap-ng $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char capng_clear ();
int
main ()
{

```

```

return capng_clear ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_cap_ng_capng_clear=yes
else
    ac_cv_lib_cap_ng_capng_clear=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_cap_ng_capng_clear" >&5
$as_echo "$ac_cv_lib_cap_ng_capng_clear" >&6; }
if test "x$ac_cv_lib_cap_ng_capng_clear" = xyes; then :
    have_libaudit=yes
else
    have_libaudit=no
fi

    fi
fi

if test x$have_libaudit = xyes; then
    HAVE_LIBAUDIT_TRUE=
    HAVE_LIBAUDIT_FALSE='#'
else
    HAVE_LIBAUDIT_TRUE='#'
    HAVE_LIBAUDIT_FALSE=
fi

if test x$have_libaudit = xyes ; then
    SELINUX_LIBS="$SELINUX_LIBS -laudit -lcap-ng"

$as_echo "@%:@define HAVE_LIBAUDIT 1" >>confdefs.h

fi

# Check for ADT API (Solaris Basic Security Mode auditing)
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for ADT API" >&5
$as_echo_n "checking for ADT API... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#include <bsm/adt.h>
adt_user_context = ADT_USER;

```

```

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    check_adt_audit=yes
else
    check_adt_audit=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test ${check_adt_audit} = yes
then

$as_echo "@%:@define HAVE_ADT /**/" >>confdefs.h

    ADT_LIBS="-lbsm"
    LIBS="-lbsm $LIBS"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

# Check for SCM_RIGHTS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for SCM_RIGHTS" >&5
$as_echo_n "checking for SCM_RIGHTS... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <sys/socket.h>
#include <sys/un.h>
static int x = SCM_RIGHTS;

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: supported" >&5

```

```

$as_echo "supported" >&6; }

$as_echo "@%:@define HAVE_UNIX_FD_PASSING 1" >>confdefs.h

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not supported" >&5
$as_echo "not supported" >&6; }
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

NETWORK_libs=
if test x$dbus_win = xyes ; then
  if test x$dbus_wince = xyes ; then
    NETWORK_libs="-lws2"
  else
    NETWORK_libs="-lws2_32"
  fi
fi
fi

@%:@ Check whether --with-valgrind was given.
if test "${with_valgrind+set}" = set; then :
  withval=$with_valgrind;
else
  with_valgrind=no
fi

if test x$with_valgrind != xno; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for VALGRIND" >&5
$as_echo_n "checking for VALGRIND... " >&6; }

if test -n "$VALGRIND_CFLAGS"; then
  pkg_cv_VALGRIND_CFLAGS="$VALGRIND_CFLAGS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
    { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"valgrind >= 3.6\""; } >&5
    ($PKG_CONFIG --exists --print-errors "valgrind >= 3.6") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_VALGRIND_CFLAGS=`$PKG_CONFIG --cflags "valgrind >= 3.6"
2>/dev/null`
  else
    pkg_failed=yes
  fi
else

```

```

    pkg_failed=untried
fi
if test -n "$VALGRIND_LIBS"; then
    pkg_cv_VALGRIND_LIBS="$VALGRIND_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \
        \ $PKG_CONFIG --exists -
-print-errors \"valgrind >= 3.6\""; } >&5
        ($PKG_CONFIG --exists --print-errors "valgrind >= 3.6") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \
        \ $? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_VALGRIND_LIBS=`$PKG_CONFIG --libs "valgrind >= 3.6"
2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

```

```

if test $pkg_failed = yes; then

```

```

    if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
        _pkg_short_errors_supported=yes
    else
        _pkg_short_errors_supported=no
    fi
    if test $_pkg_short_errors_supported = yes; then
        VALGRIND_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "valgrind >= 3.6" 2>&1`
    else
        VALGRIND_PKG_ERRORS=`$PKG_CONFIG --print-errors "valgrind
>= 3.6" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$VALGRIND_PKG_ERRORS" >&5

```

```

    as_fn_error $? "Package requirements (valgrind >= 3.6) were not
met:

```

```

$VALGRIND_PKG_ERRORS

```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables VALGRIND_CFLAGS and VALGRIND_LIBS to avoid the need to call pkg-config.

See the pkg-config man page for more details.

```

" "$LINENO" 5

```

```

elif test $pkg_failed = untried; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
    >&5
    $as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

```

Alternatively, you may set the environment variables VALGRIND_CFLAGS and VALGRIND_LIBS to avoid the need to call pkg-config. See the pkg-config man page for more details.

To get pkg-config, see <<http://pkg-config.freedesktop.org/>>. See `config.log' for more details" "\$LINENO" 5; }

```

else
    VALGRIND_CFLAGS=$pkg_cv_VALGRIND_CFLAGS
    VALGRIND_LIBS=$pkg_cv_VALGRIND_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
    $as_echo "yes" >&6; }
    :
fi

```

```

$as_echo "@%:@define WITH_VALGRIND 1" >>confdefs.h

```

```

fi

```

```

#### Set up final flags
LIBDBUS_LIBS="$THREAD_LIBS $NETWORK_libs"

```

```

### X11 detection
DBUS_X_LIBS=
DBUS_X_CFLAGS=

```

```

@%:@ Check whether --enable-x11-autolaunch was given.
if test "${enable_x11_autolaunch+set}" = set; then :
    enableval=$enable_x11_autolaunch;
else
    enable_x11_autolaunch=auto
fi

```

```

if test "x$dbus_win" = xyes; then
    if test "x$enable_x11_autolaunch" = xyes; then
        as_fn_error $? "X11 auto-launch is not supported on Windows"
"$LINENO" 5
    fi

```

```

        enable_x11_autolaunch=no
        have_x11=no
else

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for X" >&5
$as_echo_n "checking for X... " >&6; }

@%:@ Check whether --with-x was given.
if test "${with_x+set}" = set; then :
  withval=$with_x;
fi

# $have_x is `yes', `no', `disabled', or empty when we do not yet
know.
if test "x$with_x" = xno; then
  # The user explicitly disabled X.
  have_x=disabled
else
  case $x_includes,$x_libraries in #(
    *\`*) as_fn_error $? "cannot use X directory names containing '"
"$LINENO" 5;; #(
    *,NONE | NONE,*) if ${ac_cv_have_x+:} false; then :
  $as_echo_n "(cached) " >&6
else
  # One or both of the vars are not set, and there is no cached value.
ac_x_includes=no ac_x_libraries=no
# Standard set of common directories for X headers.
# Check X11 before X11Rn because it is often a symlink to the current
release.
ac_x_header_dirs=''

if test "$ac_x_includes" = no; then
  # Guess where to find include files, by looking for Xlib.h.
  # First, try using that file with no special directory specified.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <X11/Xlib.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
  # We can compile using X headers with no special include directory.
ac_x_includes=
else
  for ac_dir in $ac_x_header_dirs; do
    if test -r "$ac_dir/X11/Xlib.h"; then
      ac_x_includes=$ac_dir
      break
    fi
  done
fi
rm -f conftest.err conftest.i conftest.$ac_ext
fi # $ac_x_includes = no

if test "$ac_x_libraries" = no; then
  # Check for the libraries.
  # See if we find them without any special options.

```

```

# Don't add to $LIBS permanently.
ac_save_LIBS=$LIBS
LIBS="-lX11 $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <X11/Xlib.h>
int
main ()
{
XrmInitialize ()
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
LIBS=$ac_save_LIBS
# We can link X programs with no special library path.
ac_x_libraries=
else
LIBS=$ac_save_LIBS
for ac_dir in `$as_echo "$ac_x_includes $ac_x_header_dirs" | sed
s/include/lib/g`
do
# Don't even attempt the hair of trying to link an X program!
for ac_extension in a so sl dylib la dll; do
if test -r "$ac_dir/libX11.$ac_extension"; then
ac_x_libraries=$ac_dir
break 2
fi
done
done
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
fi # $ac_x_libraries = no

case $ac_x_includes,$ac_x_libraries in #(
no,* | *,no | *\')
# Didn't find X, or a directory has "" in its name.
ac_cv_have_x="have_x=no";; #(
*)
# Record where we found X for the cache.
ac_cv_have_x="have_x=yes\
ac_x_includes='$ac_x_includes'\
ac_x_libraries='$ac_x_libraries'"
esac
fi
;; #(
*) have_x=yes;;
esac
eval "$ac_cv_have_x"
fi # $with_x != no

```



```

if test "$have_x" != yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $have_x" >&5
$as_echo "$have_x" >&6; }
  no_x=yes
else
  # If each of the values was on the command line, it overrides each
  guess.
  test "x$x_includes" = xNONE && x_includes=$ac_x_includes
  test "x$x_libraries" = xNONE && x_libraries=$ac_x_libraries
  # Update the cache value to reflect the command line values.
  ac_cv_have_x="have_x=yes\
  ac_x_includes='$x_includes'\
  ac_x_libraries='$x_libraries'"
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: libraries
$x_libraries, headers $x_includes" >&5
$as_echo "libraries $x_libraries, headers $x_includes" >&6; }
fi

if test "$no_x" = yes; then
  # Not all programs may use this symbol, but it does not hurt to
  define it.

$as_echo "@%:@define X_DISPLAY_MISSING 1" >>confdefs.h

  X_CFLAGS= X_PRE_LIBS= X_LIBS= X_EXTRA_LIBS=
else
  if test -n "$x_includes"; then
    X_CFLAGS="$X_CFLAGS -I$x_includes"
  fi

  # It would also be nice to do this for all -L options, not just this
  one.
  if test -n "$x_libraries"; then
    X_LIBS="$X_LIBS -L$x_libraries"
    # For Solaris; some versions of Sun CC require a space after -R
    and
    # others require no space. Words are not sufficient . . . .
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -R must
be followed by a space" >&5
$as_echo_n "checking whether -R must be followed by a space... " >&6;
}
    ac_xsave_LIBS=$LIBS; LIBS="$LIBS -R$x_libraries"
    ac_xsave_c_werror_flag=$ac_c_werror_flag
    ac_c_werror_flag=yes
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

```

```

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    X_LIBS="$X_LIBS -R$x_libraries"
else
  LIBS="$ac_xsave_LIBS -R $x_libraries"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    X_LIBS="$X_LIBS -R $x_libraries"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: neither works" >&5
$as_echo "neither works" >&6; }
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    ac_c_werror_flag=$ac_xsave_c_werror_flag
    LIBS=$ac_xsave_LIBS
fi

# Check for system-dependent libraries X programs must link with.
# Do this before checking for the system-independent R6 libraries
# (-lICE), since we may need -lsocket or whatever for X linking.

if test "$ISC" = yes; then
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lnsl_s -linet"
else
  # Martyn Johnson says this is needed for Ultrix, if the X
  # libraries were built with DECnet support.  And Karl Berry says
  # the Alpha needs dnet_stub (dnet does not exist).
  ac_xsave_LIBS="$LIBS"; LIBS="$LIBS $X_LIBS -lX11"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

```

```

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char XOpenDisplay ();
int
main ()
{
return XOpenDisplay ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

else
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for dnet_ntoa in -
ldnet" >&5
$as_echo_n "checking for dnet_ntoa in -ldnet... " >&6; }
if ${ac_cv_lib_dnet_dnet_ntoa+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-ldnet $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char dnet_ntoa ();
int
main ()
{
return dnet_ntoa ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_dnet_dnet_ntoa=yes
else
ac_cv_lib_dnet_dnet_ntoa=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest.$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dnet_dnet_ntoa" >&5
$as_echo "$ac_cv_lib_dnet_dnet_ntoa" >&6; }
if test "x$ac_cv_lib_dnet_dnet_ntoa" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -ldnet"
fi

  if test $ac_cv_lib_dnet_dnet_ntoa = no; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dnet_ntoa
in -ldnet_stub" >&5
$as_echo_n "checking for dnet_ntoa in -ldnet_stub... " >&6; }
if ${ac_cv_lib_dnet_stub_dnet_ntoa+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-ldnet_stub $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dnet_ntoa ();
int
main ()
{
return dnet_ntoa ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_dnet_stub_dnet_ntoa=yes
else
  ac_cv_lib_dnet_stub_dnet_ntoa=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dnet_stub_dnet_ntoa" >&5
$as_echo "$ac_cv_lib_dnet_stub_dnet_ntoa" >&6; }
if test "x$ac_cv_lib_dnet_stub_dnet_ntoa" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -ldnet_stub"
fi

fi

```

```

fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS="$ac_xsave_LIBS"

# msh@cis.ufl.edu says -lnsl (and -lsocket) are needed for his
386/AT,
# to get the SysV transport functions.
# Chad R. Larson says the Pyramis MIS-ES running DC/OSx (SVR4)
# needs -lnsl.
# The nsl library prevents programs from opening the X display
# on Irix 5.2, according to T.E. Dickey.
# The functions gethostbyname, getservbyname, and inet_addr are
# in -lbsd on LynxOS 3.0.1/i386, according to Lars Hecking.
ac_fn_c_check_func "$LINENO" "gethostbyname"
"ac_cv_func_gethostbyname"
if test "x$ac_cv_func_gethostbyname" = xyes; then :

fi

    if test $ac_cv_func_gethostbyname = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
gethostbyname in -lnsl" >&5
$as_echo_n "checking for gethostbyname in -lnsl... " >&6; }
if ${ac_cv_lib_nsl_gethostbyname+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lnsl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();
int
main ()
{
return gethostbyname ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_nsl_gethostbyname=yes
else
    ac_cv_lib_nsl_gethostbyname=no
fi

```

```

rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_nsl_gethostbyname" >&5
$as_echo "$ac_cv_lib_nsl_gethostbyname" >&6; }
if test "x$ac_cv_lib_nsl_gethostbyname" = xyes; then :
    X_EXTRA_LIBS="$X_EXTRA_LIBS -lnsl"
fi

    if test $ac_cv_lib_nsl_gethostbyname = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
gethostbyname in -lbsd" >&5
$as_echo_n "checking for gethostbyname in -lbsd... " >&6; }
if ${ac_cv_lib_bsd_gethostbyname+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lbsd $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();
int
main ()
{
return gethostbyname ();
;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_bsd_gethostbyname=yes
else
    ac_cv_lib_bsd_gethostbyname=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_bsd_gethostbyname" >&5
$as_echo "$ac_cv_lib_bsd_gethostbyname" >&6; }
if test "x$ac_cv_lib_bsd_gethostbyname" = xyes; then :
    X_EXTRA_LIBS="$X_EXTRA_LIBS -lbsd"

```

```

fi

    fi
fi

# lieder@skyler.mavd.honeywell.com says without -lsocket,
# socket/setsockopt and other routines are undefined under SCO ODT
# 2.0. But -lsocket is broken on IRIX 5.2 (and is not necessary
# on later versions), says Simon Leinen: it contains gethostby*
# variants that don't use the name server (or something). -
lsocket
# must be given before -lnsl if both are needed. We assume that
# if connect needs -lnsl, so does gethostbyname.
ac_fn_c_check_func "$LINENO" "connect" "ac_cv_func_connect"
if test "x$ac_cv_func_connect" = xyes; then :

fi

    if test $ac_cv_func_connect = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for connect in
-lsocket" >&5
$as_echo_n "checking for connect in -lsocket... " >&6; }
if ${ac_cv_lib_socket_connect+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lsocket $X_EXTRA_LIBS $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char connect ();
int
main ()
{
return connect ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_socket_connect=yes
else
    ac_cv_lib_socket_connect=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

```

```

LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_socket_connect" >&5
$as_echo "$ac_cv_lib_socket_connect" >&6; }
if test "x$ac_cv_lib_socket_connect" = xyes; then :
  X_EXTRA_LIBS="-lsocket $X_EXTRA_LIBS"
fi

fi

# Guillermo Gomez says -lposix is necessary on A/UX.
ac_fn_c_check_func "$LINENO" "remove" "ac_cv_func_remove"
if test "x$ac_cv_func_remove" = xyes; then :

fi

if test $ac_cv_func_remove = no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for remove in
-lposix" >&5
$as_echo_n "checking for remove in -lposix... " >&6; }
if ${ac_cv_lib_posix_remove+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lposix $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char remove ();
int
main ()
{
return remove ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_posix_remove=yes
else
  ac_cv_lib_posix_remove=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS

```



```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_posix_remove" >&5
$as_echo "$ac_cv_lib_posix_remove" >&6; }
if test "x$ac_cv_lib_posix_remove" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lposix"
fi

fi

# BSDI BSD/OS 2.1 needs -lipc for XOpenDisplay.
ac_fn_c_check_func "$LINENO" "shmat" "ac_cv_func_shmat"
if test "x$ac_cv_func_shmat" = xyes; then :

fi

if test $ac_cv_func_shmat = no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for shmat in -
lipc" >&5
$as_echo_n "checking for shmat in -lipc... " >&6; }
if ${ac_cv_lib_ipc_shmat+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lipc $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char shmat ();
int
main ()
{
return shmat ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_ipc_shmat=yes
else
  ac_cv_lib_ipc_shmat=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_lib_ipc_shmat"
>&5
$sas_echo "$ac_cv_lib_ipc_shmat" >&6; }
if test "x$ac_cv_lib_ipc_shmat" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lipc"
fi

  fi
fi

# Check for libraries that X11R6 Xt/Xaw programs need.
ac_save_LDFLAGS=$LDFLAGS
test -n "$x_libraries" && LDFLAGS="$LDFLAGS -L$x_libraries"
# SM needs ICE to (dynamically) link under SunOS 4.x (so we have to
# check for ICE first), but we must link in the order -lSM -lICE or
# we get undefined symbols. So assume we have SM if we have ICE.
# These have to be linked with before -lX11, unlike the other
# libraries we check for below, so use a different variable.
# John Interrante, Karl Berry
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
IceConnectionNumber in -lICE" >&5
$sas_echo_n "checking for IceConnectionNumber in -lICE... " >&6; }
if ${ac_cv_lib_ICE_IceConnectionNumber+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lICE $X_EXTRA_LIBS $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char IceConnectionNumber ();
int
main ()
{
return IceConnectionNumber ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_ICE_IceConnectionNumber=yes
else
  ac_cv_lib_ICE_IceConnectionNumber=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$sac_exeext conftest.$ac_ext

```

```

LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_ICE_IceConnectionNumber" >&5
$as_echo "$ac_cv_lib_ICE_IceConnectionNumber" >&6; }
if test "x$ac_cv_lib_ICE_IceConnectionNumber" = xyes; then :
  X_PRE_LIBS="$X_PRE_LIBS -lSM -lICE"
fi

LDFLAGS=$ac_save_LDFLAGS

fi

if test "x$no_x" = xyes; then
  have_x11=no
else
  have_x11=yes
  DBUS_X_LIBS="$X_LIBS $X_PRE_LIBS -lX11 $X_EXTRA_LIBS"
  DBUS_X_CFLAGS="$X_CFLAGS"
fi
fi

if test "x$enable_x11_autolaunch,$have_x11" = xyes,no; then
  as_fn_error $? "X11 auto-launch requires X headers/libraries"
"$LINENO" 5
else
  # move from "auto" to "yes" or "no" if necessary
  if test "x$enable_x11_autolaunch" != xno; then
    enable_x11_autolaunch="$have_x11"
  fi
fi
fi

if test "x$have_x11" = xyes ; then

$as_echo "@%:@define DBUS_BUILD_X11 1" >>confdefs.h

fi

if test "x$enable_x11_autolaunch" = xyes ; then

$as_echo "@%:@define DBUS_ENABLE_X11_AUTOLAUNCH 1" >>confdefs.h

fi

#### gcc warning flags

cc_supports_flag() {

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC
supports \"\$*\\" >&5
$as_echo_n "checking whether $CC supports \"\$*\\"... \" >&6; }
    save_CFLAGS="$CFLAGS"
    CFLAGS="$*"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    rc=yes
else
    rc=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
    CFLAGS="$save_CFLAGS"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $rc" >&5
$as_echo "$rc" >&6; }
    test "x$rc" = xyes
}

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands \" >&5
$as_echo_n "checking to see if compiler understands ... \" >&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS "
    CXXFLAGS="$CXXFLAGS "

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes

```

```

else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then

    true
else

    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

tp_warnings=""
for tp_flag in    all \
    extra \
    char-subscripts \
    missing-declarations \
    missing-prototypes \
    nested-externs \
    pointer-arith \
    cast-align \
    no-address \
    float-equal \
    declaration-after-statement \
; do

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -W$tp_flag" >&5
$as_echo_n "checking to see if compiler understands -W$tp_flag... "
>&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -W$tp_flag"
    CXXFLAGS="$CXXFLAGS -W$tp_flag"

    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

;
return 0;

```

```

}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    tp_warnings="$tp_warnings -W$tp_flag"
    true
else

    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

done

tp_error_flags="-Werror"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Werror" >&5
$as_echo_n "checking to see if compiler understands -Werror... " >&6;
}

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -Werror"
CXXFLAGS="$CXXFLAGS -Werror"

cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

```

```

CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    tp_werror=yes
    true
else
    tp_werror=no
    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

for tp_flag in
missing-field-initializers \
unused-parameter \
sign-compare \
pointer-sign \
type-limits \
; do
                                $DISABLE_UNUSED_WARNINGS \

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Wno-$tp_flag" >&5
$as_echo_n "checking to see if compiler understands -Wno-$tp_flag... "
>&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -Wno-$tp_flag"
    CXXFLAGS="$CXXFLAGS -Wno-$tp_flag"

    cat confdefs.h - << _ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

```

```

if test "X$flag_ok" = Xyes ; then
    tp_warnings="$tp_warnings -Wno-$tp_flag"
    true
else
    true
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$sas_echo "$flag_ok" >&6; }

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Wno-error=$tp_flag" >&5
$sas_echo_n "checking to see if compiler understands -Wno-
error=$tp_flag... " >&6; }

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -Wno-error=$tp_flag"
CXXFLAGS="$CXXFLAGS -Wno-error=$tp_flag"

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    tp_error_flags="$tp_error_flags -Wno-error=$tp_flag"
    true
else
    tp_werror=no
    true
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$sas_echo "$flag_ok" >&6; }

done

```



```

    @%:@ Check whether --enable-Werror was given.
if test "${enable_Werror+set}" = set; then :
    enableval=$enable_Werror; tp_werror=$enableval
else
    :
fi

    if test "x$tp_werror" = xyes &&          test x$dbus_win != xyes -a
x$dbus_cygwin != xyes -a x$enable_developer = xyes; then
        WARNING_CFLAGS="$tp_error_flags $tp_warnings"
    else
        WARNING_CFLAGS="$tp_warnings"
    fi

if test "x$GCC" = "xyes"; then
    # We're treating -fno-common like a warning: it makes the linker
more
    # strict, because on some systems the linker is *always* this strict

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -fno-common" >&5
$as_echo_n "checking to see if compiler understands -fno-common... "
>&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -fno-common"
    CXXFLAGS="$CXXFLAGS -fno-common"

    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"

```

```

CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    WARNING_CFLAGS="$WARNING_CFLAGS -fno-common"
    true
else

    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

# http://bugs.freedesktop.org/show_bug.cgi?id=10599

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -fno-strict-aliasing" >&5
$as_echo_n "checking to see if compiler understands -fno-strict-
aliasing... " >&6; }

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -fno-strict-aliasing"
CXXFLAGS="$CXXFLAGS -fno-strict-aliasing"

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    WARNING_CFLAGS="$WARNING_CFLAGS -fno-strict-aliasing"
    true
else

```

```

    true
  fi
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

  if test "x$enable_ansi" = "xyes"; then

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -pedantic"
>&5
$as_echo_n "checking to see if compiler understands -ansi -
D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -pedantic... " >&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -
pedantic"
    CXXFLAGS="$CXXFLAGS -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -
pedantic"

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  flag_ok=yes
else
  flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

  if test "X$flag_ok" = Xyes ; then
    WARNING_CFLAGS="$WARNING_CFLAGS -ansi -D_POSIX_C_SOURCE=199309L -
D_BSD_SOURCE -pedantic"
    true
  else

    true
  fi
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5

```

```

$as_echo "$flag_ok" >&6; }

    fi
fi

CFLAGS="$WARNING_CFLAGS $CFLAGS"

case $host_os in
    solaris*)
        # Solaris' C library apparently needs these runes to be
        threadsafe...
        CFLAGS="$CFLAGS -D_POSIX_PTHREAD_SEMANTICS -D_REENTRANT"
        # ... this opt-in to get sockaddr_in6 and sockaddr_storage...
        CFLAGS="$CFLAGS -D__EXTENSIONS__"
        # ... and this opt-in to get file descriptor passing support
        CFLAGS="$CFLAGS -D_XOPEN_SOURCE=500"
        ;;
esac

### Doxygen Documentation

# Extract the first word of "doxygen", so it can be a program name
with args.
set dummy doxygen; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_DOXYGEN+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $DOXYGEN in
    [\\/] * | ?:[\\/] *)
      ac_cv_path_DOXYGEN="$DOXYGEN" # Let the user override the test with
a path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_path_DOXYGEN="$as_dir/$ac_word$ac_exec_ext"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

```

```

    test -z "$ac_cv_path_DOXYGEN" && ac_cv_path_DOXYGEN="no"
    ;;
esac
fi
DOXYGEN=$ac_cv_path_DOXYGEN
if test -n "$DOXYGEN"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DOXYGEN" >&5
$as_echo "$DOXYGEN" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
Doxygen documentation" >&5
$as_echo_n "checking whether to build Doxygen documentation... " >&6;
}

if test x$DOXYGEN = xno ; then
    have_doxygen=no
else
    have_doxygen=yes
fi

if test x$enable_doxygen_docs = xauto ; then
    if test x$have_doxygen = xno ; then
        enable_doxygen_docs=no
    else
        enable_doxygen_docs=yes
    fi
fi

if test x$enable_doxygen_docs = xyes; then
    if test x$have_doxygen = xno; then
        as_fn_error $? "Building Doxygen docs explicitly required, but
Doxygen not found" "$LINENO" 5
    fi
fi

if test x$enable_doxygen_docs = xyes; then
    DBUS_DOXYGEN_DOCS_ENABLED_TRUE=
    DBUS_DOXYGEN_DOCS_ENABLED_FALSE='#'
else
    DBUS_DOXYGEN_DOCS_ENABLED_TRUE='#'
    DBUS_DOXYGEN_DOCS_ENABLED_FALSE=
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_doxygen_docs"
>&5
$as_echo "$enable_doxygen_docs" >&6; }

```

```

for ac_prog in xsltproc
do
  # Extract the first word of "$ac_prog", so it can be a program name
  with args.
  set dummy $ac_prog; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_XSLTPROC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$XSLTPROC"; then
      ac_cv_prog_XSLTPROC="$XSLTPROC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_XSLTPROC="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      XSLTPROC=$ac_cv_prog_XSLTPROC
      if test -n "$XSLTPROC"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $XSLTPROC" >&5
        $as_echo "$XSLTPROC" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      test -n "$XSLTPROC" && break
    done

    if test "x$XSLTPROC" != "x"; then
      DBUS_HAVE_XSLTPROC_TRUE=
      DBUS_HAVE_XSLTPROC_FALSE='#'
    else
      DBUS_HAVE_XSLTPROC_TRUE='#'
      DBUS_HAVE_XSLTPROC_FALSE=
    fi
  fi

```

```

### XML Documentation

# Extract the first word of "xmlto", so it can be a program name with
args.
set dummy xmlto; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$sas_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_XMLTO+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  case $XMLTO in
    [\\/* | ?:[\\/*]*)
      ac_cv_path_XMLTO="$XMLTO" # Let the user override the test with a
path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_path_XMLTO="$as_dir/$ac_word$ac_exec_ext"
      $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

  test -z "$ac_cv_path_XMLTO" && ac_cv_path_XMLTO="no"
  ;;
esac
fi
XMLTO=$ac_cv_path_XMLTO
if test -n "$XMLTO"; then
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $XMLTO" >&5
$sas_echo "$XMLTO" >&6; }
else
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$sas_echo "no" >&6; }
fi

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build XML
documentation" >&5
$sas_echo_n "checking whether to build XML documentation... " >&6; }

```

```

if test x$XMLTO = xno ; then
    have_xmlto=no
else
    have_xmlto=yes
fi

if test x$enable_xml_docs = xauto ; then
    if test x$have_xmlto = xno ; then
        enable_xml_docs=no
    else
        enable_xml_docs=yes
    fi
fi

if test x$enable_xml_docs = xyes; then
    if test x$have_xmlto = xno; then
        as_fn_error $? "Building XML docs explicitly required, but xmlto
not found" "$LINENO" 5
    fi
fi

    if test x$enable_xml_docs = xyes; then
        DBUS_XML_DOCS_ENABLED_TRUE=
        DBUS_XML_DOCS_ENABLED_FALSE='#'
    else
        DBUS_XML_DOCS_ENABLED_TRUE='#'
        DBUS_XML_DOCS_ENABLED_FALSE=
    fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_xml_docs" >&5
$as_echo "$enable_xml_docs" >&6; }

# Extract the first word of "man2html", so it can be a program name
with args.
set dummy man2html; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_MAN2HTML+:} false; then :
    $as_echo_n "(cached) " >&6
else
    case $MAN2HTML in
    [\\/] * | ?:[\\/] *)
        ac_cv_path_MAN2HTML="$MAN2HTML" # Let the user override the test
with a path.
        ;;
    *)
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.

```



```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_path MAN2HTML="$sas_dir/$ac_word$ac_exec_ext"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

;;
esac
fi
MAN2HTML=$ac_cv_path_MAN2HTML
if test -n "$MAN2HTML"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAN2HTML" >&5
$as_echo "$MAN2HTML" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test x$MAN2HTML != x; then
    DBUS_HAVE_MAN2HTML_TRUE=
    DBUS_HAVE_MAN2HTML_FALSE='#'
else
    DBUS_HAVE_MAN2HTML_TRUE='#'
    DBUS_HAVE_MAN2HTML_FALSE=
fi

if test x$enable_doxygen_docs = xyes -a x$enable_xml_docs = xyes -a \
    x$MAN2HTML != x; then
    DBUS_CAN_UPLOAD_DOCS_TRUE=
    DBUS_CAN_UPLOAD_DOCS_FALSE='#'
else
    DBUS_CAN_UPLOAD_DOCS_TRUE='#'
    DBUS_CAN_UPLOAD_DOCS_FALSE=
fi

#### Have to go $localstatedir->$prefix/var->/usr/local/var

#### find the actual value for $prefix that we'll end up with
## (I know this is broken and should be done in the Makefile, but
## that's a major pain and almost nobody actually seems to care)

EXP_VAR=EXPANDED_PREFIX
FROM_VAR="$prefix"

```

```

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
    prefix="$ac_default_prefix"
fi
    if test "x$exec_prefix" = "xNONE"; then
    exec_prefix=$prefix
fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

    full_var=$new_full_var
EXPANDED_PREFIX="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

EXP_VAR=EXPANDED_LOCALSTATEDIR
FROM_VAR="$localstatedir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
    prefix="$ac_default_prefix"
fi
    if test "x$exec_prefix" = "xNONE"; then
    exec_prefix=$prefix
fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

    full_var=$new_full_var
EXPANDED_LOCALSTATEDIR="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

```

```

EXP_VAR=EXPANDED_SYSCONFDIR
FROM_VAR="$sysconfdir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
        prefix="$ac_default_prefix"
    fi
    if test "x$exec_prefix" = "xNONE"; then
        exec_prefix=$prefix
    fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

full_var=$new_full_var
EXPANDED_SYSCONFDIR="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

EXP_VAR=EXPANDED_BINDIR
FROM_VAR="$bindir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
        prefix="$ac_default_prefix"
    fi
    if test "x$exec_prefix" = "xNONE"; then
        exec_prefix=$prefix
    fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

full_var=$new_full_var
EXPANDED_BINDIR="$full_var"

```

```
prefix=$prefix_save
exec_prefix=$exec_prefix_save
```

```
EXP_VAR=EXPANDED_LIBDIR
FROM_VAR="$libdir"
```

```
prefix_save=$prefix
exec_prefix_save=$exec_prefix
```

```
if test "x$prefix" = "xNONE"; then
prefix="$ac_default_prefix"
fi
if test "x$exec_prefix" = "xNONE"; then
exec_prefix=$prefix
fi
```

```
full_var="$FROM_VAR"
while true; do
new_full_var="`eval echo $full_var`"
if test "x$new_full_var" = "x$full_var"; then break; fi
full_var=$new_full_var
done
```

```
full_var=$new_full_var
EXPANDED_LIBDIR="$full_var"
```

```
prefix=$prefix_save
exec_prefix=$exec_prefix_save
```

```
EXP_VAR=EXPANDED_LIBEXECDIR
FROM_VAR="$libexecdir"
```

```
prefix_save=$prefix
exec_prefix_save=$exec_prefix
```

```
if test "x$prefix" = "xNONE"; then
prefix="$ac_default_prefix"
fi
if test "x$exec_prefix" = "xNONE"; then
exec_prefix=$prefix
fi
```

```
full_var="$FROM_VAR"
while true; do
new_full_var="`eval echo $full_var`"
if test "x$new_full_var" = "x$full_var"; then break; fi
full_var=$new_full_var
```

```

done

    full_var=$new_full_var
    EXPANDED_LIBEXECDIR="$full_var"

    prefix=$prefix_save
    exec_prefix=$exec_prefix_save

    EXP_VAR=EXPANDED_DATADIR
    FROM_VAR="$datadir"

    prefix_save=$prefix
    exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
        prefix="$ac_default_prefix"
    fi
    if test "x$exec_prefix" = "xNONE"; then
        exec_prefix=$prefix
    fi

    full_var="$FROM_VAR"
    while true; do
        new_full_var="`eval echo $full_var`"
        if test "x$new_full_var" = "x$full_var"; then break; fi
        full_var=$new_full_var
    done

    full_var=$new_full_var
    EXPANDED_DATADIR="$full_var"

    prefix=$prefix_save
    exec_prefix=$exec_prefix_save

#### Check our operating system
operating_system=unknown
if test -f /etc/redhat-release || test -f $EXPANDED_SYSCONFDIR/redhat-
release ; then
    operating_system=redhat
fi

if test -f /etc/slackware-version || test -f
$EXPANDED_SYSCONFDIR/slackware-version ; then
    operating_system=slackware
fi

if test -f /usr/bin/cygwin1.dll || test -f
$EXPANDED_BINDIR/cygwin1.dll ; then

```

```

    operating_system=cygwin
fi

#### Sort out init scripts

if test x$with_init_scripts = x; then
    case x$operating_system in
        xredhat) with_init_scripts=redhat ;;
        xslackware) with_init_scripts=slackware ;;
        xcygwin) with_init_scripts=cygwin ;;
        *) with_init_scripts=none ;;
    esac
fi

if test x$with_init_scripts = xredhat; then
    DBUS_INIT_SCRIPTS_RED_HAT_TRUE=
    DBUS_INIT_SCRIPTS_RED_HAT_FALSE='#'
else
    DBUS_INIT_SCRIPTS_RED_HAT_TRUE='#'
    DBUS_INIT_SCRIPTS_RED_HAT_FALSE=
fi

if test x$with_init_scripts = xslackware; then
    DBUS_INIT_SCRIPTS_SLACKWARE_TRUE=
    DBUS_INIT_SCRIPTS_SLACKWARE_FALSE='#'
else
    DBUS_INIT_SCRIPTS_SLACKWARE_TRUE='#'
    DBUS_INIT_SCRIPTS_SLACKWARE_FALSE=
fi

if test x$with_init_scripts = xcygwin; then
    DBUS_INIT_SCRIPTS_CYGWIN_TRUE=
    DBUS_INIT_SCRIPTS_CYGWIN_FALSE='#'
else
    DBUS_INIT_SCRIPTS_CYGWIN_TRUE='#'
    DBUS_INIT_SCRIPTS_CYGWIN_FALSE=
fi

#### systemd unit files

@%:@ Check whether --with-systemdsystemunitdir was given.
if test "${with_systemdsystemunitdir+set}" = set; then :
    withval=$with_systemdsystemunitdir;
else

    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"systemd\""; } >&5
        ($PKG_CONFIG --exists --print-errors "systemd") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5

```

```

    test $ac_status = 0; }; then
    with_systemdsystemunitdir=${($PKG_CONFIG --
variable=systemdsystemunitdir systemd)
else
    with_systemdsystemunitdir=no
fi

fi

if test "x$with_systemdsystemunitdir" != xno; then
    systemdsystemunitdir=$with_systemdsystemunitdir

fi
    if test -n "$with_systemdsystemunitdir" -a
"x$with_systemdsystemunitdir" != xno ; then
        HAVE_SYSTEMD_TRUE=
        HAVE_SYSTEMD_FALSE='#'
    else
        HAVE_SYSTEMD_TRUE='#'
        HAVE_SYSTEMD_FALSE=
    fi

##### Set up location for system bus socket
if ! test -z "$with_system_socket"; then
    DBUS_SYSTEM_SOCKET=$with_system_socket
else

DBUS_SYSTEM_SOCKET=${EXPANDED_LOCALSTATEDIR}/run/dbus/system_bus_socke
t
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SYSTEM_SOCKET "$DBUS_SYSTEM_SOCKET"
_ACEOF

## system bus only listens on local domain sockets, and never
## on an abstract socket (so only root can create the socket)
DBUS_SYSTEM_BUS_DEFAULT_ADDRESS="unix:path=$DBUS_SYSTEM_SOCKET"

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SYSTEM_BUS_DEFAULT_ADDRESS
"$DBUS_SYSTEM_BUS_DEFAULT_ADDRESS"
_ACEOF

##### Set up the pid file
if ! test -z "$with_system_pid_file"; then

```

```
    DBUS_SYSTEM_PID_FILE=$with_system_pid_file
elif test x$with_init_scripts = xredhat ; then
    DBUS_SYSTEM_PID_FILE=${EXPANDED_LOCALSTATEDIR}/run/messagebus.pid
else
    DBUS_SYSTEM_PID_FILE=${EXPANDED_LOCALSTATEDIR}/run/dbus/pid
fi
```

```
#### Directory to check for console ownership
if ! test -z "$with_console_auth_dir"; then
    DBUS_CONSOLE_AUTH_DIR=$with_console_auth_dir
else
    DBUS_CONSOLE_AUTH_DIR=/var/run/console/
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_CONSOLE_AUTH_DIR "$DBUS_CONSOLE_AUTH_DIR"
_ACEOF
```

```
#### File to check for console ownership
if test x$have_console_owner_file = xyes; then
    if ! test -z "$with_console_owner_file"; then
        DBUS_CONSOLE_OWNER_FILE=$with_console_owner_file
    else
        DBUS_CONSOLE_OWNER_FILE=/dev/console
    fi
else
    DBUS_CONSOLE_OWNER_FILE=
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_CONSOLE_OWNER_FILE "$DBUS_CONSOLE_OWNER_FILE"
_ACEOF
```

```
#### User to start the system bus as
if test -z "$with_dbus_user" ; then
    DBUS_USER=messagebus
else
    DBUS_USER=$with_dbus_user
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_USER "$DBUS_USER"
_ACEOF
```



```
#### Prefix to install into
DBUS_PREFIX=$EXPANDED_PREFIX
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_PREFIX "$DBUS_PREFIX"
_ACEOF
```

```
#### Directory to install data files into
DBUS_DATADIR=$EXPANDED_DATADIR
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DATADIR "$DBUS_DATADIR"
_ACEOF
```

```
#### Directory to install dbus-daemon
if test -z "$with_dbus_daemon_dir" ; then
    DBUS_DAEMONDIR=$EXPANDED_BINDIR
else
    DBUS_DAEMONDIR=$with_dbus_daemon_dir
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DAEMONDIR "$DBUS_DAEMONDIR"
_ACEOF
```

```
#### Directory to install the other binaries
DBUS_BINDIR=$EXPANDED_BINDIR
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_BINDIR "$DBUS_BINDIR"
_ACEOF
```

```
#### Directory to install the libexec binaries
DBUS_LIBEXECDIR=$EXPANDED_LIBEXECDIR
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_LIBEXECDIR "$DBUS_LIBEXECDIR"
_ACEOF
```

```
#### Tell tests where to find certain stuff in builddir
```

```
DBUS_PWD=`pwd`
# Useful in a cross-compilation environment, where the tests are run
on the host system.
```

```
@%:@ Check whether --with-dbus-test-dir was given.
if test "${with_dbus_test_dir+set}" = set; then :
  withval=$with_dbus_test_dir; DBUS_PWD=$withval
fi
```

```
DBUS_TEST_EXEC="$DBUS_PWD/test"
DBUS_TEST_DATA="$DBUS_PWD/test/data"
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_EXEC "$DBUS_TEST_EXEC"
_ACEOF
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_EXEEXT "$EXEEXT"
_ACEOF
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_BUS_BINARY "$DBUS_PWD/bus/dbus-daemon$EXEEXT"
_ACEOF
```

```
## Export the non-setuid external helper
TEST_LAUNCH_HELPER_BINARY="$DBUS_PWD/bus/dbus-daemon-launch-helper-
test$EXEEXT"
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_LAUNCH_HELPER_BINARY "$TEST_LAUNCH_HELPER_BINARY"
_ACEOF
```

```
DEFAULT_SOCKET_DIR=/tmp
```

```
DEFAULT_SOCKET_DIR=`echo $DEFAULT_SOCKET_DIR | sed 's/+/%2B/g'`
```

```
if ! test -z "$with_test_socket_dir" ; then
  TEST_SOCKET_DIR="$with_test_socket_dir"
else
```

```

    TEST_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_SOCKET_DIR "$TEST_SOCKET_DIR"
_ACEOF

if test "x$dbus_unix" = xyes; then
    TEST_LISTEN="unix:tmpdir=$TEST_SOCKET_DIR"
else
    TEST_LISTEN="tcp:host=localhost"
fi

cat >>confdefs.h <<_ACEOF
@%:@define TEST_LISTEN "$TEST_LISTEN"
_ACEOF

if ! test -z "$with_session_socket_dir" ; then
    DBUS_SESSION_SOCKET_DIR="$with_session_socket_dir"
else
    DBUS_SESSION_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SESSION_SOCKET_DIR "$DBUS_SESSION_SOCKET_DIR"
_ACEOF

if test x$dbus_win = xyes; then

DBUS_SESSION_BUS_DEFAULT_ADDRESS="$with_dbus_session_bus_default_address"
elif test x$have_launchd = xyes; then

DBUS_SESSION_BUS_DEFAULT_ADDRESS="launchd:env=DBUS_LAUNCHD_SESSION_BUS_SOCKET"
else

DBUS_SESSION_BUS_DEFAULT_ADDRESS="unix:tmpdir=$DBUS_SESSION_SOCKET_DIR"
"
fi

# darwin needs this to initialize the environment
for ac_header in crt_externs.h
do :
```

```

    ac_fn_c_check_header_mongrel "$LINENO" "crt_extrns.h"
"ac_cv_header_crt_extrns_h" "$ac_includes_default"
if test "x$ac_cv_header_crt_extrns_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_CRT_EXTRNS_H 1
_ACEOF

fi

done

ac_fn_c_check_func "$LINENO" "_NSGetEnviron"
"ac_cv_func__NSGetEnviron"
if test "x$ac_cv_func__NSGetEnviron" = xyes; then :

$as_echo "@%:@define HAVE_NSGETENVIRON 1" >>confdefs.h

fi

@%:@ Check whether --enable-stats was given.
if test "${enable_stats+set}" = set; then :
    enableval=$enable_stats;
else
    enable_stats=no
fi

if test "x$enable_stats" = xyes; then

$as_echo "@%:@define DBUS_ENABLE_STATS 1" >>confdefs.h

fi

ac_config_files="$ac_config_files Doxyfile dbus/versioninfo.rc
dbus/dbus-arch-deps.h bus/system.conf bus/session.conf bus/messagebus
bus/messagebus-config bus/org.freedesktop.dbus-session.plist
bus/rc.messagebus bus/dbus.service bus/dbus.socket Makefile
dbus/Makefile bus/Makefile tools/Makefile test/Makefile test/name-
test/Makefile doc/Makefile doc/dbus-daemon.1 dbus-1.pc dbus-1-
uninstalled.pc test/data/valid-config-files/debug-allow-all.conf
test/data/valid-config-files/debug-allow-all-sha1.conf
test/data/valid-config-files-system/debug-allow-all-pass.conf
test/data/valid-config-files-system/debug-allow-all-fail.conf
test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service

```

```

test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service test/data/invalid-
service-files-system/org.freedesktop.DBus.TestSuiteNoUser.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service"

```

```

cat >confcache <<\_ACEOF
# This file is a shell script that caches the results of configure
# tests run on this system so they can be shared between configure
# scripts and configure runs, see configure's option --config-cache.
# It is not useful on other systems.  If it contains results you don't
# want to keep, you may remove or edit it.
#
# config.status only pays attention to the cache file if you give it
# the --recheck option to rerun configure.
#
# `ac_cv_env_foo' variables (set or unset) will be overridden when
# loading this file, other *unset* `ac_cv_foo' will be assigned the
# following values.

```

```
_ACEOF
```

```

# The following way of writing the cache mishandles newlines in
values,
# but we know of no workaround that is simple, portable, and
efficient.
# So, we kill variables containing newlines.
# Ultrix sh set writes to stderr and can't be redirected directly,
# and sets the high bit in the cache file unless we assign to the
vars.
(
  for ac_var in `(set) 2>&1 | sed -n 's/^\([a-zA-Z_][a-zA-Z0-
9_]*\)=.*/\1/p'`; do
    eval ac_val=\${$ac_var}
    case $ac_val in #(
      *${as_nl}*)
        case $ac_var in #(
          *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5

```

```

$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
    esac
    case $ac_var in #(
    _ | IFS | as_nl) ;; #(
    BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
    *) { eval $ac_var=; unset $ac_var;} ;;
    esac ;;
    esac
done

(set) 2>&1 |
case $as_nl `(ac_space=' '; set) 2>&1` in #(
*${as_nl}ac_space=\ *)
# `set' does not quote correctly, so add quotes: double-quote
# substitution turns \\ into \, and sed turns \ into \.
sed -n \
"s/'/'\\\\"'/g;

s/^\([_$_as_cr_alnum]*_cv_[_$_as_cr_alnum]*\)=\(.*\)/\1='\'2'/p"
;; #(
*)
# `set' quotes correctly as required by POSIX, so do not add
quotes.
sed -n "/^[_$_as_cr_alnum]*_cv_[_$_as_cr_alnum]*=/p"
;;
esac |
sort
) |
sed '
/^ac_cv_env_/b end
t clear
:clear
s/^\([^=]*\)=\(.*\)[{}].*\)/test "${\1+set}" = set || &/
t end
s/^\([^=]*\)=\(.*\)/\1=${\1=\2}/
:end' >>confcache
if diff "$cache_file" confcache >/dev/null 2>&1; then ;; else
if test -w "$cache_file"; then
if test "x$cache_file" != "x/dev/null"; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: updating cache
$cache_file" >&5
$as_echo "$as_me: updating cache $cache_file" >&6;}
if test ! -f "$cache_file" || test -h "$cache_file"; then
cat confcache >"$cache_file"
else
case $cache_file in #(
*/* | ?:* )
mv -f confcache "$cache_file"$$ &&
mv -f "$cache_file"$$ "$cache_file" ;; #(
*)
mv -f confcache "$cache_file" ;;

```

```

        esac
    fi
fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: not updating unwritable
cache $cache_file" >&5
$as_echo "$as_me: not updating unwritable cache $cache_file" >&6;}
    fi
fi
rm -f confcache

test "x$prefix" = xNONE && prefix=$ac_default_prefix
# Let make expand exec_prefix.
test "x$exec_prefix" = xNONE && exec_prefix='${prefix}'

DEFS=-DHAVE_CONFIG_H

ac_libobjs=
ac_ltlibobjs=
U=
for ac_i in : $LIB@&t@OBS; do test "x$ac_i" = x: && continue
# 1. Remove the extension, and $U if already installed.
ac_script='s/\$U\.\./;/s/\.o$///;s/\.obj$//\'
ac_i=`$as_echo "$ac_i" | sed "$ac_script"`
# 2. Prepend LIBOBJDIR.  When used with automake>=1.10 LIBOBJDIR
#    will be set to the directory where LIBOBS objects are built.
as_fn_append ac_libobjs " \${LIBOBJDIR}$ac_i\$U.$ac_objext"
as_fn_append ac_ltlibobjs " \${LIBOBJDIR}$ac_i'\'$U.lo\'
done
LIB@&t@OBS=$ac_libobjs

LTLIBOBS=$ac_ltlibobjs

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking that generated files
are newer than configure" >&5
$as_echo_n "checking that generated files are newer than configure...
" >&6; }
    if test -n "$am_sleep_pid"; then
        # Hide warnings about reused PIDs.
        wait $am_sleep_pid 2>/dev/null
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: done" >&5
$as_echo "done" >&6; }
    if test -n "$EXEEXT"; then
        am__EXEEXT_TRUE=
        am__EXEEXT_FALSE='#'
    else
        am__EXEEXT_TRUE='#'
        am__EXEEXT_FALSE=
    fi

```

```
if test -z "${MAINTAINER_MODE_TRUE}" && test -z
"${MAINTAINER_MODE_FALSE}"; then
  as_fn_error $? "conditional \"MAINTAINER_MODE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${AMDEP_TRUE}" && test -z "${AMDEP_FALSE}"; then
  as_fn_error $? "conditional \"AMDEP\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCC_TRUE}" && test -z
"${am__fastdepCC_FALSE}"; then
  as_fn_error $? "conditional \"am__fastdepCC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCXX_TRUE}" && test -z
"${am__fastdepCXX_FALSE}"; then
  as_fn_error $? "conditional \"am__fastdepCXX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WIN_TRUE}" && test -z "${DBUS_WIN_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_WIN\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WINCE_TRUE}" && test -z "${DBUS_WINCE_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_WINCE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_UNIX_TRUE}" && test -z "${DBUS_UNIX_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_UNIX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_CYGWIN_TRUE}" && test -z "${DBUS_CYGWIN_FALSE}";
then
  as_fn_error $? "conditional \"DBUS_CYGWIN\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUILD_TESTS_TRUE}" && test -z
"${DBUS_BUILD_TESTS_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_BUILD_TESTS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_EMBEDDED_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_EMBEDDED_TESTS_FALSE}"; then
```



```

    as_fn_error $? "conditional \"DBUS_ENABLE_EMBEDDED_TESTS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_MODULAR_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_MODULAR_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_MODULAR_TESTS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WITH_GLIB_TRUE}" && test -z
"${DBUS_WITH_GLIB_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_WITH_GLIB\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_INSTALLED_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_INSTALLED_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_INSTALLED_TESTS\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

if test -z "${DBUS_USE_EXPAT_TRUE}" && test -z
"${DBUS_USE_EXPAT_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_USE_EXPAT\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_USE_LIBXML_TRUE}" && test -z
"${DBUS_USE_LIBXML_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_USE_LIBXML\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_SELINUX_TRUE}" && test -z "${HAVE_SELINUX_FALSE}";
then
    as_fn_error $? "conditional \"HAVE_SELINUX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUS_ENABLE_INOTIFY_TRUE}" && test -z
"${DBUS_BUS_ENABLE_INOTIFY_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUS_ENABLE_INOTIFY\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

```

```

if test -z "${DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE}" && test -z
"${DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_LINUX_EPOLL_TRUE}" && test -z
"${HAVE_LINUX_EPOLL_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_LINUX_EPOLL\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUS_ENABLE_KQUEUE_TRUE}" && test -z
"${DBUS_BUS_ENABLE_KQUEUE_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUS_ENABLE_KQUEUE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_LAUNCHD_TRUE}" && test -z
"${DBUS_ENABLE_LAUNCHD_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_LAUNCHD\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_CONSOLE_OWNER_FILE_TRUE}" && test -z
"${HAVE_CONSOLE_OWNER_FILE_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_CONSOLE_OWNER_FILE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_LIBAUDIT_TRUE}" && test -z
"${HAVE_LIBAUDIT_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_LIBAUDIT\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_DOXYGEN_DOCS_ENABLED_TRUE}" && test -z
"${DBUS_DOXYGEN_DOCS_ENABLED_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_DOXYGEN_DOCS_ENABLED\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_HAVE_XSLTPROC_TRUE}" && test -z
"${DBUS_HAVE_XSLTPROC_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_HAVE_XSLTPROC\" was never
defined.

```

```
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_XML_DOCS_ENABLED_TRUE}" && test -z
"${DBUS_XML_DOCS_ENABLED_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_XML_DOCS_ENABLED\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_HAVE_MAN2HTML_TRUE}" && test -z
"${DBUS_HAVE_MAN2HTML_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_HAVE_MAN2HTML\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_CAN_UPLOAD_DOCS_TRUE}" && test -z
"${DBUS_CAN_UPLOAD_DOCS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_CAN_UPLOAD_DOCS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_RED_HAT_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_RED_HAT_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_RED_HAT\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_SLACKWARE_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_SLACKWARE_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_SLACKWARE\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_CYGWIN_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_CYGWIN_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_CYGWIN\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_SYSTEMD_TRUE}" && test -z "${HAVE_SYSTEMD_FALSE}";
then
    as_fn_error $? "conditional \"HAVE_SYSTEMD\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
```



```

as_echo=$as_echo$as_echo$as_echo$as_echo$as_echo
as_echo=$as_echo$as_echo$as_echo$as_echo$as_echo$as_echo
# Prefer a ksh shell builtin over an external printf program on
Solaris,
# but without wasting forks for bash or zsh.
if test -z "$BASH_VERSION$ZSH_VERSION" \
    && (test "X`print -r -- $as_echo`" = "X$as_echo") 2>/dev/null;
then
    as_echo='print -r --'
    as_echo_n='print -rn --'
elif (test "X`printf %s $as_echo`" = "X$as_echo") 2>/dev/null; then
    as_echo='printf %s\n'
    as_echo_n='printf %s'
else
    if test "X`(/usr/ucb/echo -n -n $as_echo) 2>/dev/null`" = "X-n
$as_echo"; then
        as_echo_body='eval /usr/ucb/echo -n "$1$as_nl"'
        as_echo_n='/usr/ucb/echo -n'
    else
        as_echo_body='eval expr "X$1" : "X\\(.*\\)"'
        as_echo_n_body='eval
            arg=$1;
            case $arg in @%:@(
                *"$as_nl"*)
                    expr "X$arg" : "X\\(.*\\)$as_nl";
                    arg=`expr "X$arg" : ".*$as_nl\\(.*\\)"`;
                    esac;
                    expr "X$arg" : "X\\(.*\\)" | tr -d "$as_nl"
            ,
            export as_echo_n_body
            as_echo_n='sh -c $as_echo_n_body as_echo'
        fi
        export as_echo_body
        as_echo='sh -c $as_echo_body as_echo'
    fi
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
    PATH_SEPARATOR=:
    (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
        (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
            PATH_SEPARATOR=';'
    }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)

```

```

IFS=" " $as_nl"

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
  *[\ \/]* ) as_myself=$0 ;;
  *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
  as_myself=$0
fi
if test ! -f "$as_myself"; then
  $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
  exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh). But do not cause bugs in bash 2.01; the "|| exit
1"
# suppresses any "Segmentation fault" message there. '((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
  && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

```

```

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
    as_status=$1; test $as_status -eq 0 && as_status=1
    if test "$4"; then
        as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
        $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
    fi
    $as_echo "$as_me: error: $2" >&2
    as_fn_exit $as_status
} @%:@ as_fn_error

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @S|@? to STATUS, without forking.
as_fn_set_status ()
{
    return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS
@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take

```

```

@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$as_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
    {
        eval $1+=\$2
    }'
else
    as_fn_append ()
    {
        eval $1=\$$1\$2
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \$(( 1 + 1 )) = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
    {
        as_val=$(( $* ))
    }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

if expr a : '\(a\)' >/dev/null 2>&1 &&
    test "X`expr 00001 : '.*\(...\)`" = X001; then
    as_expr=expr
else
    as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
    as_basename=basename
else
    as_basename=false
fi

```



```

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]\[^\/]*\)/*$' \| \| \
X"$0" : 'X\(/\)\$' \| \| \
X"$0" : 'X\(/\)' \| \| . 2>/dev/null ||
$as_echo X/"$0" |
  sed '/^\.*\/\([^\/]\[^\/]*\)\/*$/{
    s//\1/
    q
  }
/^X\/\(\(\)\)\$/{
  s//\1/
  q
}
/^X\/\(\(\)\)\.*/{
  s//\1/
  q
}
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxyz'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*)
  case `echo 'xy\c'` in
  *c*) ECHO_T=' ';; # ECHO_T is single tab character.
  xy) ECHO_C='\c';;
  *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
     ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$ conf$$exe conf$$file
if test -d conf$$dir; then
  rm -f conf$$dir/conf$$file
else
  rm -f conf$$dir
  mkdir conf$$dir 2>/dev/null

```

```

fi
if (echo >conf$$file) 2>/dev/null; then
  if ln -s conf$$file conf$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$file conf$.dir 2>/dev/null && test ! -f conf$.exe
  ||
    as_ln_s='cp -pR'
  elif ln conf$.file conf$$ 2>/dev/null; then
    as_ln_s=ln
  else
    as_ln_s='cp -pR'
  fi
else
  as_ln_s='cp -pR'
fi
rm -f conf$$ conf$.exe conf$.dir/conf$.file conf$.file
rmdir conf$.dir 2>/dev/null

```

```

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "@S|@as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{
  case $as_dir in #(
  -*) as_dir=./$as_dir;;
  esac
  test -d "$as_dir" || eval $as_mkdir_p || {
    as_dirs=
    while ;; do
      case $as_dir in #(
      *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\'\\\'\\\'\\\'\\\'\\\'\\\'/g"`;;
    #'(
      *) as_qdir=$as_dir;;
    esac
    as_dirs="'$as_qdir' $as_dirs"
    as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\(. *[^\] \\) // * [^\] [^\] * / * $' \| \
X"$as_dir" : 'X\ ( // \ ) [^\]' \| \
X"$as_dir" : 'X\ ( // \ ) $' \| \
X"$as_dir" : 'X\ ( / \ ) ' \| . 2>/dev/null ||
$as_echo X"$as_dir" |
sed '/^X\ (. * [^\] \\) \\ \\ * [^\] [^\] * \ / * $ / {
s // \ 1 /
q

```

```

    }
    /^X\(\\\/\\\/)\ [^/].*/{
        s//\1/
        q
    }
    /^X\(\\\/\\\/)$/{
        s//\1/
        q
    }
    /^X\(\\\/)\.*/{
        s//\1/
        q
    }
    }
    s/.*/./; q'`
    test -d "$sas_dir" && break
done
test -z "$sas_dirs" || eval "mkdir $sas_dirs"
} || test -d "$sas_dir" || as_fn_error $? "cannot create directory
$sas_dir"

```

```

} @%:@ as_fn_mkdir_p
if mkdir -p . 2>/dev/null; then
    as_mkdir_p='mkdir -p "$sas_dir"'
else
    test -d ./-p && rmdir ./-p
    as_mkdir_p=false
fi

```

```

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
as_test_x='test -x'
as_executable_p=as_fn_executable_p

```

```

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$sas_cr_letters%P$sas_cr_LETTERS%;s%[^_$$sas_cr_alnum]%%_g'"

```

```

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+%pp%;s%[^_$$sas_cr_alnum]%%_g'"

```

```

exec 6>&1
## ----- ##
## Main body of $CONFIG_STATUS script. ##
## ----- ##

```

```
_ACEOF
test $as_write_fail = 0 && chmod +x $CONFIG_STATUS || ac_write_fail=1
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# Save the log message, to keep $0 and so on meaningful, and to
# report actual input values of CONFIG_FILES etc. instead of their
# values after options handling.
```

```
ac_log="
```

```
This file was extended by dbus $as_me 1.6.8, which was
generated by GNU Autoconf 2.69.  Invocation command line was
```

```
CONFIG_FILES      = $CONFIG_FILES
CONFIG_HEADERS    = $CONFIG_HEADERS
CONFIG_LINKS      = $CONFIG_LINKS
CONFIG_COMMANDS   = $CONFIG_COMMANDS
$ $0 $@
```

```
on `(hostname || uname -n) 2>/dev/null | sed 1q`
```

```
"
```

```
_ACEOF
```

```
case $ac_config_files in *)
```

```
*) set x $ac_config_files; shift; ac_config_files=$*;;
```

```
esac
```

```
case $ac_config_headers in *)
```

```
*) set x $ac_config_headers; shift; ac_config_headers=$*;;
```

```
esac
```

```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
```

```
# Files that config.status was made for.
```

```
config_files="$ac_config_files"
```

```
config_headers="$ac_config_headers"
```

```
config_commands="$ac_config_commands"
```

```
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
```

```
ac_cs_usage="\
```

```
\`$as_me' instantiates files and other configuration actions
from templates according to the current configuration.  Unless the
files
```

```
and actions are specified as TAGs, all are instantiated by default.
```

```
Usage: $0 [OPTION]... [TAG]...
```

```
  -h, --help          print this help, then exit
  -V, --version       print version number and configuration settings,
then exit
  --config            print configuration, then exit
```

```
-q, --quiet, --silent
                        do not print progress messages
-d, --debug            don't remove temporary files
--recheck             update $as_me by reconfiguring in the same
conditions
--file=FILE[:TEMPLATE]
                        instantiate the configuration file FILE
--header=FILE[:TEMPLATE]
                        instantiate the configuration header FILE
```

Configuration files:
\$config_files

Configuration headers:
\$config_headers

Configuration commands:
\$config_commands

Report bugs to
<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus>."

```
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_cs_config="\`$as_echo "$ac_configure_args" | sed 's/^ //;
s/[\\\"'`\\$]/\\\\\\&/g'\`"
ac_cs_version="\`
dbus config.status 1.6.8
configured by $0, generated by GNU Autoconf 2.69,
  with options \\`\\$ac_cs_config\\`"
```

Copyright (C) 2012 Free Software Foundation, Inc.
This config.status script is free software; the Free Software
Foundation
gives unlimited permission to copy, distribute and modify it."

```
ac_pwd='$ac_pwd'
srcdir='$srcdir'
INSTALL='$INSTALL'
MKDIR_P='$MKDIR_P'
AWK='$AWK'
test -n "\\$AWK" || AWK=awk
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# The default lists apply if the user does not specify any file.
ac_need_defaults=:
while test $# != 0
do
  case $1 in
    --*=?*)
      ac_option=`expr "X$1" : 'X\([^=]*\)='`
```

```

    ac_optarg=`expr "X$1" : 'X[^=]*=\(.*)'`
    ac_shift=:
    ;;
--*=)
    ac_option=`expr "X$1" : 'X\[([^\=]*)='`
    ac_optarg=
    ac_shift=:
    ;;
*)
    ac_option=$1
    ac_optarg=$2
    ac_shift=shift
    ;;
esac

case $ac_option in
# Handling of the options.
-recheck | --recheck | --rehec | --reche | --rech | --rec | --re |
--r)
    ac_cs_recheck=: ;;
--version | --versio | --versi | --vers | --ver | --ve | --v | -V )
    $as_echo "$ac_cs_version"; exit ;;
--config | --confi | --conf | --con | --co | --c )
    $as_echo "$ac_cs_config"; exit ;;
--debug | --debu | --deb | --de | --d | -d )
    debug=: ;;
--file | --fil | --fi | --f )
    $ac_shift
    case $ac_optarg in
*'') ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
'') as_fn_error $? "missing file argument" ;;
esac
as_fn_append CONFIG_FILES " '$ac_optarg'"
ac_need_defaults=false;;
--header | --heade | --head | --hea )
    $ac_shift
    case $ac_optarg in
*'') ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
esac
as_fn_append CONFIG_HEADERS " '$ac_optarg'"
ac_need_defaults=false;;
--he | --h)
    # Conflict between --help and --header
    as_fn_error $? "ambiguous option: \`$1'"
Try \`$0 --help' for more information.";;
--help | --hel | -h )
    $as_echo "$ac_cs_usage"; exit ;;
-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil | --si | --s)
    ac_cs_silent=: ;;

```

```

# This is an error.
-*) as_fn_error $? "unrecognized option: \`$1'
Try \`$0 --help' for more information." ;;

*) as_fn_append ac_config_targets " $1"
   ac_need_defaults=false ;;

esac
shift
done

ac_configure_extra_args=

if $ac_cs_silent; then
  exec 6>/dev/null
  ac_configure_extra_args="$ac_configure_extra_args --silent"
fi

_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
if \${ac_cs_recheck}; then
  set X $$SHELL '$0' $ac_configure_args \${ac_configure_extra_args} --no-
create --no-recursion
  shift
  \${as_echo} "running CONFIG_SHELL=$SHELL \$*" >&6
  CONFIG_SHELL='$SHELL'
  export CONFIG_SHELL
  exec "\$@"
fi

_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
exec 5>>config.log
{
  echo
  sed 'h;s/./-/g;s/^.../@@%:@@%:@ /;s/...$/ @%:@@%:@/;p;x;p;x' <<_ASBOX
  @%:@@%:@ Running $as_me. @%:@@%:@
  _ASBOX
  $as_echo "$ac_log"
} >&5

_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
#
# INIT-COMMANDS
#
AMDEP_TRUE="$AMDEP_TRUE" ac_aux_dir="$ac_aux_dir"

# The HP-UX ksh and POSIX shell print the target directory to stdout
# if CDPATH is set.

```

```
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH
```

```
sed_quote_subst='$sed_quote_subst'  
double_quote_subst='$double_quote_subst'  
delay_variable_subst='$delay_variable_subst'  
macro_version='`$ECHO "$macro_version" | $SED  
"$delay_single_quote_subst"``'  
macro_revision='`$ECHO "$macro_revision" | $SED  
"$delay_single_quote_subst"``'  
enable_shared='`$ECHO "$enable_shared" | $SED  
"$delay_single_quote_subst"``'  
enable_static='`$ECHO "$enable_static" | $SED  
"$delay_single_quote_subst"``'  
pic_mode='`$ECHO "$pic_mode" | $SED "$delay_single_quote_subst"``'  
enable_fast_install='`$ECHO "$enable_fast_install" | $SED  
"$delay_single_quote_subst"``'  
SHELL='`$ECHO "$SHELL" | $SED "$delay_single_quote_subst"``'  
ECHO='`$ECHO "$ECHO" | $SED "$delay_single_quote_subst"``'  
PATH_SEPARATOR='`$ECHO "$PATH_SEPARATOR" | $SED  
"$delay_single_quote_subst"``'  
host_alias='`$ECHO "$host_alias" | $SED "$delay_single_quote_subst"``'  
host='`$ECHO "$host" | $SED "$delay_single_quote_subst"``'  
host_os='`$ECHO "$host_os" | $SED "$delay_single_quote_subst"``'  
build_alias='`$ECHO "$build_alias" | $SED  
"$delay_single_quote_subst"``'  
build='`$ECHO "$build" | $SED "$delay_single_quote_subst"``'  
build_os='`$ECHO "$build_os" | $SED "$delay_single_quote_subst"``'  
SED='`$ECHO "$SED" | $SED "$delay_single_quote_subst"``'  
Xsed='`$ECHO "$Xsed" | $SED "$delay_single_quote_subst"``'  
GREP='`$ECHO "$GREP" | $SED "$delay_single_quote_subst"``'  
EGREP='`$ECHO "$EGREP" | $SED "$delay_single_quote_subst"``'  
FGREP='`$ECHO "$FGREP" | $SED "$delay_single_quote_subst"``'  
LD='`$ECHO "$LD" | $SED "$delay_single_quote_subst"``'  
NM='`$ECHO "$NM" | $SED "$delay_single_quote_subst"``'  
LN_S='`$ECHO "$LN_S" | $SED "$delay_single_quote_subst"``'  
max_cmd_len='`$ECHO "$max_cmd_len" | $SED  
"$delay_single_quote_subst"``'  
ac_objext='`$ECHO "$ac_objext" | $SED "$delay_single_quote_subst"``'  
exeext='`$ECHO "$exeext" | $SED "$delay_single_quote_subst"``'  
lt_unset='`$ECHO "$lt_unset" | $SED "$delay_single_quote_subst"``'  
lt_SP2NL='`$ECHO "$lt_SP2NL" | $SED "$delay_single_quote_subst"``'  
lt_NL2SP='`$ECHO "$lt_NL2SP" | $SED "$delay_single_quote_subst"``'  
lt_cv_to_host_file_cmd='`$ECHO "$lt_cv_to_host_file_cmd" | $SED  
"$delay_single_quote_subst"``'  
lt_cv_to_tool_file_cmd='`$ECHO "$lt_cv_to_tool_file_cmd" | $SED  
"$delay_single_quote_subst"``'  
reload_flag='`$ECHO "$reload_flag" | $SED  
"$delay_single_quote_subst"``'  
reload_cmds='`$ECHO "$reload_cmds" | $SED  
"$delay_single_quote_subst"``'  
OBJDUMP='`$ECHO "$OBJDUMP" | $SED "$delay_single_quote_subst"``'
```



```
deplibs_check_method='`$ECHO "$deplibs_check_method" | $SED
"$delay_single_quote_subst"``'
file_magic_cmd='`$ECHO "$file_magic_cmd" | $SED
"$delay_single_quote_subst"``'
file_magic_glob='`$ECHO "$file_magic_glob" | $SED
"$delay_single_quote_subst"``'
want_nocaseglob='`$ECHO "$want_nocaseglob" | $SED
"$delay_single_quote_subst"``'
DLLTOOL='`$ECHO "$DLLTOOL" | $SED "$delay_single_quote_subst"``'
sharedlib_from_linklib_cmd='`$ECHO "$sharedlib_from_linklib_cmd" |
$SED "$delay_single_quote_subst"``'
AR='`$ECHO "$AR" | $SED "$delay_single_quote_subst"``'
AR_FLAGS='`$ECHO "$AR_FLAGS" | $SED "$delay_single_quote_subst"``'
archiver_list_spec='`$ECHO "$archiver_list_spec" | $SED
"$delay_single_quote_subst"``'
STRIP='`$ECHO "$STRIP" | $SED "$delay_single_quote_subst"``'
RANLIB='`$ECHO "$RANLIB" | $SED "$delay_single_quote_subst"``'
old_postinstall_cmds='`$ECHO "$old_postinstall_cmds" | $SED
"$delay_single_quote_subst"``'
old_postuninstall_cmds='`$ECHO "$old_postuninstall_cmds" | $SED
"$delay_single_quote_subst"``'
old_archive_cmds='`$ECHO "$old_archive_cmds" | $SED
"$delay_single_quote_subst"``'
lock_old_archive_extraction='`$ECHO "$lock_old_archive_extraction" |
$SED "$delay_single_quote_subst"``'
CC='`$ECHO "$CC" | $SED "$delay_single_quote_subst"``'
CFLAGS='`$ECHO "$CFLAGS" | $SED "$delay_single_quote_subst"``'
compiler='`$ECHO "$compiler" | $SED "$delay_single_quote_subst"``'
GCC='`$ECHO "$GCC" | $SED "$delay_single_quote_subst"``'
lt_cv_sys_global_symbol_pipe='`$ECHO "$lt_cv_sys_global_symbol_pipe" |
$SED "$delay_single_quote_subst"``'
lt_cv_sys_global_symbol_to_cdecl='`$ECHO
"$lt_cv_sys_global_symbol_to_cdecl" | $SED
"$delay_single_quote_subst"``'
lt_cv_sys_global_symbol_to_c_name_address='`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address" | $SED
"$delay_single_quote_subst"``'
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix='`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address_lib_prefix" | $SED
"$delay_single_quote_subst"``'
nm_file_list_spec='`$ECHO "$nm_file_list_spec" | $SED
"$delay_single_quote_subst"``'
lt_sysroot='`$ECHO "$lt_sysroot" | $SED "$delay_single_quote_subst"``'
objdir='`$ECHO "$objdir" | $SED "$delay_single_quote_subst"``'
MAGIC_CMD='`$ECHO "$MAGIC_CMD" | $SED "$delay_single_quote_subst"``'
lt_prog_compiler_no_builtin_flag='`$ECHO
"$lt_prog_compiler_no_builtin_flag" | $SED
"$delay_single_quote_subst"``'
lt_prog_compiler_pic='`$ECHO "$lt_prog_compiler_pic" | $SED
"$delay_single_quote_subst"``'
lt_prog_compiler_wl='`$ECHO "$lt_prog_compiler_wl" | $SED
"$delay_single_quote_subst"``'
```

```
lt_prog_compiler_static='`$ECHO "$lt_prog_compiler_static" | $SED
"$delay_single_quote_subst"``'
lt_cv_prog_compiler_c_o='`$ECHO "$lt_cv_prog_compiler_c_o" | $SED
"$delay_single_quote_subst"``'
need_locks='`$ECHO "$need_locks" | $SED "$delay_single_quote_subst"``'
MANIFEST_TOOL='`$ECHO "$MANIFEST_TOOL" | $SED
"$delay_single_quote_subst"``'
DSYMUTIL='`$ECHO "$DSYMUTIL" | $SED "$delay_single_quote_subst"``'
NMEDIT='`$ECHO "$NMEDIT" | $SED "$delay_single_quote_subst"``'
LIPO='`$ECHO "$LIPO" | $SED "$delay_single_quote_subst"``'
OTOOL='`$ECHO "$OTOOL" | $SED "$delay_single_quote_subst"``'
OTOOL64='`$ECHO "$OTOOL64" | $SED "$delay_single_quote_subst"``'
libext='`$ECHO "$libext" | $SED "$delay_single_quote_subst"``'
shrext_cmds='`$ECHO "$shrext_cmds" | $SED
"$delay_single_quote_subst"``'
extract_expsyms_cmds='`$ECHO "$extract_expsyms_cmds" | $SED
"$delay_single_quote_subst"``'
archive_cmds_need_lc='`$ECHO "$archive_cmds_need_lc" | $SED
"$delay_single_quote_subst"``'
enable_shared_with_static_runtimes='`$ECHO
"$enable_shared_with_static_runtimes" | $SED
"$delay_single_quote_subst"``'
export_dynamic_flag_spec='`$ECHO "$export_dynamic_flag_spec" | $SED
"$delay_single_quote_subst"``'
whole_archive_flag_spec='`$ECHO "$whole_archive_flag_spec" | $SED
"$delay_single_quote_subst"``'
compiler_needs_object='`$ECHO "$compiler_needs_object" | $SED
"$delay_single_quote_subst"``'
old_archive_from_new_cmds='`$ECHO "$old_archive_from_new_cmds" | $SED
"$delay_single_quote_subst"``'
old_archive_from_expsyms_cmds='`$ECHO "$old_archive_from_expsyms_cmds"
| $SED "$delay_single_quote_subst"``'
archive_cmds='`$ECHO "$archive_cmds" | $SED
"$delay_single_quote_subst"``'
archive_expsym_cmds='`$ECHO "$archive_expsym_cmds" | $SED
"$delay_single_quote_subst"``'
module_cmds='`$ECHO "$module_cmds" | $SED
"$delay_single_quote_subst"``'
module_expsym_cmds='`$ECHO "$module_expsym_cmds" | $SED
"$delay_single_quote_subst"``'
with_gnu_ld='`$ECHO "$with_gnu_ld" | $SED
"$delay_single_quote_subst"``'
allow_undefined_flag='`$ECHO "$allow_undefined_flag" | $SED
"$delay_single_quote_subst"``'
no_undefined_flag='`$ECHO "$no_undefined_flag" | $SED
"$delay_single_quote_subst"``'
hardcode_libdir_flag_spec='`$ECHO "$hardcode_libdir_flag_spec" | $SED
"$delay_single_quote_subst"``'
hardcode_libdir_separator='`$ECHO "$hardcode_libdir_separator" | $SED
"$delay_single_quote_subst"``'
hardcode_direct='`$ECHO "$hardcode_direct" | $SED
"$delay_single_quote_subst"``'
```

```
hardcode_direct_absolute='`$ECHO "$hardcode_direct_absolute" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L='`$ECHO "$hardcode_minus_L" | $SED
"$delay_single_quote_subst"`'
hardcode_shlibpath_var='`$ECHO "$hardcode_shlibpath_var" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic='`$ECHO "$hardcode_automatic" | $SED
"$delay_single_quote_subst"`'
inherit_rpath='`$ECHO "$inherit_rpath" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs='`$ECHO "$link_all_deplibs" | $SED
"$delay_single_quote_subst"`'
always_export_symbols='`$ECHO "$always_export_symbols" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds='`$ECHO "$export_symbols_cmds" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms='`$ECHO "$exclude_expsyms" | $SED
"$delay_single_quote_subst"`'
include_expsyms='`$ECHO "$include_expsyms" | $SED
"$delay_single_quote_subst"`'
prelink_cmds='`$ECHO "$prelink_cmds" | $SED
"$delay_single_quote_subst"`'
postlink_cmds='`$ECHO "$postlink_cmds" | $SED
"$delay_single_quote_subst"`'
file_list_spec='`$ECHO "$file_list_spec" | $SED
"$delay_single_quote_subst"`'
variables_saved_for_relink='`$ECHO "$variables_saved_for_relink" |
$SED "$delay_single_quote_subst"`'
need_lib_prefix='`$ECHO "$need_lib_prefix" | $SED
"$delay_single_quote_subst"`'
need_version='`$ECHO "$need_version" | $SED
"$delay_single_quote_subst"`'
version_type='`$ECHO "$version_type" | $SED
"$delay_single_quote_subst"`'
runpath_var='`$ECHO "$runpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_var='`$ECHO "$shlibpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_overrides_runpath='`$ECHO "$shlibpath_overrides_runpath" |
$SED "$delay_single_quote_subst"`'
libname_spec='`$ECHO "$libname_spec" | $SED
"$delay_single_quote_subst"`'
library_names_spec='`$ECHO "$library_names_spec" | $SED
"$delay_single_quote_subst"`'
soname_spec='`$ECHO "$soname_spec" | $SED
"$delay_single_quote_subst"`'
install_override_mode='`$ECHO "$install_override_mode" | $SED
"$delay_single_quote_subst"`'
postinstall_cmds='`$ECHO "$postinstall_cmds" | $SED
"$delay_single_quote_subst"`'
postuninstall_cmds='`$ECHO "$postuninstall_cmds" | $SED
"$delay_single_quote_subst"`'
```

```
finish_cmds='`$ECHO "$finish_cmds" | $SED
"$delay_single_quote_subst"``'
finish_eval='`$ECHO "$finish_eval" | $SED
"$delay_single_quote_subst"``'
hardcode_into_libs='`$ECHO "$hardcode_into_libs" | $SED
"$delay_single_quote_subst"``'
sys_lib_search_path_spec='`$ECHO "$sys_lib_search_path_spec" | $SED
"$delay_single_quote_subst"``'
sys_lib_dlsearch_path_spec='`$ECHO "$sys_lib_dlsearch_path_spec" |
$SED "$delay_single_quote_subst"``'
hardcode_action='`$ECHO "$hardcode_action" | $SED
"$delay_single_quote_subst"``'
enable_dlopen='`$ECHO "$enable_dlopen" | $SED
"$delay_single_quote_subst"``'
enable_dlopen_self='`$ECHO "$enable_dlopen_self" | $SED
"$delay_single_quote_subst"``'
enable_dlopen_self_static='`$ECHO "$enable_dlopen_self_static" | $SED
"$delay_single_quote_subst"``'
old_strip_lib='`$ECHO "$old_strip_lib" | $SED
"$delay_single_quote_subst"``'
strip_lib='`$ECHO "$strip_lib" | $SED "$delay_single_quote_subst"``'
compiler_lib_search_dirs='`$ECHO "$compiler_lib_search_dirs" | $SED
"$delay_single_quote_subst"``'
predep_objects='`$ECHO "$predep_objects" | $SED
"$delay_single_quote_subst"``'
postdep_objects='`$ECHO "$postdep_objects" | $SED
"$delay_single_quote_subst"``'
predeps='`$ECHO "$predeps" | $SED "$delay_single_quote_subst"``'
postdeps='`$ECHO "$postdeps" | $SED "$delay_single_quote_subst"``'
compiler_lib_search_path='`$ECHO "$compiler_lib_search_path" | $SED
"$delay_single_quote_subst"``'
LD_CXX='`$ECHO "$LD_CXX" | $SED "$delay_single_quote_subst"``'
LD_RC='`$ECHO "$LD_RC" | $SED "$delay_single_quote_subst"``'
reload_flag_CXX='`$ECHO "$reload_flag_CXX" | $SED
"$delay_single_quote_subst"``'
reload_flag_RC='`$ECHO "$reload_flag_RC" | $SED
"$delay_single_quote_subst"``'
reload_cmds_CXX='`$ECHO "$reload_cmds_CXX" | $SED
"$delay_single_quote_subst"``'
reload_cmds_RC='`$ECHO "$reload_cmds_RC" | $SED
"$delay_single_quote_subst"``'
old_archive_cmds_CXX='`$ECHO "$old_archive_cmds_CXX" | $SED
"$delay_single_quote_subst"``'
old_archive_cmds_RC='`$ECHO "$old_archive_cmds_RC" | $SED
"$delay_single_quote_subst"``'
compiler_CXX='`$ECHO "$compiler_CXX" | $SED
"$delay_single_quote_subst"``'
compiler_RC='`$ECHO "$compiler_RC" | $SED
"$delay_single_quote_subst"``'
GCC_CXX='`$ECHO "$GCC_CXX" | $SED "$delay_single_quote_subst"``'
GCC_RC='`$ECHO "$GCC_RC" | $SED "$delay_single_quote_subst"``'
```

```
lt_prog_compiler_no_builtin_flag_CXX='`$ECHO
"$lt_prog_compiler_no_builtin_flag_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_no_builtin_flag_RC='`$ECHO
"$lt_prog_compiler_no_builtin_flag_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_pic_CXX='`$ECHO "$lt_prog_compiler_pic_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_pic_RC='`$ECHO "$lt_prog_compiler_pic_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_wl_CXX='`$ECHO "$lt_prog_compiler_wl_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_wl_RC='`$ECHO "$lt_prog_compiler_wl_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_static_CXX='`$ECHO "$lt_prog_compiler_static_CXX" |
$SED "$delay_single_quote_subst"`'
lt_prog_compiler_static_RC='`$ECHO "$lt_prog_compiler_static_RC" |
$SED "$delay_single_quote_subst"`'
lt_cv_prog_compiler_c_o_CXX='`$ECHO "$lt_cv_prog_compiler_c_o_CXX" |
$SED "$delay_single_quote_subst"`'
lt_cv_prog_compiler_c_o_RC='`$ECHO "$lt_cv_prog_compiler_c_o_RC" |
$SED "$delay_single_quote_subst"`'
archive_cmds_need_lc_CXX='`$ECHO "$archive_cmds_need_lc_CXX" | $SED
"$delay_single_quote_subst"`'
archive_cmds_need_lc_RC='`$ECHO "$archive_cmds_need_lc_RC" | $SED
"$delay_single_quote_subst"`'
enable_shared_with_static_runtimes_CXX='`$ECHO
"$enable_shared_with_static_runtimes_CXX" | $SED
"$delay_single_quote_subst"`'
enable_shared_with_static_runtimes_RC='`$ECHO
"$enable_shared_with_static_runtimes_RC" | $SED
"$delay_single_quote_subst"`'
export_dynamic_flag_spec_CXX='`$ECHO "$export_dynamic_flag_spec_CXX" |
$SED "$delay_single_quote_subst"`'
export_dynamic_flag_spec_RC='`$ECHO "$export_dynamic_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
whole_archive_flag_spec_CXX='`$ECHO "$whole_archive_flag_spec_CXX" |
$SED "$delay_single_quote_subst"`'
whole_archive_flag_spec_RC='`$ECHO "$whole_archive_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
compiler_needs_object_CXX='`$ECHO "$compiler_needs_object_CXX" | $SED
"$delay_single_quote_subst"`'
compiler_needs_object_RC='`$ECHO "$compiler_needs_object_RC" | $SED
"$delay_single_quote_subst"`'
old_archive_from_new_cmds_CXX='`$ECHO "$old_archive_from_new_cmds_CXX"
| $SED "$delay_single_quote_subst"`'
old_archive_from_new_cmds_RC='`$ECHO "$old_archive_from_new_cmds_RC" |
$SED "$delay_single_quote_subst"`'
old_archive_from_expsyms_cmds_CXX='`$ECHO
"$old_archive_from_expsyms_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
```

```
old_archive_from_expsyms_cmds_RC='`$ECHO
"$old_archive_from_expsyms_cmds_RC" | $SED
"$delay_single_quote_subst"`'
archive_cmds_CXX='`$ECHO "$archive_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
archive_cmds_RC='`$ECHO "$archive_cmds_RC" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds_CXX='`$ECHO "$archive_expsym_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds_RC='`$ECHO "$archive_expsym_cmds_RC" | $SED
"$delay_single_quote_subst"`'
module_cmds_CXX='`$ECHO "$module_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
module_cmds_RC='`$ECHO "$module_cmds_RC" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds_CXX='`$ECHO "$module_expsym_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds_RC='`$ECHO "$module_expsym_cmds_RC" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld_CXX='`$ECHO "$with_gnu_ld_CXX" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld_RC='`$ECHO "$with_gnu_ld_RC" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag_CXX='`$ECHO "$allow_undefined_flag_CXX" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag_RC='`$ECHO "$allow_undefined_flag_RC" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag_CXX='`$ECHO "$no_undefined_flag_CXX" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag_RC='`$ECHO "$no_undefined_flag_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_flag_spec_CXX='`$ECHO "$hardcode_libdir_flag_spec_CXX"
| $SED "$delay_single_quote_subst"`'
hardcode_libdir_flag_spec_RC='`$ECHO "$hardcode_libdir_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_libdir_separator_CXX='`$ECHO "$hardcode_libdir_separator_CXX"
| $SED "$delay_single_quote_subst"`'
hardcode_libdir_separator_RC='`$ECHO "$hardcode_libdir_separator_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_direct_CXX='`$ECHO "$hardcode_direct_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_RC='`$ECHO "$hardcode_direct_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_absolute_CXX='`$ECHO "$hardcode_direct_absolute_CXX" |
$SED "$delay_single_quote_subst"`'
hardcode_direct_absolute_RC='`$ECHO "$hardcode_direct_absolute_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_minus_L_CXX='`$ECHO "$hardcode_minus_L_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L_RC='`$ECHO "$hardcode_minus_L_RC" | $SED
"$delay_single_quote_subst"`'
```

```
hardcode_shlibpath_var_CXX='`$ECHO "$hardcode_shlibpath_var_CXX" |
$SED "$delay_single_quote_subst"`'
hardcode_shlibpath_var_RC='`$ECHO "$hardcode_shlibpath_var_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic_CXX='`$ECHO "$hardcode_automatic_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic_RC='`$ECHO "$hardcode_automatic_RC" | $SED
"$delay_single_quote_subst"`'
inherit_rpath_CXX='`$ECHO "$inherit_rpath_CXX" | $SED
"$delay_single_quote_subst"`'
inherit_rpath_RC='`$ECHO "$inherit_rpath_RC" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs_CXX='`$ECHO "$link_all_deplibs_CXX" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs_RC='`$ECHO "$link_all_deplibs_RC" | $SED
"$delay_single_quote_subst"`'
always_export_symbols_CXX='`$ECHO "$always_export_symbols_CXX" | $SED
"$delay_single_quote_subst"`'
always_export_symbols_RC='`$ECHO "$always_export_symbols_RC" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds_CXX='`$ECHO "$export_symbols_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds_RC='`$ECHO "$export_symbols_cmds_RC" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms_CXX='`$ECHO "$exclude_expsyms_CXX" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms_RC='`$ECHO "$exclude_expsyms_RC" | $SED
"$delay_single_quote_subst"`'
include_expsyms_CXX='`$ECHO "$include_expsyms_CXX" | $SED
"$delay_single_quote_subst"`'
include_expsyms_RC='`$ECHO "$include_expsyms_RC" | $SED
"$delay_single_quote_subst"`'
prelink_cmds_CXX='`$ECHO "$prelink_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
prelink_cmds_RC='`$ECHO "$prelink_cmds_RC" | $SED
"$delay_single_quote_subst"`'
postlink_cmds_CXX='`$ECHO "$postlink_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
postlink_cmds_RC='`$ECHO "$postlink_cmds_RC" | $SED
"$delay_single_quote_subst"`'
file_list_spec_CXX='`$ECHO "$file_list_spec_CXX" | $SED
"$delay_single_quote_subst"`'
file_list_spec_RC='`$ECHO "$file_list_spec_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_action_CXX='`$ECHO "$hardcode_action_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_action_RC='`$ECHO "$hardcode_action_RC" | $SED
"$delay_single_quote_subst"`'
compiler_lib_search_dirs_CXX='`$ECHO "$compiler_lib_search_dirs_CXX" |
$SED "$delay_single_quote_subst"`'
compiler_lib_search_dirs_RC='`$ECHO "$compiler_lib_search_dirs_RC" |
$SED "$delay_single_quote_subst"`'
```

```

predep_objects_CXX='`$ECHO "$predep_objects_CXX" | $SED
"$delay_single_quote_subst"`'
predep_objects_RC='`$ECHO "$predep_objects_RC" | $SED
"$delay_single_quote_subst"`'
postdep_objects_CXX='`$ECHO "$postdep_objects_CXX" | $SED
"$delay_single_quote_subst"`'
postdep_objects_RC='`$ECHO "$postdep_objects_RC" | $SED
"$delay_single_quote_subst"`'
predeps_CXX='`$ECHO "$predeps_CXX" | $SED
"$delay_single_quote_subst"`'
predeps_RC='`$ECHO "$predeps_RC" | $SED "$delay_single_quote_subst"`'
postdeps_CXX='`$ECHO "$postdeps_CXX" | $SED
"$delay_single_quote_subst"`'
postdeps_RC='`$ECHO "$postdeps_RC" | $SED
"$delay_single_quote_subst"`'
compiler_lib_search_path_CXX='`$ECHO "$compiler_lib_search_path_CXX" |
$SED "$delay_single_quote_subst"`'
compiler_lib_search_path_RC='`$ECHO "$compiler_lib_search_path_RC" |
$SED "$delay_single_quote_subst"`'

```

```

LTCC='$LTCC'
LTCFLAGS='$LTCFLAGS'
compiler='$compiler_DEFAULT'

```

A function that is used when there is no print builtin or printf.

```

func_fallback_echo ()
{
    eval 'cat << _LTECHO_EOF
\ $1
_LTECHO_EOF'
}

```

```

# Quote eveled strings.
for var in SHELL \
ECHO \
PATH_SEPARATOR \
SED \
GREP \
EGREP \
FGREP \
LD \
NM \
LN_S \
lt_SP2NL \
lt_NL2SP \
reload_flag \
OBJDUMP \
deplibs_check_method \
file_magic_cmd \
file_magic_glob \
want_nocaseglob \
DLLTOOL \

```


sharedlib_from_linklib_cmd \
AR \
AR_FLAGS \
archiver_list_spec \
STRIP \
RANLIB \
CC \
CFLAGS \
compiler \
lt_cv_sys_global_symbol_pipe \
lt_cv_sys_global_symbol_to_cdecl \
lt_cv_sys_global_symbol_to_c_name_address \
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix \
nm_file_list_spec \
lt_prog_compiler_no_builtin_flag \
lt_prog_compiler_pic \
lt_prog_compiler_wl \
lt_prog_compiler_static \
lt_cv_prog_compiler_c_o \
need_locks \
MANIFEST_TOOL \
DSYMUTIL \
NMEDIT \
LIPO \
OTOOL \
OTOOL64 \
shrext_cmds \
export_dynamic_flag_spec \
whole_archive_flag_spec \
compiler_needs_object \
with_gnu_ld \
allow_undefined_flag \
no_undefined_flag \
hardcode_libdir_flag_spec \
hardcode_libdir_separator \
exclude_expsyms \
include_expsyms \
file_list_spec \
variables_saved_for_relink \
libname_spec \
library_names_spec \
soname_spec \
install_override_mode \
finish_eval \
old_striplib \
striplib \
compiler_lib_search_dirs \
predep_objects \
postdep_objects \
predeps \
postdeps \
compiler_lib_search_path \

```
LD_CXX \  
LD_RC \  
reload_flag_CXX \  
reload_flag_RC \  
compiler_CXX \  
compiler_RC \  
lt_prog_compiler_no_builtin_flag_CXX \  
lt_prog_compiler_no_builtin_flag_RC \  
lt_prog_compiler_pic_CXX \  
lt_prog_compiler_pic_RC \  
lt_prog_compiler_wl_CXX \  
lt_prog_compiler_wl_RC \  
lt_prog_compiler_static_CXX \  
lt_prog_compiler_static_RC \  
lt_cv_prog_compiler_c_o_CXX \  
lt_cv_prog_compiler_c_o_RC \  
export_dynamic_flag_spec_CXX \  
export_dynamic_flag_spec_RC \  
whole_archive_flag_spec_CXX \  
whole_archive_flag_spec_RC \  
compiler_needs_object_CXX \  
compiler_needs_object_RC \  
with_gnu_ld_CXX \  
with_gnu_ld_RC \  
allow_undefined_flag_CXX \  
allow_undefined_flag_RC \  
no_undefined_flag_CXX \  
no_undefined_flag_RC \  
hardcode_libdir_flag_spec_CXX \  
hardcode_libdir_flag_spec_RC \  
hardcode_libdir_separator_CXX \  
hardcode_libdir_separator_RC \  
exclude_expsyms_CXX \  
exclude_expsyms_RC \  
include_expsyms_CXX \  
include_expsyms_RC \  
file_list_spec_CXX \  
file_list_spec_RC \  
compiler_lib_search_dirs_CXX \  
compiler_lib_search_dirs_RC \  
predep_objects_CXX \  
predep_objects_RC \  
postdep_objects_CXX \  
postdep_objects_RC \  
predeps_CXX \  
predeps_RC \  
postdeps_CXX \  
postdeps_RC \  
compiler_lib_search_path_CXX \  
compiler_lib_search_path_RC; do  
  case `eval \\\\\\\\\\\$ECHO \\\\\\\\\\\"\\\\\\\\\\\\\\$\\$var"\\\\\\\\\\"` in  
    *[\\\\\\\\\\\\\\\`\\\\\\\\\\"\\\\\\\\\\$]*)
```

```

        eval "lt_$var=\\\\\\\\\\\\\\\\\"\\\\\\\\`\\\\\\\\$ECHO \\\\\"\\\\\\\\$\\$var\\\\\\\\" | \\\\$SED
\\\\\\\\$sed_quote_subst\\\\\\\\\"\\\\\\\\`\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\"
    ;;
*)
    eval "lt_$var=\\\\\\\\\\\\\\\\\"\\\\\\\\$\\$var\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\"
    ;;
esac
done

```

```

# Double-quote double-eval'd strings.
for var in reload_cmds \
old_postinstall_cmds \
old_postuninstall_cmds \
old_archive_cmds \
extract_expsyms_cmds \
old_archive_from_new_cmds \
old_archive_from_expsyms_cmds \
archive_cmds \
archive_expsym_cmds \
module_cmds \
module_expsym_cmds \
export_symbols_cmds \
prelink_cmds \
postlink_cmds \
postinstall_cmds \
postuninstall_cmds \
finish_cmds \
sys_lib_search_path_spec \
sys_lib_dlsearch_path_spec \
reload_cmds_CXX \
reload_cmds_RC \
old_archive_cmds_CXX \
old_archive_cmds_RC \
old_archive_from_new_cmds_CXX \
old_archive_from_new_cmds_RC \
old_archive_from_expsyms_cmds_CXX \
old_archive_from_expsyms_cmds_RC \
archive_cmds_CXX \
archive_cmds_RC \
archive_expsym_cmds_CXX \
archive_expsym_cmds_RC \
module_cmds_CXX \
module_cmds_RC \
module_expsym_cmds_CXX \
module_expsym_cmds_RC \
export_symbols_cmds_CXX \
export_symbols_cmds_RC \
prelink_cmds_CXX \
prelink_cmds_RC \
postlink_cmds_CXX \
postlink_cmds_RC; do
    case `eval \\\\$ECHO \\\\\"\\\\\\\\$\\$var"\\\\\\\\` in

```

```

    *[\\"\\$]*)
    eval "lt_\$var=\\\\\\\\\\"\\\\\\\\\\"$ECHO \\\\"\\\\\\\$var\\" | \\\\$SED -e
    \\\$double_quote_subst\\" -e \\\$sed_quote_subst\\" -e
    \\\$delay_variable_subst\\"\\\\\\\\\\"\\\\\\\\\\""
    ;;
    *)
    eval "lt_\$var=\\\\\\\\\\"\\\\\\\\\\\$var\\\\\\\\\\""
    ;;
  esac
done

ac_aux_dir='$ac_aux_dir'
xsi_shell='$xsi_shell'
lt_shell_append='$lt_shell_append'

# See if we are running on zsh, and set the options which allow our
# commands through without removal of \ escapes INIT.
if test -n "\${ZSH_VERSION+set}" ; then
  setopt NO_GLOB_SUBST
fi

PACKAGE='$PACKAGE'
VERSION='$VERSION'
TIMESTAMP='$TIMESTAMP'
RM='$RM'
ofile='$ofile'

_ACEOF

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1

# Handling of arguments.
for ac_config_target in $ac_config_targets
do
  case $ac_config_target in
    "config.h") CONFIG_HEADERS="$CONFIG_HEADERS config.h" ;;
    "depfiles") CONFIG_COMMANDS="$CONFIG_COMMANDS depfiles" ;;
    "libtool") CONFIG_COMMANDS="$CONFIG_COMMANDS libtool" ;;
    "Doxyfile") CONFIG_FILES="$CONFIG_FILES Doxyfile" ;;
    "dbus/versioninfo.rc") CONFIG_FILES="$CONFIG_FILES
dbus/versioninfo.rc" ;;
    "dbus/dbus-arch-deps.h") CONFIG_FILES="$CONFIG_FILES dbus/dbus-
arch-deps.h" ;;
    "bus/system.conf") CONFIG_FILES="$CONFIG_FILES bus/system.conf" ;;

```

```

"bus/session.conf") CONFIG_FILES="$CONFIG_FILES bus/session.conf"
;;
"bus/messagebus") CONFIG_FILES="$CONFIG_FILES bus/messagebus" ;;
"bus/messagebus-config") CONFIG_FILES="$CONFIG_FILES
bus/messagebus-config" ;;
"bus/org.freedesktop.dbus-session.plist")
CONFIG_FILES="$CONFIG_FILES bus/org.freedesktop.dbus-session.plist" ;;
"bus/rc.messagebus") CONFIG_FILES="$CONFIG_FILES
bus/rc.messagebus" ;;
"bus/dbus.service") CONFIG_FILES="$CONFIG_FILES bus/dbus.service"
;;
"bus/dbus.socket") CONFIG_FILES="$CONFIG_FILES bus/dbus.socket" ;;
"Makefile") CONFIG_FILES="$CONFIG_FILES Makefile" ;;
"dbus/Makefile") CONFIG_FILES="$CONFIG_FILES dbus/Makefile" ;;
"bus/Makefile") CONFIG_FILES="$CONFIG_FILES bus/Makefile" ;;
"tools/Makefile") CONFIG_FILES="$CONFIG_FILES tools/Makefile" ;;
"test/Makefile") CONFIG_FILES="$CONFIG_FILES test/Makefile" ;;
"test/name-test/Makefile") CONFIG_FILES="$CONFIG_FILES test/name-
test/Makefile" ;;
"doc/Makefile") CONFIG_FILES="$CONFIG_FILES doc/Makefile" ;;
"doc/dbus-daemon.1") CONFIG_FILES="$CONFIG_FILES doc/dbus-
daemon.1" ;;
"dbus-1.pc") CONFIG_FILES="$CONFIG_FILES dbus-1.pc" ;;
"dbus-1-uninstalled.pc") CONFIG_FILES="$CONFIG_FILES dbus-1-
uninstalled.pc" ;;
"test/data/valid-config-files/debug-allow-all.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files/debug-allow-
all.conf" ;;
"test/data/valid-config-files/debug-allow-all-sha1.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files/debug-allow-
all-sha1.conf" ;;
"test/data/valid-config-files-system/debug-allow-all-pass.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files-system/debug-
allow-all-pass.conf" ;;
"test/data/valid-config-files-system/debug-allow-all-fail.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files-system/debug-
allow-all-fail.conf" ;;
"test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service" ;;
"test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service" ;;
"test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service" ;;
"test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service")

```

```

CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service" ;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service"
;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service"
;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service" ;;

    *) as_fn_error $? "invalid argument: \`${ac_config_target}'" "$LINENO"
5;;
    esac
done

```

```

# If the user did not use the arguments to specify the items to
# instantiate,
# then the envvar interface is used. Set only those that are not.
# We use the long form for the default assignment because of an
# extremely

```

```

# bizarre bug on SunOS 4.1.3.
if $ac_need_defaults; then
  test "${CONFIG_FILES+set}" = set || CONFIG_FILES=$config_files
  test "${CONFIG_HEADERS+set}" = set || CONFIG_HEADERS=$config_headers
  test "${CONFIG_COMMANDS+set}" = set ||
CONFIG_COMMANDS=$config_commands
fi

# Have a temporary directory for convenience.  Make it in the build
tree
# simply because there is no reason against having it here, and in
addition,
# creating and moving files from /tmp can sometimes cause problems.
# Hook for its removal unless debugging.
# Note that there is a small window in which the directory will not be
cleaned:
# after its creation but before its name has been assigned to `$tmp'.
$debug ||
{
  tmp= ac_tmp=
  trap 'exit_status=$?'
  : "${ac_tmp:= $tmp}"
  { test ! -d "$ac_tmp" || rm -fr "$ac_tmp"; } && exit $exit_status
' 0
  trap 'as_fn_exit 1' 1 2 13 15
}
# Create a (secure) tmp directory for tmp files.

{
  tmp=`(umask 077 && mktemp -d "./confXXXXXX") 2>/dev/null` &&
  test -d "$tmp"
} ||
{
  tmp=./conf$$-$RANDOM
  (umask 077 && mkdir "$tmp")
} || as_fn_error $? "cannot create a temporary directory in ."
"$LINENO" 5
ac_tmp=$tmp

# Set up the scripts for CONFIG_FILES section.
# No need to generate them if there are no CONFIG_FILES.
# This happens for instance with `./config.status config.h'.
if test -n "$CONFIG_FILES"; then

ac_cr=`echo X | tr X '\015'`
# On cygwin, bash can eat \r inside `` if the user requested igncr.
# But we know of no other shell where ac_cr would be empty at this
# point, so we can use a bashism as a fallback.
if test "x$ac_cr" = x; then
  eval ac_cr=\$\`\\r\`
fi

```

```

ac_cs_awk_cr=`$AWK 'BEGIN { print "a\r\n" }' </dev/null 2>/dev/null`
if test "$ac_cs_awk_cr" = "a${ac_cr}b"; then
    ac_cs_awk_cr='\r\n'
else
    ac_cs_awk_cr=$ac_cr
fi

echo 'BEGIN {' >"$ac_tmp/subs1.awk" &&
_ACEOF

{
    echo "cat >conf$$$subs.awk <<_ACEOF" &&
    echo "$ac_subst_vars" | sed 's/./&!$&$ac_delim/' &&
    echo "_ACEOF"
} >conf$$$subs.sh ||
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
ac_delim_num=`echo "$ac_subst_vars" | grep -c '^`
ac_delim='%!_!# '
for ac_last_try in false false false false false ;; do
    . ./conf$$$subs.sh ||
        as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5

    ac_delim_n=`sed -n "s/.*$ac_delim$/X/p" conf$$$subs.awk | grep -c X`
    if test $ac_delim_n = $ac_delim_num; then
        break
    elif $ac_last_try; then
        as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
    else
        ac_delim="$ac_delim!$ac_delim_$ac_delim!! "
    fi
done
rm -f conf$$$subs.sh

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
cat >>"$ac_tmp/subs1.awk" <<\\_ACAWK &&
_ACEOF
sed -n '
h
s/^[S["/; s/!.*"/]=/
p
g
s/^[^!]*!//
:repl
t repl
s/'"$ac_delim"'$//
t delim
:nl
h
s/\(.\\{148\\}\)..*/\1/
t more1
s/["\\]/\\&/g; s/^\//; s/$/\\n"\\

```



```

p
n
b repl
:more1
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/.\{148\}//
t nl
:delim
h
s/\(.\{148\}\)\..*/\1/
t more2
s/["\\]/\\&/g; s/^"/; s/$"/
p
b
:more2
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/.\{148\}//
t delim
' <conf$$subs.awk | sed '
/^[^"]*/{
    N
    s/\n//
}
' >>$CONFIG_STATUS || ac_write_fail=1
rm -f conf$$subs.awk
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
_ACAWK
cat >>"$ac_tmp/subs1.awk" <<_ACAWK &&
    for (key in S) S_is_set[key] = 1
    FS = " "
}
{
    line = $ 0
    nfields = split(line, field, "@")
    substed = 0
    len = length(field[1])
    for (i = 2; i < nfields; i++) {
        key = field[i]
        keylen = length(key)
        if (S_is_set[key]) {
            value = S[key]
            line = substr(line, 1, len) "" value "" substr(line, len +
keylen + 3)
            len += length(value) + length(field[++i])
            substed = 1
        } else
            len += 1 + keylen
    }
}

```

```

    }

    print line
}

_ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
if sed "s/$ac_cr//" < /dev/null > /dev/null 2>&1; then
    sed "s/$ac_cr\\$//; s/$ac_cr/$ac_cs_awk_cr/g"
else
    cat
fi < "$ac_tmp/subs1.awk" > "$ac_tmp/subs.awk" \
|| as_fn_error $? "could not setup config files machinery" "$LINENO"
5
_ACEOF

# VPATH may cause trouble with some makes, so we remove sole
$(srcdir),
# ${srcdir} and @srcdir@ entries from VPATH if srcdir is ".", strip
leading and
# trailing colons and then remove the whole line if VPATH becomes
empty
# (actually we leave an empty line to preserve line numbers).
if test "x$srcdir" = x.; then
    ac_vpsub='/^[ ]*VPATH[ ]*=[ ]*{
h
s///
s/^\:/
s/[ ]*$\:/
s/:\$(srcdir)::/g
s/:\${srcdir}::/g
s/:\@srcdir@::/g
s/^\:*/
s/:\:*/
x
s/\(=[ ]*\).*/\1/
G
s/\n//
s/^[^=]*=[ ]*$//
}'
fi

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
fi # test -n "$CONFIG_FILES"

# Set up the scripts for CONFIG_HEADERS section.
# No need to generate them if there are no CONFIG_HEADERS.
# This happens for instance with `./config.status Makefile'.
if test -n "$CONFIG_HEADERS"; then
cat >"$ac_tmp/defines.awk" <<\_ACAWK ||
BEGIN {

```

```

_ACEOF

# Transform confdefs.h into an awk script `defines.awk', embedded as
# here-document in config.status, that substitutes the proper values
into
# config.h.in to produce config.h.

# Create a delimiter string that does not exist in confdefs.h, to ease
# handling of long lines.
ac_delim='%!_!# '
for ac_last_try in false false ;; do
  ac_tt=`sed -n "/$ac_delim/p" confdefs.h`
  if test -z "$ac_tt"; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_HEADERS" "$LINENO" 5
  else
    ac_delim="$ac_delim!$ac_delim _$ac_delim!! "
  fi
done

# For the awk script, D is an array of macro values keyed by name,
# likewise P contains macro parameters if any. Preserve backslash
# newline sequences.

ac_word_re=[_$as_cr_Letters][_$as_cr_alnum]*
sed -n \
s/.\{148\}/&'"$ac_delim"'/g \
t rset \
:rset \
s/^[ ]*#[ ]*define[ ]*[ ]*/ / \
t def \
d \
:def \
s/\\$/ / \
t bsnl \
s/["\\]/\\&/g \
s/^\ ("$ac_word_re"\)\ ([[^\]]*\)\ [ ]*\ (.*) /P["\1"]="\2"\ \
D["\1"]=" \3"/p \
s/^\ ("$ac_word_re"\)[ ]*\ (.*) /D["\1"]=" \2"/p \
d \
:bsnl \
s/["\\]/\\&/g \
s/^\ ("$ac_word_re"\)\ ([[^\]]*\)\ [ ]*\ (.*) /P["\1"]="\2"\ \
D["\1"]=" \3\\n"/p \
t cont \
s/^\ ("$ac_word_re"\)[ ]*\ (.*) /D["\1"]=" \2\\n"/p \
t cont \
d \
:cont \
n \
s/.\{148\}/&'"$ac_delim"'/g

```

```

t clear
:clear
s/\\$//
t bsnlc
s/["\\]/\\&/g; s/^"/; s/$"/p
d
:bsnlc
s/["\\]/\\&/g; s/^"/; s/$/\\\\\\n"\\p
b cont
' <confdefs.h | sed '
s/"$ac_delim"/"\\
"/g' >>$CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
  for (key in D) D_is_set[key] = 1
  FS = " "
}
/^[\t ]*#[\t ]*(define|undef)[\t ]+$ac_word_re([\t ]|\$)/ {
  line = \$0
  split(line, arg, " ")
  if (arg[1] == "#") {
    defundef = arg[2]
    mac1 = arg[3]
  } else {
    defundef = substr(arg[1], 2)
    mac1 = arg[2]
  }
  split(mac1, mac2, "(") #)
  macro = mac2[1]
  prefix = substr(line, 1, index(line, defundef) - 1)
  if (D_is_set[macro]) {
    # Preserve the white space surrounding the "#".
    print prefix "define", macro P[macro] D[macro]
    next
  } else {
    # Replace #undef with comments. This is necessary, for example,
    # in the case of _POSIX_SOURCE, which is predefined and required
    # on some systems where configure will not decide to define it.
    if (defundef == "undef") {
      print "/*", prefix defundef, macro, "*/"
      next
    }
  }
}
}
{ print }
_ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
  as_fn_error $? "could not setup config headers machinery" "$LINENO"
5
fi # test -n "$CONFIG_HEADERS"

```

```

eval set X " :F $CONFIG_FILES :H $CONFIG_HEADERS :C
$CONFIG_COMMANDS"
shift
for ac_tag
do
  case $ac_tag in
    :[FHLC]) ac_mode=$ac_tag; continue;;
  esac
  case $ac_mode$ac_tag in
    :[FHL]*:*);;
    :L* | :C*:* ) as_fn_error $? "invalid tag ``$ac_tag'" "$LINENO" 5;;
    :[FH]-) ac_tag=-:-;;
    :[FH]*) ac_tag=$ac_tag:$ac_tag.in;;
  esac
  ac_save_IFS=$IFS
  IFS=:
  set x $ac_tag
  IFS=$ac_save_IFS
  shift
  ac_file=$1
  shift

  case $ac_mode in
    :L) ac_source=$1;;
    :[FH])
      ac_file_inputs=
      for ac_f
      do
        case $ac_f in
          -) ac_f="$ac_tmp/stdin";;
          *) # Look for the file first in the build tree, then in the
source tree
          # (if the path is not absolute). The absolute path cannot be
DOS-style,
          # because $ac_f cannot contain `:'.
          test -f "$ac_f" ||
          case $ac_f in
            [\\/$]*) false;;
            *) test -f "$srcdir/$ac_f" && ac_f="$srcdir/$ac_f";;
          esac ||
          as_fn_error 1 "cannot find input file: ``$ac_f'" "$LINENO" 5;;
        esac
        case $ac_f in *\'*) ac_f=`$as_echo "$ac_f" | sed
"s/'/'\\\''/g"`;; esac
        as_fn_append ac_file_inputs " '$ac_f'"
      done

      # Let's still pretend it is `configure' which instantiates (i.e.,
don't
      # use $as_me), people would be surprised to read:
      # /* config.h. Generated by config.status. */

```

```

configure_input='Generated from '`
  $as_echo "$*" | sed 's|^[^:]*/||;s|:[^:]*/|, |g'
  `' by configure.'
if test x"$ac_file" != x-; then
  configure_input="$ac_file. $configure_input"
  { $as_echo "$as_me:${as_lineno-$LINENO}: creating $ac_file" >&5
$as_echo "$as_me: creating $ac_file" >&6;}
  fi
  # Neutralize special characters interpreted by sed in replacement
  strings.
  case $configure_input in
    *\&* | *\\|* | *\\* )
      ac_sed_conf_input=`$as_echo "$configure_input" |
sed 's/[\\&|]/\\\\&/g'`;; #
    *) ac_sed_conf_input=$configure_input;;
  esac

  case $ac_tag in
    *:-* | *:-) cat >"$ac_tmp/stdin" \
  || as_fn_error $? "could not create $ac_file" "$LINENO" 5 ;;
  esac
  ;;
esac

ac_dir=`$as_dirname -- "$ac_file" ||
$as_expr X"$ac_file" : 'X\([^/]\)\/*[^/][^/]*/*$' \|\ \
X"$ac_file" : 'X\(/\)\[^/]' \|\ \
X"$ac_file" : 'X\(/\)\$' \|\ \
X"$ac_file" : 'X\(/\)' \|\ . 2>/dev/null ||
$as_echo X"$ac_file" |
sed '/^X\([^/]\)\/*[^/][^/]*\/*$/{
s//\1/
q
}
/^X\(\.\.\)\[^/].*${
s//\1/
q
}
/^X\(\.\.\)\$/{
s//\1/
q
}
/^X\(\.\.\).*${
s//\1/
q
}
s/././; q'`
ac_dir="$ac_dir"; as_fn_mkdir_p
ac_buildidir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_buildidir_sub=. ac_top_build_prefix= ;;

```

```

*)
  ac_dir_suffix=/`$as_echo "$ac_dir" | sed 's|^\.([\//]|||)`
  # A ".." for each directory in $ac_dir_suffix.
  ac_top_buildddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\//]*|/..|g;s|/|||`
  case $ac_top_buildddir_sub in
    "") ac_top_buildddir_sub=. ac_top_build_prefix= ;;
    *) ac_top_build_prefix=$ac_top_buildddir_sub/ ;;
  esac ;;
esac
ac_abs_top_buildddir=$ac_pwd
ac_abs_buildddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_buildddir=$ac_top_build_prefix

case $srcdir in
  .) # We are building in place.
    ac_srcdir=.
    ac_top_srcdir=$ac_top_buildddir_sub
    ac_abs_top_srcdir=$ac_pwd ;;
  [\\/] * | ?:[\\/] * ) # Absolute name.
    ac_srcdir=$srcdir$ac_dir_suffix;
    ac_top_srcdir=$srcdir
    ac_abs_top_srcdir=$srcdir ;;
  *) # Relative name.
    ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
    ac_top_srcdir=$ac_top_build_prefix$srcdir
    ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

case $ac_mode in
:F)
#
# CONFIG_FILE
#

case $INSTALL in
[\\/$] * | ?:[\\/] * ) ac_INSTALL=$INSTALL ;;
*) ac_INSTALL=$ac_top_build_prefix$INSTALL ;;
esac
ac_MKDIR_P=$MKDIR_P
case $MKDIR_P in
[\\/$] * | ?:[\\/] * ) ;;
*/*) ac_MKDIR_P=$ac_top_build_prefix$MKDIR_P ;;
esac
_ACEOF

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# If the template does not know about datarootdir, expand it.
# FIXME: This hack should be removed a few years after 2.60.

```

```

ac_datarootdir_hack=; ac_datarootdir_seen=
ac_sed_dataroot='
/datarootdir/ {
    p
    q
}
/@datadir@/p
/@docdir@/p
/@infodir@/p
/@localedir@/p
/@mandir@/p'
case `eval "sed -n \"\$ac_sed_dataroot\" \$ac_file_inputs"` in
*datarootdir*) ac_datarootdir_seen=yes;;
*@datadir@*|*@docdir@*|*@infodir@*|*@localedir@*|*@mandir@*)
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file_inputs
seems to ignore the --datarootdir setting" >&5
$as_echo "$as_me: WARNING: $ac_file_inputs seems to ignore the --
datarootdir setting" >&2;}
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
    ac_datarootdir_hack='
    s&@datadir@&${datadir}&g
    s&@docdir@&${docdir}&g
    s&@infodir@&${infodir}&g
    s&@localedir@&${localedir}&g
    s&@mandir@&${mandir}&g
    s&\\\$${datarootdir}&${datarootdir}&g' ;;
esac
_ACEOF

# Neutralize VPATH when `srcdir' = `.'.
# Shell code in configure.ac might set extrasub.
# FIXME: do we really want to maintain this feature?
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_sed_extra="$ac_vpsub
$extrasub
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
:t
/@[a-zA-Z_][a-zA-Z_0-9]*@/!b
s|@configure_input@|${ac_sed_conf_input}|;t t
s&@top_builddir@&${ac_top_builddir_sub}&;t t
s&@top_build_prefix@&${ac_top_build_prefix}&;t t
s&@srcdir@&${ac_srcdir}&;t t
s&@abs_srcdir@&${ac_abs_srcdir}&;t t
s&@top_srcdir@&${ac_top_srcdir}&;t t
s&@abs_top_srcdir@&${ac_abs_top_srcdir}&;t t
s&@builddir@&${ac_builddir}&;t t
s&@abs_builddir@&${ac_abs_builddir}&;t t
s&@abs_top_builddir@&${ac_abs_top_builddir}&;t t
s&@INSTALL@&${ac_INSTALL}&;t t
s&@MKDIR_P@&${ac_MKDIR_P}&;t t

```



```

$ac_datarootdir_hack
"
eval sed "\"$ac_sed_extra\" \"$ac_file_inputs" | $AWK -f
"$ac_tmp/subs.awk" \
  >$ac_tmp/out || as_fn_error $? "could not create $ac_file" "$LINENO"
5

test -z "$ac_datarootdir_hack$ac_datarootdir_seen" &&
  { ac_out=`sed -n '/\${datarootdir}/p' "$ac_tmp/out"`; test -n
"$ac_out"; } &&
  { ac_out=`sed -n '/^[ ]*datarootdir[ ]*:*=/p' \
  "$ac_tmp/out"`; test -z "$ac_out"; } &&
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file contains
a reference to the variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&5
$as_echo "$as_me: WARNING: $ac_file contains a reference to the
variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&2;}

rm -f "$ac_tmp/stdin"
case $ac_file in
-) cat "$ac_tmp/out" && rm -f "$ac_tmp/out";;
*) rm -f "$ac_file" && mv "$ac_tmp/out" "$ac_file";;
esac \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
;;
:H)
#
# CONFIG_HEADER
#
if test x"$ac_file" != x-; then
  {
    $as_echo "/* $configure_input */" \
    && eval '$AWK -f "$ac_tmp/defines.awk"' "$ac_file_inputs"
  } >"$ac_tmp/config.h" \
  || as_fn_error $? "could not create $ac_file" "$LINENO" 5
  if diff "$ac_file" "$ac_tmp/config.h" >/dev/null 2>&1; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: $ac_file is unchanged"
>&5
$as_echo "$as_me: $ac_file is unchanged" >&6;}
  else
    rm -f "$ac_file"
    mv "$ac_tmp/config.h" "$ac_file" \
    || as_fn_error $? "could not create $ac_file" "$LINENO" 5
  fi
else
  $as_echo "/* $configure_input */" \
  && eval '$AWK -f "$ac_tmp/defines.awk"' "$ac_file_inputs" \
  || as_fn_error $? "could not create -" "$LINENO" 5
fi
# Compute "$ac_file"'s index in $config_headers.
_am_arg="$ac_file"

```

```

_am_stamp_count=1
for _am_header in $config_headers ;; do
  case $_am_header in
    $_am_arg | $_am_arg:* )
      break ;;
    * )
      _am_stamp_count=`expr $_am_stamp_count + 1` ;;
  esac
done
echo "timestamp for $_am_arg" >`$as_dirname -- "$_am_arg" ||
$as_expr X"$_am_arg" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \|| \
  X"$_am_arg" : 'X\(//\)[^/]' \|| \
  X"$_am_arg" : 'X\(//\)$' \|| \
  X"$_am_arg" : 'X\(/\)' \|| . 2>/dev/null ||
$as_echo X"$_am_arg" |
  sed '/^X\(.*[^/]\)\|\|\/*[^/][^/]*\/*$/{
    s//\1/
    q
  }
/^X\(\|\|\|\)\[^/].*$/ {
  s//\1/
  q
}
/^X\(\|\|\|\)$$/ {
  s//\1/
  q
}
/^X\(\|\|\)\.*/ {
  s//\1/
  q
}
s/.*/./; q'`/stamp-h$_am_stamp_count
;;

:C) { $as_echo "$as_me:${as_lineno-$LINENO}: executing $ac_file
commands" >&5
$as_echo "$as_me: executing $ac_file commands" >&6;}
;;
esac

case $ac_file$ac_mode in
  "depfiles":C) test x"$AMDEP_TRUE" != x"" || {
  # Autoconf 2.62 quotes --file arguments for eval, but not when files
  # are listed without --file. Let's play safe and only enable the
eval
  # if we detect the quoting.
  case $CONFIG_FILES in
    *\'*) eval set x "$CONFIG_FILES" ;;
    *) set x $CONFIG_FILES ;;
  esac
  shift

```

```

for mf
do
  # Strip MF so we end up with the name of the file.
  mf=`echo "$mf" | sed -e 's/:.*$//'\`
  # Check whether this is an Automake generated Makefile or not.
  # We used to match only the files named 'Makefile.in', but
  # some people rename them; so instead we look at the file content.
  # Grep'ing the first line is not enough: some people post-process
  # each Makefile.in and add a new line on top of each file to say
so.
  # Grep'ing the whole file is not good either: AIX grep has a line
  # limit of 2048, but all sed's we know have understand at least
4000.
  if sed -n 's,^#.*generated by automake.*,X,p' "$mf" | grep X
>/dev/null 2>&1; then
    dirpart=`$as_dirname -- "$mf" ||
$as_expr X"$mf" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$mf" : 'X\(//\)[^/]' \| \
  X"$mf" : 'X\(//\)$' \| \
  X"$mf" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$mf" |
  sed '/^X\(.*[^/]\)\/*[^/][^/]*/*$/{
    s//\1/
    q
  }
/^X\(\\/\)\)[^/].*/{
  s//\1/
  q
}
/^X\(\\/\)\)$/{
  s//\1/
  q
}
/^X\(\\/\).*/{
  s//\1/
  q
}
s/.*\/./; q'\`
  else
    continue
  fi
  # Extract the definition of DEPDIR, am__include, and am__quote
  # from the Makefile without running 'make'.
  DEPDIR=`sed -n 's/^DEPDIR = //p' < "$mf"`
  test -z "$DEPDIR" && continue
  am__include=`sed -n 's/^am__include = //p' < "$mf"`
  test -z "am__include" && continue
  am__quote=`sed -n 's/^am__quote = //p' < "$mf"`
  # Find all dependency output files, they are included files with
  # $(DEPDIR) in their names. We invoke sed twice because it is the
  # simplest approach to changing $(DEPDIR) to its actual value in
the

```

```

# expansion.
for file in `sed -n "
    s/^\$am__include \$am__quote\(.*(DEPDIR).*\)$am__quote"'\$/\1/p'
<"$mf" | \
    sed -e 's/\$(DEPDIR)/'"$DEPDIR"'/g`; do
# Make sure the directory exists.
test -f "$dirpart/$file" && continue
fdir=`$as_dirname -- "$file" ||
$as_expr X"$file" : 'X\([^/]\)\/*\([^/]\)*/*$' \| \
X"$file" : 'X\(/\)\[^/]' \| \
X"$file" : 'X\(/\)\$' \| \
X"$file" : 'X\(/)\' \| . 2>/dev/null ||
$as_echo X"$file" |
sed '/^\X\(.*\[^/]\)\.\.\/*\[^/]\[^/]*\/*$/{
    s//\1/
    q
}
/^X\(\.\.\.\)\[^/].*/{
    s//\1/
    q
}
/^X\(\.\.\.\)\$/{
    s//\1/
    q
}
/^X\(\.\.\)\.*/{
    s//\1/
    q
}
s/.*\/./; q'`
as_dir=$dirpart/$fdir; as_fn_mkdir_p
# echo "creating $dirpart/$file"
echo '# dummy' > "$dirpart/$file"
done
done
}
;;
"libtool":C)

# See if we are running on zsh, and set the options which allow
our
# commands through without removal of \ escapes.
if test -n "${ZSH_VERSION+set}" ; then
    setopt NO_GLOB_SUBST
fi

cfgfile="${ofile}T"
trap "$RM \"\$cfgfile\"; exit 1" 1 2 15
$RM "$cfgfile"

cat <<_LT_EOF >> "$cfgfile"
#! $SHELL

```

```
# `SECHO "$ofile" | sed 's%^.*/%%'` - Provide generalized library-
building support services.
# Generated automatically by $as_me ($PACKAGE$TIMESTAMP) $VERSION
# Libtool was configured on host `(hostname || uname -n) 2>/dev/null |
sed 1q`:
# NOTE: Changes made to this file will be lost: look at ltmain.sh.
#
# Copyright (C) 1996, 1997, 1998, 1999, 2000, 2001, 2003, 2004,
2005,
#           2006, 2007, 2008, 2009, 2010, 2011 Free Software
#           Foundation, Inc.
# Written by Gordon Matzigkeit, 1996
#
# This file is part of GNU Libtool.
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# obtained by writing to the Free Software Foundation, Inc.,
# 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

# The names of the tagged configurations supported by this script.
available_tags="CXX RC "

# ### BEGIN LIBTOOL CONFIG

# Which release of libtool.m4 was used?
macro_version=$macro_version
macro_revision=$macro_revision

# Whether or not to build shared libraries.
build_libtool_libs=$enable_shared

# Whether or not to build static libraries.
build_old_libs=$enable_static
```

```
# What type of objects to build.
pic_mode=$pic_mode

# Whether or not to optimize for fast installation.
fast_install=$enable_fast_install

# Shell to use when invoking shell scripts.
SHELL=$lt_SHELL

# An echo program that protects backslashes.
ECHO=$lt_ECHO

# The PATH separator for the build system.
PATH_SEPARATOR=$lt_PATH_SEPARATOR

# The host system.
host_alias=$host_alias
host=$host
host_os=$host_os

# The build system.
build_alias=$build_alias
build=$build
build_os=$build_os

# A sed program that does not truncate output.
SED=$lt_SED

# Sed that helps us avoid accidentally triggering echo(1) options like
-n.
Xsed="\$SED -e 1s/^X//"

# A grep program that handles long lines.
GREP=$lt_GREP

# An ERE matcher.
EGREP=$lt_EGREP

# A literal string matcher.
FGREP=$lt_FGREP

# A BSD- or MS-compatible name lister.
NM=$lt_NM

# Whether we need soft or hard links.
LN_S=$lt_LN_S

# What is the maximum length of a command?
max_cmd_len=$max_cmd_len

# Object file suffix (normally "o").
```

```
objext=$ac_objext

# Executable file suffix (normally "").
exeext=$exeext

# whether the shell understands "unset".
lt_unset=$lt_unset

# turn spaces into newlines.
SP2NL=$lt_lt_SP2NL

# turn newlines into spaces.
NL2SP=$lt_lt_NL2SP

# convert \${build} file names to \${host} format.
to_host_file_cmd=$lt_cv_to_host_file_cmd

# convert \${build} files to toolchain format.
to_tool_file_cmd=$lt_cv_to_tool_file_cmd

# An object symbol dumper.
OBJDUMP=$lt_OBJDUMP

# Method to check whether dependent libraries are shared objects.
deplibs_check_method=$lt_deplibs_check_method

# Command to use when deplibs_check_method = "file_magic".
file_magic_cmd=$lt_file_magic_cmd

# How to find potential files when deplibs_check_method =
"file_magic".
file_magic_glob=$lt_file_magic_glob

# Find potential files using nocaseglob when deplibs_check_method =
"file_magic".
want_nocaseglob=$lt_want_nocaseglob

# DLL creation program.
DLLTOOL=$lt_DLLTOOL

# Command to associate shared and link libraries.
sharedlib_from_linklib_cmd=$lt_sharedlib_from_linklib_cmd

# The archiver.
AR=$lt_AR

# Flags to create an archive.
AR_FLAGS=$lt_AR_FLAGS

# How to feed a file listing to the archiver.
archiver_list_spec=$lt_archiver_list_spec
```

```
# A symbol stripping program.
STRIP=$lt_STRIP

# Commands used to install an old-style archive.
RANLIB=$lt_RANLIB
old_postinstall_cmds=$lt_old_postinstall_cmds
old_postuninstall_cmds=$lt_old_postuninstall_cmds

# Whether to use a lock for old archive extraction.
lock_old_archive_extraction=$lock_old_archive_extraction

# A C compiler.
LTCC=$lt_CC

# LTCC compiler flags.
LTCFLAGS=$lt_CFLAGS

# Take the output of nm and produce a listing of raw symbols and C
names.
global_symbol_pipe=$lt_lt_cv_sys_global_symbol_pipe

# Transform the output of nm in a proper C declaration.
global_symbol_to_cdecl=$lt_lt_cv_sys_global_symbol_to_cdecl

# Transform the output of nm in a C name address pair.
global_symbol_to_c_name_address=$lt_lt_cv_sys_global_symbol_to_c_name_
address

# Transform the output of nm in a C name address pair when lib prefix
is needed.
global_symbol_to_c_name_address_lib_prefix=$lt_lt_cv_sys_global_symbol_
_to_c_name_address_lib_prefix

# Specify filename containing input files for \ $NM.
nm_file_list_spec=$lt_nm_file_list_spec

# The root where to search for dependent libraries, and in which our
libraries should be installed.
lt_sysroot=$lt_sysroot

# The name of the directory that contains temporary libtool files.
objdir=$objdir

# Used to examine libraries when file_magic_cmd begins with "file".
MAGIC_CMD=$MAGIC_CMD

# Must we lock files when doing compilation?
need_locks=$lt_need_locks

# Manifest tool.
MANIFEST_TOOL=$lt_MANIFEST_TOOL
```



```
# Tool to manipulate archived DWARF debug symbol files on Mac OS X.
DSYMUTIL=${lt_DSYMUTIL}

# Tool to change global to local symbols on Mac OS X.
NMEDIT=${lt_NMEDIT}

# Tool to manipulate fat objects and archives on Mac OS X.
LIPO=${lt_LIPO}

# ldd/readelf like tool for Mach-O binaries on Mac OS X.
OTOOL=${lt_OTOOL}

# ldd/readelf like tool for 64 bit Mach-O binaries on Mac OS X 10.4.
OTOOL64=${lt_OTOOL64}

# Old archive suffix (normally "a").
libext=${libext}

# Shared library suffix (normally ".so").
shrext_cmds=${lt_shrext_cmds}

# The commands to extract the exported symbol list from a shared
archive.
extract_expsyms_cmds=${lt_extract_expsyms_cmds}

# Variables whose values should be saved in libtool wrapper scripts
and
# restored at link time.
variables_saved_for_relink=${lt_variables_saved_for_relink}

# Do we need the "lib" prefix for modules?
need_lib_prefix=${need_lib_prefix}

# Do we need a version for libraries?
need_version=${need_version}

# Library versioning type.
version_type=${version_type}

# Shared library runtime path variable.
runpath_var=${runpath_var}

# Shared library path variable.
shlibpath_var=${shlibpath_var}

# Is shlibpath searched before the hard-coded library search path?
shlibpath_overrides_runpath=${shlibpath_overrides_runpath}

# Format of library name prefix.
libname_spec=${lt_libname_spec}
```

```
# List of archive names.  First name is the real one, the rest are
links.
# The last name is the one that the linker finds with -lNAME
library_names_spec=$lt_library_names_spec

# The coded name of the library, if different from the real name.
soname_spec=$lt_soname_spec

# Permission mode override for installation of shared libraries.
install_override_mode=$lt_install_override_mode

# Command to use after installation of a shared archive.
postinstall_cmds=$lt_postinstall_cmds

# Command to use after uninstallation of a shared archive.
postuninstall_cmds=$lt_postuninstall_cmds

# Commands used to finish a libtool library installation in a
directory.
finish_cmds=$lt_finish_cmds

# As "finish_cmds", except a single script fragment to be evaled but
# not shown.
finish_eval=$lt_finish_eval

# Whether we should hardcode library paths into libraries.
hardcode_into_libs=$hardcode_into_libs

# Compile-time system search path for libraries.
sys_lib_search_path_spec=$lt_sys_lib_search_path_spec

# Run-time system search path for libraries.
sys_lib_dlsearch_path_spec=$lt_sys_lib_dlsearch_path_spec

# Whether dlopen is supported.
dlopen_support=$enable_dlopen

# Whether dlopen of programs is supported.
dlopen_self=$enable_dlopen_self

# Whether dlopen of statically linked programs is supported.
dlopen_self_static=$enable_dlopen_self_static

# Commands to strip libraries.
old_striplib=$lt_old_striplib
striplib=$lt_striplib

# The linker used to build libraries.
LD=$lt_LD

# How to create reloadable object files.
```

```
reload_flag=$lt_reload_flag
reload_cmds=$lt_reload_cmds

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds

# A language specific compiler.
CC=$lt_compiler

# Is the compiler the GNU compiler?
with_gcc=$GCC

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag

# Additional compiler flags for building library objects.
pic_flag=$lt_lt_prog_compiler_pic

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_runtimes

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds
```

```
archive_expsym_cmds=$lt_archive_expsym_cmds

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds
module_expsym_cmds=$lt_module_expsym_cmds

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=$lt_hardcode_libdir_separator

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=$hardcode_direct

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=$hardcode_direct_absolute

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=$hardcode_minus_L

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=$hardcode_shlibpath_var

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=$hardcode_automatic
```

```
# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=$inherit_rpath

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=$link_all_deplibs

# Set to "yes" if exported symbols are required.
always_export_symbols=$always_export_symbols

# The commands to list exported symbols.
export_symbols_cmds=$lt_export_symbols_cmds

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=$lt_exclude_expsyms

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects
postdep_objects=$lt_postdep_objects
predeps=$lt_predeps
postdeps=$lt_postdeps

# The library search path used internally by the compiler when linking
# a shared library.
compiler_lib_search_path=$lt_compiler_lib_search_path

# ### END LIBTOOL CONFIG

_LT_EOF
```

```

case $host_os in
aix3*)
    cat <<\_LT_EOF >> "$cfgfile"
# AIX sometimes has problems with the GCC collect2 program.  For some
# reason, if we set the COLLECT_NAMES environment variable, the
problems
# vanish in a puff of smoke.
if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
fi
_LT_EOF
;;
esac

```

```
ltmain="$ac_aux_dir/ltmain.sh"
```

```

# We use sed instead of cat because bash on DJGPP gets confused if
# if finds mixed CR/LF and LF-only lines.  Since sed operates in
# text mode, it properly converts lines to CR/LF.  This bash problem
# is reportedly fixed, but why not run on old versions too?
sed 'sq' "$ltmain" >> "$cfgfile" \
    || (rm -f "$cfgfile"; exit 1)

if test x"$xsi_shell" = xyes; then
    sed -e '/^func_dirname ()$/,/^{ } # func_dirname /c\
func_dirname ()\
{\
\   case ${1} in\
\     */*) func_dirname_result="${1%/*}${2}" ;;\
\     * ) func_dirname_result="${3}" ;;\
\   esac\
} # Extended-shell func_dirname implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_basename ()$/,/^{ } # func_basename /c\
func_basename ()\
{\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_basename implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

```

```

    sed -e '/^func_dirname_and_basename ()$/,/^{ } #
func_dirname_and_basename /c\
func_dirname_and_basename ()\
{\
\   case ${1} in\
\     */*) func_dirname_result="${1%/*}${2}" ;;\
\     * ) func_dirname_result="${3}" ;;\
\   esac\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_dirname_and_basename implementation'
"$cfgfile" > $cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_stripname ()$/,/^{ } # func_stripname /c\
func_stripname ()\
{\
\   # pdksh 5.2.14 does not do ${X%$Y} correctly if both X and Y are\
\   # positional parameters, so assign one to ordinary parameter
first.\
\   func_stripname_result=${3}\
\   func_stripname_result=${func_stripname_result#"${1}"}\
\   func_stripname_result=${func_stripname_result%"${2}"}\
} # Extended-shell func_stripname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_split_long_opt ()$/,/^{ } # func_split_long_opt /c\
func_split_long_opt ()\
{\
\   func_split_long_opt_name=${1%*=*}\
\   func_split_long_opt_arg=${1##*=}\
} # Extended-shell func_split_long_opt implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_split_short_opt ()$/,/^{ } # func_split_short_opt /c\
func_split_short_opt ()\
{\

```

```

\   func_split_short_opt_arg=${1#??}\
\   func_split_short_opt_name=${1%"$func_split_short_opt_arg"}\
} # Extended-shell func_split_short_opt implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_lo2o ()$/,/^\} # func_lo2o /c\
func_lo2o ()\
{\
\   case ${1} in\
\     *.lo) func_lo2o_result=${1%.lo}.${objext} ;;\
\     *)   func_lo2o_result=${1} ;;\
\   esac\
} # Extended-shell func_lo2o implementation' "$cfgfile" > $cfgfile.tmp
\
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_xform ()$/,/^\} # func_xform /c\
func_xform ()\
{\
  func_xform_result=${1%.*}.lo\
} # Extended-shell func_xform implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_arith ()$/,/^\} # func_arith /c\
func_arith ()\
{\
  func_arith_result=$(( $* ))\
} # Extended-shell func_arith implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_len ()$/,/^\} # func_len /c\
func_len ()\
{\

```



```

    func_len_result=${#1}\
} # Extended-shell func_len implementation' "$cfgfile" > $cfgfile.tmp
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

fi

if test x"$lt_shell_append" = xyes; then
    sed -e '/^func_append ()$/,/^{ # func_append /c\
func_append ()\
{\
    eval "${1}+=\\${2}"\
} # Extended-shell func_append implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_append_quoted ()$/,/^{ # func_append_quoted /c\
func_append_quoted ()\
{\
\    func_quote_for_eval "${2}"\
\    eval "${1}+=\\\ \\\ $func_quote_for_eval_result"\
} # Extended-shell func_append_quoted implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    # Save a `func_append' function call where possible by direct use of
    '+='
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1+= "%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
else
    # Save a `func_append' function call even when '+' is not available
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1=" $\1%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:

```

```

fi

if test x"$_lt_function_replace_fail" = x:""; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Unable to
substitute extended shell functions in $ofile" >&5
$as_echo "$as_me: WARNING: Unable to substitute extended shell
functions in $ofile" >&2;}
fi

  mv -f "$cfgfile" "$ofile" ||
  (rm -f "$ofile" && cp "$cfgfile" "$ofile" && rm -f "$cfgfile")
  chmod +x "$ofile"

  cat <<_LT_EOF >> "$ofile"

# ### BEGIN LIBTOOL TAG CONFIG: CXX

# The linker used to build libraries.
LD=$lt_LD_CXX

# How to create reloadable object files.
reload_flag=$lt_reload_flag_CXX
reload_cmds=$lt_reload_cmds_CXX

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds_CXX

# A language specific compiler.
CC=$lt_compiler_CXX

# Is the compiler the GNU compiler?
with_gcc=$GCC_CXX

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag_CXX

# Additional compiler flags for building library objects.
pic_flag=$lt_lt_prog_compiler_pic_CXX

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl_CXX

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static_CXX

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o_CXX

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc_CXX

```

```
# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_run
times_CXX

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec_CXX

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec_CXX

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object_CXX

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds_CXX

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds_CXX

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds_CXX
archive_expsym_cmds=$lt_archive_expsym_cmds_CXX

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds_CXX
module_expsym_cmds=$lt_module_expsym_cmds_CXX

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld_CXX

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag_CXX

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag_CXX

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec_CXX

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=$lt_hardcode_libdir_separator_CXX

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=$hardcode_direct_CXX
```

```
# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=$hardcode_direct_absolute_CXX

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=$hardcode_minus_L_CXX

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=$hardcode_shlibpath_var_CXX

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=$hardcode_automatic_CXX

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=$inherit_rpath_CXX

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=$link_all_deplibs_CXX

# Set to "yes" if exported symbols are required.
always_export_symbols=$always_export_symbols_CXX

# The commands to list exported symbols.
export_symbols_cmds=$lt_export_symbols_cmds_CXX

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=$lt_exclude_expsyms_CXX

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms_CXX

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds_CXX

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds_CXX

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec_CXX
```

```

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action_CXX

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs_CXX

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects_CXX
postdep_objects=$lt_postdep_objects_CXX
predeps=$lt_predeps_CXX
postdeps=$lt_postdeps_CXX

# The library search path used internally by the compiler when linking
# a shared library.
compiler_lib_search_path=$lt_compiler_lib_search_path_CXX

# ### END LIBTOOL TAG CONFIG: CXX
_LT_EOF

    cat <<_LT_EOF >> "$ofile"

# ### BEGIN LIBTOOL TAG CONFIG: RC

# The linker used to build libraries.
LD=$lt_LD_RC

# How to create reloadable object files.
reload_flag=$lt_reload_flag_RC
reload_cmds=$lt_reload_cmds_RC

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds_RC

# A language specific compiler.
CC=$lt_compiler_RC

# Is the compiler the GNU compiler?
with_gcc=$GCC_RC

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag_RC

# Additional compiler flags for building library objects.
pic_flag=$lt_lt_prog_compiler_pic_RC

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl_RC

```

```
# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static_RC

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o_RC

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc_RC

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_run
times_RC

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec_RC

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec_RC

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object_RC

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds_RC

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds_RC

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds_RC
archive_expsym_cmds=$lt_archive_expsym_cmds_RC

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds_RC
module_expsym_cmds=$lt_module_expsym_cmds_RC

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld_RC

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag_RC

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag_RC

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec_RC
```

```
# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=${lt_hardcode_libdir_separator_RC}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=${hardcode_direct_RC}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=${hardcode_direct_absolute_RC}

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=${hardcode_minus_L_RC}

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=${hardcode_shlibpath_var_RC}

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=${hardcode_automatic_RC}

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=${inherit_rpath_RC}

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=${link_all_deplibs_RC}

# Set to "yes" if exported symbols are required.
always_export_symbols=${always_export_symbols_RC}

# The commands to list exported symbols.
export_symbols_cmds=${lt_export_symbols_cmds_RC}

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=${lt_exclude_expsyms_RC}

# Symbols that must always be exported.
include_expsyms=${lt_include_expsyms_RC}
```

```

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds_RC

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds_RC

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec_RC

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action_RC

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs_RC

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects_RC
postdep_objects=$lt_postdep_objects_RC
predeps=$lt_predeps_RC
postdeps=$lt_postdeps_RC

# The library search path used internally by the compiler when linking
# a shared library.
compiler_lib_search_path=$lt_compiler_lib_search_path_RC

# ### END LIBTOOL TAG CONFIG: RC
_LT_EOF

;;

esac
done # for ac_tag

as_fn_exit 0
_ACEOF
ac_clean_files=$ac_clean_files_save

test $ac_write_fail = 0 ||
  as_fn_error $? "write failure creating $CONFIG_STATUS" "$LINENO" 5

# configure is writing to config.log, and then calls config.status.
# config.status does its own redirection, appending to config.log.
# Unfortunately, on DOS this fails, as config.log is still kept open
# by configure, so config.status won't be able to write to it; its
# output is simply discarded. So we exec the FD to /dev/null,
# effectively closing config.log, so it can be properly (re)opened and
# appended to by config.status. When coming back to configure, we

```



```

# need to make the FD available again.
if test "$no_create" != yes; then
  ac_cs_success=:
  ac_config_status_args=
  test "$silent" = yes &&
    ac_config_status_args="$ac_config_status_args --quiet"
  exec 5>/dev/null
  $SHELL $CONFIG_STATUS $ac_config_status_args || ac_cs_success=false
  exec 5>>config.log
  # Use ||, not &&, to avoid exiting from the if with $? = 1, which
  # would make configure fail if this is the last instruction.
  $ac_cs_success || as_fn_exit 1
fi
if test -n "$ac_unrecognized_opts" && test "$enable_option_checking"
!= no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: unrecognized
options: $ac_unrecognized_opts" >&5
$as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2;}
fi

```

echo "

```

          D-Bus $VERSION
          =====

```

```

prefix:                ${EXPANDED_PREFIX}
exec_prefix:           ${exec_prefix}
  libdir:               ${EXPANDED_LIBDIR}
  libexecdir:          ${EXPANDED_LIBEXECDIR}
  bindir:              ${EXPANDED_BINDIR}
  sysconfdir:          ${EXPANDED_SYSCONFDIR}
  localstatedir:       ${EXPANDED_LOCALSTATEDIR}
datadir:               ${EXPANDED_DATADIR}
source code location:  ${srcdir}
compiler:              ${CC}
cflags:                ${CFLAGS}
cppflags:              ${CPPFLAGS}
cxxflags:              ${CXXFLAGS}
64-bit int:            ${DBUS_INT64_TYPE}
32-bit int:            ${DBUS_INT32_TYPE}
16-bit int:            ${DBUS_INT16_TYPE}
  Doxygen:              ${DOXYGEN:-not found}
  xmlto:                ${XMLTO:-not found}
  man2html:             ${MAN2HTML:-not found}"

```

echo "

```

  Rebuilding generated files: ${USE_MAINTAINER_MODE}
  gcc coverage profiling:     ${enable_compiler_coverage}
  Building embedded tests:    ${enable_embedded_tests}
  Building modular tests:     ${enable_modular_tests}
    - with GLib:              ${with_glib}

```

```

Building verbose mode:      ${enable_verbose_mode}
Building assertions:       ${enable_asserts}
Building checks:          ${enable_checks}
Building bus stats API:    ${enable_stats}
Building SELinux support:  ${have_selinux}
Building inotify support:  ${have_inotify}
Building dnotify support:  ${have_dnotify}
Building kqueue support:   ${have_kqueue}
Building systemd support:  ${have_systemd}
Building X11 code:         ${enable_x11}
Building Doxygen docs:     ${enable_doxygen_docs}
Building XML docs:         ${enable_xml_docs}
Building cache support:    ${enable_userdb_cache}
Building launchd support:  ${have_launchd}
Using XML parser:         ${with_xml}
Init scripts style:       ${with_init_scripts}
Abstract socket names:    ${ac_cv_have_abstract_sockets}
System bus socket:        ${DBUS_SYSTEM_SOCKET}
System bus address:       ${DBUS_SYSTEM_BUS_DEFAULT_ADDRESS}
System bus PID file:      ${DBUS_SYSTEM_PID_FILE}
Session bus address:      ${DBUS_SESSION_BUS_DEFAULT_ADDRESS}
Console auth dir:         ${DBUS_CONSOLE_AUTH_DIR}
Console owner file:       ${have_console_owner_file}
Console owner file path:  ${DBUS_CONSOLE_OWNER_FILE}
System bus user:          ${DBUS_USER}
Session bus services dir: ${EXPANDED_DATADIR}/dbus-1/services
'make check' socket dir:  ${TEST_SOCKET_DIR}
"
if test x$have_launchd = xyes; then
    echo "          launchd agent dir:          ${LAUNCHD_AGENT_DIR}"
fi
echo

if test x$enable_embedded_tests = xyes; then
    echo "NOTE: building with unit tests increases the size of the
installed library and renders it insecure."
fi
if test x$enable_embedded_tests = xyes -a x$enable_asserts = xno; then
    echo "NOTE: building with embedded tests but without
assertions means tests may not properly report failures (this
configuration is only useful when doing something like profiling the
tests)"
fi
if test x$enable_compiler_coverage = xyes; then
    echo "NOTE: building with coverage profiling is definitely for
developers only."
fi
if test x$enable_verbose_mode = xyes; then
    echo "NOTE: building with verbose mode increases library size,
may slightly increase security risk, and decreases performance."
fi
if test x$enable_asserts = xyes; then

```

```

        echo "NOTE: building with assertions increases library size
and decreases performance."
fi
if test x$enable_checks = xno; then
    echo "NOTE: building without checks for arguments passed to
public API makes it harder to debug apps using D-Bus, but will
slightly decrease D-Bus library size and _very_ slightly improve
performance."
fi
if test x$dbus_use_libxml = xtrue; then
    echo
    echo "WARNING: You have chosen to use libxml as your xml parser
however this code path is not maintained by the D-Bus developers and
if it breaks you get to keep the pieces.  If you have selected this
option in err please reconfigure with expat (e.g. --with-xml=expat)."

```

This removes parts of the standard D-Bus API and ABI (the 't' and 'x' typecodes, the dbus_int64_t and dbus_uint64_t types, etc.) and should only be used if your compiler lacks support for 64-bit integers. Please report a bug with details of your platform and compiler.

This option is likely to be removed in future, unless the D-Bus developers receive reports that it is still needed.

```

" >&5
$as_echo "$as_me: WARNING: You have disabled 64-bit integers via --
without-64-bit.

```

This removes parts of the standard D-Bus API and ABI (the 't' and 'x' typecodes, the dbus_int64_t and dbus_uint64_t types, etc.) and should only be used if your compiler lacks support for 64-bit integers. Please report a bug with details of your platform and compiler.

This option is likely to be removed in future, unless the D-Bus developers receive reports that it is still needed.

```

" >&2;}
fi

```



```

if test -z "$BASH_VERSION$ZSH_VERSION" \
    && (test "X`print -r -- $as_echo`" = "X$as_echo") 2>/dev/null;
then
    as_echo='print -r --'
    as_echo_n='print -rn --'
elif (test "X`printf %s $as_echo`" = "X$as_echo") 2>/dev/null; then
    as_echo='printf %s\n'
    as_echo_n='printf %s'
else
    if test "X`(/usr/ucb/echo -n -n $as_echo) 2>/dev/null`" = "X-n
$as_echo"; then
        as_echo_body='eval /usr/ucb/echo -n "$1$as_nl"'
        as_echo_n='/usr/ucb/echo -n'
    else
        as_echo_body='eval expr "X$1" : "X\\(.*\\"'
        as_echo_n_body='eval
        arg=$1;
        case $arg in @%:@(
        *"$as_nl"*)
            expr "X$arg" : "X\\(.*\\"$as_nl";
            arg=`expr "X$arg" : ".*$as_nl\\(.*\\"`;
            esac;
            expr "X$arg" : "X\\(.*\\" | tr -d "$as_nl"
        ,
        export as_echo_n_body
        as_echo_n='sh -c $as_echo_n_body as_echo'
    fi
    export as_echo_body
    as_echo='sh -c $as_echo_body as_echo'
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
    PATH_SEPARATOR=:
    (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
        (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
            PATH_SEPARATOR=';'
    }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " $as_nl

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=

```

```

case $0 in @%:@((
    *[\ \/]* ) as_myself=$0 ;;
    *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

    ;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
    as_myself=$0
fi
if test ! -f "$as_myself"; then
    $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
    exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh). But do not cause bugs in bash 2.01; the "|| exit
# 1"
# suppresses any "Segmentation fault" message there. ' ((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
    && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

# Use a proper internal environment variable to ensure we don't fall
# into an infinite loop, continuously re-executing ourselves.
if test x"${_as_can_reexec}" != xno && test "x$CONFIG_SHELL" != x;
then
    _as_can_reexec=no; export _as_can_reexec;

```

```

    # We cannot yet assume a decent shell, so we have to provide a
    # neutralization value for shells without unset; and this also
    # works around shells that cannot unset nonexistent variables.
    # Preserve -v and -x to the replacement shell.
    BASH_ENV=/dev/null
    ENV=/dev/null
    (unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
    case $- in @%:@ (((
        *v*x* | *x*v* ) as_opts=-vx ;;
        *v* ) as_opts=-v ;;
        *x* ) as_opts=-x ;;
        * ) as_opts= ;;
    esac
    exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
    # Admittedly, this is quite paranoid, since all the known shells bail
    # out after a failed `exec`.
    $as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
    as_fn_exit 255
    fi
    # We don't want this to propagate to other subprocesses.
    { _as_can_reexec=; unset _as_can_reexec;}
    if test "x$CONFIG_SHELL" = x; then
        as_bourne_compatible="if test -n \"\${ZSH_VERSION+set}\" && (emulate
sh) >/dev/null 2>&1; then :
        emulate sh
        NULLCMD=:
        # Pre-4.2 versions of Zsh do word splitting on \"\${1+\\"$@"}, which
        # is contrary to our usage.  Disable this feature.
        alias -g \"\${1+\\"$@"}'=\"\\"$@"'
        setopt NO_GLOB_SUBST
    else
        case \"(set -o) 2>/dev/null\" in @%:@(
        *posix*) :
            set -o posix ;; @%:@(
        *) :
            ;;
    esac
    fi
    "
    as_required="as_fn_return () { (exit \"$1"); }
as_fn_success () { as_fn_return 0; }
as_fn_failure () { as_fn_return 1; }
as_fn_ret_success () { return 0; }
as_fn_ret_failure () { return 1; }

    exitcode=0
    as_fn_success || { exitcode=1; echo as_fn_success failed.; }
    as_fn_failure && { exitcode=1; echo as_fn_failure succeeded.; }
    as_fn_ret_success || { exitcode=1; echo as_fn_ret_success failed.; }
    as_fn_ret_failure && { exitcode=1; echo as_fn_ret_failure succeeded.; }
    }
    if ( set x; as_fn_ret_success y && test x = \"\$1\" ); then :

```

```

else
    exitcode=1; echo positional parameters were not saved.
fi
test x\$exitcode = x0 || exit 1
test -x / || exit 1"
    as_suggested="
as_lineno_1=";as_suggested=$as_suggested$LINENO;as_suggested=$as_sugge
sted" as_lineno_1a=$LINENO

as_lineno_2=";as_suggested=$as_suggested$LINENO;as_suggested=$as_sugge
sted" as_lineno_2a=$LINENO
    eval 'test \"x\$as_lineno_1'\$as_run'\\" !=
\"x\$as_lineno_2'\$as_run'\\" &&
    test \"x`expr \$as_lineno_1'\$as_run' + 1`\\" =
\"x\$as_lineno_2'\$as_run'\\" || exit 1
test \"\$( ( 1 + 1 ) ) = 2 || exit 1

    test -n \"\${ZSH_VERSION+set}\${BASH_VERSION+set}\" || (

ECHO='////////////////////////////////////
////////////////////////////////////
////////////////////////////////////
\\'
    ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO
    ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO
    PATH=/empty FPATH=/empty; export PATH FPATH
    test \"X`printf %s \$ECHO`\" = \"X\$ECHO\" \\
        || test \"X`print -r -- \$ECHO`\" = \"X\$ECHO\" ) || exit 1"
    if (eval "$as_required") 2>/dev/null; then :
        as_have_required=yes
    else
        as_have_required=no
    fi
    if test x$as_have_required = xyes && (eval "$as_suggested")
2>/dev/null; then :

else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
as_found=false
for as_dir in /bin$PATH_SEPARATOR/usr/bin$PATH_SEPARATOR$PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    as_found=:
    case $as_dir in @%:@(
        /*)
            for as_base in sh bash ksh sh5; do
                # Try only shells that exist, to save several forks.
                as_shell=$as_dir/$as_base
                if { test -f "$as_shell" || test -f "$as_shell.exe"; } &&

```



```

        { $as_echo "$as_bourne_compatible"$as_required" |
as_run=a "$as_shell"; } 2>/dev/null; then :
    CONFIG_SHELL=$as_shell as_have_required=yes
        if { $as_echo "$as_bourne_compatible"$as_suggested" |
as_run=a "$as_shell"; } 2>/dev/null; then :
    break 2
fi
fi
    done;;
    esac
    as_found=false
done
$as_found || { if { test -f "$SHELL" || test -f "$SHELL.exe"; } &&
    { $as_echo "$as_bourne_compatible"$as_required" | as_run=a
"$SHELL"; } 2>/dev/null; then :
    CONFIG_SHELL=$SHELL as_have_required=yes
fi; }
IFS=$as_save_IFS

    if test "x$CONFIG_SHELL" != x; then :
    export CONFIG_SHELL
        # We cannot yet assume a decent shell, so we have to
provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec'.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
exit 255
fi

    if test x$as_have_required = xno; then :
$as_echo "$0: This script requires a shell more modern than all"
$as_echo "$0: the shells that I found on your system."
if test x${ZSH_VERSION+set} = xset ; then
    $as_echo "$0: In particular, zsh $ZSH_VERSION has bugs and should"
    $as_echo "$0: be upgraded to zsh 4.3.4 or later."
else
    $as_echo "$0: Please tell bug-autoconf@gnu.org and

```

```

$0:
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLib
$0: about your system, including any error possibly output
$0: before this message. Then install a modern shell, or
$0: manually run the script under such a shell if you do
$0: have one."
    fi
    exit 1
fi
fi
fi
SHELL=${CONFIG_SHELL-/bin/sh}
export SHELL
# Unset more variables known to interfere with behavior of common
tools.
CLICOLOR_FORCE= GREP_OPTIONS=
unset CLICOLOR_FORCE GREP_OPTIONS

## ----- ##
## M4sh Shell Functions. ##
## ----- ##
@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @S|@? to STATUS, without forking.
as_fn_set_status ()
{
    return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS
@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_mkdir_p
@%:@ -----

```

```

@%:@ Create "$S|$as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{
    case $as_dir in #(
    -*) as_dir=./$as_dir;;
    esac
    test -d "$as_dir" || eval $as_mkdir_p || {
        as_dirs=
        while ;; do
            case $as_dir in #(
            *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\'/g"`;;
            #\'(
            *) as_qdir=$as_dir;;
            esac
            as_dirs="'$as_qdir' $as_dirs"
            as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\(. *[^\]\\\\)//* [^\] [^\]*/ *$' \\| \\
X"$as_dir" : 'X\ (//\ ) [^\]' \\| \\
X"$as_dir" : 'X\ (//\ )$' \\| \\
X"$as_dir" : 'X\ (/\ )' \\| . 2>/dev/null ||
$as_echo X"$as_dir" |
sed '/^X\(. *[^\]\\\\)\\\\\\\\/* [^\] [^\]*/ *$/{
s//\1/
q
}
/^X\ (\\/\ ) [^\].*/{
s//\1/
q
}
/^X\ (\\/\ )$/{
s//\1/
q
}
/^X\ (\\/\ ) .*/{
s//\1/
q
}
s/.*/./; q'`
            test -d "$as_dir" && break
        done
        test -z "$as_dirs" || eval "mkdir $as_dirs"
    } || test -d "$as_dir" || as_fn_error $? "cannot create directory
$as_dir"

} @%:@ as_fn_mkdir_p

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.

```

```

as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$as_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
    {
        eval $1+=\$2
    }'
else
    as_fn_append ()
    {
        eval $1=\$$1\$2
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \$(( 1 + 1 )) = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
    {
        as_val=$(( $* ))
    }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the

```

```

@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
  as_status=$1; test $as_status -eq 0 && as_status=1
  if test "$4"; then
    as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
  fi
  $as_echo "$as_me: error: $2" >&2
  as_fn_exit $as_status
} @%:@ as_fn_error

if expr a : '\(a\)' >/dev/null 2>&1 &&
  test "X`expr 00001 : '.*\(...\)`" = X001; then
  as_expr=expr
else
  as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
  as_basename=basename
else
  as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]\*\)\/*$' \| \| \
  X"$0" : 'X\(/\)\$' \| \| \
  X"$0" : 'X\(/\)' \| \| . 2>/dev/null ||
$as_echo X/"$0" |
  sed '/^\.*\/\([^\/]\*\)\/*$/{
    s//\1/
    q
  }
/^X\/\(\//\)\$/{
    s//\1/
    q
  }
/^X\/\(\//\)\.*/{
    s//\1/
    q
  }
s/.*\/./; q'`

```

```

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxy'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

as_lineno_1=$LINENO as_lineno_1a=$LINENO
as_lineno_2=$LINENO as_lineno_2a=$LINENO
eval 'test "x$as_lineno_1'$as_run'" != "x$as_lineno_2'$as_run'" &&
test "x`expr $as_lineno_1'$as_run' + 1`" = "x$as_lineno_2'$as_run'"
|| {
# Blame Lee E. McMahon (1931-1989) for sed's syntax.  :-)
sed -n '
    p
    /[$]LINENO/=
    ' <$as_myself |
    sed '
        s/[$]LINENO.*&-/
        t lineno
        b
        :lineno
        N
        :loop
        s/[$]LINENO\([^'$as_cr_alnum'_].*\n\)\(.*\)/\2\1\2/
        t loop
        s/-\n.*//
    ' >$as_me.lineno &&
chmod +x "$as_me.lineno" ||
{ $as_echo "$as_me: error: cannot create $as_me.lineno; rerun with
a POSIX shell" >&2; as_fn_exit 1; }

# If we had to re-execute with $CONFIG_SHELL, we're ensured to have
# already done that, so ensure we don't try to do so again and fall
# in an infinite loop.  This has already happened in practice.
_as_can_reexec=no; export _as_can_reexec
# Don't try to exec as it changes ${0}, causing all sort of problems
# (the dirname of ${0} is not the place where we might find the
# original and so on.  Autoconf is especially sensitive to this).
. "$as_me.lineno"
# Exit status is that of the last command.
exit
}

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*))
case `echo 'xy\c'` in
*c*) ECHO_T=' ';; # ECHO_T is single tab character.
xy) ECHO_C='\c';;

```

```

*)    echo `echo ksh88 bug on AIX 6.1` > /dev/null
      ECHO_T=' ';;
esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$ conf$$$.exe conf$$$.file
if test -d conf$$$.dir; then
  rm -f conf$$$.dir/conf$$$.file
else
  rm -f conf$$$.dir
  mkdir conf$$$.dir 2>/dev/null
fi
if (echo >conf$$$.file) 2>/dev/null; then
  if ln -s conf$$$.file conf$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$$.file conf$$$.dir 2>/dev/null && test ! -f conf$$$.exe
  ||
    as_ln_s='cp -pR'
  elif ln conf$$$.file conf$$ 2>/dev/null; then
    as_ln_s=ln
  else
    as_ln_s='cp -pR'
  fi
else
  as_ln_s='cp -pR'
fi
rm -f conf$$ conf$$$.exe conf$$$.dir/conf$$$.file conf$$$.file
rmdir conf$$$.dir 2>/dev/null

if mkdir -p . 2>/dev/null; then
  as_mkdir_p='mkdir -p "$as_dir"'
else
  test -d ./-p && rmdir ./-p
  as_mkdir_p=false
fi

as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+%pp%;s%[^_$as_cr_alnum]%%_g'"

```

```
SHELL=${CONFIG_SHELL-/bin/sh}
```

```
test -n "$DJDIR" || exec 7<&0 </dev/null  
exec 6>&1
```

```
# Name of the host.  
# hostname on some systems (SVR3.2, old GNU/Linux) returns a bogus  
exit status,  
# so uname gets run too.  
ac_hostname=`(hostname || uname -n) 2>/dev/null | sed 1q`
```

```
#  
# Initializations.  
#  
ac_default_prefix=/usr/local  
ac_clean_files=  
ac_config_libobj_dir=.  
LIB@&t@OBSJ=  
cross_compiling=no  
subdirs=  
MFLAGS=  
MAKEFLAGS=
```

```
# Identity of this package.  
PACKAGE_NAME='dbus-glib'  
PACKAGE_TARNAME='dbus-glib'  
PACKAGE_VERSION='0.100.2'  
PACKAGE_STRING='dbus-glib 0.100.2'  
PACKAGE_BUGREPORT='https://bugs.freedesktop.org/enter_bug.cgi?product=  
dbus&component=GLib'  
PACKAGE_URL=''
```

```
# Factoring default headers for most tests.  
ac_includes_default="\  
#include <stdio.h>  
#ifdef HAVE_SYS_TYPES_H  
# include <sys/types.h>  
#endif  
#ifdef HAVE_SYS_STAT_H  
# include <sys/stat.h>  
#endif  
#ifdef STDC_HEADERS  
# include <stdlib.h>  
# include <stddef.h>  
#else  
# ifdef HAVE_STDLIB_H  
# include <stdlib.h>  
# endif  
#endif  
#ifdef HAVE_STRING_H
```



```
# if !defined STDC_HEADERS && defined HAVE_MEMORY_H
# include <memory.h>
# endif
# include <string.h>
#endif
#ifdef HAVE_STRINGS_H
# include <strings.h>
#endif
#ifdef HAVE_INTTYPES_H
# include <inttypes.h>
#endif
#ifdef HAVE_STDINT_H
# include <stdint.h>
#endif
#ifdef HAVE_UNISTD_H
# include <unistd.h>
#endif"
```

```
ac_subst_vars='am__EXEEXT_FALSE
am__EXEEXT_TRUE
LTLIBOBJS
LIB@&t@OBS
TEST_SOCKET_DIR
ABSOLUTE_TOP_BUILDDIR
TEST_SLEEP_FOREVER_BINARY
TEST_SEGFAULT_BINARY
TEST_EXIT_BINARY
TEST_INTERFACES_SERVICE_BINARY
TEST_CORE_SERVICE_BINARY
TEST_SHELL_SERVICE_BINARY
TEST_SERVICE_BINARY
TEST_SERVICE_DIR
EXPANDED_DATADIR
EXPANDED_LIBDIR
EXPANDED_BINDIR
EXPANDED_SYSCONFDIR
EXPANDED_LOCALSTATEDIR
GTK_DOC_USE_REBASE_FALSE
GTK_DOC_USE_REBASE_TRUE
GTK_DOC_USE_LIBTOOL_FALSE
GTK_DOC_USE_LIBTOOL_TRUE
GTK_DOC_BUILD_PDF_FALSE
GTK_DOC_BUILD_PDF_TRUE
GTK_DOC_BUILD_HTML_FALSE
GTK_DOC_BUILD_HTML_TRUE
ENABLE_GTK_DOC_FALSE
ENABLE_GTK_DOC_TRUE
GTKDOC_DEPS_LIBS
GTKDOC_DEPS_CFLAGS
HTML_DIR
GTKDOC_MKPDF
GTKDOC_REBASE
```

GTKDOC_CHECK
DBUS_GLIB_TOOL_LIBS
DBUS_GLIB_TOOL_CFLAGS
GLIB_GENMARSHAL
HAVE_GLIB_THREADS_FALSE
HAVE_GLIB_THREADS_TRUE
DBUS_GLIB_THREADS_LIBS
DBUS_GLIB_THREADS_CFLAGS
DBUS_GLIB_LIBS
DBUS_GLIB_CFLAGS
DBUS_LIBS
DBUS_CFLAGS
PKG_CONFIG_LIBDIR
PKG_CONFIG_PATH
PKG_CONFIG
DBUS_PATH_OR_ABSTRACT
OTOOL64
OTOOL
LIPO
NMEDIT
DSYMUTIL
MANIFEST_TOOL
RANLIB
ac_ct_AR
AR
DLLTOOL
OBJDUMP
LN_S
NM
ac_ct_DUMPBIN
DUMPBIN
LD
FGREP
SED
LIBTOOL
DBUS_BUILD_TESTS_FALSE
DBUS_BUILD_TESTS_TRUE
DBUS_BINDING_TOOL
DBUS_BASH_COMPLETION_FALSE
DBUS_BASH_COMPLETION_TRUE
EGREP
GREP
CPP
am__fastdepCC_FALSE
am__fastdepCC_TRUE
CCDEPMODE
am__nodep
AMDEPBACKSLASH
AMDEP_FALSE
AMDEP_TRUE
am__quote
am__include

DEPDIR
OBJEXT
EXEEXT
ac_ct_CC
CPPFLAGS
LDFLAGS
CFLAGS
CC
LT_AGE
LT_REVISION
LT_CURRENT
AM_BACKSLASH
AM_DEFAULT_VERBOSITY
AM_DEFAULT_V
AM_V
MAINT
MAINTAINER_MODE_FALSE
MAINTAINER_MODE_TRUE
am__untar
am__tar
AMTAR
am__leading_dot
SET_MAKE
AWK
mkdir_p
MKDIR_P
INSTALL_STRIP_PROGRAM
STRIP
install_sh
MAKEINFO
AUTOHEADER
AUTOMAKE
AUTOCONF
ACLOCAL
VERSION
PACKAGE
CYGPATH_W
am__isrc
INSTALL_DATA
INSTALL_SCRIPT
INSTALL_PROGRAM
host_os
host_vendor
host_cpu
host
build_os
build_vendor
build_cpu
build
target_alias
host_alias
build_alias

LIBS
ECHO_T
ECHO_N
ECHO_C
DEFS
mandir
localedir
libdir
psdir
pdfdir
dvidir
htmldir
infodir
docdir
oldincludedir
includedir
localstatedir
sharedstatedir
sysconfdir
datadir
datarootdir
libexecdir
sbindir
bindir
program_transform_name
prefix
exec_prefix
PACKAGE_URL
PACKAGE_BUGREPORT
PACKAGE_STRING
PACKAGE_VERSION
PACKAGE_TARNAME
PACKAGE_NAME
PATH_SEPARATOR
SHELL'
ac_subst_files=''
ac_user_opts='
enable_option_checking
enable_maintainer_mode
enable_silent_rules
enable_dependency_tracking
enable_tests
enable_ansi
enable_verbose_mode
enable_asserts
enable_checks
enable_gcov
enable_bash_completion
with_test_socket_dir
with_introspect_xml
with_dbus_binding_tool
enable_shared

```

enable_static
with_pic
enable_fast_install
with_gnu_ld
with_libtool_sysroot
enable_libtool_lock
with_html_dir
enable_gtk_doc
enable_gtk_doc_html
enable_gtk_doc_pdf
'
        ac_precious_vars='build_alias
host_alias
target_alias
CC
CFLAGS
LDFLAGS
LIBS
CPPFLAGS
CPP
PKG_CONFIG
PKG_CONFIG_PATH
PKG_CONFIG_LIBDIR
DBUS_CFLAGS
DBUS_LIBS
DBUS_GLIB_CFLAGS
DBUS_GLIB_LIBS
DBUS_GLIB_THREADS_CFLAGS
DBUS_GLIB_THREADS_LIBS
GTKDOC_DEPS_CFLAGS
GTKDOC_DEPS_LIBS'

# Initialize some variables set by options.
ac_init_help=
ac_init_version=false
ac_unrecognized_opts=
ac_unrecognized_sep=
# The variables have the same names as the options, with
# dashes changed to underlines.
cache_file=/dev/null
exec_prefix=NONE
no_create=
no_recursion=
prefix=NONE
program_prefix=NONE
program_suffix=NONE
program_transform_name=s,x,x,
silent=
site=
srcdir=
verbose=

```

```

x_includes=NONE
x_libraries=NONE

# Installation directory options.
# These are left unexpanded so users can "make install
exec_prefix=/foo"
# and all the variables that are supposed to be based on exec_prefix
# by default will actually change.
# Use braces instead of parens because sh, perl, etc. also accept
them.
# (The list follows the same order as the GNU Coding Standards.)
bindir='${exec_prefix}/bin'
sbindir='${exec_prefix}/sbin'
libexecdir='${exec_prefix}/libexec'
datarootdir='${prefix}/share'
datadir='${datarootdir}'
sysconfdir='${prefix}/etc'
sharedstatedir='${prefix}/com'
localstatedir='${prefix}/var'
includedir='${prefix}/include'
oldincludedir='/usr/include'
docdir='${datarootdir}/doc/${PACKAGE_TARNAME}'
infodir='${datarootdir}/info'
htmldir='${docdir}'
dvidir='${docdir}'
pdfdir='${docdir}'
psdir='${docdir}'
libdir='${exec_prefix}/lib'
localedir='${datarootdir}/locale'
mandir='${datarootdir}/man'

ac_prev=
ac_dashdash=
for ac_option
do
# If the previous option needs an argument, assign it.
if test -n "$ac_prev"; then
eval $ac_prev=\$ac_option
ac_prev=
continue
fi

case $ac_option in
*=?*) ac_optarg=`expr "X$ac_option" : '[^=]*=\(.*\)'` ;;
*=) ac_optarg= ;;
*) ac_optarg=yes ;;
esac

# Accept the important Cygnus configure options, so we can diagnose
typos.

case $ac_dashdash$ac_option in

```

```

--)
  ac_dashdash=yes ;;

-bindir | --bindir | --bindi | --bind | --bin | --bi)
  ac_prev=bindir ;;
-bindir=* | --bindir=* | --bindi=* | --bind=* | --bin=* | --bi=*)
  bindir=$ac_optarg ;;

-build | --build | --buil | --bui | --bu)
  ac_prev=build_alias ;;
-build=* | --build=* | --buil=* | --bui=* | --bu=*)
  build_alias=$ac_optarg ;;

-cache-file | --cache-file | --cache-fil | --cache-fi \
| --cache-f | --cache- | --cache | --cach | --cac | --ca | --c)
  ac_prev=cache_file ;;
-cache-file=* | --cache-file=* | --cache-fil=* | --cache-fi=* \
| --cache-f=* | --cache-=* | --cache=* | --cach=* | --cac=* | --ca=*
| --c=*)
  cache_file=$ac_optarg ;;

--config-cache | -C)
  cache_file=config.cache ;;

-datadir | --datadir | --datadi | --datad)
  ac_prev=datadir ;;
-datadir=* | --datadir=* | --datadi=* | --datad=*)
  datadir=$ac_optarg ;;

-datarootdir | --datarootdir | --datarootdi | --datarootd | --
dataroot \
| --dataroo | --dataro | --datar)
  ac_prev=datarootdir ;;
-datarootdir=* | --datarootdir=* | --datarootdi=* | --datarootd=* \
| --dataroot=* | --dataroo=* | --dataro=* | --datar=*)
  datarootdir=$ac_optarg ;;

-disable-* | --disable-*)
  ac_useropt=`expr "x$ac_option" : 'x-*disable-\(.*\)'`
  # Reject names that are not valid shell variable names.
  expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
  as_fn_error $? "invalid feature name: $ac_useropt"
  ac_useropt_orig=$ac_useropt
  ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
  case $ac_user_opts in
    *)
"enable_$ac_useropt"
"*) ;;
  *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
disable-$ac_useropt_orig"
  ac_unrecognized_sep=', ';;

```

```

    esac
    eval enable_${ac_useropt}=no ;;

-docdir | --docdir | --docdi | --doc | --do)
    ac_prev=docdir ;;
-docdir=* | --docdir=* | --docdi=* | --doc=* | --do=*)
    docdir=${ac_optarg} ;;

-dvidir | --dvidir | --dvidi | --dvid | --dvi | --dv)
    ac_prev=dvidir ;;
-dvidir=* | --dvidir=* | --dvidi=* | --dvid=* | --dvi=* | --dv=*)
    dvidir=${ac_optarg} ;;

-enable-* | --enable-*)
    ac_useropt=`expr "x${ac_option}" : 'x-*enable-\([^=]*\)'`
    # Reject names that are not valid shell variable names.
    expr "x${ac_useropt}" : ".*[^\+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid feature name: ${ac_useropt}"
    ac_useropt_orig=${ac_useropt}
    ac_useropt=`$as_echo "${ac_useropt}" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *)
"enable_${ac_useropt}"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts${ac_unrecognized_sep}--
enable-${ac_useropt_orig}"
        ac_unrecognized_sep=', ';;
    esac
    eval enable_${ac_useropt}=\${ac_optarg} ;;

-exec-prefix | --exec_prefix | --exec-prefix | --exec-prefi \
| --exec-pref | --exec-pre | --exec-pr | --exec-p | --exec- \
| --exec | --exe | --ex)
    ac_prev=exec_prefix ;;
-exec-prefix=* | --exec_prefix=* | --exec-prefix=* | --exec-prefi=*
\
| --exec-pref=* | --exec-pre=* | --exec-pr=* | --exec-p=* | --exec-
=* \
| --exec=* | --exe=* | --ex=*)
    exec_prefix=${ac_optarg} ;;

-gas | --gas | --ga | --g)
    # Obsolete; use --with-gas.
    with_gas=yes ;;

-help | --help | --hel | --he | -h)
    ac_init_help=long ;;
-help=r* | --help=r* | --hel=r* | --he=r* | -hr*)
    ac_init_help=recursive ;;
-help=s* | --help=s* | --hel=s* | --he=s* | -hs*)
    ac_init_help=short ;;

```



```

-host | --host | --hos | --ho)
  ac_prev=host_alias ;;
-host=* | --host=* | --hos=* | --ho=*)
  host_alias=$ac_optarg ;;

-htmldir | --htmldir | --htmldi | --html | --html | --htm | --ht)
  ac_prev=htmldir ;;
-htmldir=* | --htmldir=* | --htmldi=* | --html=* | --html=* | --
htm=* \
| --ht=*)
  htmldir=$ac_optarg ;;

-includedir | --includedir | --includedi | --included | --include \
| --includ | --inclu | --incl | --inc)
  ac_prev=includedir ;;
-includedir=* | --includedir=* | --includedi=* | --included=* | --
include=* \
| --includ=* | --inclu=* | --incl=* | --inc=*)
  includedir=$ac_optarg ;;

-infodir | --infodir | --infodi | --infod | --info | --inf)
  ac_prev=infodir ;;
-infodir=* | --infodir=* | --infodi=* | --infod=* | --info=* | --
inf=*)
  infodir=$ac_optarg ;;

-libdir | --libdir | --libdi | --libd)
  ac_prev=libdir ;;
-libdir=* | --libdir=* | --libdi=* | --libd=*)
  libdir=$ac_optarg ;;

-libexecdir | --libexecdir | --libexecdi | --libexecd | --libexec \
| --libexe | --libex | --libe)
  ac_prev=libexecdir ;;
-libexecdir=* | --libexecdir=* | --libexecdi=* | --libexecd=* | --
libexec=* \
| --libexe=* | --libex=* | --libe=*)
  libexecdir=$ac_optarg ;;

-localedir | --localedir | --localedi | --localed | --locale)
  ac_prev=localedir ;;
-localedir=* | --localedir=* | --localedi=* | --localed=* | --
locale=*)
  locale=$ac_optarg ;;

-localstatedir | --localstatedir | --localstatedi | --localstated \
| --localstate | --localstat | --localsta | --localst | --locals)
  ac_prev=localstatedir ;;
-localstatedir=* | --localstatedir=* | --localstatedi=* | --
localstated=* \

```

```

| --localstate=* | --localstat=* | --localsta=* | --localst=* | --
locals=*)
    localstatedir=$ac_optarg ;;

-mandir | --mandir | --mandi | --mand | --man | --ma | --m)
    ac_prev=mandir ;;
-mandir=* | --mandir=* | --mandi=* | --mand=* | --man=* | --ma=* | -
-m=*)
    mandir=$ac_optarg ;;

-nfp | --nfp | --nf)
    # Obsolete; use --without-fp.
    with_fp=no ;;

-no-create | --no-create | --no-creat | --no-crea | --no-cre \
| --no-cr | --no-c | -n)
    no_create=yes ;;

-no-recursion | --no-recursion | --no-recursio | --no-recursi \
| --no-recurs | --no-recur | --no-recu | --no-rec | --no-re | --no-
r)
    no_recursion=yes ;;

-oldincludedir | --oldincludedir | --oldincludedi | --oldincluded \
| --oldinclude | --oldinclud | --oldinclu | --oldincl | --oldinc \
| --oldin | --oldi | --old | --ol | --o)
    ac_prev=oldincludedir ;;
-oldincludedir=* | --oldincludedir=* | --oldincludedi=* | --
oldincluded=* \
| --oldinclude=* | --oldinclud=* | --oldinclu=* | --oldincl=* | --
oldinc=* \
| --oldin=* | --oldi=* | --old=* | --ol=* | --o=*)
    oldincludedir=$ac_optarg ;;

-prefix | --prefix | --prefi | --pref | --pre | --pr | --p)
    ac_prev=prefix ;;
-prefix=* | --prefix=* | --prefi=* | --pref=* | --pre=* | --pr=* | -
-p=*)
    prefix=$ac_optarg ;;

-program-prefix | --program-prefix | --program-prefi | --program-
pref \
| --program-pre | --program-pr | --program-p)
    ac_prev=program_prefix ;;
-program-prefix=* | --program-prefix=* | --program-prefi=* \
| --program-pref=* | --program-pre=* | --program-pr=* | --program-
p=*)
    program_prefix=$ac_optarg ;;

-program-suffix | --program-suffix | --program-suffi | --program-
suff \
| --program-suf | --program-su | --program-s)

```

```

    ac_prev=program_suffix ;;
-program-suffix=* | --program-suffix=* | --program-suffi=* \
| --program-suff=* | --program-suf=* | --program-su=* | --program-
s=*)
    program_suffix=$ac_optarg ;;

-program-transform-name | --program-transform-name \
| --program-transform-nam | --program-transform-na \
| --program-transform-n | --program-transform- \
| --program-transform | --program-transfor \
| --program-transfo | --program-transf \
| --program-trans | --program-tran \
| --progr-tra | --program-tr | --program-t)
    ac_prev=program_transform_name ;;
-program-transform-name=* | --program-transform-name=* \
| --program-transform-nam=* | --program-transform-na=* \
| --program-transform-n=* | --program-transform-==* \
| --program-transform=* | --program-transfor=* \
| --program-transfo=* | --program-transf=* \
| --program-trans=* | --program-tran=* \
| --progr-tra=* | --program-tr=* | --program-t=*)
    program_transform_name=$ac_optarg ;;

-pdfdir | --pdfdir | --pdfdi | --pdfd | --pdf | --pd)
    ac_prev=pdfdir ;;
-pdfdir=* | --pdfdir=* | --pdfdi=* | --pdfd=* | --pdf=* | --pd=*)
    pdfdir=$ac_optarg ;;

-psdir | --psdir | --psdi | --psd | --ps)
    ac_prev=psdir ;;
-psdir=* | --psdir=* | --psdi=* | --psd=* | --ps=*)
    psdir=$ac_optarg ;;

-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil)
    silent=yes ;;

-sbindir | --sbindir | --sbindi | --sbind | --sbin | --sbi | --sb)
    ac_prev=sbindir ;;
-sbindir=* | --sbindir=* | --sbindi=* | --sbind=* | --sbin=* \
| --sbi=* | --sb=*)
    sbindir=$ac_optarg ;;

-sharedstatedir | --sharedstatedir | --sharedstatedi \
| --sharedstated | --sharedstate | --sharedstat | --sharedsta \
| --sharedst | --shares | --shared | --share | --shar \
| --sha | --sh)
    ac_prev=sharedstatedir ;;
-sharedstatedir=* | --sharedstatedir=* | --sharedstatedi=* \
| --sharedstated=* | --sharedstate=* | --sharedstat=* | --
sharedsta=* \
| --sharedst=* | --shares=* | --shared=* | --share=* | --shar=* \

```

```

| --sha=* | --sh=*)
    sharedstatedir=$ac_optarg ;;

-site | --site | --sit)
    ac_prev=site ;;
-site=* | --site=* | --sit=*)
    site=$ac_optarg ;;

-srcdir | --srcdir | --srcdi | --srcd | --src | --sr)
    ac_prev=srcdir ;;
-srcdir=* | --srcdir=* | --srcdi=* | --srcd=* | --src=* | --sr=*)
    srcdir=$ac_optarg ;;

-sysconfdir | --sysconfdir | --sysconfdi | --sysconfd | --sysconf \
| --syscon | --sysco | --sysc | --sys | --sy)
    ac_prev=sysconfdir ;;
-sysconfdir=* | --sysconfdir=* | --sysconfdi=* | --sysconfd=* | --
sysconf=* \
| --syscon=* | --sysco=* | --sysc=* | --sys=* | --sy=*)
    sysconfdir=$ac_optarg ;;

-target | --target | --targe | --targ | --tar | --ta | --t)
    ac_prev=target_alias ;;
-target=* | --target=* | --targe=* | --targ=* | --tar=* | --ta=* | -
-t=*)
    target_alias=$ac_optarg ;;

-v | -verbose | --verbose | --verbos | --verbo | --verb)
    verbose=yes ;;

-version | --version | --versio | --versi | --vers | -V)
    ac_init_version=: ;;

-with-* | --with-*)
    ac_useropt=`expr "x$ac_option" : 'x-*with-\([^=]*\) '`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid package name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *)
"with_$ac_useropt"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--with-
$ac_useropt_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval with_$ac_useropt=\$ac_optarg ;;

-without-* | --without-*)

```

```

ac_useropt=`expr "x${ac_option}" : 'x-*without-\(.*\)'`
# Reject names that are not valid shell variable names.
expr "x${ac_useropt}" : ".*[^+._$as_cr_alnum]" >/dev/null &&
  as_fn_error $? "invalid package name: ${ac_useropt}"
ac_useropt_orig=${ac_useropt}
ac_useropt=`$as_echo "${ac_useropt}" | sed 's/[-+.]/_/g'`
case $ac_user_opts in
  *)
"with_${ac_useropt}"
*) ;;
  *)
ac_unrecognized_opts="$ac_unrecognized_opts${ac_unrecognized_sep}--
without-${ac_useropt_orig}"
  ac_unrecognized_sep=', ';;
  esac
  eval with_${ac_useropt}=no ;;

--x)
  # Obsolete; use --with-x.
  with_x=yes ;;

-x-includes | --x-includes | --x-include | --x-includ | --x-inclu \
| --x-incl | --x-inc | --x-in | --x-i)
  ac_prev=x_includes ;;
-x-includes=* | --x-includes=* | --x-include=* | --x-includ=* | --x-
inclu=* \
| --x-incl=* | --x-inc=* | --x-in=* | --x-i=*)
  x_includes=${ac_optarg} ;;

-x-libraries | --x-libraries | --x-librarie | --x-librari \
| --x-librar | --x-libra | --x-libr | --x-lib | --x-li | --x-l)
  ac_prev=x_libraries ;;
-x-libraries=* | --x-libraries=* | --x-librarie=* | --x-librari=* \
| --x-librar=* | --x-libra=* | --x-libr=* | --x-lib=* | --x-li=* | -
-x-l=*)
  x_libraries=${ac_optarg} ;;

-*) as_fn_error $? "unrecognized option: \`${ac_option}`
Try \`${0} --help' for more information"
  ;;

*=*)
ac_envvar=`expr "x${ac_option}" : 'x\([^=]*\)='`
# Reject names that are not valid shell variable names.
case $ac_envvar in #(
  ' | [0-9]* | *[^_.$as_cr_alnum]* )
  as_fn_error $? "invalid variable name: \`${ac_envvar}`" ;;
  esac
eval $ac_envvar=\${ac_optarg}
export $ac_envvar ;;

*)

```

```

# FIXME: should be removed in autoconf 3.0.
$as_echo "$as_me: WARNING: you should use --build, --host, --
target" >&2
  expr "x$sac_option" : ".*[^-._$as_cr_alnum]" >/dev/null &&
  $as_echo "$as_me: WARNING: invalid host type: $sac_option" >&2
  : "${build_alias=$sac_option} ${host_alias=$sac_option}
${target_alias=$sac_option}"
  ;;

esac
done

if test -n "$sac_prev"; then
  ac_option=--`echo $sac_prev | sed 's/_/_/g'`
  as_fn_error $? "missing argument to $sac_option"
fi

if test -n "$sac_unrecognized_opts"; then
  case $enable_option_checking in
    no) ;;
    fatal) as_fn_error $? "unrecognized options:
$sac_unrecognized_opts" ;;
    *)
      $as_echo "$as_me: WARNING: unrecognized options:
$sac_unrecognized_opts" >&2 ;;
  esac
fi

# Check all directory arguments for consistency.
for ac_var in   exec_prefix prefix bindir sbindir libexecdir
datarootdir \
               datadir sysconfdir sharedstatedir localstatedir includedir
\
               oldincludedir docdir infodir htmdir dvidir pdfdir psdir \
libdir localedir mandir
do
  eval ac_val=\$$ac_var
  # Remove trailing slashes.
  case $ac_val in
    */ )
      ac_val=`expr "X$ac_val" : 'X\([^/]\)' \| "X$ac_val" :
'X\(.*\)'`
      eval $ac_var=\$ac_val;;
  esac
  # Be sure to have absolute directory names.
  case $ac_val in
    [\\/$]* | ?:[\\/$]* ) continue;;
    NONE | ' ' ) case $ac_var in *prefix ) continue;; esac;;
  esac
  as_fn_error $? "expected an absolute directory name for --$ac_var:
$ac_val"
done

```

```

# There might be people who depend on the old broken behavior: ` $host `
# used to hold the argument of --host etc.
# FIXME: To remove some day.
build=$build_alias
host=$host_alias
target=$target_alias

# FIXME: To remove some day.
if test "x$host_alias" != x; then
  if test "x$build_alias" = x; then
    cross_compiling=maybe
  elif test "x$build_alias" != "x$host_alias"; then
    cross_compiling=yes
  fi
fi

ac_tool_prefix=
test -n "$host_alias" && ac_tool_prefix=$host_alias-

test "$silent" = yes && exec 6>/dev/null

ac_pwd=`pwd` && test -n "$ac_pwd" &&
ac_ls_di=`ls -di .` &&
ac_pwd_ls_di=`cd "$ac_pwd" && ls -di .` ||
  as_fn_error $? "working directory cannot be determined"
test "X$ac_ls_di" = "X$ac_pwd_ls_di" ||
  as_fn_error $? "pwd does not report name of working directory"

# Find the source files, if location was not specified.
if test -z "$srcdir"; then
  ac_srcdir_defaulted=yes
  # Try the directory containing this script, then the parent
  directory.
  ac_confdir=`$as_dirname -- "$as_myself" ||
$as_expr X"$as_myself" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$as_myself" : 'X\(//\)[^/]' \| \
  X"$as_myself" : 'X\(//\)$' \| \
  X"$as_myself" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$as_myself" |
  sed '/^X\(.*[^/]\)\|\/\/*[^/][^/]*\/*$/{
    s//\1/
    q
  }
/^X\(\\\|\/\)\ [^/].*${
  s//\1/
  q
}
/^X\(\\\|\/\)$/{
  s//\1/
  q

```

```

    }
    /^X\(\|\)\.*/{
        s/>\1/
        q
    }
    s/.*\/./; q'`
srcdir=$ac_confdir
if test ! -r "$srcdir/$ac_unique_file"; then
    srcdir=..
fi
else
    ac_srcdir_defaulted=no
fi
if test ! -r "$srcdir/$ac_unique_file"; then
    test "$ac_srcdir_defaulted" = yes && srcdir="$ac_confdir or .."
    as_fn_error $? "cannot find sources ($ac_unique_file) in $srcdir"
fi
ac_msg="sources are in $srcdir, but `cd $srcdir' does not work"
ac_abs_confdir=`(
    cd "$srcdir" && test -r "./$ac_unique_file" || as_fn_error $?
"$ac_msg"
    pwd)`
# When building in place, set srcdir=.
if test "$ac_abs_confdir" = "$ac_pwd"; then
    srcdir=.
fi
# Remove unnecessary trailing slashes from srcdir.
# Double slashes in file names in object file debugging info
# mess up M-x gdb in Emacs.
case $srcdir in
*/) srcdir=`expr "X$srcdir" : 'X\([^\/]\)' \| "X$srcdir" :
'X\(.*\)'`;
esac
for ac_var in $ac_precious_vars; do
    eval ac_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_env_${ac_var}_value=\${${ac_var}_value}
    eval ac_cv_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_cv_env_${ac_var}_value=\${${ac_var}_value}
done

#
# Report the --help message.
#
if test "$ac_init_help" = "long"; then
    # Omit some internal or obsolete options to make the list less
    imposing.
    # This message is too long to be a string in the A/UX 3.1 sh.
    cat <<_ACEOF
\`configure' configures dbus-glib 0.100.2 to adapt to many kinds of
systems.

Usage: $0 [OPTION]... [VAR=VALUE]...

```


To assign environment variables (e.g., CC, CFLAGS...), specify them as VAR=VALUE. See below for descriptions of some of the useful variables.

Defaults for the options are specified in brackets.

Configuration:

-h, --help	display this help and exit
--help=short	display options specific to this package
--help=recursive	display the short help of all the included packages
-V, --version	display version information and exit
-q, --quiet, --silent	do not print '\`checking ...' messages
--cache-file=FILE	cache test results in FILE [disabled]
-C, --config-cache	alias for '\`--cache-file=config.cache'
-n, --no-create	do not create output files
--srcdir=DIR	find the sources in DIR [configure dir or '\`..']

Installation directories:

--prefix=PREFIX	install architecture-independent files in PREFIX
	@<:@@S @ac_default_prefix@:>@
--exec-prefix=EPREFIX	install architecture-dependent files in EPREFIX
	@<:@PREFIX@:>@

By default, '\`make install' will install all the files in '\`\$ac_default_prefix/bin', '\`\$ac_default_prefix/lib' etc. You can specify an installation prefix other than '\`\$ac_default_prefix' using '\`--prefix', for instance '\`--prefix=\$HOME'.

For better control, use the options below.

Fine tuning of the installation directories:

--bindir=DIR	user executables [EPREFIX/bin]
--sbindir=DIR	system admin executables [EPREFIX/sbin]
--libexecdir=DIR	program executables [EPREFIX/libexec]
--sysconfdir=DIR	read-only single-machine data [PREFIX/etc]
--sharedstatedir=DIR	modifiable architecture-independent data [PREFIX/com]
--localstatedir=DIR	modifiable single-machine data [PREFIX/var]
--libdir=DIR	object code libraries [EPREFIX/lib]
--includedir=DIR	C header files [PREFIX/include]
--oldincludedir=DIR	C header files for non-gcc [/usr/include]
--datarootdir=DIR	read-only arch.-independent data root [PREFIX/share]
--datadir=DIR	read-only architecture-independent data [DATAROOTDIR]

```

--infodir=DIR          info documentation [DATAROOTDIR/info]
--localedir=DIR       locale-dependent data [DATAROOTDIR/locale]
--mandir=DIR          man documentation [DATAROOTDIR/man]
--docdir=DIR          documentation root @<:@DATAROOTDIR/doc/dbus-
glib@:>@
--htmldir=DIR         html documentation [DOCDIR]
--dvidir=DIR          dvi documentation [DOCDIR]
--pdfdir=DIR          pdf documentation [DOCDIR]
--psdir=DIR           ps documentation [DOCDIR]
_ACEOF

```

```
cat <<\_ACEOF
```

Program names:

```

--program-prefix=PREFIX      prepend PREFIX to installed
program names
--program-suffix=SUFFIX      append SUFFIX to installed
program names
--program-transform-name=PROGRAM  run sed PROGRAM on installed
program names

```

System types:

```

--build=BUILD      configure for building on BUILD [guessed]
--host=HOST        cross-compile to build programs to run on HOST
[BUILD]
_ACEOF

```

```
fi
```

```

if test -n "$ac_init_help"; then
  case $ac_init_help in
    short | recursive ) echo "Configuration of dbus-glib 0.100.2:";;
    esac
  cat <<\_ACEOF

```

Optional Features:

```

--disable-option-checking  ignore unrecognized --enable/--with
options
--disable-FEATURE          do not include FEATURE (same as --enable-
FEATURE=no)
--enable-FEATURE[=ARG]    include FEATURE [ARG=yes]
--enable-maintainer-mode  enable make rules and dependencies not

```

useful (and

```

sometimes confusing) to the casual installer
--enable-silent-rules      less verbose build output (undo: "make V=1")
--disable-silent-rules    verbose build output (undo: "make V=0")
--enable-dependency-tracking
                           do not reject slow dependency extractors
--disable-dependency-tracking
                           speeds up one-time build
--enable-tests             enable unit test code
--enable-ansi              enable -ansi -pedantic gcc flags

```

```

--enable-verbose-mode    support verbose debug mode
--enable-asserts        include assertion checks
--enable-checks          include sanity checks on public API
--enable-gcov            compile with coverage profiling
instrumentation (gcc
                        only)
--enable-bash-completion
                        install bash completion scripts
--enable-shared@<:@=PKGS@:>@ build shared libraries
@<:@default=yes@:>@
--enable-static@<:@=PKGS@:>@ build static libraries
@<:@default=yes@:>@
--enable-fast-install@<:@=PKGS@:>@
                        optimize for fast installation
@<:@default=yes@:>@
--disable-libtool-lock  avoid locking (might break parallel builds)
--enable-gtk-doc         use gtk-doc to build documentation
@<:@@<:@default=no@:>@@@:>@
--enable-gtk-doc-html   build documentation in html format
@<:@@<:@default=yes@:>@@@:>@
--enable-gtk-doc-pdf    build documentation in pdf format
@<:@@<:@default=no@:>@@@:>@

```

Optional Packages:

```

--with-PACKAGE[=ARG]    use PACKAGE [ARG=yes]
--without-PACKAGE       do not use PACKAGE (same as --with-
PACKAGE=no)
--with-test-socket-dir=dirname
                        Where to put sockets for make check
--with-introspect-xml=filename
                        Pass in a pregenerated dbus daemon
introspection xml
                        file (as generated by 'dbus-daemon --
introspect') to
                        use instead of querying the installed dbus
daemon
--with-dbus-binding-tool=filename
                        Use external dbus-binding-tool program
--with-pic@<:@=PKGS@:>@ try to use only PIC/non-PIC objects
@<:@default=use
                        both@:>@
--with-gnu-ld           assume the C compiler uses GNU ld
@<:@default=no@:>@
--with-libtool-sysroot=DIR Search for dependent libraries within DIR
                        (or the compiler's sysroot if not specified).
--with-html-dir=PATH    path to installed docs

```

Some influential environment variables:

```

CC          C compiler command
CFLAGS      C compiler flags
LDFLAGS     linker flags, e.g. -L<lib dir> if you have libraries in

```

```

LIBS          nonstandard directory <lib dir>
CPPFLAGS      libraries to pass to the linker, e.g. -l<library>
               (Objective) C/C++ preprocessor flags, e.g. -I<include
dir> if
               you have headers in a nonstandard directory <include
dir>
CPP           C preprocessor
PKG_CONFIG    path to pkg-config utility
PKG_CONFIG_PATH
               directories to add to pkg-config's search path
PKG_CONFIG_LIBDIR
               path overriding pkg-config's built-in search path
DBUS_CFLAGS   C compiler flags for DBUS, overriding pkg-config
DBUS_LIBS     linker flags for DBUS, overriding pkg-config
DBUS_GLIB_CFLAGS
               C compiler flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_LIBS
               linker flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_THREADS_CFLAGS
               C compiler flags for DBUS_GLIB_THREADS, overriding pkg-
config
DBUS_GLIB_THREADS_LIBS
               linker flags for DBUS_GLIB_THREADS, overriding pkg-
config
GTKDOC_DEPS_CFLAGS
               C compiler flags for GTKDOC_DEPS, overriding pkg-config
GTKDOC_DEPS_LIBS
               linker flags for GTKDOC_DEPS, overriding pkg-config

```

Use these variables to override the choices made by `configure' or to help it to find libraries and programs with nonstandard names/locations.

Report bugs to

<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLib>.

_ACEOF

ac_status=\$?

fi

```

if test "$ac_init_help" = "recursive"; then
  # If there are subdirs, report their specific --help.
  for ac_dir in : $ac_subdirs_all; do test "x$ac_dir" = x: && continue
    test -d "$ac_dir" ||
      { cd "$srcdir" && ac_pwd=`pwd` && srcdir=. && test -d "$ac_dir";
    } ||
      continue
    ac_builddir=.

```

```

case "$ac_dir" in

```

```

  .) ac_dir_suffix= ac_top_builddir_sub=. ac_top_build_prefix= ;;

```

```

  *)

```

```

ac_dir_suffix=/`$as_echo "$ac_dir" | sed 's|^\.([\//]|||)`
# A ".." for each directory in $ac_dir_suffix.
ac_top_builddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\\/]*/|/..|g;s|/|||`
case $ac_top_builddir_sub in
  "") ac_top_builddir_sub=. ac_top_build_prefix= ;;
  *) ac_top_build_prefix=$ac_top_builddir_sub/ ;;
esac ;;
esac
ac_abs_top_builddir=$ac_pwd
ac_abs_builddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_builddir=$ac_top_build_prefix

case $srcdir in
  .) # We are building in place.
    ac_srcdir=.
    ac_top_srcdir=$ac_top_builddir_sub
    ac_abs_top_srcdir=$ac_pwd ;;
  [\\/* | ?:[\\/*]* ) # Absolute name.
    ac_srcdir=$srcdir$ac_dir_suffix;
    ac_top_srcdir=$srcdir
    ac_abs_top_srcdir=$srcdir ;;
  *) # Relative name.
    ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
    ac_top_srcdir=$ac_top_build_prefix$srcdir
    ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

cd "$ac_dir" || { ac_status=$?; continue; }
# Check for gusted configure.
if test -f "$ac_srcdir/configure.gnu"; then
  echo &&
  $SHELL "$ac_srcdir/configure.gnu" --help=recursive
elif test -f "$ac_srcdir/configure"; then
  echo &&
  $SHELL "$ac_srcdir/configure" --help=recursive
else
  $as_echo "$as_me: WARNING: no configuration information is in
$ac_dir" >&2
  fi || ac_status=$?
  cd "$ac_pwd" || { ac_status=$?; break; }
done
fi

test -n "$ac_init_help" && exit $ac_status
if $ac_init_version; then
  cat <<\_ACEOF
dbus-glib configure 0.100.2
generated by GNU Autoconf 2.69

```

Copyright (C) 2012 Free Software Foundation, Inc.
This configure script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it.

```
_ACEOF
  exit
fi

## ----- ##
## Autoconf initialization. ##
## ----- ##

@%:@ ac_fn_c_try_compile LINENO
@%:@ -----
@%:@ Try to compile conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_compile ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  rm -f conftest.$ac_objext
  if { { ac_try="$ac_compile"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compile") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    grep -v '^ *+' conftest.err >conftest.er1
    cat conftest.er1 >&5
    mv -f conftest.er1 conftest.err
  fi
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } && {
    test -z "$ac_c_werror_flag" ||
    test ! -s conftest.err
  } && test -s conftest.$ac_objext; then :
  ac_retval=0
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' conftest.$ac_ext >&5

  ac_retval=1
fi
  eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
  as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_compile

@%:@ ac_fn_c_try_link LINENO
```

```

@%:@ -----
@%:@ Try to link confptest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_link ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  rm -f confptest.$ac_objext confptest$ac_exeext
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>confptest.err
  ac_status=$?
  if test -s confptest.err; then
    grep -v '^ *+' confptest.err >confptest.er1
    cat confptest.er1 >&5
    mv -f confptest.er1 confptest.err
  fi
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } && {
    test -z "$ac_c_werror_flag" ||
    test ! -s confptest.err
    } && test -s confptest$ac_exeext && {
    test "$cross_compiling" = yes ||
    test -x confptest$ac_exeext
    }; then :
  ac_retval=0
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' confptest.$ac_ext >&5

  ac_retval=1
fi
# Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
# created by the PGI compiler (confptest_ipa8_confptest.oo), as it
would
# interfere with the next link command; also delete a directory that
is
# left behind by Apple's compiler. We do this before executing the
actions.
rm -rf confptest.dSYM confptest_ipa8_confptest.oo
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_link

@%:@ ac_fn_c_try_cpp LINENO

```

```

@%:@ -----
@%:@ Try to preprocess confctest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_cpp ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if { { ac_try="$ac_cpp confctest.$ac_ext"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_cpp confctest.$ac_ext") 2>confctest.err
  ac_status=$?
  if test -s confctest.err; then
    grep -v '^ *+' confctest.err >confctest.er1
    cat confctest.er1 >&5
    mv -f confctest.er1 confctest.err
  fi
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } > confctest.i && {
    test -z "$ac_c_preproc_warn_flag$ac_c_werror_flag" ||
    test ! -s confctest.err
  }; then :
    ac_retval=0
  else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' confctest.$ac_ext >&5

    ac_retval=1
  fi
  eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_cpp

@%:@ ac_fn_c_try_run LINENO
@%:@ -----
@%:@ Try to link confctest.@S|@ac_ext, and return whether this
succeeded. Assumes
@%:@ that executables *can* be run.
ac_fn_c_try_run ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac

```



```

eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; } && { ac_try='./confptest$ac_exeext'
  { { case "((($ac_try" in
  *\"* | *\"`* | *\"\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; }; then :
  ac_retval=0
else
  $as_echo "$as_me: program exited with status $ac_status" >&5
  $as_echo "$as_me: failed program was:" >&5
sed 's/^/|/' confptest.$ac_ext >&5

  ac_retval=$ac_status
fi
rm -rf confptest.dSYM confptest_ipa8_confptest.o
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_run

@%:@ ac_fn_c_check_header_compile LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists and can be compiled using the include
files in
@%:@ INCLUDES, setting the cache variable VAR accordingly.
ac_fn_c_check_header_compile ()
{
  as_lineno=${as_lineno-"$1"}
  as_lineno_stack=as_lineno_stack=$as_lineno_stack
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
  $as_echo_n "checking for $2... " >&6; }
  if eval \"\${$3+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
$4
@%:@include <$2>
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  eval "$3=yes"
else

```

```

    eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
eval ac_res=\${$3
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_header_compile

@%:@ ac_fn_c_check_func LINENO FUNC VAR
@%:@ -----
@%:@ Tests whether FUNC exists, setting the cache variable VAR
accordingly
ac_fn_c_check_func ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
/* Define $2 to an innocuous variant, in case <limits.h> declares $2.
   For example, HP-UX 11i <limits.h> declares gettimeofday. */
#define $2 innocuous_$2

/* System header to define __stub macros and hopefully few prototypes,
   which can conflict with char $2 (); below.
   Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
   <limits.h> exists even on freestanding compilers. */

#ifdef __STDC__
# include <limits.h>
#else
# include <assert.h>
#endif

#undef $2

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char $2 ();
/* The GNU C library defines this for functions which it implements

```

```

        to always fail with ENOSYS.  Some functions are actually named
        something starting with __ and the normal name is an alias.  */
#if defined __stub_$2 || defined __stub__$2
choke me
#endif

int
main ()
{
return $2 ();
;
return 0;
}
ACEOF
if ac_fn_c_try_link "$LINENO"; then :
eval "$3=yes"
else
eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
fi
eval ac_res=\${$3}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_func

@%:@ ac_fn_c_check_header_mongrel LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists, giving a warning if it cannot be
compiled using
@%:@ the include files in INCLUDES and setting the cache variable VAR
@%:@ accordingly.
ac_fn_c_check_header_mongrel ()
{
as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
if eval \${$3+:} false; then :
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
$as_echo_n "(cached) " >&6
fi
eval ac_res=\${$3}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
else
# Is the header compilable?

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 usability" >&5
$as_echo_n "checking $2 usability... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
@%:@include <$2>
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_header_compiler=yes
else
  ac_header_compiler=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_compiler"
>&5
$as_echo "$ac_header_compiler" >&6; }

# Is the header present?
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 presence" >&5
$as_echo_n "checking $2 presence... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <$2>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
  ac_header_preproc=yes
else
  ac_header_preproc=no
fi
rm -f conftest.err conftest.i conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_preproc"
>&5
$as_echo "$ac_header_preproc" >&6; }

# So?  What about this header?
case $ac_header_compiler:$ac_header_preproc:$ac_c_preproc_warn_flag in
#((
  yes:no: )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: accepted by
the compiler, rejected by the preprocessor!" >&5
$as_echo "$as_me: WARNING: $2: accepted by the compiler, rejected by
the preprocessor!" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
    ;;
  no:yes:* )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: present but
cannot be compiled" >&5
$as_echo "$as_me: WARNING: $2: present but cannot be compiled" >&2;}

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      check
for missing prerequisite headers?" >&5
$as_echo "$as_me: WARNING: $2:      check for missing prerequisite
headers?" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: see the
Autoconf documentation" >&5
$as_echo "$as_me: WARNING: $2: see the Autoconf documentation" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      section
\"Present But Cannot Be Compiled\"" >&5
$as_echo "$as_me: WARNING: $2:      section \"Present But Cannot Be
Compiled\"" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
( $as_echo "## -----
----- ##
## Report this to
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=Glib
##
## -----
----- ##"
) | sed "s/^\$as_me: WARNING:      /" >&2
;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval `\$${3+:} false; then :
  $as_echo_n "(cached) " >&6
else
  eval "$3=\$ac_header_compiler"
fi
eval ac_res=\$${3}
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
fi
eval $as_lineno_stack; ${as_lineno_stack+:} unset as_lineno

} @%:@ ac_fn_c_check_header_mongrel
cat >config.log <<_ACEOF
This file contains any messages produced by compilers while
running configure, to aid debugging if configure makes a mistake.

It was created by dbus-glib $as_me 0.100.2, which was
generated by GNU Autoconf 2.69.  Invocation command line was

    $ $0 $@

_ACEOF
exec 5>>config.log
{

```

```

cat <<_ASUNAME
## ----- ##
## Platform. ##
## ----- ##

hostname = `(hostname || uname -n) 2>/dev/null | sed 1q`
uname -m = `(uname -m) 2>/dev/null || echo unknown`
uname -r = `(uname -r) 2>/dev/null || echo unknown`
uname -s = `(uname -s) 2>/dev/null || echo unknown`
uname -v = `(uname -v) 2>/dev/null || echo unknown`

/usr/bin/uname -p = `(/usr/bin/uname -p) 2>/dev/null || echo unknown`
/bin/uname -X      = `(/bin/uname -X) 2>/dev/null      || echo unknown`

/bin/arch          = `(/bin/arch) 2>/dev/null          || echo
unknown`
/usr/bin/arch -k   = `(/usr/bin/arch -k) 2>/dev/null   || echo
unknown`
/usr/convex/getsysinfo = `(/usr/convex/getsysinfo) 2>/dev/null || echo
unknown`
/usr/bin/hostinfo  = `(/usr/bin/hostinfo) 2>/dev/null  || echo
unknown`
/bin/machine       = `(/bin/machine) 2>/dev/null       || echo
unknown`
/usr/bin/oslevel   = `(/usr/bin/oslevel) 2>/dev/null   || echo
unknown`
/bin/universe      = `(/bin/universe) 2>/dev/null      || echo
unknown`

_ASUNAME

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  $as_echo "PATH: $as_dir"
done
IFS=$as_save_IFS

} >&5

cat >&5 <<_ACEOF

## ----- ##
## Core tests. ##
## ----- ##

_ACEOF

```



```

## Output variables. ##
## ----- ##"
    echo
    for ac_var in $ac_subst_vars
    do
        eval ac_val=\$$ac_var
        case $ac_val in
            *'\''*) ac_val=`$as_echo "$ac_val" | sed
"s/'\''/'\''\\\'\'\'\'\'\'\'\'\'\'\'\'\'\'\'\'\'/g"`;;
        esac
        $as_echo "$ac_var='\''$ac_val'\''"
    done | sort
    echo

    if test -n "$ac_subst_files"; then
        $as_echo "## ----- ##"
## File substitutions. ##
## ----- ##"
        echo
        for ac_var in $ac_subst_files
        do
            eval ac_val=\$$ac_var
            case $ac_val in
                *'\''*) ac_val=`$as_echo "$ac_val" | sed
"s/'\''/'\''\\\'\'\'\'\'\'\'\'\'\'\'\'\'\'\'\'\'/g"`;;
            esac
            $as_echo "$ac_var='\''$ac_val'\''"
        done | sort
        echo
    fi

    if test -s confdefs.h; then
        $as_echo "## ----- ##"
## confdefs.h. ##
## ----- ##"
        echo
        cat confdefs.h
        echo
    fi
    test "$ac_signal" != 0 &&
        $as_echo "$as_me: caught signal $ac_signal"
        $as_echo "$as_me: exit $exit_status"
} >&5
rm -f core *.core core.conftest.* &&
rm -f -r conftest* confdefs* conf$$* $ac_clean_files &&
exit $exit_status
' 0
for ac_signal in 1 2 13 15; do
    trap 'ac_signal='$ac_signal'; as_fn_exit 1' $ac_signal
done
ac_signal=0

```

```

# confdefs.h avoids OS command line length limits that DEFS can
exceed.
rm -f -r conftest* confdefs.h

$as_echo "/* confdefs.h */" > confdefs.h

# Predefined preprocessor variables.

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_NAME "$PACKAGE_NAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_TARNAME "$PACKAGE_TARNAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_VERSION "$PACKAGE_VERSION"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_STRING "$PACKAGE_STRING"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_BUGREPORT "$PACKAGE_BUGREPORT"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_URL "$PACKAGE_URL"
_ACEOF

# Let the site file select an alternate cache file if it wants to.
# Prefer an explicitly selected file to automatically selected ones.
ac_site_file1=NONE
if test -n "$CONFIG_SITE"; then
  # We do not want a PATH search for config.site.
  case $CONFIG_SITE in @%:@(
    -*) ac_site_file1=./$CONFIG_SITE;;
    */*) ac_site_file1=$CONFIG_SITE;;
    *) ac_site_file1=./$CONFIG_SITE;;
  esac
fi
for ac_site_file in $ac_site_file1
do
  test "x$ac_site_file" = xNONE && continue
  if test /dev/null != "$ac_site_file" && test -r "$ac_site_file";
then
  { $as_echo "$as_me:${as_lineno-$LINENO}: loading site script
$ac_site_file" >&5
$as_echo "$as_me: loading site script $ac_site_file" >&6;}

```

```

    sed 's/^/| /' "$ac_site_file" >&5
    . "$ac_site_file" \
    || { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "failed to load site script $ac_site_file
See \`config.log' for more details" "$LINENO" 5; }
    fi
done

if test -r "$cache_file"; then
    # Some versions of bash will fail to source /dev/null (special files
    # actually), so we avoid doing that. DJGPP emulates it as a regular
    file.
    if test /dev/null != "$cache_file" && test -f "$cache_file"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: loading cache
$cache_file" >&5
$as_echo "$as_me: loading cache $cache_file" >&6;}
        case $cache_file in
            [\\/]*) | ?:[\\/]*) . "$cache_file";;
            *) . "$cache_file";;
        esac
    fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: creating cache $cache_file"
>&5
$as_echo "$as_me: creating cache $cache_file" >&6;}
    >$cache_file
fi

# Check that the precious variables saved in the cache have kept the
same
# value.
ac_cache_corrupted=false
for ac_var in $ac_precious_vars; do
    eval ac_old_set=\$ac_cv_env_${ac_var}_set
    eval ac_new_set=\$ac_env_${ac_var}_set
    eval ac_old_val=\$ac_cv_env_${ac_var}_value
    eval ac_new_val=\$ac_env_${ac_var}_value
    case $ac_old_set,$ac_new_set in
        set,*)
            { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
set to \`$ac_old_val' in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was set to \`$ac_old_val' in the
previous run" >&2;}
            ac_cache_corrupted=: ;;
        ,set)
            { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
not set in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was not set in the previous run"
>&2;}
            ac_cache_corrupted=: ;;
    esac
done

```

```

,);;
*)
    if test "x$ac_old_val" != "x$ac_new_val"; then
    # differences in whitespace do not lead to failure.
    ac_old_val_w=`echo x $ac_old_val`
    ac_new_val_w=`echo x $ac_new_val`
    if test "$ac_old_val_w" != "$ac_new_val_w"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: error: ``$ac_var' has
changed since the previous run:" >&5
$as_echo "$as_me: error: ``$ac_var' has changed since the previous
run:" >&2;}
        ac_cache_corrupted=:
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: warning: ignoring
whitespace changes in ``$ac_var' since the previous run:" >&5
$as_echo "$as_me: warning: ignoring whitespace changes in ``$ac_var'
since the previous run:" >&2;}
        eval $ac_var=\$ac_old_val
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: former value:
``$ac_old_val'" >&5
$as_echo "$as_me: former value: ``$ac_old_val'" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: current value:
``$ac_new_val'" >&5
$as_echo "$as_me: current value: ``$ac_new_val'" >&2;}
    fi;;
esac
# Pass precious variables to config.status.
if test "$ac_new_set" = set; then
    case $ac_new_val in
    *'*) ac_arg=$ac_var=`$as_echo "$ac_new_val" | sed
"s/'/'\|\\\\\\\\\\\\\|'/'/g"` ;;
    *) ac_arg=$ac_var=$ac_new_val ;;
    esac
    case " $ac_configure_args " in
    *" '$ac_arg' "*) ;; # Avoid dups. Use of quotes ensures
accuracy.
    *) as_fn_append ac_configure_args " '$ac_arg'" ;;
    esac
    fi
done
if $ac_cache_corrupted; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: error: in ``$ac_pwd':" >&5
$as_echo "$as_me: error: in ``$ac_pwd':" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: error: changes in the
environment can compromise the build" >&5
$as_echo "$as_me: error: changes in the environment can compromise the
build" >&2;}
    as_fn_error $? "run `make distclean' and/or `rm $cache_file' and
start over" "$LINENO" 5
fi
## ----- ##

```

```

## Main body of script. ##
## ----- ##

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

ac_aux_dir=
for ac_dir in "$srcdir" "$srcdir/.." "$srcdir/../../."; do
  if test -f "$ac_dir/install-sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install-sh -c"
    break
  elif test -f "$ac_dir/install.sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install.sh -c"
    break
  elif test -f "$ac_dir/shtool"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/shtool install -c"
    break
  fi
done
if test -z "$ac_aux_dir"; then
  as_fn_error $? "cannot find install-sh, install.sh, or shtool in
\"$srcdir\" \"$srcdir/..\" \"$srcdir/../../\"" "$LINENO" 5
fi

# These three variables are undocumented and unsupported,
# and are intended to be withdrawn in a future Autoconf release.
# They can cause serious problems if a builder's source tree is in a
directory
# whose full name contains unusual characters.
ac_config_guess="$SHELL $ac_aux_dir/config.guess" # Please don't use
this var.
ac_config_sub="$SHELL $ac_aux_dir/config.sub" # Please don't use this
var.
ac_configure="$SHELL $ac_aux_dir/configure" # Please don't use this
var.

# Make sure we can run config.sub.
$SHELL "$ac_aux_dir/config.sub" sun4 >/dev/null 2>&1 ||
  as_fn_error $? "cannot run $SHELL $ac_aux_dir/config.sub" "$LINENO"
5

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking build system type"
>&5
$as_echo_n "checking build system type... " >&6; }
if ${ac_cv_build+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_build_alias=$build_alias
test "x$ac_build_alias" = x &&
  ac_build_alias=`$SHELL "$ac_aux_dir/config.guess"`
test "x$ac_build_alias" = x &&
  as_fn_error $? "cannot guess build type; you must specify one"
"$LINENO" 5
ac_cv_build=`$SHELL "$ac_aux_dir/config.sub" $ac_build_alias` ||
  as_fn_error $? "$SHELL $ac_aux_dir/config.sub $ac_build_alias
failed" "$LINENO" 5

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_build" >&5
$as_echo "$ac_cv_build" >&6; }
case $ac_cv_build in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical build" "$LINENO" 5;;
esac
build=$ac_cv_build
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_build
shift
build_cpu=$1
build_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
build_os=$*
IFS=$ac_save_IFS
case $build_os in *\ *) build_os=`echo "$build_os" | sed 's/ /-/g'`;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking host system type"
>&5
$as_echo_n "checking host system type... " >&6; }
if ${ac_cv_host+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$host_alias" = x; then
    ac_cv_host=$ac_cv_build
  else
    ac_cv_host=`$SHELL "$ac_aux_dir/config.sub" $host_alias` ||
      as_fn_error $? "$SHELL $ac_aux_dir/config.sub $host_alias failed"
"$LINENO" 5
  fi
fi

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_host" >&5
$as_echo "$ac_cv_host" >&6; }
case $ac_cv_host in
*-*-* ) ;;
*) as_fn_error $? "invalid value of canonical host" "$LINENO" 5;;
esac
host=$ac_cv_host
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_host
shift
host_cpu=$1
host_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
host_os=$*
IFS=$ac_save_IFS
case $host_os in *\ *) host_os=`echo "$host_os" | sed 's/ /-/g'`;;
esac

am__api_version='1.12'

# Find a good install program.  We prefer a C program (faster),
# so one script is as good as another.  But avoid the broken or
# incompatible versions:
# SysV /etc/install, /usr/sbin/install
# SunOS /usr/etc/install
# IRIX /sbin/install
# AIX /bin/install
# AmigaOS /C/install, which installs bootblocks on floppy discs
# AIX 4 /usr/bin/installbsd, which doesn't work without a -g flag
# AFS /usr/afsws/bin/install, which mishandles nonexistent args
# SVR4 /usr/ucb/install, which tries to use the nonexistent group
"staff"
# OS/2's system install, which has a completely different semantic
# ./install, which can be erroneously created by make from
./install.sh.
# Reject install programs that cannot install multiple files.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a BSD-compatible
install" >&5
$as_echo_n "checking for a BSD-compatible install... " >&6; }
if test -z "$INSTALL"; then
if ${ac_cv_path_install+:} false; then :
  $as_echo_n "(cached) " >&6
else
  as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
  for as_dir in $PATH
  do
    IFS=$as_save_IFS

```

```

test -z "$as_dir" && as_dir=.
# Account for people who put trailing slashes in PATH elements.
case $as_dir/ in @%:@(
./ | ../ | /[cC]/* | \
/etc/* | /usr/sbin/* | /usr/etc/* | /sbin/* | /usr/afsws/bin/* | \
?:[\\/]os2[\\/]install[\\/] * | ?:[\\/]OS2[\\/]INSTALL[\\/] * | \
/usr/ucb/* ) ;;
*)
# OSF1 and SCO ODT 3.0 have their own names for install.
# Don't use installbsd from OSF since it installs stuff as root
# by default.
for ac_prog in ginstall scoinst install; do
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext"; then
      if test $ac_prog = install &&
        grep dspmsg "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
then
        # AIX install. It has an incompatible calling convention.
        :
      elif test $ac_prog = install &&
        grep pwplus "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
then
        # program-specific install script used by HP pwplus--don't
        use.
        :
      else
        rm -rf conftest.one conftest.two conftest.dir
        echo one > conftest.one
        echo two > conftest.two
        mkdir conftest.dir
        if "$as_dir/$ac_prog$ac_exec_ext" -c conftest.one
conftest.two "`pwd`/conftest.dir" &&
          test -s conftest.one && test -s conftest.two &&
          test -s conftest.dir/conftest.one &&
          test -s conftest.dir/conftest.two
        then
          ac_cv_path_install="$as_dir/$ac_prog$ac_exec_ext -c"
          break 3
        fi
      fi
    fi
  done
done
done
;;
esac

done
IFS=$as_save_IFS

rm -rf conftest.one conftest.two conftest.dir

fi

```



```

if test "${ac_cv_path_install+set}" = set; then
    INSTALL=$ac_cv_path_install
else
    # As a last resort, use the slow shell script.  Don't cache a
    # value for INSTALL within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    INSTALL=$ac_install_sh
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $INSTALL" >&5
$as_echo "$INSTALL" >&6; }

# Use test -z because SunOS4 sh mishandles braces in ${var-val}.
# It thinks the first close brace ends the variable substitution.
test -z "$INSTALL_PROGRAM" && INSTALL_PROGRAM='${INSTALL}'

test -z "$INSTALL_SCRIPT" && INSTALL_SCRIPT='${INSTALL}'

test -z "$INSTALL_DATA" && INSTALL_DATA='${INSTALL} -m 644'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether build
environment is sane" >&5
$as_echo_n "checking whether build environment is sane... " >&6; }
# Reject unsafe characters in $srcdir or the absolute working
directory
# name.  Accept space and tab only in the latter.
am_lf='
'
case `pwd` in
    *[\\"#\$\&'\` \ $am_lf]*)
        as_fn_error $? "unsafe absolute working directory name" "$LINENO"
5;;
esac
case $srcdir in
    *[\\"#\$\&'\` \ $am_lf\ \]*)
        as_fn_error $? "unsafe srcdir value: '$srcdir'" "$LINENO" 5;;
esac

# Do 'set' in a subshell so we don't clobber the current shell's
# arguments.  Must try -L first in case configure is actually a
# symlink; some systems play weird games with the mod time of symlinks
# (eg FreeBSD returns the mod time of the symlink's containing
# directory).
if (
    am_has_slept=no
    for am_try in 1 2; do
        echo "timestamp, slept: $am_has_slept" > conftest.file
        set X `ls -Lt "$srcdir/configure" conftest.file 2> /dev/null`
        if test "$*" = "X"; then
            # -L didn't work.
            set X `ls -t "$srcdir/configure" conftest.file`

```

```

fi
if test "$*" != "X $srcdir/configure conftest.file" \
  && test "$*" != "X conftest.file $srcdir/configure"; then

  # If neither matched, then we have a broken ls.  This can happen
  # if, for instance, CONFIG_SHELL is bash and it inherits a
  # broken ls alias from the environment.  This has actually
  # happened.  Such a system could not be considered "sane".
  as_fn_error $? "ls -t appears to fail.  Make sure there is not a
broken
alias in your environment" "$LINENO" 5
fi
if test "$2" = conftest.file || test $am_try -eq 2; then
  break
fi
# Just in case.
sleep 1
am_has_slept=yes
done
test "$2" = conftest.file
)
then
  # Ok.
  :
else
  as_fn_error $? "newly created file is older than distributed files!
Check your system clock" "$LINENO" 5
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
# If we didn't sleep, we still need to ensure time stamps of
config.status and
# generated files are strictly newer.
am_sleep_pid=
if grep 'slept: no' conftest.file >/dev/null 2>&1; then
  ( sleep 1 ) &
  am_sleep_pid=$!
fi

rm -f conftest.file

test "$program_prefix" != NONE &&

program_transform_name="s^&$program_prefix&;$program_transform_name"
# Use a double $ so make ignores it.
test "$program_suffix" != NONE &&

program_transform_name="s\&$program_suffix&;$program_transform_name"
# Double any \ or $.
# By default was `s,x,x', remove it if useless.
ac_script='s/[\\$]/&&/g;s;/s,x,x,$//'

```

```

program_transform_name=`$as_echo "$program_transform_name" | sed
"$ac_script"`

# expand $ac_aux_dir to an absolute path
am_aux_dir=`cd $ac_aux_dir && pwd`

if test x"${MISSING+set}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      MISSING="\${SHELL} \"$am_aux_dir/missing\"" ;;
    *)
      MISSING="\${SHELL} $am_aux_dir/missing" ;;
  esac
fi
# Use eval to expand $SHELL
if eval "$MISSING --run true"; then
  am_missing_run="$MISSING --run "
else
  am_missing_run=
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: 'missing' script
is too old or missing" >&5
$as_echo "$as_me: WARNING: 'missing' script is too old or missing"
>&2;}
fi

if test x"${install_sh}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      install_sh="\${SHELL} '$am_aux_dir/install-sh'" ;;
    *)
      install_sh="\${SHELL} $am_aux_dir/install-sh"
  esac
fi

# Installed binaries are usually stripped using 'strip' when the user
# run "make install-strip". However 'strip' might not be the right
# tool to use in cross-compilation environments, therefore Automake
# will honor the 'STRIP' environment variable to overrule this
program.
if test "$cross_compiling" != no; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$STRIP"; then
        ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
      else

```

```

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_STRIP="{ac_tool_prefix}strip"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
STRIP=$ac_cv_prog_STRIP
if test -n "$STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
$as_echo "$STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_STRIP"; then
  ac_ct_STRIP=$STRIP
  # Extract the first word of "strip", so it can be a program name
  with args.
  set dummy strip; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_STRIP"; then
      ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_STRIP="strip"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
if test -n "$ac_ct_STRIP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_STRIP" = x; then
        STRIP=":"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        STRIP=$ac_ct_STRIP
    fi
else
    STRIP="$ac_cv_prog_STRIP"
fi

fi
INSTALL_STRIP_PROGRAM="\$(install_sh) -c -s"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a thread-safe
mkdir -p" >&5
$as_echo_n "checking for a thread-safe mkdir -p... " >&6; }
if test -z "$MKDIR_P"; then
    if ${ac_cv_path_mkdir+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH$PATH_SEPARATOR/opt/sfw/bin
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_prog in mkdir gmkdir; do

```

```

    for ac_exec_ext in '' $ac_executable_extensions; do
      as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext" || continue
      case `"$as_dir/$ac_prog$ac_exec_ext" --version 2>&1` in #(
        'mkdir (GNU coreutils) '* | \
        'mkdir (coreutils) '* | \
        'mkdir (fileutils) '4.1*)
          ac_cv_path_mkdir=$as_dir/$ac_prog$ac_exec_ext
          break 3;;
        esac
      done
    done
done
IFS=$as_save_IFS

fi

test -d ./--version && rmdir ./--version
if test "${ac_cv_path_mkdir+set}" = set; then
  MKDIR_P="$ac_cv_path_mkdir -p"
else
  # As a last resort, use the slow shell script. Don't cache a
  # value for MKDIR_P within a source directory, because that will
  # break other packages using the cache if that directory is
  # removed, or if the value is a relative name.
  MKDIR_P="$ac_install_sh -d"
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $MKDIR_P" >&5
$as_echo "$MKDIR_P" >&6; }

for ac_prog in gawk mawk nawk awk
do
  # Extract the first word of "$ac_prog", so it can be a program name
  with args.
  set dummy $ac_prog; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_AWK+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$AWK"; then
      ac_cv_prog_AWK="$AWK" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_AWK="$ac_prog"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
AWK=$ac_cv_prog_AWK
if test -n "$AWK"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $AWK" >&5
$as_echo "$AWK" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$AWK" && break
done

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether ${MAKE-make}
sets \$(MAKE)" >&5
$as_echo_n "checking whether ${MAKE-make} sets \$(MAKE)... " >&6; }
set x ${MAKE-make}
ac_make=`$as_echo "$2" | sed 's/+/p/g; s/[^a-zA-Z0-9_]/_/g`
if eval `$(ac_cv_prog_make_${ac_make}_set+:) false; then :
    $as_echo_n "(cached) " >&6
else
    cat >confptest.make <<\_ACEOF
SHELL = /bin/sh
all:
    @echo '@@@%=%$(MAKE)=@@@%%'
_ ACEOF
# GNU make sometimes prints "make[1]: Entering ...", which would
confuse us.
case `$(MAKE-make) -f confptest.make 2>/dev/null` in
    *@@@%=?*=@@@%*)
        eval ac_cv_prog_make_${ac_make}_set=yes;;
    *)
        eval ac_cv_prog_make_${ac_make}_set=no;;
esac
rm -f confptest.make
fi
if eval test `$(ac_cv_prog_make_${ac_make}_set = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    SET_MAKE=
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }
  SET_MAKE="MAKE=${MAKE-make}"
fi

rm -rf .tst 2>/dev/null
mkdir .tst 2>/dev/null
if test -d .tst; then
  am__leading_dot=.
else
  am__leading_dot=_
fi
rmdir .tst 2>/dev/null

if test "`cd $srcdir && pwd`" != "`pwd`; then
  # Use -I$(srcdir) only when $(srcdir) != ., so that make's output
  # is not polluted with repeated "-I."
  am__isrc=' -I$(srcdir)'
  # test to see if srcdir already configured
  if test -f $srcdir/config.status; then
    as_fn_error $? "source directory already configured; run \"make
distclean\" there first" "$LINENO" 5
  fi
fi

# test whether we have cygpath
if test -z "$CYGPATH_W"; then
  if (cygpath --version) >/dev/null 2>/dev/null; then
    CYGPATH_W='cygpath -w'
  else
    CYGPATH_W=echo
  fi
fi

# Define the identity of the package.
PACKAGE='dbus-glib'
VERSION='0.100.2'

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE "$PACKAGE"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define VERSION "$VERSION"
_ACEOF

# Some tools Automake needs.

ACLOCAL=${ACLOCAL-"${am_missing_run}aclocal-${am__api_version}"}

```



```

AUTOCONF=${AUTOCONF-"${am_missing_run}autoconf"}

AUTOMAKE=${AUTOMAKE-"${am_missing_run}automake-${am__api_version}"}

AUTOHEADER=${AUTOHEADER-"${am_missing_run}autoheader"}

MAKEINFO=${MAKEINFO-"${am_missing_run}makeinfo"}

# For better backward compatibility.  To be removed once Automake
# 1.9.x
# dies out for good.  For more background, see:
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00001.html>
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00014.html>
mkdir_p='${MKDIR_P}'

# We need awk for the "check" target.  The system "awk" is bad on
# some platforms.
# Always define AMTAR for backward compatibility.  Yes, it's still
# used
# in the wild :-( We should find a proper way to deprecate it ...
AMTAR='${TAR-tar}'

am__tar='${TAR-tar} chof - "$$tardir"' am__untar='${TAR-tar} xf -'

ac_config_headers="$ac_config_headers config.h"

# Honor aclocal flags
ACLOCAL="$ACLOCAL $ACLOCAL_FLAGS"

## must come before we use the $USE_MAINTAINER_MODE variable later

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to enable
maintainer-specific portions of Makefiles" >&5
$as_echo_n "checking whether to enable maintainer-specific portions of
Makefiles... " >&6; }
  @%:@ Check whether --enable-maintainer-mode was given.
if test "${enable_maintainer_mode+set}" = set; then :
  enableval=$enable_maintainer_mode; USE_MAINTAINER_MODE=$enableval
else
  USE_MAINTAINER_MODE=no
fi

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$USE_MAINTAINER_MODE" >&5
$as_echo "$USE_MAINTAINER_MODE" >&6; }
    if test $USE_MAINTAINER_MODE = yes; then
        MAINTAINER_MODE_TRUE=
        MAINTAINER_MODE_FALSE='#'
    else
        MAINTAINER_MODE_TRUE='#'
        MAINTAINER_MODE_FALSE=
    fi

    MAINT=$MAINTAINER_MODE_TRUE

@%:@ Check whether --enable-silent-rules was given.
if test "${enable_silent_rules+set}" = set; then :
    enableval=$enable_silent_rules;
fi

case $enable_silent_rules in @%:@ (((
    yes) AM_DEFAULT_VERBOSITY=0;;
    no) AM_DEFAULT_VERBOSITY=1;;
    *) AM_DEFAULT_VERBOSITY=0;;
esac
am_make=${MAKE-make}
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $am_make
supports nested variables" >&5
$as_echo_n "checking whether $am_make supports nested variables... "
>&6; }
if ${am_cv_make_support_nested_variables+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if $as_echo 'TRUE=$(BAR$(V))
BAR0=false
BAR1=true
V=1
am__doit:
    @$(TRUE)
.PHONY: am__doit' | $am_make -f - >/dev/null 2>&1; then
    am_cv_make_support_nested_variables=yes
else
    am_cv_make_support_nested_variables=no
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_make_support_nested_variables" >&5
$as_echo "$am_cv_make_support_nested_variables" >&6; }
if test $am_cv_make_support_nested_variables = yes; then
    AM_V='$ (V) '
    AM_DEFAULT_V='$ (AM_DEFAULT_VERBOSITY) '

```

```

else
  AM_V=$AM_DEFAULT_VERBOSITY
  AM_DEFAULT_V=$AM_DEFAULT_VERBOSITY
fi
AM_BACKSLASH='\ '

# libtool versioning - this applies to libdbus
#
# See
http://sources.redhat.com/autobook/autobook/autobook\_91.html#SEC91 for
details
#

## increment if the interface has additions, changes, removals.
LT_CURRENT=4

## increment any time the source changes; set to
## 0 if you increment CURRENT
LT_REVISION=2

## increment if any interfaces have been added; set to 0
## if any interfaces have been changed or removed. removal has
## precedence over adding, so set to 0 if both happened.
LT_AGE=2

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}gcc", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$CC"; then
      ac_cv_prog_CC="$CC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_CC="$ac_tool_prefix/gcc"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_CC"; then
  ac_ct_CC=$CC
  # Extract the first word of "gcc", so it can be a program name with
  args.
  set dummy gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_CC"; then
      ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
          for ac_exec_ext in '' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_ac_ct_CC="gcc"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
      done
    fi
  fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test "x$ac_ct_CC" = x; then
  CC=""
else
  case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
  CC=$ac_ct_CC
fi
else
  CC="$ac_cv_prog_CC"
fi

if test -z "$CC"; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}cc", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}cc; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_CC+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$CC"; then
        ac_cv_prog_CC="$CC" # Let the user override the test.
      else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_CC="${ac_tool_prefix}cc"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    fi
fi
if test -z "$CC"; then
    # Extract the first word of "cc", so it can be a program name with
    args.
    set dummy cc; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_CC+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$CC"; then
            ac_cv_prog_CC="$CC" # Let the user override the test.
        else
            ac_prog_rejected=no
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '$ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        if test "$as_dir/$ac_word$ac_exec_ext" = "/usr/ucb/cc"; then
                            ac_prog_rejected=yes
                            continue
                        fi
                    fi
                done
                ac_cv_prog_CC="cc"
                $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                break 2
            fi
        done

```

```

done
IFS=$as_save_IFS

if test $ac_prog_rejected = yes; then
  # We found a bogon in the path, so make sure we never use it.
  set dummy $ac_cv_prog_CC
  shift
  if test $@%:@ != 0; then
    # We chose a different compiler from the bogus one.
    # However, it has the same basename, so the bogon will be chosen
    # first if we set CC to just the basename; use the full file name.
    shift
    ac_cv_prog_CC="$as_dir/$ac_word${1+' '}$@"
  fi
fi
fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$CC"; then
  if test -n "$ac_tool_prefix"; then
    for ac_prog in cl.exe
    do
      # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
      be a program name with args.
      set dummy $ac_tool_prefix$ac_prog; ac_word=$2
      { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
      if ${ac_cv_prog_CC+:} false; then :
        $as_echo_n "(cached) " >&6
      else
        if test -n "$CC"; then
          ac_cv_prog_CC="$CC" # Let the user override the test.
        else
          as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
          for as_dir in $PATH
          do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_exec_ext in ' $ac_executable_extensions; do
              if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                ac_cv_prog_CC="$ac_tool_prefix$ac_prog"
              fi
            done
          done
        fi
      fi
    done
  fi
fi

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$CC" && break
done
fi
if test -z "$CC"; then
    ac_ct_CC=$CC
    for ac_prog in cl.exe
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_CC+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_CC"; then
        ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_ac_ct_CC="$ac_prog"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done

```



```

IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_CC" && break
done

  if test "x$ac_ct_CC" = x; then
    CC=""
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    CC=$ac_ct_CC
  fi
fi

fi

test -z "$CC" && { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "no acceptable C compiler found in $PATH
See `config.log' for more details" "$LINENO" 5; }

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\"* | *\`* | *\\*) ac_try_echo=\`$ac_try`;
  *) ac_try_echo=$ac_try;;
esac

```

```

eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>confptest.err
  ac_status=$?
  if test -s confptest.err; then
    sed '10a\
... rest of stderr output deleted ...
    10q' confptest.err >confptest.er1
    cat confptest.er1 >&5
  fi
  rm -f confptest.er1 confptest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }
done

cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
/* end confdefs.h. */

int
main ()
{
    ;
    return 0;
}
_ACEOF
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files a.out a.out.dSYM a.exe b.out"
# Try to create an executable without -o first, disregard a.out.
# It will help us diagnose broken compilers, and finding out an
intuition
# of exeext.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
compiler works" >&5
$as_echo_n "checking whether the C compiler works... " >&6; }
ac_link_default=`$as_echo "$ac_link" | sed 's/ -o *confptest[^\ ]*//'`

# The possible output files:
ac_files="a.out confptest.exe confptest a.exe a_out.exe b.out
confptest.*"

ac_rmfiles=
for ac_file in $ac_files
do
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    * ) ac_rmfiles="$ac_rmfiles $ac_file";;
  esac
done
rm -f $ac_rmfiles

```

```

if { { ac_try="$ac_link_default"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
(eval "$ac_link_default") 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
test $ac_status = 0; }; then :
# Autoconf-2.13 could set the ac_cv_exeext variable to `no'.
# So ignore a value of `no', otherwise this would lead to `EXEEXT =
no'
# in a Makefile. We should not override ac_cv_exeext if it was
cached,
# so that the user can short-circuit this test for compilers unknown
to
# Autoconf.
for ac_file in $ac_files ''
do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj )
      ;;
    [ab].out )
      # We found the default executable, but exeext='' is most
      # certainly right.
      break;;
    *.* )
      if test "${ac_cv_exeext+set}" = set && test "$ac_cv_exeext" !=
no;
      then ;; else
        ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)'`
      fi
      # We set ac_cv_exeext here because the later test for it is not
      # safe: cross compilers may not add the suffix if given an `-o'
      # argument, so we may need to know it at that point already.
      # Even if this section looks crufty: it has the advantage of
      # actually working.
      break;;
    * )
      break;;
  esac
done
test "$ac_cv_exeext" = no && ac_cv_exeext=

else
  ac_file=''
fi
if test -z "$ac_file"; then :

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':" >&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "C compiler cannot create executables
See `config.log' for more details" "$LINENO" 5; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
default output file name" >&5
$as_echo_n "checking for C compiler default output file name... " >&6;
}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_file" >&5
$as_echo "$ac_file" >&6; }
ac_exeext=$ac_cv_exeext

rm -f -r a.out a.out.dSYM a.exe conftest$ac_cv_exeext b.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of
executables" >&5
$as_echo_n "checking for suffix of executables... " >&6; }
if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; then :
  # If both `conftest.exe' and `conftest' are `present' (well,
observable)
  # catch `conftest.exe'. For instance with Cygwin, `ls conftest' will
  # work properly (i.e., refer to `conftest.exe'), while it won't with
  # `rm'.
for ac_file in conftest.exe conftest conftest.*; do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    *.* ) ac_cv_exeext=`expr "$ac_file" : '[^.]*(\\..*)'`
      break;;
    * ) break;;
  esac
done

```

```

else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
  >&5
  $as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
  as_fn_error $? "cannot compute suffix of executables: cannot compile
  and link
  See \`config.log' for more details" "$LINENO" 5; }
fi
rm -f confptest confptest$ac_cv_exeext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_exeext" >&5
$as_echo "$ac_cv_exeext" >&6; }

rm -f confptest.$ac_ext
EXEEXT=$ac_cv_exeext
ac_exeext=$EXEEXT
cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
@%:@include <stdio.h>
int
main ()
{
FILE *f = fopen ("confptest.out", "w");
  return ferror (f) || fclose (f) != 0;

  ;
  return 0;
}
_ACEOF
ac_clean_files="$ac_clean_files confptest.out"
# Check that the compiler produces executables we can run.  If not,
either
# the compiler is broken, or we cross compile.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are cross
compiling" >&5
$as_echo_n "checking whether we are cross compiling... " >&6; }
if test "$cross_compiling" != yes; then
  { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
  test $ac_status = 0; }
  if { ac_try='./confptest$ac_cv_exeext'
  { { case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac

```

```

eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; }; then
    cross_compiling=no
  else
    if test "$cross_compiling" = maybe; then
      cross_compiling=yes
    else
      { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`$ac_pwd':"
>&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "cannot run C compiled programs.
If you meant to cross compile, use \`--host'.
See \`config.log' for more details" "$LINENO" 5; }
    fi
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $cross_compiling" >&5
$as_echo "$cross_compiling" >&6; }

rm -f conftest.$ac_ext conftest$ac_cv_exeext conftest.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of object
files" >&5
$as_echo_n "checking for suffix of object files... " >&6; }
if ${ac_cv_objext+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
rm -f conftest.o conftest.obj
if { { ac_try="$ac_compile"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\`$ac_try;
  *) ac_try_echo=$ac_try;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compile") 2>&5
  ac_status=$?

```

```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then :
for ac_file in conftest.o conftest.obj conftest.*; do
test -f "$ac_file" || continue;
case $ac_file in
*. $ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM ) ;;
*) ac_cv_objext=`expr "$ac_file" : '.*\.(.*)'`
break;;
esac
done
else
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in ` $ac_pwd':" >&5
$as_echo "$as_me: error: in ` $ac_pwd':" >&2;}
as_fn_error $? "cannot compute suffix of object files: cannot compile
See `config.log' for more details" "$LINENO" 5; }
fi
rm -f conftest.$ac_cv_objext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_objext" >&5
$as_echo "$ac_cv_objext" >&6; }
OBJEXT=$ac_cv_objext
ac_objext=$OBJEXT
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C compiler" >&5
$as_echo_n "checking whether we are using the GNU C compiler... " >&6;
}
if ${ac_cv_c_compiler_gnu+:} false; then :
$as_echo_n "(cached) " >&6
else
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{
#ifdef __GNUC__
choke me
#endif

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_compiler_gnu=yes
else
ac_compiler_gnu=no
fi

```

```

rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_c_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_c_compiler_gnu" >&5
$as_echo "$ac_cv_c_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
  GCC=yes
else
  GCC=
fi
ac_test_CFLAGS=${CFLAGS+set}
ac_save_CFLAGS=$CFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC accepts
-g" >&5
$as_echo_n "checking whether $CC accepts -g... " >&6; }
if ${ac_cv_prog_cc_g+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_save_c_werror_flag=$ac_c_werror_flag
  ac_c_werror_flag=yes
  ac_cv_prog_cc_g=no
  CFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_prog_cc_g=yes
else
  CFLAGS=""
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :

```



```

else
  ac_c_werror_flag=$ac_save_c_werror_flag
  CFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_prog_cc_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  ac_c_werror_flag=$ac_save_c_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cc_g" >&5
$as_echo "$ac_cv_prog_cc_g" >&6; }
if test "$ac_test_CFLAGS" = set; then
  CFLAGS=$ac_save_CFLAGS
elif test $ac_cv_prog_cc_g = yes; then
  if test "$GCC" = yes; then
    CFLAGS="-g -O2"
  else
    CFLAGS="-g"
  fi
else
  if test "$GCC" = yes; then
    CFLAGS="-O2"
  else
    CFLAGS=
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $CC option to
accept ISO C89" >&5
$as_echo_n "checking for $CC option to accept ISO C89... " >&6; }
if ${ac_cv_prog_cc_c89+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_cv_prog_cc_c89=no
ac_save_CC=$CC
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>

```

```

#include <stdio.h>
struct stat;
/* Most of the following tests are stolen from RCS 5.7's src/conf.sh.
*/
struct buf { int x; };
FILE * (*rcsopen) (struct buf *, struct stat *, int);
static char *e (p, i)
    char **p;
    int i;
{
    return p[i];
}
static char *f (char * (*g) (char **, int), char **p, ...)
{
    char *s;
    va_list v;
    va_start (v,p);
    s = g (p, va_arg (v,int));
    va_end (v);
    return s;
}

/* OSF 4.0 Compaq cc is some sort of almost-ANSI by default.  It has
function prototypes and stuff, but not '\xHH' hex character
constants.
These don't provoke an error unfortunately, instead are silently
treated
as 'x'.  The following induces an error, until -std is added to get
proper ANSI mode.  Curiously '\x00'!='x' always comes out true, for
an
array size at least.  It's necessary to write '\x00'==0 to get
something
that's true only with -std.  */
int osf4_cc_array ['\x00' == 0 ? 1 : -1];

/* IBM C 6 for AIX is almost-ANSI by default, but it replaces macro
parameters
inside strings and character constants.  */
#define FOO(x) 'x'
int xlc6_cc_array[FOO(a) == 'x' ? 1 : -1];

int test (int i, double x);
struct s1 {int (*f) (int a);};
struct s2 {int (*f) (double a);};
int pairnames (int, char **, FILE * (*)(struct buf *, struct stat *,
int), int, int);
int argc;
char **argv;
int
main ()
{
return f (e, argv, 0) != argv[0] || f (e, argv, 1) != argv[1];
}

```

```

;
return 0;
}
_ACEOF
for ac_arg in ' -qlanglvl=extc89 -qlanglvl=ansi -std \
  -Ae "-Aa -D_HPUX_SOURCE" "-Xc -D__EXTENSIONS__"
do
  CC="$ac_save_CC $ac_arg"
  if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_c89=$ac_arg
  fi
  rm -f core conftest.err conftest.$ac_objext
  test "x$ac_cv_prog_cc_c89" != "xno" && break
done
rm -f conftest.$ac_ext
CC=$ac_save_CC

fi
# AC_CACHE_VAL
case "x$ac_cv_prog_cc_c89" in
  x)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: none needed" >&5
$as_echo "none needed" >&6; } ;;
  xno)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: unsupported" >&5
$as_echo "unsupported" >&6; } ;;
  *)
    CC="$CC $ac_cv_prog_cc_c89"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_prog_cc_c89" >&5
$as_echo "$ac_cv_prog_cc_c89" >&6; } ;;
esac
if test "x$ac_cv_prog_cc_c89" != xno; then :

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
DEPDIR="${am__leading_dot}deps"

ac_config_commands="$ac_config_commands depfiles"

am_make=${MAKE-make}
cat > confinc << 'END'
am__doit:
  @echo this is the am__doit target
.PHONY: am__doit

```

```

END
# If we don't find an include directive, just comment out the code.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for style of include
used by $am_make" >&5
$as_echo_n "checking for style of include used by $am_make... " >&6; }
am__include="#"
am__quote=
_am_result=none
# First try GNU make style include.
echo "include confinc" > confmf
# Ignore all kinds of additional output from 'make'.
case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
  am__include=include
  am__quote=
  _am_result=GNU
  ;;
esac
# Now try BSD make style include.
if test "$am__include" = "#"; then
  echo '.include "confinc"' > confmf
  case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
    am__include=.include
    am__quote=""
    _am_result=BSD
    ;;
  esac
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $_am_result" >&5
$as_echo "$_am_result" >&6; }
rm -f confinc confmf

@%:@ Check whether --enable-dependency-tracking was given.
if test "${enable_dependency_tracking}" = set; then :
  enableval=$enable_dependency_tracking;
fi

if test "x$enable_dependency_tracking" != xno; then
  am_depcomp="$ac_aux_dir/depcomp"
  AMDEPBACKSLASH='\'
  am__nodep='_no'
fi
if test "x$enable_dependency_tracking" != xno; then
  AMDEP_TRUE=
  AMDEP_FALSE='#'
else
  AMDEP_TRUE='#'
  AMDEP_FALSE=
fi

```

```

depcc="$CC"    am_compiler_list=

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$as_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CC_dependencies_compiler_type+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$SAMDEP_TRUE" && test -f "$am_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf confptest.dir
    mkdir confptest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$am_depcomp" confptest.dir
    cd confptest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.
    mkdir sub

    am_cv_CC_dependencies_compiler_type=none
    if test "$am_compiler_list" = ""; then
      am_compiler_list=`sed -n 's/^#*\([a-zA-Z0-9]*\))$/\1/p' <
./depcomp`
    fi
    am_universal=false
    case " $depcc " in #(
      *\ -arch\ *\ -arch\ *) am_universal=true ;;
    esac

    for depmode in $am_compiler_list; do
      # Setup a source with many dependencies, because some compilers
      # like to wrap large dependency lists on column 80 (with \), and
      # we should not choose a depcomp mode which is confused by this.
      #
      # We need to recreate these files for each test, as the compiler
may
      # overwrite some of them when testing with obscure command lines.
      # This happens at least with the AIX C compiler.
      : > sub/confptest.c

```

```

for i in 1 2 3 4 5 6; do
    echo '#include "conftst'$i'.h"' >> sub/conftest.c
    # Using ": > sub/conftst$i.h" creates only sub/conftst1.h with
    # Solaris 10 /bin/sh.
    echo '/* dummy */' > sub/conftst$i.h
done
echo "${am__include} ${am__quote}sub/conftest.Po${am__quote}" >
confmf

# We check with '-c' and '-o' for the sake of the "dashmstdout"
# mode. It turns out that the SunPro C++ compiler does not
properly
# handle '-M -o', and we need to detect this. Also, some Intel
# versions had trouble with output in subdirs.
am__obj=sub/conftest.${OBJEXT-o}
am__minus_obj="-o $am__obj"
case $depmode in
gcc)
    # This depmode causes a compiler race in universal mode.
    test "$am__universal" = false || continue
    ;;
nosideeffect)
    # After this tag, mechanisms are not by side-effect, so they'll
    # only be used when explicitly requested.
    if test "x$enable_dependency_tracking" = xyes; then
        continue
    else
        break
    fi
    ;;
msvc7 | msvc7msys | msvisualcpp | msvcmsys)
    # This compiler won't grok '-c -o', but also, the minuso test
has
    # not run yet. These depmodes are late enough in the game, and
    # so weak that their functioning should not be impacted.
    am__obj=conftest.${OBJEXT-o}
    am__minus_obj=
    ;;
none) break ;;
esac
if depmode=$depmode \
    source=sub/conftest.c object=$am__obj \
    depfile=sub/conftest.Po tmpdepfile=sub/conftest.TPo \
    $SHELL ./depcomp $depcc -c $am__minus_obj sub/conftest.c \
    >/dev/null 2>conftest.err &&
    grep sub/conftst1.h sub/conftest.Po > /dev/null 2>&1 &&
    grep sub/conftst6.h sub/conftest.Po > /dev/null 2>&1 &&
    grep $am__obj sub/conftest.Po > /dev/null 2>&1 &&
    ${MAKE-make} -s -f confmf > /dev/null 2>&1; then
    # icc doesn't choke on unknown options, it will just issue
warnings

```

```

        # or remarks (even with -Werror). So we grep stderr for any
message
        # that says an option was ignored or not supported.
        # When given -MP, icc 7.0 and 7.1 complain thusly:
        #   icc: Command line warning: ignoring option '-M'; no argument
required
        # The diagnosis changed in icc 8.0:
        #   icc: Command line remark: option '-MP' not supported
        if (grep 'ignoring option' conftest.err ||
            grep 'not supported' conftest.err) >/dev/null 2>&1; then ;;
else
        am_cv_CC_dependencies_compiler_type=$depmode
        break
    fi
fi
done

    cd ..
    rm -rf conftest.dir
else
    am_cv_CC_dependencies_compiler_type=none
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CC_dependencies_compiler_type" >&5
$as_echo "$am_cv_CC_dependencies_compiler_type" >&6; }
CCDEPMODE=depmode=$am_cv_CC_dependencies_compiler_type

if
    test "x$enable_dependency_tracking" != xno \
    && test "$am_cv_CC_dependencies_compiler_type" = gcc3; then
    am__fastdepCC_TRUE=
    am__fastdepCC_FALSE='#'
else
    am__fastdepCC_TRUE='#'
    am__fastdepCC_FALSE=
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing strerror" >&5
$as_echo_n "checking for library containing strerror... " >&6; }
if ${ac_cv_search_strerror+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_func_search_save_LIBS=$LIBS
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.

```

```

    Use char because int might match the return type of a GCC
    builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char strerror ();
int
main ()
{
return strerror ();
    ;
    return 0;
}
__ACEOF
for ac_lib in ' cposix; do
    if test -z "$ac_lib"; then
        ac_res="none required"
    else
        ac_res=-l$ac_lib
        LIBS="-l$ac_lib $ac_func_search_save_LIBS"
    fi
    if ac_fn_c_try_link "$LINENO"; then :
        ac_cv_search_strerror=$ac_res
    fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
    if ${ac_cv_search_strerror+:} false; then :
        break
    fi
done
if ${ac_cv_search_strerror+:} false; then :

else
    ac_cv_search_strerror=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_strerror" >&5
$as_echo "$ac_cv_search_strerror" >&6; }
ac_res=$ac_cv_search_strerror
if test "$ac_res" != no; then :
    test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'

```



```

ac_compiler_gnu=$ac_cv_c_compiler_gnu
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to run the C
preprocessor" >&5
$as_echo_n "checking how to run the C preprocessor... " >&6; }
# On Suns, sometimes $CPP names a directory.
if test -n "$CPP" && test -d "$CPP"; then
  CPP=
fi
if test -z "$CPP"; then
  if ${ac_cv_prog_CPP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    # Double quotes because CPP needs to be expanded
    for CPP in "$CC -E" "$CC -E -traditional-cpp" "/lib/cpp"
    do
      ac_preproc_ok=false
      for ac_c_preproc_warn_flag in ' yes
do
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
  # <limits.h> exists even on freestanding compilers.
  # On the NeXT, cc -E runs the code through the compiler's parser,
  # not just through cpp. "Syntax error" is here to catch this case.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
          Syntax error
        _ACEOF
      if ac_fn_c_try_cpp "$LINENO"; then :
    else
      # Broken: fails on valid input.
      continue
    fi
    rm -f conftest.err conftest.i conftest.$ac_ext

    # OK, works on sane cases.  Now check whether nonexistent headers
    # can be detected and how.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
        _ACEOF
      if ac_fn_c_try_cpp "$LINENO"; then :
    # Broken: success on invalid input.
    continue
  else
    # Passes both tests.

```

```

ac_preproc_ok=:
break
fi
rm -f confptest.err confptest.i confptest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :
    break
fi

    done
    ac_cv_prog_CPP=$CPP

fi
    CPP=$ac_cv_prog_CPP
else
    ac_cv_prog_CPP=$CPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CPP" >&5
$as_echo "$CPP" >&6; }
ac_preproc_ok=false
for ac_c_preproc_warn_flag in '' yes
do
    # Use a header file that comes with gcc, so configuring glibc
    # with a fresh cross-compiler works.
    # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
    # <limits.h> exists even on freestanding compilers.
    # On the NeXT, cc -E runs the code through the compiler's parser,
    # not just through cpp. "Syntax error" is here to catch this case.
    cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
                Syntax error

    _ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :

else
    # Broken: fails on valid input.
continue
fi
rm -f confptest.err confptest.i confptest.$ac_ext

    # OK, works on sane cases. Now check whether nonexistent headers
    # can be detected and how.
    cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */

```

```

@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
  # Broken: success on invalid input.
  continue
else
  # Passes both tests.
  ac_preproc_ok=:
  break
fi
rm -f confptest.err confptest.i confptest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :

else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
  >&5
  $as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
  as_fn_error $? "C preprocessor `'$CPP\' fails sanity check
  See `config.log' for more details" "$LINENO" 5; }
fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS confptest.$ac_ext >&5'
ac_link='$CC -o confptest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
confptest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for grep that
handles long lines and -e" >&5
$as_echo_n "checking for grep that handles long lines and -e... " >&6;
}
if ${ac_cv_path_GREP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$GREP"; then
    ac_path_GREP_found=false
    # Loop through the user's path and test for each of PROGRAMME-LIST
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in grep ggrep; do
        for ac_exec_ext in ' $ac_executable_extensions; do
          ac_path_GREP="$as_dir/$ac_prog$ac_exec_ext"
          as_fn_executable_p "$ac_path_GREP" || continue
        done
      done
    done
  fi

```

```

# Check for GNU ac_path_GREP and select it if it is found.
# Check for GNU $ac_path_GREP
case `"$ac_path_GREP" --version 2>&1` in
*GNU*)
  ac_cv_path_GREP="$ac_path_GREP" ac_path_GREP_found=;;
*)
  ac_count=0
  $as_echo_n 0123456789 >"confptest.in"
  while :
  do
    cat "confptest.in" "confptest.in" >"confptest.tmp"
    mv "confptest.tmp" "confptest.in"
    cp "confptest.in" "confptest.nl"
    $as_echo 'GREP' >> "confptest.nl"
    "$ac_path_GREP" -e 'GREP$' -e '-(cannot match)-' < "confptest.nl"
  >"confptest.out" 2>/dev/null || break
  diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
  as_fn_arith $ac_count + 1 && ac_count=$as_val
  if test $ac_count -gt ${ac_path_GREP_max-0}; then
    # Best one so far, save it but keep looking for a better one
    ac_cv_path_GREP="$ac_path_GREP"
    ac_path_GREP_max=$ac_count
  fi
  # 10*(2^10) chars as input seems more than enough
  test $ac_count -gt 10 && break
done
rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

  $ac_path_GREP_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_GREP"; then
  as_fn_error $? "no acceptable grep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
  ac_cv_path_GREP=$GREP
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_GREP" >&5
$as_echo "$ac_cv_path_GREP" >&6; }
GREP="$ac_cv_path_GREP"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for egrep" >&5
$as_echo_n "checking for egrep... " >&6; }
if ${ac_cv_path_EGREP+:} false; then :
  $as_echo_n "(cached) " >&6

```

```

else
  if echo a | $GREP -E '(a|b)' >/dev/null 2>&1
  then ac_cv_path_EGREP="$GREP -E"
  else
    if test -z "$EGREP"; then
      ac_path_EGREP_found=false
      # Loop through the user's path and test for each of PROGNAMES_LIST
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_prog in egrep; do
          for ac_exec_ext in '' $ac_executable_extensions; do
            ac_path_EGREP="$as_dir/$ac_prog$ac_exec_ext"
            as_fn_executable_p "$ac_path_EGREP" || continue
          # Check for GNU ac_path_EGREP and select it if it is found.
          # Check for GNU $ac_path_EGREP
          case `"$ac_path_EGREP" --version 2>&1` in
          *GNU*)
            ac_cv_path_EGREP="$ac_path_EGREP" ac_path_EGREP_found=:;
          *)
            ac_count=0
            $as_echo_n 0123456789 >"confptest.in"
            while :
            do
              cat "confptest.in" "confptest.in" >"confptest.tmp"
              mv "confptest.tmp" "confptest.in"
              cp "confptest.in" "confptest.nl"
              $as_echo 'EGREP' >> "confptest.nl"
              "$ac_path_EGREP" 'EGREP$' < "confptest.nl" >"confptest.out"
            2>/dev/null || break
              diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
              as_fn_arith $ac_count + 1 && ac_count=$as_val
              if test $ac_count -gt ${ac_path_EGREP_max-0}; then
                # Best one so far, save it but keep looking for a better one
                ac_cv_path_EGREP="$ac_path_EGREP"
                ac_path_EGREP_max=$ac_count
              fi
              # 10*(2^10) chars as input seems more than enough
              test $ac_count -gt 10 && break
            done
            rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
          esac

          $ac_path_EGREP_found && break 3
        done
      done
    done
  done
  IFS=$as_save_IFS
  if test -z "$ac_cv_path_EGREP"; then

```

```

    as_fn_error $? "no acceptable egrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
    fi
else
    ac_cv_path_EGREP=$EGREP
fi

    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_EGREP"
>&5
$as_echo "$ac_cv_path_EGREP" >&6; }
EGREP="$ac_cv_path_EGREP"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$as_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_header_stdcl=yes
else
    ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test $ac_cv_header_stdcl = yes; then
    # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
    $EGREP "memchr" >/dev/null 2>&1; then :

```

```

else
    ac_cv_header_stdcl=no
fi
rm -f confctest*

fi

if test $ac_cv_header_stdcl = yes; then
    # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
    cat confdefs.h - <<_ACEOF >confctest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>

_ACEOF
if (eval "$ac_cpp confctest.$ac_ext" 2>&5 |
    $EGREP "free" >/dev/null 2>&1; then :

else
    ac_cv_header_stdcl=no
fi
rm -f confctest*

fi

if test $ac_cv_header_stdcl = yes; then
    # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
    if test "$cross_compiling" = yes; then :
    else
        cat confdefs.h - <<_ACEOF >confctest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0x0FF) == 0x020)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
        (('a' <= (c) && (c) <= 'i' \
         || ('j' <= (c) && (c) <= 'r' \
         || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
    int i;
    for (i = 0; i < 256; i++)

```

```

        if (XOR (islower (i), ISLOWER (i))
            || toupper (i) != TOUPPER (i))
            return 2;
        return 0;
    }
    _ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
    ac_cv_header_stdc=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdc"
>&5
$as_echo "$ac_cv_header_stdc" >&6; }
if test $ac_cv_header_stdc = yes; then

$as_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

@%:@ Check whether --enable-tests was given.
if test "${enable_tests+set}" = set; then :
    enableval=$enable_tests; enable_tests=$enableval
else
    enable_tests=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-ansi was given.
if test "${enable_ansi+set}" = set; then :
    enableval=$enable_ansi; enable_ansi=$enableval
else
    enable_ansi=no
fi

@%:@ Check whether --enable-verbose-mode was given.
if test "${enable_verbose_mode+set}" = set; then :
    enableval=$enable_verbose_mode; enable_verbose_mode=$enableval
else
    enable_verbose_mode=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-asserts was given.
if test "${enable_asserts+set}" = set; then :
    enableval=$enable_asserts; enable_asserts=$enableval
else

```



```

    enable_asserts=$USE_MAINTAINER_MODE
fi

@%:@ Check whether --enable-checks was given.
if test "${enable_checks+set}" = set; then :
    enableval=$enable_checks; enable_checks=$enableval
else
    enable_checks=yes
fi

@%:@ Check whether --enable-gcov was given.
if test "${enable_gcov+set}" = set; then :
    enableval=$enable_gcov; enable_gcov=$enableval
else
    enable_gcov=no
fi

@%:@ Check whether --enable-bash-completion was given.
if test "${enable_bash_completion+set}" = set; then :
    enableval=$enable_bash_completion; enable_bash_completion=$enableval
else
    enable_bash_completion=yes
fi

@%:@ Check whether --with-test-socket-dir was given.
if test "${with_test_socket_dir+set}" = set; then :
    withval=$with_test_socket_dir;
fi

@%:@ Check whether --with-introspect-xml was given.
if test "${with_introspect_xml+set}" = set; then :
    withval=$with_introspect_xml;
fi

    if test x$enable_bash_completion = xyes; then
        DBUS_BASH_COMPLETION_TRUE=
        DBUS_BASH_COMPLETION_FALSE='#'
    else
        DBUS_BASH_COMPLETION_TRUE='#'
        DBUS_BASH_COMPLETION_FALSE=
    fi

if test x$enable_bash_completion = xyes; then

$as_echo "@%:@define DBUS_BASH_COMPLETION 1" >>confdefs.h

```

```
fi

if test x$enable_verbose_mode = xyes; then

$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h

fi

@%:@ Check whether --with-dbus-binding-tool was given.
if test "${with_dbus_binding_tool+set}" = set; then :
  withval=$with_dbus_binding_tool; DBUS_BINDING_TOOL=$withval
else
  DBUS_BINDING_TOOL=\$(top_builddir)/dbus/dbus-binding-tool
fi

  if test x$enable_tests = xyes; then
    DBUS_BUILD_TESTS_TRUE=
    DBUS_BUILD_TESTS_FALSE='#'
  else
    DBUS_BUILD_TESTS_TRUE='#'
    DBUS_BUILD_TESTS_FALSE=
  fi

if test x$enable_tests = xyes; then

$as_echo "@%:@define DBUS_BUILD_TESTS 1" >>confdefs.h

fi

if test x$enable_verbose_mode = xyes; then

$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h

fi
if test x$enable_asserts = xno; then

$as_echo "@%:@define DBUS_DISABLE_ASSERT 1" >>confdefs.h

$as_echo "@%:@define G_DISABLE_ASSERT 1" >>confdefs.h

fi
if test x$enable_checks = xno; then

$as_echo "@%:@define DBUS_DISABLE_CHECKS 1" >>confdefs.h

$as_echo "@%:@define G_DISABLE_CHECKS 1" >>confdefs.h
```

```

fi

#### gcc warning flags

if test "x$GCC" = "xyes"; then

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether gcc
understands -Wfloat-equal" >&5
$as_echo_n "checking whether gcc understands -Wfloat-equal... " >&6; }

    ac_save_CFLAGS="$CFLAGS"
    CFLAGS="$CFLAGS -Wfloat-equal"

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

    _ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cc_flag=yes
else
    ac_cc_flag=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$ac_save_CFLAGS"

    if test "x$ac_cc_flag" = "xyes"; then
        ac_flag_float_equal=yes
    else
        ac_flag_float_equal=no
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cc_flag" >&5
$as_echo "$ac_cc_flag" >&6; }

    case " $CFLAGS " in
*[\ \ ]-Wall[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wall" ;;
esac

    case " $CFLAGS " in
*[\ \ ]-Wchar-subscripts[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wchar-subscripts" ;;
esac

    case " $CFLAGS " in
*[\ \ ]-Wmissing-declarations[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wmissing-declarations" ;;
esac

```

```

case " $CFLAGS " in
*[\ \ ]-Wmissing-prototypes[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wmissing-prototypes" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wnested-externs[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wnested-externs" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wpointer-arith[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wpointer-arith" ;;
esac

case " $CFLAGS " in
*[\ \ ]-Wcast-align[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wcast-align" ;;
esac

if test "x$ac_flag_float_equal" = "xyes"; then
  case " $CFLAGS " in
  *[\ \ ]-Wfloat-equal[\ \ ]*) ;;
  *) CFLAGS="$CFLAGS -Wfloat-equal" ;;
  esac
fi

case " $CFLAGS " in
*[\ \ ]-Wsign-compare[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -Wsign-compare" ;;
esac

# This one is special - it's not a warning override.
# http://bugs.freedesktop.org/show\_bug.cgi?id=10599
# is the bug for DBus core.
case " $CFLAGS " in
*[\ \ ]-fno-strict-aliasing[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -fno-strict-aliasing" ;;
esac

if test "x$enable_ansi" = "xyes"; then
  case " $CFLAGS " in
  *[\ \ ]-ansi[\ \ ]*) ;;
  *) CFLAGS="$CFLAGS -ansi" ;;
  esac

  case " $CFLAGS " in
  *[\ \ ]-D_POSIX_C_SOURCE*) ;;
  *) CFLAGS="$CFLAGS -D_POSIX_C_SOURCE=199309L" ;;
  esac

  case " $CFLAGS " in

```

```

*[\ \ ]-D_BSD_SOURCE[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -D_BSD_SOURCE" ;;
esac

case " $CFLAGS " in
*[\ \ ]-pedantic[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -pedantic" ;;
esac
fi
if test x$enable_gcov = xyes; then
case " $CFLAGS " in
*[\ \ ]-fprofile-arcs[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -fprofile-arcs" ;;
esac
case " $CFLAGS " in
*[\ \ ]-ftest-coverage[\ \ ]*) ;;
*) CFLAGS="$CFLAGS -ftest-coverage" ;;
esac

## remove optimization
CFLAGS=`echo "$CFLAGS" | sed -e 's/-O[0-9]*//g'`
fi
else
if test x$enable_gcov = xyes; then
as_fn_error $? "--enable-gcov can only be used with gcc" "$LINENO"
5
fi
fi

case `pwd` in
*\ * | *\ *)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Libtool does not
cope well with whitespace in `pwd`" >&5
$as_echo "$as_me: WARNING: Libtool does not cope well with whitespace
in `pwd`" >&2;} ;;
esac

macro_version='2.4.2'
macro_revision='1.3337'

```



```

}

case "$ECHO" in
    printf*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: printf"
>&5
$as_echo "printf" >&6; } ;;
    print*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: print -r"
>&5
$as_echo "print -r" >&6; } ;;
    *) { $as_echo "$as_me:${as_lineno-$LINENO}: result: cat" >&5
$as_echo "cat" >&6; } ;;
esac

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a sed that does
not truncate output" >&5
$as_echo_n "checking for a sed that does not truncate output... " >&6;
}
if ${ac_cv_path_SED+:} false; then :
    $as_echo_n "(cached) " >&6
else

```

```

ac_script=s/aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa/bbbbbbbbbbbbbbbbbbbbbbbbbb
bbbbbbbbbbbb/
    for ac_i in 1 2 3 4 5 6 7; do
        ac_script="$ac_script$as_nl$ac_script"
    done
    echo "$ac_script" 2>/dev/null | sed 99q >confptest.sed
    { ac_script=; unset ac_script;}
    if test -z "$SED"; then
        ac_path_SED_found=false
        # Loop through the user's path and test for each of PROGMAME-LIST
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_prog in sed gsed; do
                for ac_exec_ext in '' $ac_executable_extensions; do
                    ac_path_SED="$as_dir/$ac_prog$ac_exec_ext"

```

```

        as_fn_executable_p "$ac_path_SED" || continue
# Check for GNU ac_path_SED and select it if it is found.
# Check for GNU $ac_path_SED
case `"$ac_path_SED" --version 2>&1` in
*GNU*)
    ac_cv_path_SED="$ac_path_SED" ac_path_SED_found=;;;
*)
    ac_count=0
    $as_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $as_echo ' ' >> "confptest.nl"
        "$ac_path_SED" -f confptest.sed < "confptest.nl" >"confptest.out"
2>/dev/null || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_SED_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_SED="$ac_path_SED"
            ac_path_SED_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

        $ac_path_SED_found && break 3
    done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_SED"; then
    as_fn_error $? "no acceptable sed could be found in \$PATH"
"$LINENO" 5
fi
else
    ac_cv_path_SED=$SED
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_SED" >&5
$as_echo "$ac_cv_path_SED" >&6; }
SED="$ac_cv_path_SED"
rm -f confptest.sed

test -z "$SED" && SED=sed
Xsed="$SED -e 1s/^X//"

```



```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for fgrep" >&5
$sas_echo_n "checking for fgrep... " >&6; }
if ${ac_cv_path_FGREP+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if echo 'ab*c' | $GREP -F 'ab*c' >/dev/null 2>&1
  then ac_cv_path_FGREP="$GREP -F"
  else
    if test -z "$FGREP"; then
      ac_path_FGREP_found=false
      # Loop through the user's path and test for each of PROGMAME-LIST
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_prog in fgrep; do
          for ac_exec_ext in ' $ac_executable_extensions; do
            ac_path_FGREP="$as_dir/$ac_prog$ac_exec_ext"
            as_fn_executable_p "$ac_path_FGREP" || continue
          # Check for GNU ac_path_FGREP and select it if it is found.
          # Check for GNU $ac_path_FGREP
          case `"$ac_path_FGREP" --version 2>&1` in
          *GNU*)
            ac_cv_path_FGREP="$ac_path_FGREP" ac_path_FGREP_found=:;
          *)
            ac_count=0
            $sas_echo_n 0123456789 >"confptest.in"
            while :
            do
              cat "confptest.in" "confptest.in" >"confptest.tmp"
              mv "confptest.tmp" "confptest.in"
              cp "confptest.in" "confptest.nl"
              $sas_echo 'FGREP' >> "confptest.nl"
              "$ac_path_FGREP" FGREP < "confptest.nl" >"confptest.out" 2>/dev/null
            || break
              diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
            as_fn_arith $ac_count + 1 && ac_count=$as_val
            if test $ac_count -gt ${ac_path_FGREP_max-0}; then
              # Best one so far, save it but keep looking for a better one
              ac_cv_path_FGREP="$ac_path_FGREP"
              ac_path_FGREP_max=$ac_count
            fi
          done
        done
      done
    fi
  fi

```

```

    fi
    # 10*(2^10) chars as input seems more than enough
    test $ac_count -gt 10 && break
done
rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

    $ac_path_FGREP_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_FGREP"; then
    as_fn_error $? "no acceptable fgrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_FGREP=$FGREP
fi

    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_FGREP"
>&5
$as_echo "$ac_cv_path_FGREP" >&6; }
FGREP="$ac_cv_path_FGREP"

test -z "$GREP" && GREP=grep

```

```

@%:@ Check whether --with-gnu-ld was given.
if test "${with_gnu_ld+set}" = set; then :
    withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes
else

```

```

    with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
    # Check if gcc -print-prog-name=ld gives a path.
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
$CC" >&5
$as_echo_n "checking for ld used by $CC... " >&6; }
    case $host in
    *-*-mingw*)
        # gcc leaves a trailing carriage return which upsets mingw
        ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
    *)
        ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
    esac
    case $ac_prog in
    # Accept absolute paths.
    [[\/*] | ?:[\/*]*)
        re_direlt=' /^[^/][^/]*/\.\./'
        # Canonicalize the pathname of ld
        ac_prog=`$ECHO "$ac_prog" | $SED 's%\\%/%g'`
        while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
            ac_prog=`$ECHO $ac_prog | $SED "s%$re_direlt%/"`
        done
        test -z "$LD" && LD="$ac_prog"
        ;;
    "")
        # If it fails, then pretend we aren't using GCC.
        ac_prog=ld
        ;;
    *)
        # If it is relative, then search for the first ld in PATH.
        with_gnu_ld=unknown
        ;;
    esac
elif test "$with_gnu_ld" = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -z "$LD"; then
        lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
        for ac_dir in $PATH; do
            IFS="$lt_save_ifs"
            test -z "$ac_dir" && ac_dir=.
        done
    fi

```

```

    if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.
        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
        *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break
            ;;
        *)
            test "$with_gnu_ld" != yes && break
            ;;
        esac
    fi
done
IFS="$lt_save_ifs"
else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5
$as_echo "$LD" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \$PATH"
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
    $as_echo_n "(cached) " >&6
else
    # I'd rather use --version here, but apparently some GNU lds only
accept -v.
    case `"$LD" -v 2>&1 </dev/null` in
    *GNU* | *'with BFD'*)
        lt_cv_prog_gnu_ld=yes
        ;;
    *)
        lt_cv_prog_gnu_ld=no
        ;;
    esac
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5

```

```
$as_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for BSD- or MS-
compatible name lister (nm)" >&5
$as_echo_n "checking for BSD- or MS-compatible name lister (nm)... "
>&6; }
if ${lt_cv_path_NM+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$NM"; then
    # Let the user override the test.
    lt_cv_path_NM="$NM"
  else
    lt_nm_to_check="${ac_tool_prefix}nm"
    if test -n "$ac_tool_prefix" && test "$build" = "$host"; then
      lt_nm_to_check="$lt_nm_to_check nm"
    fi
    for lt_tmp_nm in $lt_nm_to_check; do
      lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
      for ac_dir in $PATH /usr/ccs/bin/elf /usr/ccs/bin /usr/ucb /bin;
      do
        IFS="$lt_save_ifs"
        test -z "$ac_dir" && ac_dir=.
        tmp_nm="$ac_dir/$lt_tmp_nm"
        if test -f "$tmp_nm" || test -f "$tmp_nm$ac_exeext" ; then
          # Check to see if the nm accepts a BSD-compat flag.
          # Adding the `sed 1q' prevents false positives on HP-UX, which
          says:
          #   nm: unknown option "B" ignored
          # Tru64's nm complains that /dev/null is an invalid object file
          case `"$tmp_nm" -B /dev/null 2>&1 | sed '1q'` in
          */dev/null* | *'Invalid file or object type'*)
            lt_cv_path_NM="$tmp_nm -B"
            break
          ;;
          *)
            case `"$tmp_nm" -p /dev/null 2>&1 | sed '1q'` in
            */dev/null*)
              lt_cv_path_NM="$tmp_nm -p"
              break
            ;;
            *)
          ;;
          *)
        fi
      done
    done
  fi
}
```

```

        lt_cv_path_NM=${lt_cv_path_NM="$tmp_nm"} # keep the first
match, but
        continue # so that we can try to find one that supports BSD
flags
        ;;
    esac
    ;;
    esac
    fi
done
IFS="$lt_save_ifs"
done
: ${lt_cv_path_NM=no}
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_path_NM" >&5
$as_echo "$lt_cv_path_NM" >&6; }
if test "$lt_cv_path_NM" != "no"; then
    NM="$lt_cv_path_NM"
else
    # Didn't find any BSD compatible name lister, look for dumpbin.
    if test -n "$DUMPBIN"; then :
        # Let the user override the test.
    else
        if test -n "$ac_tool_prefix"; then
            for ac_prog in dumpbin "link -dump"
            do
                # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
                be a program name with args.
                set dummy $ac_tool_prefix$ac_prog; ac_word=$2
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
                $as_echo_n "checking for $ac_word... " >&6; }
                if ${ac_cv_prog_DUMPBIN+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    if test -n "$DUMPBIN"; then
                        ac_cv_prog_DUMPBIN="$DUMPBIN" # Let the user override the test.
                    else
                        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                        for as_dir in $PATH
                        do
                            IFS=$as_save_IFS
                            test -z "$as_dir" && as_dir=.
                            for ac_exec_ext in ' ' $ac_executable_extensions; do
                                if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                                    ac_cv_prog_DUMPBIN="$ac_tool_prefix$ac_prog"
                                    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                                    break 2
                                fi
                            done
                        done
                    fi
                fi
            done
        fi
    fi
done
done

```

```

IFS=$as_save_IFS

fi
fi
DUMPBIN=$ac_cv_prog_DUMPBIN
if test -n "$DUMPBIN"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DUMPBIN" >&5
$as_echo "$DUMPBIN" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$DUMPBIN" && break
done
fi
if test -z "$DUMPBIN"; then
  ac_ct_DUMPBIN=$DUMPBIN
  for ac_prog in dumpbin "link -dump"
  do
    # Extract the first word of "$ac_prog", so it can be a program name
    with args.
    set dummy $ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_DUMPBIN+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$ac_ct_DUMPBIN"; then
        ac_cv_prog_ac_ct_DUMPBIN="$ac_ct_DUMPBIN" # Let the user override
        the test.
      else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_DUMPBIN="$ac_prog"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DUMPBIN=$ac_cv_prog_ac_ct_DUMPBIN

```

```

if test -n "$ac_ct_DUMPBIN"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DUMPBIN" >&5
$as_echo "$ac_ct_DUMPBIN" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_DUMPBIN" && break
done

  if test "x$ac_ct_DUMPBIN" = x; then
    DUMPBIN=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DUMPBIN=$ac_ct_DUMPBIN
  fi
fi

  case ` $DUMPBIN -symbols /dev/null 2>&1 | sed '1q' ` in
*COFF*)
    DUMPBIN="$DUMPBIN -symbols"
    ;;
*)
    DUMPBIN=:
    ;;
esac
  fi

  if test "$DUMPBIN" != ":"; then
    NM="$DUMPBIN"
  fi
fi
test -z "$NM" && NM=nm

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the name lister
($NM) interface" >&5
$as_echo_n "checking the name lister ($NM) interface... " >&6; }
if ${lt_cv_nm_interface+:} false; then :

```



```

    $as_echo_n "(cached) " >&6
else
    lt_cv_nm_interface="BSD nm"
    echo "int some_variable = 0;" > conftest.$ac_ext
    (eval echo "\"\$as_me:$LINENO: $ac_compile\"" >&5)
    (eval "$ac_compile" 2>conftest.err)
    cat conftest.err >&5
    (eval echo "\"\$as_me:$LINENO: $NM \\\"conftest.$ac_objext\\\"\""
>&5)
    (eval "$NM \"conftest.$ac_objext\" 2>conftest.err > conftest.out)
    cat conftest.err >&5
    (eval echo "\"\$as_me:$LINENO: output\"" >&5)
    cat conftest.out >&5
    if $GREP 'External.*some_variable' conftest.out > /dev/null; then
        lt_cv_nm_interface="MS dumpbin"
    fi
    rm -f conftest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_nm_interface"
>&5
$as_echo "$lt_cv_nm_interface" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether ln -s works"
>&5
$as_echo_n "checking whether ln -s works... " >&6; }
LN_S=$as_ln_s
if test "$LN_S" = "ln -s"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no, using $LN_S"
>&5
$as_echo "no, using $LN_S" >&6; }
fi

# find the maximum length of command line arguments
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the maximum length
of command line arguments" >&5
$as_echo_n "checking the maximum length of command line arguments... "
>&6; }
if ${lt_cv_sys_max_cmd_len+:} false; then :
    $as_echo_n "(cached) " >&6
else
    i=0
    teststring="ABCD"

    case $build_os in
    msdosdjgpp*)
        # On DJGPP, this test can blow up pretty badly due to problems in
        libc
        # (any single argument exceeding 2000 bytes causes a buffer
        overrun

```

```

    # during glob expansion). Even if it were fixed, the result of
this
    # check would be larger than it should be.
    lt_cv_sys_max_cmd_len=12288;    # 12K is about right
    ;;

gnu*)
    # Under GNU Hurd, this test is not required because there is
    # no limit to the length of command line arguments.
    # Libtool will interpret -1 as no limit whatsoever
    lt_cv_sys_max_cmd_len=-1;
    ;;

cygwin* | mingw* | cegcc*)
    # On Win9x/ME, this test blows up -- it succeeds, but takes
    # about 5 minutes as the teststring grows exponentially.
    # Worse, since 9x/ME are not pre-emptively multitasking,
    # you end up with a "frozen" computer, even though with patience
    # the test eventually succeeds (with a max line length of 256k).
    # Instead, let's just punt: use the minimum linelength reported by
    # all of the supported platforms: 8192 (on NT/2K/XP).
    lt_cv_sys_max_cmd_len=8192;
    ;;

mint*)
    # On MiNT this can take a long time and run out of memory.
    lt_cv_sys_max_cmd_len=8192;
    ;;

amigaos*)
    # On AmigaOS with pdksh, this test takes hours, literally.
    # So we just punt and use a minimum line length of 8192.
    lt_cv_sys_max_cmd_len=8192;
    ;;

netbsd* | freebsd* | openbsd* | darwin* | dragonfly*)
    # This has been around since 386BSD, at least. Likely further.
    if test -x /sbin/sysctl; then
        lt_cv_sys_max_cmd_len=`/sbin/sysctl -n kern.argmax`
    elif test -x /usr/sbin/sysctl; then
        lt_cv_sys_max_cmd_len=`/usr/sbin/sysctl -n kern.argmax`
    else
        lt_cv_sys_max_cmd_len=65536    # usable default for all BSDs
    fi
    # And add a safety zone
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
    ;;

interix*)
    # We know the value 262144 and hardcode it with a safety zone
    (like BSD)

```

```

    lt_cv_sys_max_cmd_len=196608
    ;;

os2*)
    # The test takes a long time on OS/2.
    lt_cv_sys_max_cmd_len=8192
    ;;

osf*)
    # Dr. Hans Ekkehard Plesser reports seeing a kernel panic running
configure
    # due to this test when exec_disable_arg_limit is 1 on Tru64. It
is not
    # nice to cause kernel panics so lets avoid the loop below.
    # First set a reasonable default.
    lt_cv_sys_max_cmd_len=16384
    #
    if test -x /sbin/sysconfig; then
        case ` /sbin/sysconfig -q proc exec_disable_arg_limit` in
            *1*) lt_cv_sys_max_cmd_len=-1 ;;
        esac
    fi
    ;;
sco3.2v5*)
    lt_cv_sys_max_cmd_len=102400
    ;;
sysv5* | sco5v6* | sysv4.2uw2*)
    kargmax=`grep ARG_MAX /etc/conf/cf.d/stune 2>/dev/null`
    if test -n "$kargmax"; then
        lt_cv_sys_max_cmd_len=`echo $kargmax | sed 's/.*[      ]//'\`
    else
        lt_cv_sys_max_cmd_len=32768
    fi
    ;;
*)
    lt_cv_sys_max_cmd_len=`(getconf ARG_MAX) 2> /dev/null`
    if test -n "$lt_cv_sys_max_cmd_len"; then
        lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
        lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
    else
        # Make teststring a little bigger before we do anything with it.
        # a 1K string should be a reasonable start.
        for i in 1 2 3 4 5 6 7 8 ; do
            teststring=$teststring$teststring
        done
        SHELL=${SHELL-${CONFIG_SHELL-/bin/sh}}
        # If test is not a shell built-in, we'll probably end up
computing a
        # maximum length that is only half of the actual maximum length,
but
        # we can't tell.

```

```

while { test "X"`env echo "$teststring$teststring" 2>/dev/null`
\
    = "X$teststring$teststring"; } >/dev/null 2>&1 &&
    test $i != 17 # 1/2 MB should be enough
do
    i=`expr $i + 1`
    teststring=$teststring$teststring
done
# Only check the string length outside the loop.
lt_cv_sys_max_cmd_len=`expr "X$teststring" : ".*" 2>&1`
teststring=
# Add a significant safety factor because C++ compilers can tack
on
# massive amounts of additional arguments before passing them to
the
# linker. It appears as though 1/2 is a usable value.
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 2`
fi
;;
esac

fi

if test -n $lt_cv_sys_max_cmd_len ; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sys_max_cmd_len" >&5
$as_echo "$lt_cv_sys_max_cmd_len" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: none" >&5
$as_echo "none" >&6; }
fi
max_cmd_len=$lt_cv_sys_max_cmd_len

: ${CP="cp -f"}
: ${MV="mv -f"}
: ${RM="rm -f"}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands some XSI constructs" >&5
$as_echo_n "checking whether the shell understands some XSI
constructs... " >&6; }
# Try some XSI features
xsi_shell=no
( _lt_dummy="a/b/c"
  test
"$${_lt_dummy##*/},${_lt_dummy%/*},${_lt_dummy#??}"${_lt_dummy%$_lt_du
mmy"} , \

```

```

    = c,a/b,b/c, \
    && eval 'test $(( 1 + 1 )) -eq 2 \
    && test "${#_lt_dummy}" -eq 5' ) >/dev/null 2>&1 \
    && xsi_shell=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $xsi_shell" >&5
$as_echo "$xsi_shell" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands \"+=\"\" >&5
$as_echo_n "checking whether the shell understands \"+=\"... \" >&6; }
lt_shell_append=no
( foo=bar; set foo baz; eval "$1+=\$2" && test "$foo" = barbaz ) \
  >/dev/null 2>&1 \
  && lt_shell_append=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_shell_append" >&5
$as_echo "$lt_shell_append" >&6; }

if ( (MAIL=60; unset MAIL) || exit) >/dev/null 2>&1; then
  lt_unset=unset
else
  lt_unset=false
fi

# test EBCDIC or ASCII
case `echo X|tr X '\101'` in
A) # ASCII based system
  # \n is not interpreted correctly by Solaris 8 /usr/ucb/tr
  lt_SP2NL='tr \040 \012'
  lt_NL2SP='tr \015\012 \040\040'
  ;;
*) # EBCDIC based system
  lt_SP2NL='tr \100 \n'
  lt_NL2SP='tr \r\n \100\100'
  ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to convert
$build file names to $host format" >&5

```

```

$as_echo_n "checking how to convert $build file names to $host
format... " >&6; }
if ${lt_cv_to_host_file_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $host in
    *-*-mingw* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_host_file_cmd=func_convert_file_msys_to_w32
          ;;
        *-*-cygwin* )
          lt_cv_to_host_file_cmd=func_convert_file_cygwin_to_w32
          ;;
        * ) # otherwise, assume *nix
          lt_cv_to_host_file_cmd=func_convert_file_nix_to_w32
          ;;
      esac
      ;;
    *-*-cygwin* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_host_file_cmd=func_convert_file_msys_to_cygwin
          ;;
        *-*-cygwin* )
          lt_cv_to_host_file_cmd=func_convert_file_noop
          ;;
        * ) # otherwise, assume *nix
          lt_cv_to_host_file_cmd=func_convert_file_nix_to_cygwin
          ;;
      esac
      ;;
    * ) # unhandled hosts (and "normal" native builds)
      lt_cv_to_host_file_cmd=func_convert_file_noop
      ;;
  esac

fi

to_host_file_cmd=${lt_cv_to_host_file_cmd}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_to_host_file_cmd" >&5
$as_echo "$lt_cv_to_host_file_cmd" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to convert
$build file names to toolchain format" >&5
$as_echo_n "checking how to convert $build file names to toolchain
format... " >&6; }

```

```

if ${lt_cv_to_tool_file_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  #assume ordinary cross tools, or native build.
lt_cv_to_tool_file_cmd=func_convert_file_noop
case $host in
  *-*-mingw* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_tool_file_cmd=func_convert_file_msys_to_w32
        ;;
    esac
  ;;
esac

fi

to_tool_file_cmd=$lt_cv_to_tool_file_cmd
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_to_tool_file_cmd" >&5
$as_echo "$lt_cv_to_tool_file_cmd" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $LD option to
reload object files" >&5
$as_echo_n "checking for $LD option to reload object files... " >&6; }
if ${lt_cv_ld_reload_flag+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_reload_flag='-r'
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_reload_flag" >&5
$as_echo "$lt_cv_ld_reload_flag" >&6; }
reload_flag=$lt_cv_ld_reload_flag
case $reload_flag in
"" | " ") ;;
*) reload_flag=" $reload_flag" ;;
esac
reload_cmds='$LD$reload_flag -o $output$reload_objs'
case $host_os in
  cygwin* | mingw* | pw32* | cegcc*)
    if test "$GCC" != yes; then
      reload_cmds=false
    fi
    ;;
  darwin*)
    if test "$GCC" = yes; then

```

```

        reload_cmds='$LTCC $LTCFLAGS -nostdlib ${wl}-r -o
$output$reload_objs'
    else
        reload_cmds='$LD$reload_flag -o $output$reload_objs'
    fi
    ;;
esac

```

```

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}objdump", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}objdump; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_OBJDUMP+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$OBJDUMP"; then
            ac_cv_prog_OBJDUMP="$OBJDUMP" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_OBJDUMP="${ac_tool_prefix}objdump"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
                        $as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

            fi
            fi
            OBJDUMP=$ac_cv_prog_OBJDUMP
            if test -n "$OBJDUMP"; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OBJDUMP" >&5
                $as_echo "$OBJDUMP" >&6; }
            else
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```



```

$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OBJDUMP"; then
  ac_ct_OBJDUMP=$OBJDUMP
  # Extract the first word of "objdump", so it can be a program name
  with args.
  set dummy objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OBJDUMP"; then
      ac_cv_prog_ac_ct_OBJDUMP="$ac_ct_OBJDUMP" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OBJDUMP="objdump"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

    fi
  fi
  ac_ct_OBJDUMP=$ac_cv_prog_ac_ct_OBJDUMP
  if test -n "$ac_ct_OBJDUMP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OBJDUMP" >&5
    $as_echo "$ac_ct_OBJDUMP" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
    $as_echo "no" >&6; }
  fi

  if test "x$ac_ct_OBJDUMP" = x; then
    OBJDUMP="false"
  else
    case $cross_compiling:$ac_tool_warned in
yes:~)

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OBJDUMP=$ac_ct_OBJDUMP
    fi
else
    OBJDUMP="$ac_cv_prog_OBJDUMP"
fi

test -z "$OBJDUMP" && OBJDUMP=objdump

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to recognize
dependent libraries" >&5
$as_echo_n "checking how to recognize dependent libraries... " >&6; }
if ${lt_cv_deplibs_check_method+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_file_magic_cmd='$MAGIC_CMD'
lt_cv_file_magic_test_file=
lt_cv_deplibs_check_method='unknown'
# Need to set the preceding variable on all platforms that support
# interlibrary dependencies.
# 'none' -- dependencies not supported.
# 'unknown' -- same as none, but documents that we really don't know.
# 'pass_all' -- all dependencies passed with no checks.
# 'test_compile' -- check by making test program.
# 'file_magic [[regex]]' -- check by looking for files in library path
# which responds to the $file_magic_cmd with a given extended regex.
# If you have `file' or equivalent on your system and you're not sure
# whether `pass_all' will *always* work, you probably want this one.

case $host_os in
aix[4-9]*)
    lt_cv_deplibs_check_method=pass_all
    ;;

beos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

bsdi[45]*)

```

```

    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib)'
    lt_cv_file_magic_cmd='/usr/bin/file -L'
    lt_cv_file_magic_test_file=/shlib/libc.so
;;

cygwin*)
# func_win32_libid is a shell function defined in ltmain.sh
lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86 DLL'
lt_cv_file_magic_cmd='func_win32_libid'
;;

mingw* | pw32*)
# Base MSYS/MinGW do not provide the 'file' command needed by
# func_win32_libid shell function, so use a weaker test based on
'objdump',
# unless we find 'file', for example because we are cross-compiling.
# func_win32_libid assumes BSD nm, so disallow it if using MS
dumpbin.
if ( test "$lt_cv_nm_interface" = "BSD nm" && file / ) >/dev/null
2>&1; then
    lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86
DLL'
    lt_cv_file_magic_cmd='func_win32_libid'
else
    # Keep this pattern in sync with the one in func_win32_libid.
    lt_cv_deplibs_check_method='file_magic file format (pei*-
i386(.?architecture: i386)?|pe-arm-wince|pe-x86-64)'
    lt_cv_file_magic_cmd='$OBJDUMP -f'
fi
;;

cegcc*)
# use the weaker test based on 'objdump'. See mingw*.
lt_cv_deplibs_check_method='file_magic file format pe-arm-
.*little(.?architecture: arm)?'
lt_cv_file_magic_cmd='$OBJDUMP -f'
;;

darwin* | rhapsody*)
lt_cv_deplibs_check_method=pass_all
;;

freebsd* | dragonfly*)
if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
    case $host_cpu in
    i*86 )
        # Not sure whether the presence of OpenBSD here was a mistake.
        # Let's accept both of them until this is cleared up.
        lt_cv_deplibs_check_method='file_magic
(FreeBSD|OpenBSD|DragonFly)/i[3-9]86 (compact )?demand paged shared
library'

```

```

        lt_cv_file_magic_cmd=/usr/bin/file
        lt_cv_file_magic_test_file=`echo /usr/lib/libc.so.*`
        ;;
    esac
else
    lt_cv_deplibs_check_method=pass_all
fi
;;

gnu*)
    lt_cv_deplibs_check_method=pass_all
    ;;

haiku*)
    lt_cv_deplibs_check_method=pass_all
    ;;

hpux10.20* | hpux11*)
    lt_cv_file_magic_cmd=/usr/bin/file
    case $host_cpu in
    ia64*)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF-[0-9][0-9]) shared object file - IA64'
        lt_cv_file_magic_test_file=/usr/lib/hpux32/libc.so
        ;;
    hppa*64*)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF[ -][0-9][0-9])(-bit)?( [LM]SB)? shared object( file)?[, -]* PA-RISC [0-9]\.[0-9]'
        lt_cv_file_magic_test_file=/usr/lib/pa20_64/libc.sl
        ;;
    *)
        lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|PA-RISC[0-9]\.[0-9]) shared library'
        lt_cv_file_magic_test_file=/usr/lib/libc.sl
        ;;
    esac
    ;;

interix[3-9]*)
    # PIC code is broken on Interix 3.x, that's why |\a not |_pic\a
    here
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so|\.a)$'
    ;;

irix5* | irix6* | nonstopux*)
    case $LD in
    *-32|*-32 ") libmagic=32-bit;;
    *-n32|*-n32 ") libmagic=N32;;
    *-64|*-64 ") libmagic=64-bit;;
    *) libmagic=never-match;;
    esac

```

```

    lt_cv_deplibs_check_method=pass_all
    ;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
    lt_cv_deplibs_check_method=pass_all
    ;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|_pic\.a)$'
    else
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so|_pic\.a)$'
    fi
    ;;

newos6*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(executable|dynamic lib)'
    lt_cv_file_magic_cmd=/usr/bin/file
    lt_cv_file_magic_test_file=/usr/lib/libnls.so
    ;;

*nto* | *qnx*)
    lt_cv_deplibs_check_method=pass_all
    ;;

openbsd*)
    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|\.[0-9]+|_pic\.a)$'
    else
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-9]+|\.[0-9]+|_pic\.a)$'
    fi
    ;;

osf3* | osf4* | osf5*)
    lt_cv_deplibs_check_method=pass_all
    ;;

rdos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

solaris*)
    lt_cv_deplibs_check_method=pass_all
    ;;

```

```

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv4 | sysv4.3*)
    case $host_vendor in
    motorola)
        lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib) M[0-9][0-9]* Version [0-9]'
        lt_cv_file_magic_test_file=`echo /usr/lib/libc.so*`
        ;;
    ncr)
        lt_cv_deplibs_check_method=pass_all
        ;;
    sequent)
        lt_cv_file_magic_cmd='/bin/file'
        lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [LM]SB
(shared object|dynamic lib )'
        ;;
    sni)
        lt_cv_file_magic_cmd='/bin/file'
        lt_cv_deplibs_check_method="file_magic ELF [0-9][0-9]*-bit [LM]SB
dynamic lib"
        lt_cv_file_magic_test_file=/lib/libc.so
        ;;
    siemens)
        lt_cv_deplibs_check_method=pass_all
        ;;
    pc)
        lt_cv_deplibs_check_method=pass_all
        ;;
    esac
    ;;

tpf*)
    lt_cv_deplibs_check_method=pass_all
    ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_deplibs_check_method" >&5
$as_echo "$lt_cv_deplibs_check_method" >&6; }

file_magic_glob=
want_nocaseglob=no
if test "$build" = "$host"; then
    case $host_os in
    mingw* | pw32*)
        if ( shopt | grep nocaseglob ) >/dev/null 2>&1; then
            want_nocaseglob=yes
        else

```

```

        file_magic_glob=`echo
aAbBcCdDeEfFgGhHiIjJkKlLmMnNoOpPqQrRsStTuUvVwWxXyYzZ | $SED -e
"s/\(..\)\/s\/[\1]\/[\1]\/g;/g"`
        fi
        ;;
    esac
fi

file_magic_cmd=$lt_cv_file_magic_cmd
deplibs_check_method=$lt_cv_deplibs_check_method
test -z "$deplibs_check_method" && deplibs_check_method=unknown

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}dlltool", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}dlltool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_DLLTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$DLLTOOL"; then
      ac_cv_prog_DLLTOOL="$DLLTOOL" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then

```

```

        ac_cv_prog_DLLTOOL="${ac_tool_prefix}dlltool"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
DLLTOOL=$ac_cv_prog_DLLTOOL
if test -n "$DLLTOOL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DLLTOOL" >&5
$as_echo "$DLLTOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_DLLTOOL"; then
    ac_ct_DLLTOOL=$DLLTOOL
    # Extract the first word of "dlltool", so it can be a program name
    with args.
    set dummy dlltool; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_DLLTOOL+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$ac_ct_DLLTOOL"; then
            ac_cv_prog_ac_ct_DLLTOOL="$ac_ct_DLLTOOL" # Let the user override
            the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_ac_ct_DLLTOOL="dlltool"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

```



```

fi
fi
ac_ct_DLLTOOL=$ac_cv_prog_ac_ct_DLLTOOL
if test -n "$ac_ct_DLLTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DLLTOOL" >&5
$as_echo "$ac_ct_DLLTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_DLLTOOL" = x; then
    DLLTOOL="false"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DLLTOOL=$ac_ct_DLLTOOL
  fi
else
  DLLTOOL="$ac_cv_prog_DLLTOOL"
fi

test -z "$DLLTOOL" && DLLTOOL=dlltool

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to associate
runtime and link libraries" >&5
$as_echo_n "checking how to associate runtime and link libraries... "
>&6; }
if ${lt_cv_sharedlib_from_linklib_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_sharedlib_from_linklib_cmd='unknown'

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
  # two different shell functions defined in ltmain.sh
  # decide which to use based on capabilities of $DLLTOOL

```

```

case `${DLLTOOL} --help 2>&1` in
*--identify-strict*)
    lt_cv_sharedlib_from_linklib_cmd=func_cygming_dll_for_implib
    ;;
*)
lt_cv_sharedlib_from_linklib_cmd=func_cygming_dll_for_implib_fallback
    ;;
esac
    ;;
*)
    # fallback: assume linklib IS sharedlib
    lt_cv_sharedlib_from_linklib_cmd="$ECHO"
    ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sharedlib_from_linklib_cmd" >&5
$as_echo "$lt_cv_sharedlib_from_linklib_cmd" >&6; }
sharedlib_from_linklib_cmd=$lt_cv_sharedlib_from_linklib_cmd
test -z "$sharedlib_from_linklib_cmd" &&
sharedlib_from_linklib_cmd=$ECHO

```

```

if test -n "$ac_tool_prefix"; then
  for ac_prog in ar
  do
    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
    be a program name with args.
    set dummy $ac_tool_prefix$ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_AR+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$AR"; then
        ac_cv_prog_AR="$AR" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in '' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_AR="$ac_tool_prefix$ac_prog"
            fi
          done
        done
      fi
    fi
  done

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
AR=$ac_cv_prog_AR
if test -n "$AR"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $AR" >&5
$as_echo "$AR" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$AR" && break
done
fi
if test -z "$AR"; then
    ac_ct_AR=$AR
    for ac_prog in ar
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_AR+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_AR"; then
        ac_cv_prog_ac_ct_AR="$ac_ct_AR" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_ac_ct_AR="$ac_prog"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
done

```

```

IFS=$as_save_IFS

fi
fi
ac_ct_AR=$ac_cv_prog_ac_ct_AR
if test -n "$ac_ct_AR"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_AR" >&5
$as_echo "$ac_ct_AR" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_AR" && break
done

  if test "x$ac_ct_AR" = x; then
    AR="false"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    AR=$ac_ct_AR
  fi
fi

: ${AR=ar}
: ${AR_FLAGS=cru}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for archiver @FILE
support" >&5
$as_echo_n "checking for archiver @FILE support... " >&6; }
if ${lt_cv_ar_at_file+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ar_at_file=no

```

```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    echo conftest.$ac_objext > conftest.lst
    lt_ar_try='$AR $AR_FLAGS libconftest.a @conftest.lst >&5'
    { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:"
\"$lt_ar_try\""; } >&5
    (eval $lt_ar_try) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }
    if test "$ac_status" -eq 0; then
        # Ensure the archiver fails upon bogus file names.
        rm -f conftest.$ac_objext libconftest.a
        { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}: \"$lt_ar_try\"";
} >&5
    (eval $lt_ar_try) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }
    if test "$ac_status" -ne 0; then
        lt_cv_ar_at_file=@
        fi
        fi
        rm -f conftest.* libconftest.a

fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ar_at_file"
>&5
$as_echo "$lt_cv_ar_at_file" >&6; }

if test "x$lt_cv_ar_at_file" = xno; then
    archiver_list_spec=
else
    archiver_list_spec=$lt_cv_ar_at_file
fi

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}strip", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}strip; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_STRIP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$STRIP"; then
      ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_STRIP="${ac_tool_prefix}strip"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      STRIP=$ac_cv_prog_STRIP
      if test -n "$STRIP"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
        $as_echo "$STRIP" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi

      if test -z "$ac_cv_prog_STRIP"; then
        ac_ct_STRIP=$STRIP
        # Extract the first word of "strip", so it can be a program name
        with args.
        set dummy strip; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_ac_ct_STRIP+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_STRIP"; then
        ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
        test.
    else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_exec_ext in '' $ac_executable_extensions; do
                if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                    ac_cv_prog_ac_ct_STRIP="strip"
                    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                    break 2
                fi
            done
        done
        IFS=$as_save_IFS

        fi
        fi
        ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
        if test -n "$ac_ct_STRIP"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
            $as_echo "$ac_ct_STRIP" >&6; }
        else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
            $as_echo "no" >&6; }
        fi

        if test "x$ac_ct_STRIP" = x; then
            STRIP=":"
        else
            case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
            STRIP=$ac_ct_STRIP
        fi
    else
        STRIP="$ac_cv_prog_STRIP"
    fi

test -z "$STRIP" && STRIP=:

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}ranlib", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}ranlib; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_RANLIB+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$RANLIB"; then
      ac_cv_prog_RANLIB="$RANLIB" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_RANLIB="${ac_tool_prefix}ranlib"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      RANLIB=$ac_cv_prog_RANLIB
      if test -n "$RANLIB"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $RANLIB" >&5
        $as_echo "$RANLIB" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi

      if test -z "$ac_cv_prog_RANLIB"; then
        ac_ct_RANLIB=$RANLIB
        # Extract the first word of "ranlib", so it can be a program name
        with args.
        set dummy ranlib; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5

```



```

$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_RANLIB+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_RANLIB"; then
    ac_cv_prog_ac_ct_RANLIB="$ac_ct_RANLIB" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions'; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_RANLIB="ranlib"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_RANLIB=$ac_cv_prog_ac_ct_RANLIB
if test -n "$ac_ct_RANLIB"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_RANLIB" >&5
$as_echo "$ac_ct_RANLIB" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_RANLIB" = x; then
    RANLIB=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    RANLIB=$ac_ct_RANLIB
  fi
else
  RANLIB="$ac_cv_prog_RANLIB"
fi

```

```
test -z "$RANLIB" && RANLIB=:
```

```
# Determine commands to create old-style static archives.  
old_archive_cmds='$AR $AR_FLAGS $oldlib$oldobjs'  
old_postinstall_cmds='chmod 644 $oldlib'  
old_postuninstall_cmds=
```

```
if test -n "$RANLIB"; then  
  case $host_os in  
    openbsd*)  
      old_postinstall_cmds="$old_postinstall_cmds~\`$RANLIB -t  
\`$tool_oldlib"  
      ;;  
    *)  
      old_postinstall_cmds="$old_postinstall_cmds~\`$RANLIB  
\`$tool_oldlib"  
      ;;  
  esac  
  old_archive_cmds="$old_archive_cmds~\`$RANLIB \`${tool_oldlib"  
fi
```

```
case $host_os in  
  darwin*)  
    lock_old_archive_extraction=yes ;;  
  *)  
    lock_old_archive_extraction=no ;;  
esac
```

```

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Check for command to grab the raw symbol name followed by C symbol
from nm.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking command to parse $NM
output from $compiler object" >&5
$as_echo_n "checking command to parse $NM output from $compiler
object... " >&6; }
if ${lt_cv_sys_global_symbol_pipe+:} false; then :
  $as_echo_n "(cached) " >&6
else
# These are sane defaults that work on at least a few old systems.
# [They come from Ultrix.  What could be older than Ultrix?!! ;)]

# Character class describing NM global symbol codes.
symcode='[BCDEGRST]'

# Regexp to match symbols that can be accessed directly from C.
sympat='\([^_A-Za-z][_A-Za-z0-9]*\)'

# Define system-specific variables.
case $host_os in
aix*)
  symcode='[BCDT]'

```

```

;;
cygwin* | mingw* | pw32* | cegcc*)
    symcode='[ABCDGISTW]'
;;
hpux*)
    if test "$host_cpu" = ia64; then
        symcode='[ABCDEGRST]'
    fi
;;
irix* | nonstopux*)
    symcode='[BCDEGRST]'
;;
osf*)
    symcode='[BCDEGQRST]'
;;
solaris*)
    symcode='[BDRT]'
;;
sco3.2v5*)
    symcode='[DT]'
;;
sysv4.2uw2*)
    symcode='[DT]'
;;
sysv5* | sco5v6* | unixware* | OpenUNIX*)
    symcode='[ABDT]'
;;
sysv4)
    symcode='[DFNSTU]'
;;
esac

# If we're using GNU nm, then use its standard symbol codes.
case ` $NM -V 2>&1 ` in
*GNU* | *'with BFD'*)
    symcode='[ABCDGIRSTW]' ;;
esac

# Transform an extracted symbol line into a proper C declaration.
# Some systems (esp. on ia64) link data and code symbols differently,
# so use this general approach.
lt_cv_sys_global_symbol_to_cdecl="sed -n -e 's/^T .* \([^*]\)$ /extern
int \1();/p' -e 's/^$symcode* .* \([^*]\)$ /extern char \1;/p'"

# Transform an extracted symbol line into symbol name and symbol
address
lt_cv_sys_global_symbol_to_c_name_address="sed -n -e 's/^[^: ]*\([^*]\)[
]*$/ {\\\\"1\\\\"", (void *) 0},/p' -e 's/^$symcode* \([^*]\) \([^
]*\)$/ {\\"2\\", (void *) \&2},/p'"
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix="sed -n -e 's/^[^:
]\([^*]\)[ ]*$/ {\\\\"1\\\\"", (void *) 0},/p' -e 's/^$symcode* \([^*

```

```

]*\) \ (lib[^\ ]*\)$/  {"\2\", (void *) \&\2},/p' -e 's/^\$symcode* \([\^
]*\) \ ([^\ ]*\)$/  {"lib\2\", (void *) \&\2},/p'"

# Handle CRLF in mingw tool chain
opt_cr=
case $build_os in
mingw*)
    opt_cr=`$ECHO 'x\{0,1\}' | tr x '\015'` # option cr in regexp
    ;;
esac

# Try without a prefix underscore, then with it.
for ac_symprfx in "" "_"; do

    # Transform symcode, sympat, and symprfx into a raw symbol and a C
    symbol.
    symxfrm="\1 $ac_symprfx\2 \2"

    # Write the raw and C identifiers.
    if test "$lt_cv_nm_interface" = "MS dumpbin"; then
        # Fake it for dumpbin and say T for any non-static function
        # and D for any global variable.
        # Also find C++ and __fastcall symbols from MSVC++,
        # which start with @ or ?.
        lt_cv_sys_global_symbol_pipe="$AWK '\
        {last_section=section; section=\$ 3};"\
        /^COFF SYMBOL TABLE/{for(i in hide) delete hide[i]};"\
        /Section length .*#relocs.*(pick any)/{hide[last_section]=1};"\
        \$ 0!~/External *|/{next};"\
        / 0+ UNDEF /{next}; / UNDEF \([^|]\)*()/ {next};"\
        {if(hide[section]) next};"\
        {f=0}; \$ 0~/\(\).*|/{f=1}; {printf f ? "\T \" : "\D \"};"\
        {split(\$ 0, a, /\|\\r/); split(a[2], s)};"\
        s[1]~/^[@?]/{print s[1], s[1]; next};"\
        s[1]~prfx {split(s[1],t,"\@"); print t[1],\
substr(t[1],length(prfx))}"\
        ' prfx=^$ac_symprfx"
    else
        lt_cv_sys_global_symbol_pipe="sed -n -e 's/^\.*[
]\($symcode$symcode*\)[
]
]*$ac_symprfx$sympat$opt_cr$/\$symxfrm/p'"
    fi
    lt_cv_sys_global_symbol_pipe="$lt_cv_sys_global_symbol_pipe | sed '/
__gnu_lto/d'"

    # Check to see that the pipe works correctly.
    pipe_works=no

    rm -f conftest*
    cat > conftest.$ac_ext <<_LT_EOF
#ifdef __cplusplus
extern "C" {

```

```

#endif
char nm_test_var;
void nm_test_func(void);
void nm_test_func(void){}
#ifdef __cplusplus
}
#endif
int main(){nm_test_var='a';nm_test_func();return(0);}
_LT_EOF

  if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
    (eval $ac_compile) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; } ; then
    # Now try to grab the symbols.
    nlist=conftest.nm
    if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}: \"$NM
conftest.$ac_objext \\\ \"$lt_cv_sys_global_symbol_pipe" \> $nlist\""; }
>&5
    (eval $NM conftest.$ac_objext \\\ \"$lt_cv_sys_global_symbol_pipe" \>
$nlist) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; } && test -s "$nlist"; then
    # Try sorting and uniquifying the output.
    if sort "$nlist" | uniq > "$nlist.T"; then
    mv -f "$nlist.T" "$nlist"
    else
    rm -f "$nlist.T"
    fi

    # Make sure that we snagged all the symbols we need.
    if $GREP ' nm_test_var$' "$nlist" >/dev/null; then
    if $GREP ' nm_test_func$' "$nlist" >/dev/null; then
    cat <<_LT_EOF > conftest.$ac_ext
/* Keep this code in sync between libtool.m4, ltmain, lt_system.h, and
tests. */
#ifdef _WIN32 || defined(__CYGWIN__) || defined(_WIN32_WCE)
/* DATA imports from DLLs on WIN32 can't be const, because runtime
relocations are performed -- see ld's documentation on pseudo-
relocs. */
# define LT@&t@_DLSYM_CONST
#elif defined(__osf__)
/* This system does not cope well with relocations in const data. */
# define LT@&t@_DLSYM_CONST
#else
# define LT@&t@_DLSYM_CONST const
#endif

#ifdef __cplusplus

```

```

extern "C" {
#endif

_LT_EOF
    # Now generate the symbol file.
    eval "$lt_cv_sys_global_symbol_to_cdecl" < "$nlist" | $GREP -v
main >> conftest.$ac_ext'

    cat <<_LT_EOF >> conftest.$ac_ext

/* The mapping between symbol names and symbols. */
LT@&t@_DLSYM_CONST struct {
    const char *name;
    void *address;
}
lt__PROGRAM__LTX_preloaded_symbols[] =
{
    { "@PROGRAM@", (void *) 0 },
_LT_EOF
    $SED "s/^\$symcode\$symcode* \(.*\)\ \(.*)$/ {\\"2\", (void *)
&2},/" < "$nlist" | $GREP -v main >> conftest.$ac_ext
    cat <<_LT_EOF >> conftest.$ac_ext
    {0, (void *) 0}
};

/* This works around a problem in FreeBSD linker */
#ifdef FREEBSD_WORKAROUND
static const void *lt_preloaded_setup() {
    return lt__PROGRAM__LTX_preloaded_symbols;
}
#endif

#ifdef __cplusplus
}
#endif

_LT_EOF
    # Now try linking the two files.
    mv conftest.$ac_objext conftest.$ac_objext
    lt_globsym_save_LIBS=$LIBS
    lt_globsym_save_CFLAGS=$CFLAGS
    LIBS="conftest.$ac_objext"
    CFLAGS="$CFLAGS$lt_prog_compiler_no_builtin_flag"
    if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$ac_link\""; } >&5
    (eval $ac_link) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; } && test -s conftest${ac_exeext}; then
        pipe_works=yes
    fi
    LIBS=$lt_globsym_save_LIBS
    CFLAGS=$lt_globsym_save_CFLAGS

```

```

    else
        echo "cannot find nm_test_func in $nlist" >&5
    fi
    else
        echo "cannot find nm_test_var in $nlist" >&5
    fi
else
    echo "cannot run $lt_cv_sys_global_symbol_pipe" >&5
fi
else
    echo "$progname: failed program was:" >&5
    cat conftest.$ac_ext >&5
fi
rm -rf conftest* confst*

# Do not use the global_symbol_pipe unless it works.
if test "$pipe_works" = yes; then
    break
else
    lt_cv_sys_global_symbol_pipe=
fi
done

fi

if test -z "$lt_cv_sys_global_symbol_pipe"; then
    lt_cv_sys_global_symbol_to_cdecl=
fi
if test -z
"$lt_cv_sys_global_symbol_pipe$lt_cv_sys_global_symbol_to_cdecl"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: failed" >&5
$as_echo "failed" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: ok" >&5
$as_echo "ok" >&6; }
fi

# Response file support.
if test "$lt_cv_nm_interface" = "MS dumpbin"; then
    nm_file_list_spec='@'
elif $NM --help 2>/dev/null | grep '[@]FILE' >/dev/null; then
    nm_file_list_spec='@'
fi

```



```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for sysroot" >&5
$as_echo_n "checking for sysroot... " >&6; }

@%:@ Check whether --with-libtool-sysroot was given.
if test "${with_libtool_sysroot+set}" = set; then :
  withval=$with_libtool_sysroot;
else
  with_libtool_sysroot=no
fi

lt_sysroot=
case ${with_libtool_sysroot} in #(
  yes)
  if test "$GCC" = yes; then
    lt_sysroot=`$CC --print-sysroot 2>/dev/null`
  fi
  ;; #(
/*)
  lt_sysroot=`echo "$with_libtool_sysroot" | sed -e
"$sed_quote_subst"`
  ;; #(
no|'')
  ;; #(
*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
${with_libtool_sysroot}" >&5
$as_echo "${with_libtool_sysroot}" >&6; }
  as_fn_error $? "The sysroot must be an absolute path." "$LINENO" 5
  ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: ${lt_sysroot:-no}"
>&5

```

```

$as_echo "${lt_sysroot:-no}" >&&6; }

@%:@ Check whether --enable-libtool-lock was given.
if test "${enable_libtool_lock+set}" = set; then :
  enableval=$enable_libtool_lock;
fi

test "x$enable_libtool_lock" != xno && enable_libtool_lock=yes

# Some flags need to be propagated to the compiler or linker for good
# libtool support.
case $host in
ia64-*-hpux*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:"
\"$ac_compile\""; } >&5
  (eval $ac_compile) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; then
    case ` /usr/bin/file conftest.$ac_objext ` in
      *ELF-32*)
        HPUX_IA64_MODE="32"
        ;;
      *ELF-64*)
        HPUX_IA64_MODE="64"
        ;;
    esac
  fi
  rm -rf conftest*
  ;;
*-*-irix6*)
  # Find out which ABI we are using.
  echo '#line '$LINENO' "configure"' > conftest.$ac_ext
  if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:"
\"$ac_compile\""; } >&5
  (eval $ac_compile) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; then
    if test "$lt_cv_prog_gnu_ld" = yes; then
      case ` /usr/bin/file conftest.$ac_objext ` in
        *32-bit*)
          LD="${LD-ld} -melf32bsmip"
          ;;
        *N32*)
          LD="${LD-ld} -melf32bmipn32"

```

```

        ;;
        *64-bit*)
            LD="{LD-ld} -melf64bmip"
        ;;
    esac
else
    case ` /usr/bin/file conftest.$ac_objext ` in
        *32-bit*)
            LD="{LD-ld} -32"
            ;;
        *N32*)
            LD="{LD-ld} -n32"
            ;;
        *64-bit*)
            LD="{LD-ld} -64"
            ;;
    esac
fi
fi
rm -rf conftest*
;;

x86_64-*kfreebsd*-gnu|x86_64-*linux*|ppc*-*linux*|powerpc*-*linux*| \
s390*-*linux*|s390*-*tpf*|sparc*-*linux*)
# Find out which ABI we are using.
echo 'int i;' > conftest.$ac_ext
if { { eval echo "\"\$as_me\"":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; }; then
    case ` /usr/bin/file conftest.o ` in
        *32-bit*)
            case $host in
                x86_64-*kfreebsd*-gnu)
                    LD="{LD-ld} -m elf_i386_fbsd"
                    ;;
                x86_64-*linux*)
                    LD="{LD-ld} -m elf_i386"
                    ;;
                ppc64-*linux*|powerpc64-*linux*)
                    LD="{LD-ld} -m elf32ppclinux"
                    ;;
                s390x-*linux*)
                    LD="{LD-ld} -m elf_s390"
                    ;;
                sparc64-*linux*)
                    LD="{LD-ld} -m elf32_sparc"
                    ;;
            esac
        ;;
    esac
;;

```

```

    *64-bit*)
case $host in
  x86_64-*kfreebsd*-gnu)
    LD="${LD-ld} -m elf_x86_64_fbsd"
    ;;
  x86_64-*linux*)
    LD="${LD-ld} -m elf_x86_64"
    ;;
  ppc*-*linux*|powerpc*-*linux*)
    LD="${LD-ld} -m elf64ppc"
    ;;
  s390*-*linux*|s390*-*tpf*)
    LD="${LD-ld} -m elf64_s390"
    ;;
  sparc*-*linux*)
    LD="${LD-ld} -m elf64_sparc"
    ;;
esac
;;
esac
fi
rm -rf conftest*
;;

*-*-sco3.2v5*)
# On SCO OpenServer 5, we need -belf to get full-featured binaries.
SAVE_CFLAGS="$CFLAGS"
CFLAGS="$CFLAGS -belf"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
compiler needs -belf" >&5
$as_echo_n "checking whether the C compiler needs -belf... " >&6; }
if ${lt_cv_cc_needs_belf+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF

```

```

if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_cc_needs_belf=yes
else
  lt_cv_cc_needs_belf=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_cc_needs_belf"
>&5
$as_echo "$lt_cv_cc_needs_belf" >&6; }
  if test x"$lt_cv_cc_needs_belf" != x"yes"; then
    # this is probably gcc 2.8.0, egcs 1.0 or newer; no need for -belf
    CFLAGS="$SAVE_CFLAGS"
  fi
  ;;
*-*solaris*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
  (eval $ac_compile) 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; then
    case `/usr/bin/file conftest.o` in
      *64-bit*)
        case $lt_cv_prog_gnu_ld in
          yes*)
            case $host in
              i?86-*-*solaris*)
                LD="{LD-ld} -m elf_x86_64"
                ;;
              sparc*-*-*solaris*)
                LD="{LD-ld} -m elf64_sparc"
                ;;
            esac
            # GNU ld 2.21 introduced _sol2 emulations. Use them if
available.
            if ${LD-ld} -V | grep _sol2 >/dev/null 2>&1; then
              LD="{LD-ld}_sol2"
            fi
          ;;
        *)

```

```

        if ${LD-ld} -64 -r -o conftest2.o conftest.o >/dev/null 2>&1;
then
    LD="${LD-ld} -64"
    fi
    ;;
    esac
    ;;
esac
fi
rm -rf conftest*
;;
esac

need_locks="$enable_libtool_lock"

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}mt", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}mt; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_MANIFEST_TOOL+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$MANIFEST_TOOL"; then
            ac_cv_prog_MANIFEST_TOOL="$MANIFEST_TOOL" # Let the user override
            the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_MANIFEST_TOOL="${ac_tool_prefix}mt"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

            fi
            fi
            MANIFEST_TOOL=$ac_cv_prog_MANIFEST_TOOL
            if test -n "$MANIFEST_TOOL"; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MANIFEST_TOOL" >&5
                $as_echo "$MANIFEST_TOOL" >&6; }
            else
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_MANIFEST_TOOL"; then
  ac_ct_MANIFEST_TOOL=$MANIFEST_TOOL
  # Extract the first word of "mt", so it can be a program name with
  args.
  set dummy mt; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_MANIFEST_TOOL"; then
      ac_cv_prog_ac_ct_MANIFEST_TOOL="$ac_ct_MANIFEST_TOOL" # Let the user
      override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_MANIFEST_TOOL="mt"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      ac_ct_MANIFEST_TOOL=$ac_cv_prog_ac_ct_MANIFEST_TOOL
      if test -n "$ac_ct_MANIFEST_TOOL"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_ct_MANIFEST_TOOL" >&5
        $as_echo "$ac_ct_MANIFEST_TOOL" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      if test "x$ac_ct_MANIFEST_TOOL" = x; then
        MANIFEST_TOOL=":"
      else
        case $cross_compiling:$ac_tool_warned in
        yes:)

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    MANIFEST_TOOL=$ac_ct_MANIFEST_TOOL
    fi
else
    MANIFEST_TOOL="$ac_cv_prog_MANIFEST_TOOL"
fi

test -z "$MANIFEST_TOOL" && MANIFEST_TOOL=mt
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $MANIFEST_TOOL is
a manifest tool" >&5
$as_echo_n "checking if $MANIFEST_TOOL is a manifest tool... " >&6; }
if ${lt_cv_path_manifest_tool+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_path_manifest_tool=no
    echo "$as_me:$LINENO: $MANIFEST_TOOL '-?'" >&5
    $MANIFEST_TOOL '-?' 2>confptest.err > confptest.out
    cat confptest.err >&5
    if $GREP 'Manifest Tool' confptest.out > /dev/null; then
        lt_cv_path_manifest_tool=yes
    fi
    rm -f confptest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_path_manifest_tool" >&5
$as_echo "$lt_cv_path_manifest_tool" >&6; }
if test "x$lt_cv_path_manifest_tool" != xyes; then
    MANIFEST_TOOL=:
fi

    case $host_os in
        rhapsody* | darwin*)
            if test -n "$ac_tool_prefix"; then
                # Extract the first word of "${ac_tool_prefix}dsymutil", so it can
                be a program name with args.
                set dummy ${ac_tool_prefix}dsymutil; ac_word=$2
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
                $as_echo_n "checking for $ac_word... " >&6; }
                if ${ac_cv_prog_DSYPUTIL+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    if test -n "$DSYPUTIL"; then

```



```

    ac_cv_prog_DSYMUTIL="$DSYMUTIL" # Let the user override the test.
else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_DSYMUTIL="{ac_tool_prefix}dsymutil"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
DSYMUTIL=$ac_cv_prog_DSYMUTIL
if test -n "$DSYMUTIL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DSYMUTIL" >&5
$as_echo "$DSYMUTIL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_DSYMUTIL"; then
    ac_ct_DSYMUTIL=$DSYMUTIL
    # Extract the first word of "dsymutil", so it can be a program name
with args.
set dummy dsymutil; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_DSYMUTIL+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_DSYMUTIL"; then
        ac_cv_prog_ac_ct_DSYMUTIL="$ac_ct_DSYMUTIL" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then

```

```

        ac_cv_prog_ac_ct_DSYMUTIL="dsymutil"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DSYMUTIL=$ac_cv_prog_ac_ct_DSYMUTIL
if test -n "$ac_ct_DSYMUTIL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DSYMUTIL"
>&5
$as_echo "$ac_ct_DSYMUTIL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_DSYMUTIL" = x; then
    DSYMUTIL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    DSYMUTIL=$ac_ct_DSYMUTIL
  fi
else
  DSYMUTIL="$ac_cv_prog_DSYMUTIL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}nmedit", so it can be
a program name with args.
set dummy ${ac_tool_prefix}nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_NMEDIT+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$NMEDIT"; then
    ac_cv_prog_NMEDIT="$NMEDIT" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH

```

```

do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_NMEDIT="${ac_tool_prefix}nmedit"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
NMEDIT=$ac_cv_prog_NMEDIT
if test -n "$NMEDIT"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $NMEDIT" >&5
$as_echo "$NMEDIT" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_NMEDIT"; then
  ac_ct_NMEDIT=$NMEDIT
  # Extract the first word of "nmedit", so it can be a program name
  with args.
  set dummy nmedit; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_NMEDIT+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_NMEDIT"; then
      ac_cv_prog_ac_ct_NMEDIT="$ac_ct_NMEDIT" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_NMEDIT="nmedit"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
    fi
  fi

```

```

    fi
done
    done
IFS=$as_save_IFS

fi
fi
ac_ct_NMEDIT=$ac_cv_prog_ac_ct_NMEDIT
if test -n "$ac_ct_NMEDIT"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_NMEDIT" >&5
$as_echo "$ac_ct_NMEDIT" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_NMEDIT" = x; then
    NMEDIT=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    NMEDIT=$ac_ct_NMEDIT
  fi
else
  NMEDIT="$ac_cv_prog_NMEDIT"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}lipo", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}lipo; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_LIPO+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$LIPO"; then
        ac_cv_prog_LIPO="$LIPO" # Let the user override the test.
      else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then

```

```

        ac_cv_prog_LIPO="${ac_tool_prefix}lipo"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
LIPO=$ac_cv_prog_LIPO
if test -n "$LIPO"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LIPO" >&5
$as_echo "$LIPO" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_LIPO"; then
    ac_ct_LIPO=$LIPO
    # Extract the first word of "lipo", so it can be a program name with
args.
set dummy lipo; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_LIPO+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_LIPO"; then
        ac_cv_prog_ac_ct_LIPO="$ac_ct_LIPO" # Let the user override the
test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_ac_ct_LIPO="lipo"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

```

```

fi
fi
ac_ct_LIPO=$ac_cv_prog_ac_ct_LIPO
if test -n "$ac_ct_LIPO"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_LIPO" >&5
$as_echo "$ac_ct_LIPO" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_LIPO" = x; then
    LIPO=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    LIPO=$ac_ct_LIPO
  fi
else
  LIPO="$ac_cv_prog_LIPO"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool", so it can be a
program name with args.
set dummy ${ac_tool_prefix}otool; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_OTOOL+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$OTOOL"; then
    ac_cv_prog_OTOOL="$OTOOL" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_OTOOL="${ac_tool_prefix}otool"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi

```

```

done
  done
IFS=$as_save_IFS

fi
fi
OTOOL=$ac_cv_prog_OTOOL
if test -n "$OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL" >&5
$as_echo "$OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL"; then
  ac_ct_OTOOL=$OTOOL
  # Extract the first word of "otool", so it can be a program name
  with args.
  set dummy otool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL"; then
      ac_cv_prog_ac_ct_OTOOL="$ac_ct_OTOOL" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OTOOL="otool"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

fi
fi
ac_ct_OTOOL=$ac_cv_prog_ac_ct_OTOOL
if test -n "$ac_ct_OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL" >&5

```

```

$as_echo "$ac_ct_OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_OTOOL" = x; then
    OTOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OTOOL=$ac_ct_OTOOL
  fi
else
  OTOOL="$ac_cv_prog_OTOOL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool64", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}otool64; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_OTOOL64+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$OTOOL64"; then
        ac_cv_prog_OTOOL64="$OTOOL64" # Let the user override the test.
      else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_OTOOL64="${ac_tool_prefix}otool64"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi

```



```

fi
OTOOL64=$ac_cv_prog_OTOOL64
if test -n "$OTOOL64"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL64" >&5
$as_echo "$OTOOL64" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_OTOOL64"; then
  ac_ct_OTOOL64=$OTOOL64
  # Extract the first word of "otool64", so it can be a program name
  with args.
  set dummy otool64; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL64+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL64"; then
      ac_cv_prog_ac_ct_OTOOL64="$ac_ct_OTOOL64" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OTOOL64="otool64"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS
    fi
  fi

ac_ct_OTOOL64=$ac_cv_prog_ac_ct_OTOOL64
if test -n "$ac_ct_OTOOL64"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL64" >&5
$as_echo "$ac_ct_OTOOL64" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

```

```

if test "x$ac_ct_OTOOL64" = x; then
  OTOOL64=":"
else
  case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
  OTOOL64=$ac_ct_OTOOL64
fi
else
  OTOOL64="$ac_cv_prog_OTOOL64"
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
single_module linker flag" >&5
$as_echo_n "checking for -single_module linker flag... " >&6; }
if ${lt_cv_apple_cc_single_mod+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_apple_cc_single_mod=no
  if test -z "${LT_MULTI_MODULE}"; then

```

```

    # By default we will add the -single_module flag. You can
override
    # by either setting the environment variable LT_MULTI_MODULE
    # non-empty at configure time, or by adding -multi_module to the
    # link flags.
    rm -rf libconfptest.dylib*
    echo "int foo(void){return 1;}" > confptest.c
    echo "$LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
-dynamiclib -Wl,-single_module confptest.c" >&5
    $LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
    -dynamiclib -Wl,-single_module confptest.c 2>confptest.err
    _lt_result=$?
    # If there is a non-empty error log, and "single_module"
    # appears in it, assume the flag caused a linker warning
    if test -s confptest.err && $GREP single_module confptest.err;
then
    cat confptest.err >&5
    # Otherwise, if the output was created with a 0 exit code from
    # the compiler, it worked.
    elif test -f libconfptest.dylib && test $_lt_result -eq 0; then
    lt_cv_apple_cc_single_mod=yes
    else
    cat confptest.err >&5
    fi
    rm -rf libconfptest.dylib*
    rm -f confptest.*
    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_apple_cc_single_mod" >&5
$as_echo "$lt_cv_apple_cc_single_mod" >&6; }

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
exported_symbols_list linker flag" >&5
$as_echo_n "checking for -exported_symbols_list linker flag... " >&6;
}
if ${lt_cv_ld_exported_symbols_list+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_ld_exported_symbols_list=no
    save_LDFLAGS=$LDFLAGS
    echo "_main" > confptest.sym
    LDFLAGS="$LDFLAGS -Wl,-exported_symbols_list,confptest.sym"
    cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
/* end confdefs.h. */

int
main ()
{

;
return 0;

```

```

}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_ld_exported_symbols_list=yes
else
  lt_cv_ld_exported_symbols_list=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_exported_symbols_list" >&5
$as_echo "$lt_cv_ld_exported_symbols_list" >&6; }

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -force_load
linker flag" >&5
$as_echo_n "checking for -force_load linker flag... " >&6; }
if ${lt_cv_ld_force_load+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_force_load=no
  cat > conftest.c << _LT_EOF
int forced_loaded() { return 2;}
_LT_EOF
  echo "$LTCC $LTCFLAGS -c -o conftest.o conftest.c" >&5
  $LTCC $LTCFLAGS -c -o conftest.o conftest.c 2>&5
  echo "$AR cru libconftest.a conftest.o" >&5
  $AR cru libconftest.a conftest.o 2>&5
  echo "$RANLIB libconftest.a" >&5
  $RANLIB libconftest.a 2>&5
  cat > conftest.c << _LT_EOF
int main() { return 0;}
_LT_EOF
  echo "$LTCC $LTCFLAGS $LDFLAGS -o conftest conftest.c -Wl,-
force_load,./libconftest.a" >&5
  $LTCC $LTCFLAGS $LDFLAGS -o conftest conftest.c -Wl,-
force_load,./libconftest.a 2>conftest.err
  _lt_result=$?
  if test -s conftest.err && $GREP force_load conftest.err; then
    cat conftest.err >&5
  elif test -f conftest && test $_lt_result -eq 0 && $GREP
forced_load conftest >/dev/null 2>&1 ; then
    lt_cv_ld_force_load=yes
  else
    cat conftest.err >&5
  fi
  rm -f conftest.err libconftest.a conftest conftest.c
  rm -rf conftest.dSYM

fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $lt_cv_ld_force_load"
>&5
$sas_echo "$lt_cv_ld_force_load" >&6; }
  case $host_os in
    rhapsody* | darwin1.[012])
      _lt_dar_allow_undefined='${wl}-undefined ${wl}suppress' ;;
    darwin1.*)
      _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
    darwin*) # darwin 5.x on
      # if running on 10.5 or later, the deployment target defaults
      # to the OS version, if on x86, and 10.4, the deployment
      # target defaults to 10.4. Don't you love it?
      case ${MACOSX_DEPLOYMENT_TARGET-10.0},$host in
        10.0,*86*-darwin8*|10.0,*-darwin[91]*)
          _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
;;
        10.[012]*)
          _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
        10.*)
          _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
;;
      esac
    ;;
  esac
  if test "$lt_cv_apple_cc_single_mod" = "yes"; then
    _lt_dar_single_mod='single_module'
  fi
  if test "$lt_cv_ld_exported_symbols_list" = "yes"; then
    _lt_dar_export_syms=' ${wl}-
exported_symbols_list,$output_objdir/${libname}-symbols.expsym'
  else
    _lt_dar_export_syms='~$NMEDIT -s $output_objdir/${libname}-
symbols.expsym ${lib}'
  fi
  if test "$DSYMUTIL" != ":" && test "$lt_cv_ld_force_load" = "no";
then
    _lt_dsymutil='~$DSYMUTIL $lib || :'
  else
    _lt_dsymutil=
  fi
;;
esac

# On IRIX 5.3, sys/types and inttypes.h are conflicting.
for ac_header in sys/types.h sys/stat.h stdlib.h string.h memory.h
strings.h \
    inttypes.h stdint.h unistd.h
do :
  as_ac_Header=`$sas_echo "ac_cv_header_$ac_header" | $sas_tr_sh`

```

```

ac_fn_c_check_header_compile "$LINENO" "$ac_header" "$as_ac_Header"
"$ac_includes_default"
"
if eval test \"x\$$as_ac_Header\" = x\"yes\"; then :
  cat >>confdefs.h <<_ACEOF
@%:@define `$as_echo \"HAVE_$ac_header\" | $as_tr_cpp` 1
_ACEOF

fi

done

```

```

for ac_header in dlfcn.h
do :
  ac_fn_c_check_header_compile "$LINENO" "dlfcn.h"
"ac_cv_header_dlfcn_h" "$ac_includes_default"
"
if test "x$ac_cv_header_dlfcn_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DLFCN_H 1
_ACEOF

fi

done

```

```
# Set options
```

```
enable_dlopen=no
```

```
enable_win32_dll=no
```

```

@%:@ Check whether --enable-shared was given.
if test "${enable_shared+set}" = set; then :
  enableval=$enable_shared; p=${PACKAGE-default}
  case $enableval in
  yes) enable_shared=yes ;;
  no) enable_shared=no ;;
  *)
    enable_shared=no
    # Look at the argument we got. We use all the common list
    separators.
    lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"

```

```

    for pkg in $enableval; do
    IFS="$lt_save_ifs"
    if test "X$pkg" = "X$p"; then
        enable_shared=yes
    fi
    done
    IFS="$lt_save_ifs"
    ;;
esac
else
    enable_shared=yes
fi

```

```

@%:@ Check whether --enable-static was given.
if test "${enable_static+set}" = set; then :
    enableval=$enable_static; p=${PACKAGE-default}
    case $enableval in
    yes) enable_static=yes ;;
    no) enable_static=no ;;
    *)
        enable_static=no
        # Look at the argument we got.  We use all the common list
separators.
        lt_save_ifs="$IFS"; IFS="{IFS}$PATH_SEPARATOR,"
        for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
            enable_static=yes
        fi
        done
        IFS="$lt_save_ifs"
        ;;
    esac
else
    enable_static=yes
fi

```

```

@%:@ Check whether --with-pic was given.
if test "${with_pic+set}" = set; then :
  withval=$with_pic; lt_p=${PACKAGE-default}
  case $withval in
    yes|no) pic_mode=$withval ;;
    *)
      pic_mode=default
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for lt_pkg in $withval; do
        IFS="$lt_save_ifs"
        if test "X$lt_pkg" = "X$lt_p"; then
          pic_mode=yes
        fi
      done
      IFS="$lt_save_ifs"
      ;;
  esac
else
  pic_mode=default
fi

test -z "$pic_mode" && pic_mode=default

```

```

@%:@ Check whether --enable-fast-install was given.
if test "${enable_fast_install+set}" = set; then :
  enableval=$enable_fast_install; p=${PACKAGE-default}
  case $enableval in
    yes) enable_fast_install=yes ;;
    no) enable_fast_install=no ;;
    *)
      enable_fast_install=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_fast_install=yes
        fi
      done
      IFS="$lt_save_ifs"

```



```
        ;;
    esac
else
    enable_fast_install=yes
fi
```

```
# This can be used to rebuild libtool when needed
LIBTOOL_DEPS="$ltmain"
```

```
# Always use our own libtool.
LIBTOOL='$(top_builddir) '
LIBTOOL="$LIBTOOL/${host_alias}-libtool"
```

```
test -z "$LN_S" && LN_S="ln -s"
```

```
if test -n "${ZSH_VERSION+set}" ; then  
    setopt NO_GLOB_SUBST  
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for objdir" >&5  
$as_echo_n "checking for objdir... " >&6; }  
if ${lt_cv_objdir+:} false; then :  
    $as_echo_n "(cached) " >&6  
else  
    rm -f .libs 2>/dev/null  
mkdir .libs 2>/dev/null  
if test -d .libs; then  
    lt_cv_objdir=.libs  
else  
    # MS-DOS does not allow filenames that begin with a dot.  
    lt_cv_objdir=_libs  
fi  
rmdir .libs 2>/dev/null  
fi  
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_objdir" >&5  
$as_echo "$lt_cv_objdir" >&6; }  
objdir=$lt_cv_objdir
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define LT_OBJDIR "$lt_cv_objdir/"  
_ACEOF
```

```
case $host_os in  
aix3*)
```

```

# AIX sometimes has problems with the GCC collect2 program. For
some
# reason, if we set the COLLECT_NAMES environment variable, the
problems
# vanish in a puff of smoke.
if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
fi
;;
esac

# Global variables:
ofile=${host_alias}-libtool
can_build_shared=yes

# All known linkers require a '.a' archive for static linking (except
MSVC,
# which needs '.lib').
libext=a

with_gnu_ld="$lt_cv_prog_gnu_ld"

old_CC="$CC"
old_CFLAGS="$CFLAGS"

# Set sane defaults for various variables
test -z "$CC" && CC=cc
test -z "$LTCC" && LTCC=$CC
test -z "$LTCFLAGS" && LTCFLAGS=$CFLAGS
test -z "$LD" && LD=ld
test -z "$ac_objext" && ac_objext=o

for cc_temp in $compiler""; do
    case $cc_temp in
        compile | *[\//]compile | ccache | *[\//]ccache ) ;;
        distcc | *[\//]distcc | purify | *[\//]purify ) ;;
        \-*) ;;
        *) break;;
    esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^\$host_alias-%%"`

# Only perform the check for file, if the check method requires it
test -z "$MAGIC_CMD" && MAGIC_CMD=file
case $deplibs_check_method in
file_magic*)
    if test "$file_magic_cmd" = '$MAGIC_CMD'; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
${ac_tool_prefix}file" >&5
$as_echo_n "checking for ${ac_tool_prefix}file... " >&6; }

```

```

if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
  [\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
  for ac_dir in $ac_dummy; do
    IFS="$lt_save_ifs"
    test -z "$ac_dir" && ac_dir=.
    if test -f $ac_dir/${ac_tool_prefix}file; then
      lt_cv_path_MAGIC_CMD="$ac_dir/${ac_tool_prefix}file"
      if test -n "$file_magic_test_file"; then
        case $deplibs_check_method in
        "file_magic "*)
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

_LT_EOF
          fi ;;
        esac
      fi
      break
    fi
  done
  IFS="$lt_save_ifs"
  MAGIC_CMD="$lt_save_MAGIC_CMD"
  ;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"

```

```

if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

```

```

if test -z "$lt_cv_path_MAGIC_CMD"; then
  if test -n "$ac_tool_prefix"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for file" >&5
$as_echo_n "checking for file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
[\\/*] | ?:[\\/*]*)
  lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
  ;;

```

```

*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
  for ac_dir in $ac_dummy; do
    IFS="$lt_save_ifs"
    test -z "$ac_dir" && ac_dir=.
    if test -f $ac_dir/file; then
      lt_cv_path_MAGIC_CMD="$ac_dir/file"
      if test -n "$file_magic_test_file"; then
        case $deplibs_check_method in
"file_magic" *)
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

```

```

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to

```

```

*** bug-libtool@gnu.org

_LT_EOF
    fi ;;
  esac
  fi
  break
fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

else
  MAGIC_CMD=:
fi
fi

fi
;;
esac

# Use C for the default configuration in the libtool script

lt_save_CC="$CC"
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

# Source file extension for C test sources.
ac_ext=c

# Object file extension for compiled C test sources.
objext=o
objext=$objext

```

```

# Code to be used in simple compile tests
lt_simple_compile_test_code="int some_variable = 0;"

# Code to be used in simple link tests
lt_simple_link_test_code='int main(){return(0);}'

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Save the default compiler, since it gets overwritten when the other
# tags are being tested, and _LT_TAGVAR(compiler, []) is a NOP.
compiler_DEFAULT=$CC

# save warnings/boilerplate of simple test code
ac_outfile=conftest.$ac_objext
echo "$lt_simple_compile_test_code" >conftest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>conftest.err
_lt_compiler_boilerplate=`cat conftest.err`
$RM conftest*

ac_outfile=conftest.$ac_objext
echo "$lt_simple_link_test_code" >conftest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >conftest.err
_lt_linker_boilerplate=`cat conftest.err`
$RM -r conftest*

if test -n "$compiler"; then

lt_prog_compiler_no_builtin_flag=

if test "$GCC" = yes; then
  case $cc_basename in
  nvcc*)
    lt_prog_compiler_no_builtin_flag=' -Xcompiler -fno-builtin' ;;
  *)
    lt_prog_compiler_no_builtin_flag=' -fno-builtin' ;;
  esac
esac

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -fno-rtti -fno-exceptions" >&5
$as_echo_n "checking if $compiler supports -fno-rtti -fno-
exceptions... " >&6; }
if ${lt_cv_prog_compiler_rtti_exceptions+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_rtti_exceptions=no
  ac_outfile=conftest.$ac_objext
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext
  lt_compiler_flag="-fno-rtti -fno-exceptions"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>conftest.err)
  ac_status=$?
  cat conftest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$lt_compiler_boilerplate" | $SED '/^$/d' >conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if test ! -s conftest.er2 || diff conftest.exp conftest.er2
>/dev/null; then
      lt_cv_prog_compiler_rtti_exceptions=yes
    fi
  fi
  $RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_rtti_exceptions" >&5
$as_echo "$lt_cv_prog_compiler_rtti_exceptions" >&6; }

if test x"$lt_cv_prog_compiler_rtti_exceptions" = xyes; then

lt_prog_compiler_no_builtin_flag="$lt_prog_compiler_no_builtin_flag -
fno-rtti -fno-exceptions"
else
  :
fi

```



```
fi
```

```
    lt_prog_compiler_wl=  
lt_prog_compiler_pic=  
lt_prog_compiler_static=
```

```
if test "$GCC" = yes; then  
    lt_prog_compiler_wl='-Wl,'  
    lt_prog_compiler_static='-static'
```

```
case $host_os in  
    aix*)  
        # All AIX code is PIC.  
        if test "$host_cpu" = ia64; then  
            # AIX 5 now supports IA64 processor  
            lt_prog_compiler_static='-Bstatic'  
        fi  
        ;;
```

```
    amigaos*)  
        case $host_cpu in  
            powerpc)  
                # see comment about AmigaOS4 .so support  
                lt_prog_compiler_pic='-fPIC'
```

```
                ;;  
            m68k)  
                # FIXME: we need at least 68020 code to build shared  
libraries, but  
                # adding the '-m68020' flag to GCC prevents building  
anything better,  
                # like '-m68040'.  
                lt_prog_compiler_pic='-m68020 -resident32 -malways-  
restore-a4'
```

```
                ;;  
            esac  
                ;;
```

```
    beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)  
        # PIC is the default for these OSes.  
        ;;  
    mingw* | cygwin* | pw32* | os2* | cegcc*)  
        # This hack is so that the source file can tell whether it is  
being
```

```

    # built for inclusion in a dll (and should export symbols for
example).
    # Although the cygwin gcc ignores -fPIC, still need this for
old-style
    # (--disable-auto-import) libraries
    lt_prog_compiler_pic='-DDL_EXPORT'
    ;;

darwin* | rhapsody*)
    # PIC is the default on this platform
    # Common symbols not allowed in MH_DYLIB files
    lt_prog_compiler_pic='-fno-common'
    ;;

haiku*)
    # PIC is the default for Haiku.
    # The "-static" flag exists, but is broken.
    lt_prog_compiler_static=
    ;;

hpux*)
    # PIC is the default for 64-bit PA HP-UX, but not for 32-bit
    # PA HP-UX.  On IA64 HP-UX, PIC is the default but the pic flag
    # sets the default TLS model and affects inlining.
    case $host_cpu in
    hppa*64*)
    # +Z the default
    ;;
    *)
    lt_prog_compiler_pic='-fPIC'
    ;;
    esac
    ;;

interix[3-9]*)
    # Interix 3.x gcc -fpic/-fPIC options generate broken code.
    # Instead, we relocate shared libraries at runtime.
    ;;

msdosdjgpp*)
    # Just because we use GCC doesn't mean we suddenly get shared
libraries
    # on systems that don't support them.
    lt_prog_compiler_can_build_shared=no
    enable_shared=no
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'

```

```

;;

sysv4*MP*)
  if test -d /usr/nec; then
    lt_prog_compiler_pic=-Kconform_pic
  fi
  ;;

*)
  lt_prog_compiler_pic='-fPIC'
  ;;
esac

case $cc_basename in
nvcc*) # Cuda Compiler Driver 2.2
  lt_prog_compiler_wl='-Xlinker '
  if test -n "$lt_prog_compiler_pic"; then
    lt_prog_compiler_pic="-Xcompiler $lt_prog_compiler_pic"
  fi
  ;;
esac
else
# PORTME Check for flag to pass linker flags through the system
compiler.
case $host_os in
aix*)
  lt_prog_compiler_wl='-Wl,'
  if test "$host_cpu" = ia64; then
# AIX 5 now supports IA64 processor
lt_prog_compiler_static='-Bstatic'
else
lt_prog_compiler_static='-bnso -bI:/lib/syscalls.exp'
fi
;;

mingw* | cygwin* | pw32* | os2* | cegcc*)
# This hack is so that the source file can tell whether it is
being
# built for inclusion in a dll (and should export symbols for
example).
lt_prog_compiler_pic='-DDLL_EXPORT'
;;

hpux9* | hpux10* | hpux11*)
  lt_prog_compiler_wl='-Wl,'
  # PIC is the default for IA64 HP-UX and 64-bit HP-UX, but
  # not for PA HP-UX.
  case $host_cpu in
  hppa*64*|ia64*)
# +Z the default
;;
*)

```

```

    lt_prog_compiler_pic='+Z'
;;
    esac
    # Is there a better lt_prog_compiler_static that works with the
bundled CC?
    lt_prog_compiler_static='${wl}-a ${wl}archive'
;;

irix5* | irix6* | nonstopux*)
    lt_prog_compiler_wl='-Wl,'
    # PIC (with -KPIC) is the default.
    lt_prog_compiler_static='-non_shared'
;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
    case $cc_basename in
        # old Intel for x86_64 which still supported -KPIC.
        ecc*)
            lt_prog_compiler_wl='-Wl,'
            lt_prog_compiler_pic='-KPIC'
            lt_prog_compiler_static='-static'
            ;;
        # icc used to be incompatible with GCC.
        # ICC 10 doesn't accept -KPIC any more.
        icc* | ifort*)
            lt_prog_compiler_wl='-Wl,'
            lt_prog_compiler_pic='-fPIC'
            lt_prog_compiler_static='-static'
            ;;
        # Lahey Fortran 8.1.
        lf95*)
            lt_prog_compiler_wl='-Wl,'
            lt_prog_compiler_pic='--shared'
            lt_prog_compiler_static='--static'
            ;;
        nagfor*)
            # NAG Fortran compiler
            lt_prog_compiler_wl='-Wl,-Wl,,'
            lt_prog_compiler_pic='-PIC'
            lt_prog_compiler_static='-Bstatic'
            ;;
        pgcc* | pgf77* | pgf90* | pgf95* | pgfortran*)
            # Portland Group compilers (*not* the Pentium gcc compiler,
            # which looks to be a dead project)
            lt_prog_compiler_wl='-Wl,'
            lt_prog_compiler_pic='-fpic'
            lt_prog_compiler_static='-Bstatic'
            ;;
        ccc*)
            lt_prog_compiler_wl='-Wl,'
            # All Alpha code is PIC.
            lt_prog_compiler_static='-non_shared'

```

```

;;
xl* | bgxl* | bgf* | mpixl*)
# IBM XL C 8.0/Fortran 10.1, 11.1 on PPC and BlueGene
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-qpic'
lt_prog_compiler_static='-qstaticlink'
;;
*)
case ` $CC -V 2>&1 | sed 5q` in
*Sun\ Ceres\ Fortran* | *Sun*Fortran*\ [1-7].* | *Sun*Fortran*\
8.[0-3]*)
# Sun Fortran 8.3 passes all unrecognized flags to the linker
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-Bstatic'
lt_prog_compiler_wl=''
;;
*Sun\ F* | *Sun*Fortran*)
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-Bstatic'
lt_prog_compiler_wl='-Qoption ld '
;;
*Sun\ C*)
# Sun C 5.9
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-Bstatic'
lt_prog_compiler_wl='-Wl,'
;;
*Intel*\ [CF]*Compiler*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fPIC'
lt_prog_compiler_static='-static'
;;
*Portland\ Group*)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fpic'
lt_prog_compiler_static='-Bstatic'
;;
esac
;;
esac
;;

newsos6)
lt_prog_compiler_pic='-KPIC'
lt_prog_compiler_static='-Bstatic'
;;

*nto* | *qnx*)
# QNX uses GNU C++, but need to define -shared option too,
otherwise
# it will coredump.
lt_prog_compiler_pic='-fPIC -shared'

```

```

;;

osf3* | osf4* | osf5*)
    lt_prog_compiler_wl='-Wl,'
    # All OSF/1 code is PIC.
    lt_prog_compiler_static='-non_shared'
    ;;

rdos*)
    lt_prog_compiler_static='-non_shared'
    ;;

solaris*)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    case $cc_basename in
    f77* | f90* | f95* | sunf77* | sunf90* | sunf95*)
    lt_prog_compiler_wl='-Qoption ld ';;
    *)
    lt_prog_compiler_wl='-Wl, ';;
    esac
    ;;

sunos4*)
    lt_prog_compiler_wl='-Qoption ld '
    lt_prog_compiler_pic='-PIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4 | sysv4.2uw2* | sysv4.3*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4*MP*)
    if test -d /usr/nec ;then
    lt_prog_compiler_pic='-Kconform_pic'
    lt_prog_compiler_static='-Bstatic'
    fi
    ;;

sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

unicos*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_can_build_shared=no
    ;;

```

```

    uts4*)
        lt_prog_compiler_pic='-pic'
        lt_prog_compiler_static='-Bstatic'
        ;;

    *)
        lt_prog_compiler_can_build_shared=no
        ;;
    esac
fi

case $host_os in
# For platforms which do not support PIC, -DPIC is meaningless:
*djgpp*)
    lt_prog_compiler_pic=
    ;;
*)
    lt_prog_compiler_pic="$lt_prog_compiler_pic@&t@ -DPIC"
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic=$lt_prog_compiler_pic
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic" >&5
$as_echo "$lt_cv_prog_compiler_pic" >&6; }
lt_prog_compiler_pic=$lt_cv_prog_compiler_pic

#
# Check to make sure the PIC flag actually works.
#
if test -n "$lt_prog_compiler_pic"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_works=no
    ac_outfile=conftest.$ac_objext
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext
    lt_compiler_flag="$lt_prog_compiler_pic@&t@ -DPIC"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "conftest.", or (3) at the end.

```

```

# Note that $ac_compile itself does not contain backslashes and
begins
# with a dollar sign (not a hyphen), so the echo should work
correctly.
# The option is referenced via a variable to avoid confusing sed.
lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
(eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
(eval "$lt_compile" 2>confptest.err)
ac_status=$?
cat confptest.err >&5
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
if (exit $ac_status) && test -s "$ac_outfile"; then
# The compiler can only warn and ignore the option if not
recognized
# So say no if there are warnings other than the usual output.
$ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
$SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
lt_cv_prog_compiler_pic_works=yes
fi
fi
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works" >&5
$as_echo "$lt_cv_prog_compiler_pic_works" >&6; }

if test x"$lt_cv_prog_compiler_pic_works" = xyes; then
case $lt_prog_compiler_pic in
"" | " *") ;;
*) lt_prog_compiler_pic="$lt_cv_prog_compiler_pic" ;;
esac
else
lt_prog_compiler_pic=
lt_prog_compiler_can_build_shared=no
fi
fi
fi

```



```

#
# Check to make sure the static flag actually works.
#
wl=$lt_prog_compiler_wl eval
lt_tmp_static_flag="\$lt_prog_compiler_static\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_static_works=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest.$ac_exeext;
then
  # The linker can only warn and ignore the option if not
  recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&5
    $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_static_works=yes
    fi
  else
    lt_cv_prog_compiler_static_works=yes
  fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works" >&5
$as_echo "$lt_cv_prog_compiler_static_works" >&6; }

if test x"$lt_cv_prog_compiler_static_works" = xyes; then
  :
else
  lt_prog_compiler_static=
fi

```

```

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$sas_objext" >&5
$sas_echo_n "checking if $compiler supports -c -o file.$sas_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o=no
  $RM -r conftest 2>/dev/null
  mkdir conftest
  cd conftest
  mkdir out
  echo "$lt_simple_compile_test_code" > conftest.$sas_ext

  lt_compiler_flag="-o out/conftest2.$sas_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $sas_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  lt_compile=`echo "$sas_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\ :&$lt_compiler_flag :; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"$sas_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>out/conftest.err)
  ac_status=$?
  cat out/conftest.err >&5
  echo "$sas_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s out/conftest2.$sas_objext
  then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings
    $ECHO "$lt_compiler_boilerplate" | $SED '/^$/d' >
out/conftest.exp
    $SED '/^$/d; /^ *+/d' out/conftest.err >out/conftest.er2
    if test ! -s out/conftest.er2 || diff out/conftest.exp
out/conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_c_o=yes
    fi
  fi
  chmod u+w . 2>&5
  $RM conftest*
  # SGI C++ compiler will create directory out/ii_files/ for
  # template instantiation
  test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
  $RM out/* && rmdir out

```

```

cd ..
$RM -r confptest
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o=no
  $RM -r confptest 2>/dev/null
  mkdir confptest
  cd confptest
  mkdir out
  echo "$lt_simple_compile_test_code" > confptest.$ac_ext

  lt_compiler_flag="-o out/confptest2.$ac_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "confptest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "`echo \"$as_me:$LINENO: $lt_compile\"`" >&5)
  (eval "$lt_compile" 2>out/confptest.err)
  ac_status=$?
  cat out/confptest.err >&5
  echo "$as_me:$LINENO: `echo $ac_status` = $ac_status" >&5
  if (exit $ac_status) && test -s out/confptest2.$ac_objext
  then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
    $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2

```

```

        if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
            lt_cv_prog_compiler_c_o=yes
        fi
    fi
    chmod u+w . 2>&5
    $RM confptest*
    # SGI C++ compiler will create directory out/ii_files/ for
    # template instantiation
    test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
    $RM out/* && rmdir out
    cd ..
    $RM -r confptest
    $RM confptest*

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

```

```

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o" = no && test "$need_locks" != no;
then
    # do not overwrite the value of need_locks provided by the user
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
    hard_links=yes
    $RM confptest*
    ln confptest.a confptest.b 2>/dev/null && hard_links=no
    touch confptest.a
    ln confptest.a confptest.b 2>&5 || hard_links=no
    ln confptest.a confptest.b 2>/dev/null && hard_links=no
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }
    if test "$hard_links" = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: \`$CC' does not
support \`-c -o', so \`make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: \`$CC' does not support \`-c -o', so \`make
-j' may be unsafe" >&2;}
        need_locks=warn
    fi
else
    need_locks=no
fi

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }

runpath_var=
allow_undefined_flag=
always_export_symbols=no
archive_cmds=
archive_expsym_cmds=
compiler_needs_object=no
enable_shared_with_static_runtimes=no
export_dynamic_flag_spec=
export_symbols_cmds='$NM $libobjs $convenience | $global_symbol_pipe
| $SED '\''s/.* //'\' | sort | uniq > $export_symbols'
hardcode_automatic=no
hardcode_direct=no
hardcode_direct_absolute=no
hardcode_libdir_flag_spec=
hardcode_libdir_separator=
hardcode_minus_L=no
hardcode_shlibpath_var=unsupported
inherit_rpath=no
link_all_deplibs=unknown
module_cmds=
module_expsym_cmds=
old_archive_from_new_cmds=
old_archive_from_expsyms_cmds=
thread_safe_flag_spec=
whole_archive_flag_spec=
# include_expsyms should be a list of space-separated symbols to be
*always*
# included in the symbol list
include_expsyms=
# exclude_expsyms can be an extended regexp of symbols to exclude
# it will be wrapped by `(' and `)$', so one must not match
beginning or
# end of line. Example: `a|bc|.*d.*' will exclude the symbols `a'
and `bc',
# as well as any symbol that contains `d'.
exclude_expsyms='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'
# Although _GLOBAL_OFFSET_TABLE_ is a valid symbol C name, most
a.out
# platforms (ab)use it in PIC code, but their linkers get confused
if
# the symbol is explicitly referenced. Since portable code cannot
# rely on this symbol name, it's probably fine to never include it
in
# preloaded symbol tables.
# Exclude shared library initialization/finalization symbols.

```

```

extract_expsyms_cmds=

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
  # FIXME: the MSVC++ port hasn't been tested in a loooong time
  # When not using gcc, we currently assume that we are using
  # Microsoft Visual C++.
  if test "$GCC" != yes; then
    with_gnu_ld=no
  fi
  ;;
interix*)
  # we just hope/assume this is gcc and not c89 (= MSVC++)
  with_gnu_ld=yes
  ;;
openbsd*)
  with_gnu_ld=no
  ;;
esac

ld_shlibs=yes

# On some targets, GNU ld is compatible enough with the native
linker
# that we're better off using the native interface for both.
lt_use_gnu_ld_interface=no
if test "$with_gnu_ld" = yes; then
  case $host_os in
    aix*)
      # The AIX port of GNU ld has always aspired to compatibility
      # with the native linker. However, as the warning in the GNU ld
      # block says, versions before 2.19.5* couldn't really create
working
      # shared libraries, regardless of the interface used.
      case ` $LD -v 2>&l ` in
        *\ (GNU\ Binutils)\ 2.19.5*) ;;
        *\ (GNU\ Binutils)\ 2.[2-9]*) ;;
        *\ (GNU\ Binutils)\ [3-9]*) ;;
        *)
          lt_use_gnu_ld_interface=yes
          ;;
      esac
    ;;
    *)
      lt_use_gnu_ld_interface=yes
      ;;
  esac
fi

if test "$lt_use_gnu_ld_interface" = yes; then
  # If archive_cmds runs LD, not CC, wlarc should be empty
  wlarc='${wl}'

```

```

# Set some defaults for GNU ld with shared library support. These
# are reset later if shared libraries are not supported. Putting
them
# here allows them to be overridden if necessary.
runpath_var=LD_RUN_PATH
hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
export_dynamic_flag_spec='${wl}--export-dynamic'
# ancient GNU ld didn't support --whole-archive et. al.
if $LD --help 2>&1 | $GREP 'no-whole-archive' > /dev/null; then
  whole_archive_flag_spec="$wlarc"--whole-archive$convenience
"$wlarc"--no-whole-archive'
else
  whole_archive_flag_spec=
fi
supports_anon_versioning=no
case ` $LD -v 2>&1 ` in
  *GNU\ gold*) supports_anon_versioning=yes ;;
  *\ [01].* | *\ 2.[0-9].* | *\ 2.10.*) ;; # catch versions < 2.11
  *\ 2.11.93.0.2\ *) supports_anon_versioning=yes ;; # RH7.3 ...
  *\ 2.11.92.0.12\ *) supports_anon_versioning=yes ;; # Mandrake
8.2 ...
  *\ 2.11.*) ;; # other 2.11 versions
  *) supports_anon_versioning=yes ;;
esac

# See if GNU ld supports shared libraries.
case $host_os in
aix[3-9]*)
  # On AIX/PPC, the GNU linker is very broken
  if test "$host_cpu" != ia64; then
    ld_shlibs=no
    cat <<_LT_EOF 1>&2

*** Warning: the GNU linker, at least up to release 2.19, is reported
*** to be unable to reliably create shared libraries on AIX.
*** Therefore, libtool is disabling shared libraries support. If you
*** really care for shared libraries, you may want to install binutils
*** 2.20 or above, or modify your PATH so that a non-GNU linker is
found.
*** You will then need to restart the configuration process.

_LT_EOF
  fi
  ;;

amigaos*)
  case $host_cpu in
    powerpc)
      # see comment about AmigaOS4 .so support
      archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'

```

```

        archive_expsym_cmds='
;;
m68k)
    archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_minus_L=yes
;;
esac
;;

beos*)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
        allow_undefined_flag=unsupported
        # Joseph Beckenbach <jrb3@best.com> says some releases of gcc
        # support --undefined. This deserves some investigation. FIXME
        archive_cmds='$CC -nostart $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
        else
            ld_shlibs=no
            fi
        ;;

cygwin* | mingw* | pw32* | cegcc*)
    # _LT_TAGVAR(hardcode_libdir_flag_spec, ) is actually
meaningless,
    # as there is no search path for DLLs.
    hardcode_libdir_flag_spec='-L$libdir'
    export_dynamic_flag_spec='${wl}--export-all-symbols'
    allow_undefined_flag=unsupported
    always_export_symbols=no
    enable_shared_with_static_runtimes=yes
    export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\ ]*\)/\1
DATA;/s/^\.*[ ]__nm__\([^\ ]*\)[ ]\^[^\ ]*/\1 DATA;/\^[^I][ ]/d;/^[AITW][
]/s/.* //' '\'' | sort | uniq > $export_symbols'

exclude_expsyms='[_]+GLOBAL_OFFSET_TABLE_|[_]+GLOBAL__[FID]_.*|[_]+hea
d_[A-Za-z0-9_]+_dll|[A-Za-z0-9_]+_dll_iname'

    if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then
        archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
        # If the export-symbols file already is a .def file (1st line
        # is EXPORTS), use it as is; otherwise, prepend...

```



```

        archive_expsym_cmds='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
        cp $export_symbols $output_objdir/$soname.def;
    else
        echo EXPORTS > $output_objdir/$soname.def;
        cat $export_symbols >> $output_objdir/$soname.def;
    fi~
    $CC -shared $output_objdir/$soname.def $libobjs $deplibs
$compiler_flags -o $output_objdir/$soname ${wl}--enable-auto-image-
base -Xlinker --out-implib -Xlinker $lib'
    else
        ld_shlibs=no
    fi
;;

haiku*)
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    link_all_deplibs=yes
;;

interix[3-9]*)
    hardcode_direct=no
    hardcode_shlibpath_var=no
    hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
    export_dynamic_flag_spec='${wl}-E'
    # Hack: On Interix 3.x, we cannot compile PIC because of a
broken gcc.
    # Instead, shared libraries are loaded at an image base
(0x10000000 by
    # default) and relocated if they conflict, which is a slow very
memory
    # consuming and fragmenting process.  To avoid this, we pick a
random,
    # 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000
at link
    # time.  Moving up from 0x10000000 also allows more sbrk(2)
space.
    archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,`expr ${RANDOM-$$} %
4096 / 2 \* 262144 + 1342177280` -o $lib'
    archive_expsym_cmds='sed "s,^,_, " $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,`expr ${RANDOM-
$$} % 4096 / 2 \* 262144 + 1342177280` -o $lib'
;;

gnu* | linux* | tpf* | k*bsd*-gnu | kopensolaris*-gnu)
    tmp_diet=no
    if test "$host_os" = linux-dietlibc; then
        case $cc_basename in

```

```

        diet\ *) tmp_diet=yes;; # linux-dietlibc with static linking
(!diet-dyn)
    esac
    fi
    if $LD --help 2>&1 | $EGREP ': supported targets:.* elf' >
/dev/null \
    && test "$tmp_diet" = no
    then
    tmp_addflag=' $pic_flag'
    tmp_sharedflag='-shared'
    case $cc_basename,$host_cpu in
        pgcc*) # Portland Group C compiler
            whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'
            tmp_addflag=' $pic_flag'
            ;;
        pgf77* | pgf90* | pgf95* | pgfortran*)
            # Portland Group f77 and f90 compilers
            whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'
            tmp_addflag=' $pic_flag -Mnomain' ;;
        ecc*,ia64* | icc*,ia64*) # Intel C compiler on ia64
            tmp_addflag=' -i_dynamic' ;;
        efc*,ia64* | ifort*,ia64*) # Intel Fortran compiler on ia64
            tmp_addflag=' -i_dynamic -nofor_main' ;;
        ifc* | ifort*) # Intel Fortran compiler
            tmp_addflag=' -nofor_main' ;;
        lf95*) # Lahey Fortran 8.1
            whole_archive_flag_spec=
            tmp_sharedflag='--shared' ;;
        xl[cC]* | bgxl[cC]* | mpixl[cC]*) # IBM XL C 8.0 on PPC (deal
with xlf below)
            tmp_sharedflag='-qmkshrojb'
            tmp_addflag= ;;
        nvcc*) # Cuda Compiler Driver 2.2
            whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'
            compiler_needs_object=yes
            ;;
    esac
    case ` $CC -V 2>&1 | sed 5q` in
        *Sun\ C*) # Sun C 5.9
            whole_archive_flag_spec='${wl}--whole-archive`new_convenience=;
for conv in $convenience\`"; do test -z \"$conv\" ||
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\` ` ${wl}--no-whole-archive'

```

```

        compiler_needs_object=yes
        tmp_sharedflag='-G' ;;
        *Sun\ F*)                # Sun Fortran 8.3
        tmp_sharedflag='-G' ;;
    esac
    archive_cmds='$CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname -o $lib'

        if test "x$supports_anon_versioning" = xyes; then
            archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
            cat $export_symbols | sed -e "s/(.*)/\1;/" >>
$output_objdir/$libname.ver~
            echo "local: *; };" >> $output_objdir/$libname.ver~
            $CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-version-script
${wl}$output_objdir/$libname.ver -o $lib'
        fi

    case $cc_basename in
        xlf* | bgf* | bgxlf* | mpixlf*)
            # IBM XL Fortran 10.1 on PPC cannot create shared libs itself
            whole_archive_flag_spec='--whole-archive$convenience --no-
whole-archive'
            hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
            archive_cmds='$LD -shared $libobjs $deplibs $linker_flags -
soname $soname -o $lib'
            if test "x$supports_anon_versioning" = xyes; then
                archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
                cat $export_symbols | sed -e "s/(.*)/\1;/" >>
$output_objdir/$libname.ver~
                echo "local: *; };" >> $output_objdir/$libname.ver~
                $LD -shared $libobjs $deplibs $linker_flags -soname $soname
-version-script $output_objdir/$libname.ver -o $lib'
            fi
            ;;
        esac
    else
        ld_shlibs=no
    fi
    ;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable $libobjs $deplibs $linker_flags -o
$lib'
        wlarc=
    else
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    fi

```

```

    archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    fi
    ;;

solaris*)
    if $LD -v 2>&1 | $GREP 'BFD 2\.8' > /dev/null; then
        ld_shlibs=no
        cat <<_LT_EOF 1>&2

*** Warning: The releases 2.8.* of the GNU linker cannot reliably
*** create shared libraries on Solaris systems.  Therefore, libtool
*** is disabling shared libraries support.  We urge you to upgrade GNU
*** binutils to release 2.9.1 or newer.  Another option is to modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

_LT_EOF
        elif $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
            archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
            else
                ld_shlibs=no
            fi
            ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX*)
    case ` $LD -v 2>&1 ` in
        *\ [01].* | *\ 2.[0-9].* | *\ 2.1[0-5].*)
            ld_shlibs=no
            cat <<_LT_EOF 1>&2

*** Warning: Releases of the GNU linker prior to 2.16.91.0.3 can not
*** reliably create shared libraries on SCO systems.  Therefore,
libtool
*** is disabling shared libraries support.  We urge you to upgrade GNU
*** binutils to release 2.16.91.0.3 or newer.  Another option is to
modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

_LT_EOF
        ;;
    *)
        # For security reasons, it is highly recommended that you
always

```

```

        # use absolute paths for naming shared libraries, and exclude
the
        # DT_RUNPATH tag from executables and libraries.  But doing so
        # requires that you compile everything twice, which is a pain.
        if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
            hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
            archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
            else
                ld_shlibs=no
            fi
        ;;
    esac
    ;;

sunos4*)
    archive_cmds='$LD -assert pure-text -Bshareable -o $lib $libobjs
$deplibs $linker_flags'
    wlarc=
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

*)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
        else
            ld_shlibs=no
        fi
    ;;
esac

if test "$ld_shlibs" = no; then
    runpath_var=
    hardcode_libdir_flag_spec=
    export_dynamic_flag_spec=
    whole_archive_flag_spec=
fi
else
    # PORTME fill in a description of your system's linker (not GNU
ld)
    case $host_os in
    aix3*)

```

```

allow_undefined_flag=unsupported
always_export_symbols=yes
archive_expsym_cmds='$LD -o $output_objdir/$soname $libobjs
$deplibs $linker_flags -bE:$export_symbols -T512 -H512 -bM:SRE~$AR
$AR_FLAGS $lib $output_objdir/$soname'
# Note: this linker hardcodes the directories in LIBPATH if
there
# are no directories specified by -L.
hardcode_minus_L=yes
if test "$GCC" = yes && test -z "$lt_prog_compiler_static"; then
# Neither direct hardcoding nor static linking is supported with
a
# broken collect2.
hardcode_direct=unsupported
fi
;;

aix[4-9]*)
if test "$host_cpu" = ia64; then
# On IA64, the linker does run time linking by default, so we
don't
# have to do anything special.
aix_use_runtimelinking=no
exp_sym_flag='-Bexport'
no_entry_flag=""
else
# If we're using GNU nm, then we don't want the "-C" option.
# -C means demangle to AIX nm, but means don't demangle with GNU
nm
# Also, AIX nm treats weak defined symbols like other global
# defined symbols, whereas GNU nm marks them as "W".
if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then
export_symbols_cmds='$NM -Bpg $libobjs $convenience | awk '\''{
if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B") || (\ $ 2 == "W"))
&& (substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
else
export_symbols_cmds='$NM -BCpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B")) &&
(substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
fi
aix_use_runtimelinking=no

# Test if we are trying to use run time linking or normal
# AIX style linking. If -brtl is somewhere in LDFLAGS, we
# need to do runtime linking.
case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)
for ld_flag in $LDFLAGS; do
if (test $ld_flag = "-brtl" || test $ld_flag = "-Wl,-brtl");
then
aix_use_runtimelinking=yes

```

```

        break
    fi
done
;;
esac

exp_sym_flag='-bexport'
no_entry_flag='-bnoentry'
fi

# When large executables or shared objects are built, AIX ld can
# have problems creating the table of contents.  If linking a
library
# or program results in "error TOC overflow" add -mminimal-toc
to
# CXXFLAGS/CFLAGS for g++/gcc.  In the cases where that is not
# enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

archive_cmds=''
hardcode_direct=yes
hardcode_direct_absolute=yes
hardcode_libdir_separator=':'
link_all_deplibs=yes
file_list_spec='${wl}-f,'

if test "$GCC" = yes; then
case $host_os in aix4.[012]|aix4.[012].*)
# We only want to do this on AIX 4.2 and lower, the check
# below for broken collect2 doesn't work under 4.3+
collect2name=`${CC} -print-prog-name=collect2`
if test -f "$collect2name" &&
strings "$collect2name" | $GREP resolve_lib_name >/dev/null
then
# We have reworked collect2
:
else
# We have old collect2
hardcode_direct=unsupported
# It fails to find uninstalled libraries when the uninstalled
# path is not listed in the libpath.  Setting hardcode_minus_L
# to unsupported forces relinking
hardcode_minus_L=yes
hardcode_libdir_flag_spec='-L$libdir'
hardcode_libdir_separator=
fi
fi
;;
esac
shared_flag='-shared'
if test "$aix_use_runtimelinking" = yes; then
shared_flag="$shared_flag "'${wl}-G'
fi
else

```

```

# not using gcc
if test "$host_cpu" = ia64; then
# VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3 Release
# chokes on -Wl,-G. The following line is correct:
  shared_flag='-G'
else
  if test "$aix_use_runtimelinking" = yes; then
    shared_flag='${wl}-G'
  else
    shared_flag='${wl}-bM:SRE'
  fi
fi
fi

export_dynamic_flag_spec='${wl}-bexpall'
# It seems that -bexpall does not export symbols beginning with
# underscore (_), so it is better to generate a list of symbols
to export.
always_export_symbols=yes
if test "$aix_use_runtimelinking" = yes; then
# Warning - without using the other runtime loading flags (-
brtl),
# -berok will link without error, but may produce a broken
library.
  allow_undefined_flag='-berok'
  # Determine the default libpath from the value encoded in an
  # empty executable.
  if test "${lt_cv_aix_libpath+set}" = set; then
    aix_libpath=$lt_cv_aix_libpath
  else
    if ${lt_cv_aix_libpath_+set} false; then :
      $as_echo_n "(cached) " >&6
    else
      cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

  lt_aix_libpath_sed='
  /Import File Strings/,/^$/ {
    /^0/ {
      s/^0 *\([^ ]*\) *$/\1/
      p
    }
  }

```



```

    }'
    lt_cv_aix_libpath=`dump -H conftest$sac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
fi
rm -f core conftest.err conftest.$sac_objext \
conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi
fi

aix_libpath=$lt_cv_aix_libpath_
fi

    hardcode_libdir_flag_spec='${wl}-
bllibpath:$libdir:'"$aix_libpath"
    archive_expsym_cmds='$CC -o $output_objdir/$soname $libobjs
$deplibs '"'\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else ;; fi`
'"'\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
    else
        if test "$host_cpu" = ia64; then
            hardcode_libdir_flag_spec='${wl}-R $libdir:/usr/lib:/lib'
            allow_undefined_flag="-z nodefs"
            archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs '"'\${wl}$no_entry_flag"'
$compiler_flags ${wl}${allow_undefined_flag}
'"'\${wl}$exp_sym_flag:\$export_symbols"
        else
            # Determine the default libpath from the value encoded in an
            # empty executable.
            if test "${lt_cv_aix_libpath+set}" = set; then
                aix_libpath=$lt_cv_aix_libpath
            else
                if ${lt_cv_aix_libpath_+} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    cat confdefs.h - <<_ACEOF >conftest.$sac_ext
/* end confdefs.h. */

int
main ()
{

;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0 *\[^\]*\)*$\/\1/
                p
            }
        }'

    lt_cv_aix_libpath_=`dump -H conftest$sac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_
fi

    hardcode_libdir_flag_spec='${wl}-
bllibpath:$libdir:"$aix_libpath"
    # Warning - without using the other run time loading flags,
    # -berok will link without error, but may produce a broken
library.
    no_undefined_flag=' ${wl}-bernotok'
    allow_undefined_flag=' ${wl}-berok'
    if test "$with_gnu_ld" = yes; then
        # We only use this code for GNU lds that support --whole-
archive.
        whole_archive_flag_spec='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
    else
        # Exported symbols can be pulled into shared objects from
archives
        whole_archive_flag_spec='$convenience'
    fi
    archive_cmds_need_lc=yes
    # This is similar to how AIX traditionally builds its shared
libraries.

```

```

        archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
    fi
    fi
    ;;

amigaos*)
    case $host_cpu in
    powerpc)
        # see comment about AmigaOS4 .so support
        archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds=''
        ;;
    m68k)
        archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
        hardcoded_libdir_flag_spec='-L$libdir'
        hardcoded_minus_L=yes
        ;;
    esac
    ;;

bsdi[45]*)
    export_dynamic_flag_spec=-rdynamic
    ;;

cygwin* | mingw* | pw32* | cegcc*)
    # When not using gcc, we currently assume that we are using
    # Microsoft Visual C++.
    # hardcoded_libdir_flag_spec is actually meaningless, as there is
    # no search path for DLLs.
    case $cc_basename in
    cl*)
        # Native MSVC
        hardcoded_libdir_flag_spec=' '
        allow_undefined_flag=unsupported
        always_export_symbols=yes
        file_list_spec='@'
        # Tell ltmain to make .lib files, not .a files.
        libext=lib
        # Tell ltmain to make .dll files, not .so files.
        shrext_cmds=".dll"
        # FIXME: Setting linknames here is a bad hack.

```

```

        archive_cmds='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
        archive_expsym_cmds='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
            sed -n -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' -
e '1\\\\\\\\!p' < $export_symbols > $output_objdir/$soname.exp;
        else
            sed -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
$export_symbols > $output_objdir/$soname.exp;
        fi~
        $CC -o $tool_output_objdir$soname $libobjs $compiler_flags
$deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
IMPLIB:"$tool_output_objdir$libname.dll.lib"~
        linknames='
        # The linker will not automatically build a static lib if we
build a DLL.
        # _LT_TAGVAR(old_archive_from_new_cmds, )='true'
        enable_shared_with_static_runtimes=yes
        exclude_expsyms='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_.*'
        export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\\'/^[BCDGRS][ ]/s/.*[ ]\\([^\
]*\\)/\1,DATA/\\' | $SED -e '\\'/^[AITW][ ]/s/.*[ ]//\\' | sort |
uniq > $export_symbols'
        # Don't use ranlib
        old_postinstall_cmds='chmod 644 $oldlib'
        postlink_cmds='lt_outputfile="@OUTPUT@"~
        lt_tool_outputfile="@TOOL_OUTPUT@"~
        case $lt_outputfile in
        *.exe|*.EXE) ;;
        *)
            lt_outputfile="$lt_outputfile.exe"
            lt_tool_outputfile="$lt_tool_outputfile.exe"
        ;;
        esac~
        if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
            $MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
            $RM "$lt_outputfile.manifest";
        fi'
        ;;
        *)
        # Assume MSVC wrapper
        hardcode_libdir_flag_spec=' '
        allow_undefined_flag=unsupported
        # Tell ltmain to make .lib files, not .a files.
        libext=lib
        # Tell ltmain to make .dll files, not .so files.
        shrext_cmds=".dll"
        # FIXME: Setting linknames here is a bad hack.
        archive_cmds='$CC -o $lib $libobjs $compiler_flags `func_echo_all
"$deplibs" | $SED '\\'/s/ -lc$//\\'` -link -dll~linknames='

```

```

# The linker will automatically build a .lib file if we build a
DLL.
old_archive_from_new_cmds='true'
# FIXME: Should let the user specify the lib program.
old_archive_cmds='lib -OUT:$oldlib$oldobjs$old_deplibs'
enable_shared_with_static_runtimes=yes
;;
esac
;;

darwin* | rhapsody*)

archive_cmds_need_lc=no
hardcode_direct=no
hardcode_automatic=yes
hardcode_shlibpath_var=unsupported
if test "$lt_cv_ld_force_load" = "yes"; then
  whole_archive_flag_spec='`for conv in $convenience\""; do test -
n \"$conv\" && new_convenience=\"$new_convenience ${wl}-
force_load,$conv\""; done; func_echo_all \"$new_convenience\"`'
else
  whole_archive_flag_spec=''
fi
link_all_deplibs=yes
allow_undefined_flag="$lt_dar_allow_undefined"
case $cc_basename in
  ifort*) _lt_dar_can_shared=yes ;;
  *) _lt_dar_can_shared=$GCC ;;
esac
if test "$lt_dar_can_shared" = "yes"; then
  output_verbose_link_cmd=func_echo_all
  archive_cmds="\$CC -dynamiclib \$allow_undefined_flag -o \$lib
\$libobjs \$deplibs \$compiler_flags -install_name \$rpath/\$soname
\$verstring \$lt_dar_single_mod${_lt_dsymutil}"
  module_cmds="\$CC \$allow_undefined_flag -o \$lib -bundle
\$libobjs \$deplibs \$compiler_flags${_lt_dsymutil}"
  archive_expsym_cmds="sed 's,^,,' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -dynamiclib
\$allow_undefined_flag -o \$lib \$libobjs \$deplibs \$compiler_flags -
install_name \$rpath/\$soname \$verstring
\${_lt_dar_single_mod}\${_lt_dar_export_syms}\${_lt_dsymutil}"
  module_expsym_cmds="sed -e 's,^,,' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC \$allow_undefined_flag
-o \$lib -bundle \$libobjs \$deplibs
\$compiler_flags\${_lt_dar_export_syms}\${_lt_dsymutil}"
else
  ld_shlibs=no
fi

```

```

;;

dgux*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_shlibpath_var=no
    ;;

# FreeBSD 2.2.[012] allows us to include c++rt0.o to get C++
constructor
# support.  Future versions do this automatically, but an explicit
c++rt0.o
# does not break anything, and helps significantly (at the cost of
a little
# extra space).
freebsd2.2*)
    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags /usr/lib/c++rt0.o'
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

# Unfortunately, older versions of FreeBSD 2 do not have this
feature.
freebsd2.*)
    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_direct=yes
    hardcode_minus_L=yes
    hardcode_shlibpath_var=no
    ;;

# FreeBSD 3 and greater uses gcc -shared to do shared libraries.
freebsd* | dragonfly*)
    archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

hpux9*)
    if test "$GCC" = yes; then
        archive_cmds='$RM $output_objdir/$soname~$CC -shared $pic_flag
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $libobjs
$deplibs $compiler_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
    else
        archive_cmds='$RM $output_objdir/$soname~$LD -b +b
$install_libdir -o $output_objdir/$soname $libobjs $deplibs

```

```

$linker_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
    fi
    hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_direct=yes

    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
    export_dynamic_flag_spec='${wl}-E'
    ;;

hpux10*)
    if test "$GCC" = yes && test "$with_gnu_ld" = no; then
        archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
    else
        archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
    fi
    if test "$with_gnu_ld" = no; then
        hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
        hardcode_libdir_separator=:
        hardcode_direct=yes
        hardcode_direct_absolute=yes
        export_dynamic_flag_spec='${wl}-E'
        # hardcode_minus_L: Not really in the search PATH,
        # but as the default location of the library.
        hardcode_minus_L=yes
    fi
    ;;

hpux11*)
    if test "$GCC" = yes && test "$with_gnu_ld" = no; then
        case $host_cpu in
            hppa*64*)
                archive_cmds='$CC -shared ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
                ;;
            ia64*)
                archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $libobjs $deplibs $compiler_flags'
                ;;
            *)
                archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+b ${wl}$install_libdir -o $lib $libobjs $deplibs
$compiler_flags'
                ;;
        esac
    else
        case $host_cpu in

```

```

        hppa*64*)
            archive_cmds='$CC -b ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
            ;;
        ia64*)
            archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+nodefaulttrpath
-o $lib $libobjs $deplibs $compiler_flags'
            ;;
        *)

            # Older versions of the 11.00 compiler do not understand -b yet
            # (HP92453-01 A.11.01.20 doesn't, HP92453-01 B.11.X.35175-
35176.GP does)
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $CC
understands -b" >&5
$as_echo_n "checking if $CC understands -b... " >&6; }
if ${lt_cv_prog_compiler__b+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler__b=no
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -b"
    echo "$lt_simple_link_test_code" > conftest.$ac_ext
    if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
        # The linker can only warn and ignore the option if not
recognized
        # So say no if there are warnings
        if test -s conftest.err; then
            # Append any errors to the config.log.
            cat conftest.err 1>&5
            $ECHO "$lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
            $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
            if diff conftest.exp conftest.er2 >/dev/null; then
                lt_cv_prog_compiler__b=yes
            fi
        else
            lt_cv_prog_compiler__b=yes
        fi
    fi
    $RM -r conftest*
    LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler__b" >&5
$as_echo "$lt_cv_prog_compiler__b" >&6; }

if test x"$lt_cv_prog_compiler__b" = xyes; then
    archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
else

```



```

    archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
fi

    ;;
esac
fi
if test "$with_gnu_ld" = no; then
hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
hardcode_libdir_separator=:

case $host_cpu in
hppa*64*|ia64*)
    hardcode_direct=no
    hardcode_shlibpath_var=no
    ;;
*)
    hardcode_direct=yes
    hardcode_direct_absolute=yes
    export_dynamic_flag_spec='${wl}-E'

    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
    ;;
esac
fi

    ;;
esac
fi
;;

irix5* | irix6* | nonstopux*)
    if test "$GCC" = yes; then
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations -o $lib'
        # Try to use the -exported_symbol ld option, if it does not
        # work, assume that -exports_file does not work either and
        # implicitly export all symbols.
        # This should be the same for all languages, so no per-tag cache
        variable.
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$host_os linker accepts -exported_symbol" >&5
$as_echo_n "checking whether the $host_os linker accepts -
exported_symbol... " >&6; }
if ${lt_cv_irix_exported_symbol+:} false; then :
    $as_echo_n "(cached) " >&6
else
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -shared ${wl}-exported_symbol ${wl}foo
${wl}-update_registry ${wl}/dev/null"
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

```

```

int foo (void) { return 0; }
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    lt_cv_irix_exported_symbol=yes
else
    lt_cv_irix_exported_symbol=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS="$save_LDFLAGS"
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_irix_exported_symbol" >&5
$as_echo "$lt_cv_irix_exported_symbol" >&6; }
    if test "$lt_cv_irix_exported_symbol" = yes; then
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations ${wl}-exports_file
${wl}$export_symbols -o $lib'
    fi
    else
        archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -
soname $soname `test -n "$verstring" && func_echo_all "-set_version
$verstring"` -update_registry ${output_objdir}/so_locations -o $lib'
        archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags -soname $soname `test -n "$verstring" && func_echo_all
"-set_version $verstring"` -update_registry
${output_objdir}/so_locations -exports_file $export_symbols -o $lib'
    fi
    archive_cmds_need_lc='no'
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    inherit_rpath=yes
    link_all_deplibs=yes
    ;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags' # a.out
    else
        archive_cmds='$LD -shared -o $lib $libobjs $deplibs
$linker_flags' # ELF
    fi
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

newsos6)

```

```

        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=yes
        hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
        hardcode_libdir_separator=:
        hardcode_shlibpath_var=no
        ;;

*nto* | *qnx*)
        ;;

openbsd*)
        if test -f /usr/libexec/ld.so; then
            hardcode_direct=yes
            hardcode_shlibpath_var=no
            hardcode_direct_absolute=yes
            if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
                archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
                archive_expsym_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags ${wl}-retain-symbols-file,$export_symbols'
                hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
                export_dynamic_flag_spec='${wl}-E'
            else
                case $host_os in
                    openbsd[01].* | openbsd2.[0-7] | openbsd2.[0-7].*)
                        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
                        hardcode_libdir_flag_spec='-R$libdir'
                        ;;
                    *)
                        archive_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags'
                        hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
                        ;;
                esac
            fi
        else
            ld_shlibs=no
        fi
        ;;

os2*)
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_minus_L=yes
        allow_undefined_flag=unsupported
        archive_cmds='$ECHO "LIBRARY $libname INITINSTANCE" >
$output_objdir/$libname.def~$ECHO "DESCRIPTION \"$libname\"" >>
$output_objdir/$libname.def~echo DATA >>
$output_objdir/$libname.def~echo " SINGLE NONSHARED" >>
$output_objdir/$libname.def~echo EXPORTS >>

```

```

$output_objdir/$libname.def~emxexp $libobjs >>
$output_objdir/$libname.def~$CC -Zdll -Zcrt.dll -o $lib $libobjs
$deplibs $compiler_flags $output_objdir/$libname.def'
    old_archive_from_new_cmds='emximp -o $output_objdir/$libname.a
$output_objdir/$libname.def'
;;

osf3*)
    if test "$GCC" = yes; then
        allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$sverstring" && func_echo_all "${wl}-set_version ${wl}$sverstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
    else
        allow_undefined_flag=' -expect_unresolved \*'
        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -soname $soname `test -n "$sverstring" &&
func_echo_all "-set_version $sverstring"` -update_registry
${output_objdir}/so_locations -o $lib'
    fi
    archive_cmds_need_lc='no'
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
;;

osf4* | osf5*)    # as osf3* with the addition of -msym flag
    if test "$GCC" = yes; then
        allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
        archive_cmds='$CC -shared${allow_undefined_flag} $pic_flag
$libobjs $deplibs $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$sverstring" && func_echo_all "${wl}-set_version
${wl}$sverstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
        hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    else
        allow_undefined_flag=' -expect_unresolved \*'
        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -msym -soname $soname `test -n "$sverstring"
&& func_echo_all "-set_version $sverstring"` -update_registry
${output_objdir}/so_locations -o $lib'
        archive_expsym_cmds='for i in `cat $export_symbols`; do printf
"%s %s\n" -exported_symbol "\$i" >> $lib.exp; done; printf "%s\n" "-
hidden">> $lib.exp~
        $CC -shared${allow_undefined_flag} ${wl}-input ${wl}$lib.exp
$compiler_flags $libobjs $deplibs -soname $soname `test -n
"$sverstring" && $ECHO "-set_version $sverstring"` -update_registry
${output_objdir}/so_locations -o $lib~$RM $lib.exp'

# Both c and cxx compiler support -rpath directly
hardcode_libdir_flag_spec='-rpath $libdir'
fi

```

```

archive_cmds_need_lc='no'
hardcode_libdir_separator=:
;;

solaris*)
no_undefined_flag=' -z defs'
if test "$GCC" = yes; then
wlarc='${wl}'
archive_cmds='$CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-h
${wl}$soname -o $lib $libobjs $deplibs $compiler_flags'
archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-M ${wl}$lib.exp
${wl}-h ${wl}$soname -o $lib $libobjs $deplibs $compiler_flags~$RM
$lib.exp'
else
case ` $CC -V 2>&1 ` in
*"Compilers 5.0"*)
wlarc=''
archive_cmds='$LD -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $linker_flags'
archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$LD -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $linker_flags~$RM $lib.exp'
;;
*)
wlarc='${wl}'
archive_cmds='$CC -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $compiler_flags'
archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $compiler_flags~$RM $lib.exp'
;;
esac
fi
hardcode_libdir_flag_spec='-R$libdir'
hardcode_shlibpath_var=no
case $host_os in
solaris2.[0-5] | solaris2.[0-5].*) ;;
*)
# The compiler driver will combine and reorder linker options,
# but understands '-z linker_flag'. GCC discards it without
`$wl',
# but is careful enough not to reorder.
# Supported since Solaris 2.6 (maybe 2.5.1?)
if test "$GCC" = yes; then

```

```

        whole_archive_flag_spec='${wl}-z ${wl}alleextract$convenience
${wl}-z ${wl}defaultextract'
    else
        whole_archive_flag_spec='-z alleextract$convenience -z
defaultextract'
    fi
    ;;
esac
link_all_deplibs=yes
;;

sunos4*)
    if test "x$host_vendor" = xsequent; then
        # Use $CC to link under sequent, because it throws in some extra
.o
        # files that make .init and .fini sections work.
        archive_cmds='$CC -G ${wl}-h $soname -o $lib $libobjs $deplibs
$compiler_flags'
    else
        archive_cmds='$LD -assert pure-text -Bstatic -o $lib $libobjs
$deplibs $linker_flags'
    fi
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_direct=yes
    hardcode_minus_L=yes
    hardcode_shlibpath_var=no
    ;;

sysv4)
    case $host_vendor in
        sni)
            archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
            hardcode_direct=yes # is this really true???
            ;;
        siemens)
            ## LD is ld it makes a PLAMLIB
            ## CC just makes a GrossModule.
            archive_cmds='$LD -G -o $lib $libobjs $deplibs $linker_flags'
            reload_cmds='$CC -r -o $output$reload_objs'
            hardcode_direct=no
            ;;
        motorola)
            archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
            hardcode_direct=no #Motorola manual says yes, but my tests say
they lie
            ;;
    esac
    runpath_var='LD_RUN_PATH'
    hardcode_shlibpath_var=no
    ;;

```

```

sysv4.3*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_shlibpath_var=no
    export_dynamic_flag_spec='-Bexport'
    ;;

sysv4*MP*)
    if test -d /usr/nec; then
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_shlibpath_var=no
        runpath_var=LD_RUN_PATH
        hardcode_runpath_var=yes
        ld_shlibs=yes
    fi
    ;;

sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
    no_undefined_flag='${wl}-z,text'
    archive_cmds_need_lc=no
    hardcode_shlibpath_var=no
    runpath_var='LD_RUN_PATH'

    if test "$GCC" = yes; then
        archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
        archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    else
        archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
        archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    fi
    ;;

sysv5* | sco3.2v5* | sco5v6*)
    # Note: We can NOT use -z defs as we might desire, because we do
not
    # link with -lc, and that would cause any symbols used from libc
to
    # always be unresolved, which means just about no library would
    # ever link correctly.  If we're not using GNU ld we use -z text
    # though, which does catch some bad symbols but isn't as heavy-
handed
    # as -z defs.
    no_undefined_flag='${wl}-z,text'
    allow_undefined_flag='${wl}-z,nodefs'
    archive_cmds_need_lc=no

```

```

hardcode_shlibpath_var=no
hardcode_libdir_flag_spec='${wl}-R,$libdir'
hardcode_libdir_separator=':'
link_all_deplibs=yes
export_dynamic_flag_spec='${wl}-Bexport'
runpath_var='LD_RUN_PATH'

if test "$GCC" = yes; then
  archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
  archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
else
  archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
  archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
fi
;;

uts4*)
  archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
  hardcode_libdir_flag_spec='-L$libdir'
  hardcode_shlibpath_var=no
  ;;

*)
  ld_shlibs=no
  ;;
esac

if test x$host_vendor = xsni; then
  case $host in
    sysv4 | sysv4.2uw2* | sysv4.3* | sysv5*)
      export_dynamic_flag_spec='${wl}-Blargedynsym'
      ;;
    esac
fi
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs" >&5
$as_echo "$ld_shlibs" >&6; }
test "$ld_shlibs" = no && can_build_shared=no

with_gnu_ld=$with_gnu_ld

```



```

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc" in
x|xyes)
    # Assume -lc should be added
    archive_cmds_need_lc=yes

    if test "$enable_shared" = yes && test "$GCC" = yes; then
        case $archive_cmds in
        *'~'*)
            # FIXME: we may have to deal with multi-command sequences.
            ;;
        '$CC '* )
            # Test whether the compiler implicitly links with -lc since on
some
            # systems, -lgcc has to come before -lc. If gcc already passes -
lc
            # to ld, don't add -lc before -lgcc.
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$as_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }
if ${lt_cv_archive_cmds_need_lc+:} false; then :
    $as_echo_n "(cached) " >&6
else
    $RM conftest*
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

    if { { eval echo "\"\`$as_me\`:${as_lineno-$LINENO}:"
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
test $ac_status = 0; } 2>conftest.err; then
        soname=conftest
        lib=conftest
        libobjs=conftest.$ac_objext
        deplibs=
        wl=$lt_prog_compiler_wl
        pic_flag=$lt_prog_compiler_pic
        compiler_flags=-v
        linker_flags=-v

```

```

        verstring=
        output_objdir=.
        libname=confptest
        lt_save_allow_undefined_flag=$allow_undefined_flag
        allow_undefined_flag=
        if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$archive_cmds 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1\""; } >&5
        (eval $archive_cmds 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1)
2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }
        then
            lt_cv_archive_cmds_need_lc=no
        else
            lt_cv_archive_cmds_need_lc=yes
        fi
        allow_undefined_flag=$lt_save_allow_undefined_flag
    else
        cat confptest.err 1>&5
    fi
    $RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc" >&5
$as_echo "$lt_cv_archive_cmds_need_lc" >&6; }
    archive_cmds_need_lc=$lt_cv_archive_cmds_need_lc
    ;;
esac
fi
;;
esac

```



```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }

if test "$GCC" = yes; then
  case $host_os in
    darwin*) lt_awk_arg="/^libraries:/,/LR/" ;;
    *) lt_awk_arg="/^libraries:/" ;;
  esac
  case $host_os in
    mingw* | cegcc*) lt_sed_strip_eq="s,=\([A-Za-z]:\) ,\1,g" ;;
    *) lt_sed_strip_eq="s,=/,/,g" ;;
  esac
  lt_search_path_spec=`$CC -print-search-dirs | awk $lt_awk_arg | $SED
-e "s/^libraries:/" -e $lt_sed_strip_eq`
  case $lt_search_path_spec in
    *\;*)
      # if the path contains ";" then we assume it to be the separator
      # otherwise default to the standard path separator (i.e. ":") - it
is
      # assumed that no part of a normal pathname contains ";" but that
should

```

```

    # okay in the real world where ";" in dirpaths is itself
    problematic.
    lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED 's;/;/
/g'`
    ;;
*)
    lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED
"s/$PATH_SEPARATOR/ /g"`
    ;;
esac
# Ok, now we have the path, separated by spaces, we can step through
it
# and add multilib dir if necessary.
lt_tmp_lt_search_path_spec=
lt_multi_os_dir=`$CC $CPPFLAGS $CFLAGS $LDFLAGS -print-multi-os-
directory 2>/dev/null`
for lt_sys_path in $lt_search_path_spec; do
    if test -d "$lt_sys_path/$lt_multi_os_dir"; then
        lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path/$lt_multi_os_dir"
    else
        test -d "$lt_sys_path" && \
        lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path"
    fi
done
lt_search_path_spec=`$ECHO "$lt_tmp_lt_search_path_spec" | awk '
BEGIN {RS=" "; FS="|\\n";} {
lt_foo="";
lt_count=0;
for (lt_i = NF; lt_i > 0; lt_i--) {
    if ($lt_i != "" && $lt_i != ".") {
        if ($lt_i == "..") {
            lt_count++;
        } else {
            if (lt_count == 0) {
                lt_foo="/" $lt_i lt_foo;
            } else {
                lt_count--;
            }
        }
    }
}
}
if (lt_foo != "") { lt_freq[lt_foo]++; }
if (lt_freq[lt_foo] == 1) { print lt_foo; }
}'`
# AWK program above erroneously prepends '/' to C:/dos/paths
# for these hosts.
case $host_os in
mingw* | cegcc*) lt_search_path_spec=`$ECHO "$lt_search_path_spec"
|\
    $SED 's,/\/([A-Za-z]:),\1,g'` ;;

```

```

    esac
    sys_lib_search_path_spec=`$ECHO "$lt_search_path_spec" | $lt_NL2SP`
else
    sys_lib_search_path_spec="/lib /usr/lib /usr/local/lib"
fi
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
finish_eval=
shlibpath_var=
shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
aix3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
    shlibpath_var=LIBPATH

    # AIX 3 has no versioning support, so we append a major version to
the name.
    soname_spec='${libname}${release}${shared_ext}$major'
    ;;

aix[4-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    hardcode_into_libs=yes
    if test "$host_cpu" = ia64; then
        # AIX 5 supports IA64
        library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'
        shlibpath_var=LD_LIBRARY_PATH
    else
        # With GCC up to 2.95.x, collect2 would create an import file

```

```

# for dependence libraries. The import file would start with
# the line `#! .' . This would cause the generated library to
# depend on `.', always an invalid library. This was fixed in
# development snapshots of GCC prior to 3.0.
case $host_os in
  aix4 | aix4.[01] | aix4.[01].*)
    if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)';
      echo ' yes '
      echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
      :
    else
      can_build_shared=no
    fi
  ;;
esac
# AIX (on Power*) has no versioning support, so currently we can
not hardcode correct
# soname into executable. Probably we can add versioning support
to
# collect2, so additional links can be useful in future.
if test "$aix_use_runtimelinking" = yes; then
  # If using run time linking (on AIX 4.2 or later) use
lib<name>.so
  # instead of lib<name>.a to let people know that these are not
  # typical AIX shared libraries.
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  else
  # We preserve .a as extension for shared libraries through
AIX4.2
  # and later when we are not doing run time linking.
  library_names_spec='${libname}${release}.a $libname.a'
  soname_spec='${libname}${release}${shared_ext}$major'
fi
shlibpath_var=LIBPATH
fi
;;

amigaos*)
case $host_cpu in
  powerpc)
    # Since July 2007 AmigaOS4 officially supports .so libraries.
    # When compiling the executable, add -use-dynld -Lsojbs: to the
    compileline.
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    ;;
  m68k)
    library_names_spec='$libname.ixlibrary $libname.a'
    # Create ${libname}_ixlibrary.a entries in /sys/libs.

```



```

        finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
'\''s%^\./\([^/]*\)\.ixlibrary$%\1%\''`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
        ;;
    esac
    ;;

beos*)
    library_names_spec='${libname}${shared_ext}'
    dynamic_linker="$host_os ld.so"
    shlibpath_var=LIBRARY_PATH
    ;;

bsdi[45]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="$PATH:/sbin" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
    sys_lib_dldsearch_path_spec="/shlib /usr/lib /usr/local/lib"
    # the default ld.so.conf also contains /usr/contrib/lib and
    # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
    # libtool to hard-code these into programs
    ;;

cygwin* | mingw* | pw32* | cegcc*)
    version_type=windows
    shrext_cmds=".dll"
    need_version=no
    need_lib_prefix=no

    case $GCC,$cc_basename in
    yes,*)
        # gcc
        library_names_spec='$libname.dll.a'
        # DLL is installed to $(libdir)/../bin by postinstall_cmds
        postinstall_cmds='base_file=`basename \${file}`~
dldir=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\''\`i; echo
\${dldir}`~
dldir=$destdir/`dirname \${dldir}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dldir} \${dldir}/\${dldir}~
chmod a+x \${dldir}/\${dldir}~

```

```

        if test -n '\'$stripme\' && test -n '\'$striplib\''; then
            eval '\'$striplib \${dldir}/${dlname}\'' || exit \${?};
        fi
        postuninstall_cmds='dldll=\${SHELL} 2>&1 -c '\'. $file; echo
\${dlname}\''~
            dlpath=\${dir}/\${dldll}~
            \$RM \${dlpath}'
        shlibpath_overrides_runpath=yes

        case \${host_os} in
        cygwin*)
            # Cygwin DLLs use 'cyg' prefix rather than 'lib'
            soname_spec='\`echo \${libname} | sed -e 's/^lib/cyg/'\`echo
\${release} | \$SED -e 's/[.]/-/g'\` \${versuffix}\${shared_ext}'

            sys_lib_search_path_spec="\${sys_lib_search_path_spec}
/usr/lib/w32api"
            ;;
        mingw* | cegcc*)
            # MinGW DLLs use traditional 'lib' prefix
            soname_spec='\${libname}\`echo \${release} | \$SED -e 's/[.]/-
/g'\` \${versuffix}\${shared_ext}'
            ;;
        pw32*)
            # pw32 DLLs use 'pw' prefix rather than 'lib'
            library_names_spec='\`echo \${libname} | sed -e 's/^lib/pw/'\`echo
\${release} | \$SED -e 's/[.]/-/g'\` \${versuffix}\${shared_ext}'
            ;;
        esac
        dynamic_linker='Win32 ld.exe'
        ;;

*,cl*)
        # Native MSVC
        libname_spec='\${name}'
        soname_spec='\${libname}\`echo \${release} | \$SED -e 's/[.]/-
/g'\` \${versuffix}\${shared_ext}'
        library_names_spec='\${libname}.dll.lib'

        case \${build_os} in
        mingw*)
            sys_lib_search_path_spec=
            lt_save_ifs=\${IFS}
            IFS=';'
            for lt_path in \${LIB}
            do
                IFS=\${lt_save_ifs}
                # Let DOS variable expansion print the short 8.3 style file
name.
                lt_path=\`cd "\${lt_path}" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si"\`
                sys_lib_search_path_spec="\${sys_lib_search_path_spec} \${lt_path}"

```

```

done
IFS=$lt_save_ifs
# Convert to MSYS style.
sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\|/|g' -e 's| \\\([a-zA-Z]\\|):| /\\|g' -e 's|^|'|`
;;
cygwin*)
# Convert to unix form, then to dos form, then back to unix form
# but this time dos style (no spaces!) so that the unix form
looks
# like /cygdrive/c/PROGRA~1:/cygdr...
sys_lib_search_path_spec=`cygpath --path --unix "$LIB"`
sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null`
sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g"`
;;
*)
sys_lib_search_path_spec="$LIB"
if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zA-Z]:/'
>/dev/null; then
# It is most probably a Windows format PATH.
sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's/;/ /g'`
else
sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g"`
fi
# FIXME: find the short name or the path components, as spaces
are
# common. (e.g. "Program Files" -> "PROGRA~1")
;;
esac

# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\''$. $dir/\${base_file}'\''i; echo
\${dlname}'\''~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dlname} \${dldir}/\${dlname}'
postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''$. $file; echo
\${dlname}'\''~
dlpath=$dir/\${dldll}~
$RM \${dlpath}'
shlibpath_overrides_runpath=yes
dynamic_linker='Win32 link.exe'
;;
*)
# Assume MSVC wrapper

```

```

        library_names_spec='${libname}`echo ${release} | $SED -e 's/[.]/-
/g'`${versuffix}${shared_ext} $libname.lib'
        dynamic_linker='Win32 ld.exe'
        ;;
    esac
    # FIXME: first we should search . and the directory the executable
is in
    shlibpath_var=PATH
    ;;

darwin* | rhapsody*)
    dynamic_linker="$host_os dyld"
    version_type=darwin
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${major}${shared_ext}
${libname}${shared_ext}'
    soname_spec='${libname}${release}${major}${shared_ext}'
    shlibpath_overrides_runpath=yes
    shlibpath_var=DYLD_LIBRARY_PATH
    shrext_cmds='`test .$module = .yes && echo .so || echo .dylib`'

    sys_lib_search_path_spec="$sys_lib_search_path_spec /usr/local/lib"
    sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
    ;;

dgux*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

freebsd* | dragonfly*)
    # DragonFly does not have aout.  When/if they implement a new
    # versioning mechanism, adjust this.
    if test -x /usr/bin/objformat; then
        objformat=`/usr/bin/objformat`
    else
        case $host_os in
            freebsd[23].*) objformat=aout ;;
            *) objformat=elf ;;
        esac
    fi
    version_type=freebsd-$objformat
    case $version_type in
        freebsd-elf*)

```

```

        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
        need_version=no
        need_lib_prefix=no
        ;;
    freebsd-*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname${shared_ext}$versuffix'
        need_version=yes
        ;;
    esac
    shlibpath_var=LD_LIBRARY_PATH
    case $host_os in
    freebsd2.*)
        shlibpath_overrides_runpath=yes
        ;;
    freebsd3.[01]* | freebsdelf3.[01]*)
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
    freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
    freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
        shlibpath_overrides_runpath=no
        hardcode_into_libs=yes
        ;;
    *) # from 4.6 on, and DragonFly
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
    esac
    ;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

haiku*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
    ;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in
    ia64*)
        shrext_cmds='.so'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.so"
        shlibpath_var=LD_LIBRARY_PATH
        shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        if test "X$HPUX_IA64_MODE" = X32; then
            sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
        else
            sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
        fi
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
        ;;
    hppa*64*)
        shrext_cmds='.sl'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.sl"
        shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
        ;;
    *)
        shrext_cmds='.sl'
        dynamic_linker="$host_os dld.sl"
        shlibpath_var=SHLIB_PATH

```

```

    shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    ;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

irix5* | irix6* | nonstopux*)
    case $host_os in
        nonstopux*) version_type=nonstopux ;;
        *)
            if test "$lt_cv_prog_gnu_ld" = yes; then
                version_type=linux # correct to gnu/linux during the next
big refactor
            else
                version_type=irix
            fi ;;
    esac
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext} $libname${shared_ext}'
    case $host_os in
        irix5* | nonstopux*)
            libsuff= shlibsuff=
            ;;
    *)
        case $LD in # libtool.m4 will add one of these switches to LD
*-32|*" -32 " | *-melf32bsmip|*" -melf32bsmip ")

```

```

        libsuff= shlibsuff= libmagic=32-bit;;
*-n32|*" -n32 "|*-melf32bmipn32|*" -melf32bmipn32 ")
        libsuff=32 shlibsuff=N32 libmagic=N32;;
*-64|*" -64 "|*-melf64bmip|*" -melf64bmip ")
        libsuff=64 shlibsuff=64 libmagic=64-bit;;
*) libsuff= shlibsuff= libmagic=never-match;;
esac
;;
esac
shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
shlibpath_overrides_runpath=no
sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
/usr/local/lib${libsuff}"
sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
hardcode_into_libs=yes
;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)
    dynamic_linker=no
    ;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no

    # Some binutils ld are patched to set DT_RUNPATH
    if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        lt_cv_shlibpath_overrides_runpath=no
        save_LDFLAGS=$LDFLAGS
        save_libdir=$libdir
        eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl\"; \
            LDFLAGS=\"\$LDFLAGS $hardcode_libdir_flag_spec\""
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

;

```



```

    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    if ($OBJDUMP -p conftest$sac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
    lt_cv_shlibpath_overrides_runpath=yes
fi
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
    LDFLAGS=$save_LDFLAGS
    libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.
# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
    lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \2)); skip = 1; } { if (!skip) print \2; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ ]*hwcap[ ]*/d;s/[: , ]/
/g;s/=[^=]*$/;/s/=[^= ]* / /g;s/"//g;/^$/d' | tr '\n' ' '`
    sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker. Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.
dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
        finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
        dynamic_linker='NetBSD (a.out) ld.so'
    else

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='NetBSD ld.elf_so'
fi
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
;;

newsos6)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    ;;

*nto* | *qnx*)
    version_type=qnx
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    dynamic_linker='ldqnx.so'
    ;;

openbsd*)
    version_type=sunos
    sys_lib_dlsearch_path_spec="/usr/lib"
    need_lib_prefix=no
    # Some older versions of OpenBSD (3.3 at least) *do* need versioned
libs.
    case $host_os in
        openbsd3.3 | openbsd3.3.*)    need_version=yes ;;
        *)                            need_version=no  ;;
    esac
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        case $host_os in
            openbsd2.[89] | openbsd2.[89].*)
                shlibpath_overrides_runpath=no
                ;;

```

```

        *)
        shlibpath_overrides_runpath=yes
        ;;
    esac
else
    shlibpath_overrides_runpath=yes
fi
;;

os2*)
    libname_spec='$name'
    shrext_cmds=".dll"
    need_lib_prefix=no
    library_names_spec='$libname${shared_ext} $libname.a'
    dynamic_linker='OS/2 ld.exe'
    shlibpath_var=LIBPATH
    ;;

osf3* | osf4* | osf5*)
    version_type=osf
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
    sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
    ;;

rdos*)
    dynamic_linker=no
    ;;

solaris*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    # ldd complains unless libraries are executable
    postinstall_cmds='chmod +x $lib'
    ;;

sunos4*)
    version_type=sunos

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
;;

```

```

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)
            shlibpath_overrides_runpath=no
            need_lib_prefix=no
            runpath_var=LD_RUN_PATH
            ;;
        siemens)
            need_lib_prefix=no
            ;;
        motorola)
            need_lib_prefix=no
            need_version=no
            shlibpath_overrides_runpath=no
            sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
            ;;
    esac
;;

```

```

sysv4*MP*)
    if test -d /usr/nec ;then
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='$libname${shared_ext}.$versuffix
$libname${shared_ext}.$major $libname${shared_ext}'
        soname_spec='$libname${shared_ext}.$major'
        shlibpath_var=LD_LIBRARY_PATH
    fi
;;

```

```

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf
    need_lib_prefix=no
    need_version=no

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
                ;;
            esac
        fi
        sys_lib_dlsearch_path_spec='/usr/lib'
        ;;

tpf*)
    # TPF is a cross-target only. Preferred cross-host = GNU/Linux.
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

uts4*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

*)
    dynamic_linker=no
    ;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then

```

```
variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec+set}" = set; then
  sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec+set}" = set; then
  sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to hardcode  
library paths into programs" >&5
```

```

$as_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action=
if test -n "$hardcode_libdir_flag_spec" ||
    test -n "$runpath_var" ||
    test "X$hardcode_automatic" = "Xyes" ; then

    # We can hardcode non-existent directories.
    if test "$hardcode_direct" != no &&
        # If the only mechanism to avoid hardcoding is shlibpath_var, we
        # have to relink, otherwise we might link with an installed
library
        # when we should be linking with a yet-to-be-installed one
        ## test "$_LT_TAGVAR(hardcode_shlibpath_var, )" != no &&
        test "$hardcode_minus_L" != no; then
        # Linking always hardcodes the temporary library directory.
        hardcode_action=relink
    else
        # We can link without hardcoding, and we can hardcode nonexisting
dirs.
        hardcode_action=immediate
    fi
else
    # We cannot hardcode anything, or else we can only hardcode existing
# directories.
    hardcode_action=unsupported
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hardcode_action" >&5
$as_echo "$hardcode_action" >&6; }

if test "$hardcode_action" = relink ||
    test "$inherit_rpath" = yes; then
    # Fast installation is not supported
    enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
    test "$enable_shared" = no; then
    # Fast installation is not necessary
    enable_fast_install=needless
fi

    if test "x$enable_dlopen" != xyes; then
        enable_dlopen=unknown
        enable_dlopen_self=unknown
        enable_dlopen_self_static=unknown
    else
        lt_cv_dlopen=no
        lt_cv_dlopen_libs=

```



```

case $host_os in
beos*)
    lt_cv_dlopen="load_add_on"
    lt_cv_dlopen_libs=
    lt_cv_dlopen_self=yes
    ;;

mingw* | pw32* | cegcc*)
    lt_cv_dlopen="LoadLibrary"
    lt_cv_dlopen_libs=
    ;;

cygwin*)
    lt_cv_dlopen="dlopen"
    lt_cv_dlopen_libs=
    ;;

darwin*)
    # if libdl is installed we need to link against it
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \

```

```

        conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else

    lt_cv_dlopen="dyld"
    lt_cv_dlopen_libs=
    lt_cv_dlopen_self=yes

fi

;;

*)
    ac_fn_c_check_func "$LINENO" "shl_load" "ac_cv_func_shl_load"
if test "x$ac_cv_func_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for shl_load in -
ldld" >&5
$as_echo_n "checking for shl_load in -ldld... " >&6; }
if ${ac_cv_lib_dld_shl_load+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char shl_load ();
int
main ()
{
return shl_load ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dld_shl_load=yes
else

```

```

    ac_cv_lib_dld_shl_load=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_shl_load" >&5
$as_echo "$ac_cv_lib_dld_shl_load" >&6; }
if test "x$ac_cv_lib_dld_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load" lt_cv_dlopen_libs="-ldld"
else
    ac_fn_c_check_func "$LINENO" "dlopen" "ac_cv_func_dlopen"
if test "x$ac_cv_func_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
lsvld" >&5
$as_echo_n "checking for dlopen in -lsvld... " >&6; }
if ${ac_cv_lib_svld_dlopen+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lsvld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_svld_dlopen=yes
else
  ac_cv_lib_svld_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_svld_dlopen" >&5
$as_echo "$ac_cv_lib_svld_dlopen" >&6; }
if test "x$ac_cv_lib_svld_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-lsvld"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dld_link in -
ldld" >&5
$as_echo_n "checking for dld_link in -ldld... " >&6; }
if ${ac_cv_lib_dld_dld_link+:} false; then :
  $as_echo_n "(cached) " >&6

```

```

else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dld_link ();
int
main ()
{
return dld_link ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_dld_dld_link=yes
else
  ac_cv_lib_dld_dld_link=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_dld_link" >&5
$as_echo "$ac_cv_lib_dld_dld_link" >&6; }
if test "x$ac_cv_lib_dld_dld_link" = xyes; then :
  lt_cv_dlopen="dld_link" lt_cv_dlopen_libs="-ldld"
fi

fi

fi

fi

fi

fi

```

```

    ;;
esac

if test "x$lt_cv_dlopen" != xno; then
    enable_dlopen=yes
else
    enable_dlopen=no
fi

case $lt_cv_dlopen in
dlopen)
    save_CPPFLAGS="$CPPFLAGS"
    test "x$ac_cv_header_dlfcn_h" = xyes && CPPFLAGS="$CPPFLAGS -
DHAVE_DLFCN_H"

    save_LDFLAGS="$LDFLAGS"
    wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$export_dynamic_flag_spec\`"

    save_LIBS="$LIBS"
    LIBS="$lt_cv_dlopen_libs $LIBS"

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
program can dlopen itself" >&5
$as_echo_n "checking whether a program can dlopen itself... " >&6; }
if ${lt_cv_dlopen_self+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test "$cross_compiling" = yes; then :
        lt_cv_dlopen_self=cross
    else
        lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
        lt_status=$lt_dlunknown
        cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

#ifdef RTLD_GLOBAL
#   define LT_DLGLOBAL          RTLD_GLOBAL
#else
#   ifdef DL_GLOBAL
#       define LT_DLGLOBAL          DL_GLOBAL
#   else
#       define LT_DLGLOBAL          0
#   endif
#endif
#endif

```

```

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
#  ifdef RTLD_LAZY
#    define LT_DLLAZY_OR_NOW          RTLD_LAZY
#  else
#    ifdef DL_LAZY
#      define LT_DLLAZY_OR_NOW        DL_LAZY
#    else
#      ifdef RTLD_NOW
#        define LT_DLLAZY_OR_NOW      RTLD_NOW
#      else
#        ifdef DL_NOW
#          define LT_DLLAZY_OR_NOW     DL_NOW
#        else
#          define LT_DLLAZY_OR_NOW     0
#        endif
#      endif
#    endif
#  endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#if defined(__GNUC__) && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else
        {
          if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
          else puts (dlerror ());
        }
      /* dlclose (self); */
    }
  else
    puts (dlerror ());

  return status;
}
_LT_EOF

```

```

    if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
    (eval $ac_link) 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
    test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self=no ;;
    esac
    else :
        # compilation failed
        lt_cv_dlopen_self=no
    fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_dlopen_self"
>&5
$as_echo "$lt_cv_dlopen_self" >&6; }

    if test "x$lt_cv_dlopen_self" = xyes; then
        wl=$lt_prog_compiler_wl eval LDFLAGS="\$LDFLAGS
$lt_prog_compiler_static\"
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
statically linked program can dlopen itself" >&5
$as_echo_n "checking whether a statically linked program can dlopen
itself... " >&6; }
if ${lt_cv_dlopen_self_static+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test "$cross_compiling" = yes; then :
        lt_cv_dlopen_self_static=cross
    else
        lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
        lt_status=$lt_dlunknown
        cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

```



```

#ifdef RTLD_GLOBAL
# define LT_DLGLOBAL      RTLD_GLOBAL
#else
#  ifdef DL_GLOBAL
#    define LT_DLGLOBAL    DL_GLOBAL
#  else
#    define LT_DLGLOBAL    0
#  endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
#  ifdef RTLD_LAZY
#    define LT_DLLAZY_OR_NOW      RTLD_LAZY
#  else
#    ifdef DL_LAZY
#      define LT_DLLAZY_OR_NOW    DL_LAZY
#    else
#      ifdef RTLD_NOW
#        define LT_DLLAZY_OR_NOW  RTLD_NOW
#      else
#        ifdef DL_NOW
#          define LT_DLLAZY_OR_NOW  DL_NOW
#        else
#          define LT_DLLAZY_OR_NOW  0
#        endif
#      endif
#    endif
#  endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#ifdef __GNUC__ && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else
        {
          if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
          else puts (dlerror ());
        }
    }
}

```

```

    }
    /* dlclose (self); */
}
else
    puts (dlerror ());

return status;
}
_LT_EOF
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self_static=no ;;
    esac
else :
    # compilation failed
    lt_cv_dlopen_self_static=no
fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_dlopen_self_static" >&5
$as_echo "$lt_cv_dlopen_self_static" >&6; }
fi

    CPPFLAGS="$save_CPPFLAGS"
    LDFLAGS="$save_LDFLAGS"
    LIBS="$save_LIBS"
    ;;
esac

case $lt_cv_dlopen_self in
yes|no) enable_dlopen_self=$lt_cv_dlopen_self ;;
*) enable_dlopen_self=unknown ;;
esac

case $lt_cv_dlopen_self_static in
yes|no) enable_dlopen_self_static=$lt_cv_dlopen_self_static ;;
*) enable_dlopen_self_static=unknown ;;
esac

```

```
fi
```

```
striplib=
old_striplib=
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether stripping
libraries is possible" >&5
$as_echo_n "checking whether stripping libraries is possible... " >&6;
}
if test -n "$STRIP" && $STRIP -V 2>&1 | $GREP "GNU strip" >/dev/null;
then
  test -z "$old_striplib" && old_striplib="$STRIP --strip-debug"
  test -z "$striplib" && striplib="$STRIP --strip-unneeded"
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
# FIXME - insert some real tests, host_os isn't really good enough
case $host_os in
darwin*)
  if test -n "$STRIP" ; then
    striplib="$STRIP -x"
    old_striplib="$STRIP -S"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi
  ;;
*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  ;;
esac
fi
```

```

# Report which library types will actually be built
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if libtool
supports shared libraries" >&5
$as_echo_n "checking if libtool supports shared libraries... " >&6; }
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $scan_build_shared"
>&5
$as_echo "$scan_build_shared" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
shared libraries" >&5
$as_echo_n "checking whether to build shared libraries... " >&6; }
test "$scan_build_shared" = "no" && enable_shared=no

# On AIX, shared libraries and static libraries use the same
namespace, and
# are all built from PIC.
case $host_os in
aix3*)
test "$enable_shared" = yes && enable_static=no
if test -n "$RANLIB"; then
archive_cmds="$archive_cmds~\${RANLIB} \${lib}"
postinstall_cmds='\${RANLIB} \${lib}'
fi
;;
aix[4-9]*)
if test "$host_cpu" != ia64 && test "$aix_use_runtimelinking" = no
; then
test "$enable_shared" = yes && enable_static=no
fi
;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_shared" >&5
$as_echo "$enable_shared" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
static libraries" >&5
$as_echo_n "checking whether to build static libraries... " >&6; }
# Make sure either enable_shared or enable_static is yes.
test "$enable_shared" = yes || enable_static=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_static" >&5
$as_echo "$enable_static" >&6; }

```

```
fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

CC="$lt_save_CC"
```

```
ac_config_commands="$ac_config_commands libtool"
```

```
# Only expand once:
```

```
# compress spaces in flags
CFLAGS=`echo "$CFLAGS" | sed -e 's/ +/ /g'`
CPPFLAGS=`echo "$CPPFLAGS" | sed -e 's/ +/ /g'`
```

```
if test x$enable_gcov = xyes; then
    # so that config.h changes when you toggle gcov support
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_GCOV_ENABLED __GNUC__ * 10000 + __GNUC_MINOR__ * 100 +
__GNUC_PATCHLEVEL__
_ACEOF
```

```
fi
```

```
#### Various functions
```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing socket" >&5
$as_echo_n "checking for library containing socket... " >&6; }
if ${ac_cv_search_socket+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char socket ();
int
main ()
{
return socket ();
  ;
  return 0;
}
_ACEOF
for ac_lib in ' ' socket; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_socket=$ac_res
  fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
  if ${ac_cv_search_socket+:} false; then :
    break
  fi
done
if ${ac_cv_search_socket+:} false; then :

else
  ac_cv_search_socket=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_search_socket"
>&5
$as_echo "$ac_cv_search_socket" >&6; }

```

```

ac_res=$ac_cv_search_socket
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether socklen_t is
defined" >&5
$as_echo_n "checking whether socklen_t is defined... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>

int
main ()
{

socklen_t foo;
foo = 1;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  dbus_have_socklen_t=yes
else
  dbus_have_socklen_t=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_socklen_t"
>&5
$as_echo "$dbus_have_socklen_t" >&6; }

if test "x$dbus_have_socklen_t" = "xyes"; then

$as_echo "@%:@define HAVE_SOCKLEN_T 1" >>confdefs.h

fi

#### Abstract sockets

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking abstract socket
namespace" >&5
$as_echo_n "checking abstract socket namespace... " >&6; }
if ${ac_cv_have_abstract_sockets+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`${ac_pwd}':"
>&5
$as_echo "$as_me: error: in \`${ac_pwd}':" >&2;}
as_fn_error $? "cannot run test program while cross compiling
See \`config.log' for more details" "$LINENO" 5; }
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <stdlib.h>
#include <string.h>
#include <stdio.h>
#include <sys/socket.h>
#include <sys/un.h>
#include <errno.h>

int
main ()
{

  int listen_fd;
  struct sockaddr_un addr;

  listen_fd = socket (PF_UNIX, SOCK_STREAM, 0);

  if (listen_fd < 0)
    {
      fprintf (stderr, "socket() failed: %s\n", strerror (errno));
      exit (1);
    }

  memset (&addr, '\0', sizeof (addr));
  addr.sun_family = AF_UNIX;
  strcpy (addr.sun_path, "X/tmp/dbus-fake-socket-path-used-in-
configure-test");
  addr.sun_path[0] = '\0'; /* this is what makes it abstract */

  if (bind (listen_fd, (struct sockaddr*) &addr, SUN_LEN (&addr)) < 0)
    {
      fprintf (stderr, "Abstract socket namespace bind() failed:
%s\n",
              strerror (errno));
      exit (1);
    }

```



```

    }
    else
        exit (0);

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    ac_cv_have_abstract_sockets=yes
else
    ac_cv_have_abstract_sockets=no

fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$sac_cv_have_abstract_sockets" >&5
$as_echo "$sac_cv_have_abstract_sockets" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$sac_ext >&5'
ac_link='$CC -o conftest$sac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$sac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test x$enable_abstract_sockets = xyes; then
    if test x$sac_cv_have_abstract_sockets = xno; then
        as_fn_error $? "Abstract sockets explicitly required, and support
not detected." "$LINENO" 5
    fi
fi

if test x$enable_abstract_sockets = xno; then
    ac_cv_have_abstract_sockets=no;
fi

if test x$sac_cv_have_abstract_sockets = xyes ; then
    DBUS_PATH_OR_ABSTRACT=abstract

$as_echo "@%:@define HAVE_ABSTRACT_SOCKETS 1" >>confdefs.h

else
    DBUS_PATH_OR_ABSTRACT=path
fi

# this is used in addresses to prefer abstract, e.g.
# unix:path=/foo or unix:abstract=/foo

```

```

#### Sort out XML library

# see what we have
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
XML_ParserCreate_MM in -lexpat" >&5
$as_echo_n "checking for XML_ParserCreate_MM in -lexpat... " >&6; }
if ${ac_cv_lib_expat_XML_ParserCreate_MM+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lexpat $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char XML_ParserCreate_MM ();
int
main ()
{
return XML_ParserCreate_MM ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_expat_XML_ParserCreate_MM=yes
else
  ac_cv_lib_expat_XML_ParserCreate_MM=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_expat_XML_ParserCreate_MM" >&5
$as_echo "$ac_cv_lib_expat_XML_ParserCreate_MM" >&6; }
if test "x$ac_cv_lib_expat_XML_ParserCreate_MM" = xyes; then :
  for ac_header in expat.h
do :
  ac_fn_c_check_header_mongrel "$LINENO" "expat.h"
"ac_cv_header_expat_h" "$ac_includes_default"
if test "x$ac_cv_header_expat_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXPAT_H 1
_ACEOF

```

```

    have_expat=true
else
    have_expat=false
fi

done

else
    have_expat=false
fi

if ! $have_expat ; then
    as_fn_error $? "expat library not found, check config.log for failed
attempts" "$LINENO" 5
fi

XML_LIBS=-lexpat
XML_CFLAGS=

#### Set up final flags

if test "x$sac_cv_env_PKG_CONFIG_set" != "xset"; then
    if test -n "$sac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
        be a program name with args.
        set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_path_PKG_CONFIG+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            case $PKG_CONFIG in
            [\\/] * | ?:[\\/] *)
                ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
                with a path.
                ;;
            *)
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in ' $sac_executable_extensions; do
                        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then

```

```

        ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
    ac_pt_PKG_CONFIG=$PKG_CONFIG
    # Extract the first word of "pkg-config", so it can be a program
    name with args.
    set dummy pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        case $ac_pt_PKG_CONFIG in
            [\\/]*)
                ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
                override the test with a path.
                ;;
            *)
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in ' $ac_executable_extensions; do
                        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                            ac_cv_path_ac_pt_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
                            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                            break 2
                        fi
                    done
                done
            fi
        done
    fi

```

```

done
IFS=$as_save_IFS

;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
  >&5
  $as_echo "$ac_pt_PKG_CONFIG" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
  $as_echo "no" >&6; }
fi

if test "x$ac_pt_PKG_CONFIG" = x; then
  PKG_CONFIG=""
else
  case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
  PKG_CONFIG=$ac_pt_PKG_CONFIG
fi
else
  PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
  _pkg_min_version=0.9.0
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
  $as_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }
  if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
  $as_echo "yes" >&6; }
  else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
  $as_echo "no" >&6; }
  PKG_CONFIG=""
fi
fi

pkg_failed=no

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS" >&5
$as_echo_n "checking for DBUS... " >&6; }

if test -n "$DBUS_CFLAGS"; then
  pkg_cv_DBUS_CFLAGS="$DBUS_CFLAGS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
    { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-1 >= 1.2.16\>"; } >&5
    ($PKG_CONFIG --exists --print-errors "dbus-1 >= 1.2.16") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_DBUS_CFLAGS=`$PKG_CONFIG --cflags "dbus-1 >= 1.2.16"
2>/dev/null`
  else
    pkg_failed=yes
  fi
else
  pkg_failed=untried
fi

if test -n "$DBUS_LIBS"; then
  pkg_cv_DBUS_LIBS="$DBUS_LIBS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
    { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-1 >= 1.2.16\>"; } >&5
    ($PKG_CONFIG --exists --print-errors "dbus-1 >= 1.2.16") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_DBUS_LIBS=`$PKG_CONFIG --libs "dbus-1 >= 1.2.16" 2>/dev/null`
  else
    pkg_failed=yes
  fi
else
  pkg_failed=untried
fi

if test $pkg_failed = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
  _pkg_short_errors_supported=yes
else
  _pkg_short_errors_supported=no
fi
if test $_pkg_short_errors_supported = yes; then

```

```

        DBUS_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "dbus-1 >= 1.2.16" 2>&1`
        else
            DBUS_PKG_ERRORS=`$PKG_CONFIG --print-errors "dbus-1 >=
1.2.16" 2>&1`
        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_PKG_ERRORS" >&5

        as_fn_error $? "Package requirements (dbus-1 >= 1.2.16) were not
met:

$DBUS_PKG_ERRORS

Consider adjusting the PKG_CONFIG_PATH environment variable if you
installed software in a non-standard prefix.

Alternatively, you may set the environment variables DBUS_CFLAGS
and DBUS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details." "$LINENO" 5
    elif test $pkg_failed = untried; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
        as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

Alternatively, you may set the environment variables DBUS_CFLAGS
and DBUS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details.

To get pkg-config, see <http://pkg-config.freedesktop.org/>.
See `config.log' for more details" "$LINENO" 5; }
    else
        DBUS_CFLAGS=$pkg_cv_DBUS_CFLAGS
        DBUS_LIBS=$pkg_cv_DBUS_LIBS
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    fi

# Glib detection

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS_GLIB" >&5
$as_echo_n "checking for DBUS_GLIB... " >&6; }

```

```

if test -n "$DBUS_GLIB_CFLAGS"; then
    pkg_cv_DBUS_GLIB_CFLAGS="$DBUS_GLIB_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"gobject-2.0 >= 2.26, gio-2.0 >= 2.26\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gobject-2.0 >= 2.26, gio-2.0
>= 2.26") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_CFLAGS=`$PKG_CONFIG --cflags "gobject-2.0 >= 2.26,
gio-2.0 >= 2.26" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
if test -n "$DBUS_GLIB_LIBS"; then
    pkg_cv_DBUS_GLIB_LIBS="$DBUS_GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"gobject-2.0 >= 2.26, gio-2.0 >= 2.26\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gobject-2.0 >= 2.26, gio-2.0
>= 2.26") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_LIBS=`$PKG_CONFIG --libs "gobject-2.0 >= 2.26, gio-
2.0 >= 2.26" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
fi

if test $pkg_failed = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
    $as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
if
    if test $_pkg_short_errors_supported = yes; then

```



```

        DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "gobject-2.0 >= 2.26, gio-2.0 >= 2.26" 2>&1`
        else
            DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors
"gobject-2.0 >= 2.26, gio-2.0 >= 2.26" 2>&1`
        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_GLIB_PKG_ERRORS" >&5

        as_fn_error $? "Package requirements (gobject-2.0 >= 2.26, gio-
2.0 >= 2.26) were not met:

```

```
$DBUS_GLIB_PKG_ERRORS
```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables DBUS_GLIB_CFLAGS and DBUS_GLIB_LIBS to avoid the need to call pkg-config.

See the pkg-config man page for more details." "\$LINENO" 5

```
elif test $pkg_failed = untried; then
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
```

```
$as_echo "no" >&6; }
```

```
{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
```

```
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
```

```
as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
```

```
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.
```

Alternatively, you may set the environment variables DBUS_GLIB_CFLAGS and DBUS_GLIB_LIBS to avoid the need to call pkg-config.

See the pkg-config man page for more details.

To get pkg-config, see <<http://pkg-config.freedesktop.org/>>.

```
See `config.log' for more details" "$LINENO" 5; }
```

```
else
```

```
    DBUS_GLIB_CFLAGS=$pkg_cv_DBUS_GLIB_CFLAGS
```

```
    DBUS_GLIB_LIBS=$pkg_cv_DBUS_GLIB_LIBS
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
```

```
$as_echo "yes" >&6; }
```

```
fi
```

```
pkg_failed=no
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
```

```
DBUS_GLIB_THREADS" >&5
```

```
$as_echo_n "checking for DBUS_GLIB_THREADS... " >&6; }
```

```
if test -n "$DBUS_GLIB_THREADS_CFLAGS"; then
```

```
    pkg_cv_DBUS_GLIB_THREADS_CFLAGS="$DBUS_GLIB_THREADS_CFLAGS"
```

```

elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"gthread-2.0 >= 2.6\"; } >&5
        ($PKG_CONFIG --exists --print-errors "gthread-2.0 >= 2.6") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_THREADS_CFLAGS=`$PKG_CONFIG --cflags "gthread-2.0
>= 2.6" 2>/dev/null`
    else
        pkg_failed=yes
    fi
    else
        pkg_failed=untried
    fi
if test -n "$DBUS_GLIB_THREADS_LIBS"; then
    pkg_cv_DBUS_GLIB_THREADS_LIBS="$DBUS_GLIB_THREADS_LIBS"
    elif test -n "$PKG_CONFIG"; then
        if test -n "$PKG_CONFIG" && \
            { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"gthread-2.0 >= 2.6\"; } >&5
            ($PKG_CONFIG --exists --print-errors "gthread-2.0 >= 2.6") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
            test $ac_status = 0; }; then
            pkg_cv_DBUS_GLIB_THREADS_LIBS=`$PKG_CONFIG --libs "gthread-2.0 >=
2.6" 2>/dev/null`
        else
            pkg_failed=yes
        fi
        else
            pkg_failed=untried
        fi
fi

if test $pkg_failed = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
    $as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        DBUS_GLIB_THREADS_PKG_ERRORS=`$PKG_CONFIG --short-errors
--print-errors "gthread-2.0 >= 2.6" 2>&1`
    else
        DBUS_GLIB_THREADS_PKG_ERRORS=`$PKG_CONFIG --print-errors
"gthread-2.0 >= 2.6" 2>&1`

```

```

        fi
        # Put the nasty error message in config.log where it belongs
        echo "$DBUS_GLIB_THREADS_PKG_ERRORS" >&5

        have_glib_threads=no
    elif test $pkg_failed = untried; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        have_glib_threads=no
    else
        DBUS_GLIB_THREADS_CFLAGS=$pkg_cv_DBUS_GLIB_THREADS_CFLAGS
        DBUS_GLIB_THREADS_LIBS=$pkg_cv_DBUS_GLIB_THREADS_LIBS
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
        have_glib_threads=yes
    fi

    if test x$have_glib_threads = xyes; then
        HAVE_GLIB_THREADS_TRUE=
        HAVE_GLIB_THREADS_FALSE='#'
    else
        HAVE_GLIB_THREADS_TRUE='#'
        HAVE_GLIB_THREADS_FALSE=
    fi

GLIB_GENMARSHAL=`$PKG_CONFIG --variable=glib_genmarshal glib-2.0`

DBUS_GLIB_TOOL_CFLAGS=$XML_CFLAGS
DBUS_GLIB_TOOL_LIBS="$XML_LIBS"

### gtk-doc Documentation

    # Extract the first word of "gtkdoc-check", so it can be a program
    name with args.
    set dummy gtkdoc-check; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_GTKDOC_CHECK+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        case $GTKDOC_CHECK in
        [\\/] * | ?:[\\/] *)

```

```

    ac_cv_path_GTKDOC_CHECK="$GTKDOC_CHECK" # Let the user override the
test with a path.
    ;;
*)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_path_GTKDOC_CHECK="$as_dir/$ac_word$ac_exec_ext"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

    ;;
esac
fi
GTKDOC_CHECK=$ac_cv_path_GTKDOC_CHECK
if test -n "$GTKDOC_CHECK"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_CHECK" >&5
$as_echo "$GTKDOC_CHECK" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    for ac_prog in gtkdoc-rebase
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_GTKDOC_REBASE+:} false; then :
    $as_echo_n "(cached) " >&6
else
    case $GTKDOC_REBASE in
    [\\/] * | ?:[\\/] *)
        ac_cv_path_GTKDOC_REBASE="$GTKDOC_REBASE" # Let the user override
the test with a path.
        ;;
    *)
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path GTKDOC_REBASE="$as_dir/$ac_word$ac_exec_ext"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

;;
esac
fi
GTKDOC_REBASE=$ac_cv_path GTKDOC_REBASE
if test -n "$GTKDOC_REBASE"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_REBASE" >&5
$as_echo "$GTKDOC_REBASE" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

test -n "$GTKDOC_REBASE" && break
done
test -n "$GTKDOC_REBASE" || GTKDOC_REBASE="true"

# Extract the first word of "gtkdoc-mkpdf", so it can be a program
name with args.
set dummy gtkdoc-mkpdf; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path GTKDOC_MKPDF+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $GTKDOC_MKPDF in
  [\\/] * | ?:[\\/] *)
    ac_cv_path GTKDOC_MKPDF="$GTKDOC_MKPDF" # Let the user override the
test with a path.
    ;;
  *)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path GTKDOC_MKPDF="$as_dir/$ac_word$ac_exec_ext"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
GTKDOC_MKPDF=$ac_cv_path_GTKDOC_MKPDF
if test -n "$GTKDOC_MKPDF"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $GTKDOC_MKPDF" >&5
$as_echo "$GTKDOC_MKPDF" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

@%:@ Check whether --with-html-dir was given.
if test "${with_html_dir+set}" = set; then :
    withval=$with_html_dir;
else
    with_html_dir='${datadir}/gtk-doc/html'
fi

HTML_DIR="$with_html_dir"

@%:@ Check whether --enable-gtk-doc was given.
if test "${enable_gtk_doc+set}" = set; then :
    enableval=$enable_gtk_doc;
else
    enable_gtk_doc=no
fi

if test x$enable_gtk_doc = xyes; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"gtk-doc >= 1.4\""; } >&5
        ($PKG_CONFIG --exists --print-errors "gtk-doc >= 1.4") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        :
    else

```

```

    as_fn_error $? "You need to have gtk-doc >= 1.4 installed to build
$PACKAGE_NAME" "$LINENO" 5
fi
    if test "x$PACKAGE_NAME" != "xglib"; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GTKDOC_DEPS" >&5
$as_echo_n "checking for GTKDOC_DEPS... " >&6; }

if test -n "$GTKDOC_DEPS_CFLAGS"; then
    pkg_cv_GTKDOC_DEPS_CFLAGS="$GTKDOC_DEPS_CFLAGS"
    elif test -n "$PKG_CONFIG"; then
        if test -n "$PKG_CONFIG" && \
            { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0\""; } >&5
            ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.10.0 gobject-2.0
>= 2.10.0") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
            test $ac_status = 0; }; then
                pkg_cv_GTKDOC_DEPS_CFLAGS=`$PKG_CONFIG --cflags "glib-2.0 >= 2.10.0
gobject-2.0 >= 2.10.0" 2>/dev/null`
            else
                pkg_failed=yes
            fi
        else
            pkg_failed=untried
        fi
    if test -n "$GTKDOC_DEPS_LIBS"; then
        pkg_cv_GTKDOC_DEPS_LIBS="$GTKDOC_DEPS_LIBS"
        elif test -n "$PKG_CONFIG"; then
            if test -n "$PKG_CONFIG" && \
                { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0\""; } >&5
                ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.10.0 gobject-2.0
>= 2.10.0") 2>&5
                ac_status=$?
                $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
                test $ac_status = 0; }; then
                    pkg_cv_GTKDOC_DEPS_LIBS=`$PKG_CONFIG --libs "glib-2.0 >= 2.10.0
gobject-2.0 >= 2.10.0" 2>/dev/null`
                else
                    pkg_failed=yes
                fi
            else
                pkg_failed=untried
            fi
        fi
    if test $pkg_failed = yes; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        GTKDOC_DEPS_PKG_ERRORS=`$PKG_CONFIG --short-errors --
print-errors "glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0" 2>&1`
    else
        GTKDOC_DEPS_PKG_ERRORS=`$PKG_CONFIG --print-errors "glib-
2.0 >= 2.10.0 gobject-2.0 >= 2.10.0" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$GTKDOC_DEPS_PKG_ERRORS" >&5

    as_fn_error $? "Package requirements (glib-2.0 >= 2.10.0 gobject-
2.0 >= 2.10.0) were not met:

$GTKDOC_DEPS_PKG_ERRORS

```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables

```

GTKDOC_DEPS_CFLAGS
and GTKDOC_DEPS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details." "$LINENO" 5
elif test $pkg_failed = untried; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "The pkg-config script could not be found or is too
old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

```

Alternatively, you may set the environment variables

```

GTKDOC_DEPS_CFLAGS
and GTKDOC_DEPS_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details.

```

To get pkg-config, see <<http://pkg-config.freedesktop.org/>>.

See `config.log' for more details" "\$LINENO" 5; }

```

else
    GTKDOC_DEPS_CFLAGS=$pkg_cv GTKDOC_DEPS_CFLAGS
    GTKDOC_DEPS_LIBS=$pkg_cv GTKDOC_DEPS_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```



```

fi
    fi
fi

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build
gtk-doc documentation" >&5
$sas_echo_n "checking whether to build gtk-doc documentation... " >&6;
}
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $enable_gtk_doc"
>&5
$sas_echo "$enable_gtk_doc" >&6; }

    @%:@ Check whether --enable-gtk-doc-html was given.
if test "${enable_gtk_doc_html+set}" = set; then :
    enableval=$enable_gtk_doc_html;
else
    enable_gtk_doc_html=yes
fi

    @%:@ Check whether --enable-gtk-doc-pdf was given.
if test "${enable_gtk_doc_pdf+set}" = set; then :
    enableval=$enable_gtk_doc_pdf;
else
    enable_gtk_doc_pdf=no
fi

if test -z "$GTKDOC_MKPDF"; then
    enable_gtk_doc_pdf=no
fi

    if test x$enable_gtk_doc = xyes; then
        ENABLE_GTK_DOC_TRUE=
        ENABLE_GTK_DOC_FALSE='#'
    else
        ENABLE_GTK_DOC_TRUE='#'
        ENABLE_GTK_DOC_FALSE=
    fi

    if test x$enable_gtk_doc_html = xyes; then
        GTK_DOC_BUILD_HTML_TRUE=
        GTK_DOC_BUILD_HTML_FALSE='#'
    else
        GTK_DOC_BUILD_HTML_TRUE='#'
        GTK_DOC_BUILD_HTML_FALSE=
    fi

    if test x$enable_gtk_doc_pdf = xyes; then
        GTK_DOC_BUILD_PDF_TRUE=
        GTK_DOC_BUILD_PDF_FALSE='#'

```

```

else
  GTK_DOC_BUILD_PDF_TRUE='#'
  GTK_DOC_BUILD_PDF_FALSE=
fi

  if test -n "$LIBTOOL"; then
    GTK_DOC_USE_LIBTOOL_TRUE=
    GTK_DOC_USE_LIBTOOL_FALSE='#'
  else
    GTK_DOC_USE_LIBTOOL_TRUE='#'
    GTK_DOC_USE_LIBTOOL_FALSE=
  fi

  if test -n "$GTKDOC_REBASE"; then
    GTK_DOC_USE_REBASE_TRUE=
    GTK_DOC_USE_REBASE_FALSE='#'
  else
    GTK_DOC_USE_REBASE_TRUE='#'
    GTK_DOC_USE_REBASE_FALSE=
  fi

##### Have to go $localstatedir->$prefix/var->/usr/local/var
##### someone please fix this a better way...

##### find the actual value for $prefix that we'll end up with
## (I know this is broken and should be done in the Makefile, but
## that's a major pain and almost nobody actually seems to care)
REAL_PREFIX=
if test "x$prefix" = "xNONE"; then
  REAL_PREFIX=$ac_default_prefix
else
  REAL_PREFIX=$prefix
fi

## temporarily change prefix and exec_prefix
old_prefix=$prefix
prefix=$REAL_PREFIX

if test "x$exec_prefix" = xNONE ; then
  REAL_EXEC_PREFIX=$REAL_PREFIX
else
  REAL_EXEC_PREFIX=$exec_prefix
fi
old_exec_prefix=$exec_prefix
exec_prefix=$REAL_EXEC_PREFIX

## eval everything
LOCALSTATEDIR_TMP="$localstatedir"
EXPANDED_LOCALSTATEDIR=`eval echo $LOCALSTATEDIR_TMP`

```

```
SYSCONFDIR_TMP="$sysconfdir"  
EXPANDED_SYSCONFDIR=`eval echo $SYSCONFDIR_TMP`
```

```
BINDIR_TMP="$bindir"  
EXPANDED_BINDIR=`eval echo $BINDIR_TMP`
```

```
LIBDIR_TMP="$libdir"  
EXPANDED_LIBDIR=`eval echo $LIBDIR_TMP`
```

```
DATADIR_TMP="$datadir"  
EXPANDED_DATADIR=`eval echo $DATADIR_TMP`
```

```
## put prefix and exec_prefix back  
prefix=$old_prefix  
exec_prefix=$old_exec_prefix
```

```
#### Tell tests where to find certain stuff in builddir  
ABSOLUTE_TOP_BUILDDIR=`cd ${ac_top_builddir}. && pwd`
```

```
TEST_SERVICE_DIR=${ABSOLUTE_TOP_BUILDDIR}/test/data/valid-service-  
files
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SERVICE_DIR "$TEST_SERVICE_DIR"  
_ACEOF
```

```
TEST_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-service
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SERVICE_BINARY "$TEST_SERVICE_BINARY"  
_ACEOF
```

```
TEST_SHELL_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-shell-  
service
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SHELL_SERVICE_BINARY "$TEST_SHELL_SERVICE_BINARY"  
_ACEOF
```

```
TEST_CORE_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/core/test-  
service-glib
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_CORE_SERVICE_BINARY "$TEST_CORE_SERVICE_BINARY"  
_ACEOF
```

```
TEST_INTERFACES_SERVICE_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/interface  
s/test-service
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_INTERFACES_SERVICE_BINARY  
"$TEST_INTERFACES_SERVICE_BINARY"  
_ACEOF
```

```
TEST_EXIT_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-exit
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_EXIT_BINARY "$TEST_EXIT_BINARY"  
_ACEOF
```

```
TEST_SEGFAULT_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-segfault
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SEGFAULT_BINARY "$TEST_SEGFAULT_BINARY"  
_ACEOF
```

```
TEST_SLEEP_FOREVER_BINARY=${ABSOLUTE_TOP_BUILDDIR}/test/test-sleep-  
forever
```

```
cat >>confdefs.h <<_ACEOF  
@%:@define TEST_SLEEP_FOREVER_BINARY "$TEST_SLEEP_FOREVER_BINARY"  
_ACEOF
```

```

if ! test -z "$with_test_socket_dir" ; then
    TEST_SOCKET_DIR="$with_test_socket_dir"
else
    TEST_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi

```

```

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_SOCKET_DIR "$TEST_SOCKET_DIR"
_ACEOF

```

```

ac_config_files="$ac_config_files Makefile m4/Makefile doc/Makefile
doc/reference/Makefile doc/reference/version.xml dbus/Makefile
dbus/examples/Makefile dbus/examples/statemachine/Makefile
test/Makefile test/core/Makefile test/interfaces/Makefile
test/data/valid-service-files/debug-glib.service test/data/valid-
service-files/debug-echo.service test/data/valid-service-
files/interfaces-test.service test/lib/Makefile test/manual/Makefile
tools/Makefile dbus-glib-1.pc dbus-glib-1-uninstalled.pc"

```

```

cat >confcache <<\_ACEOF
# This file is a shell script that caches the results of configure
# tests run on this system so they can be shared between configure
# scripts and configure runs, see configure's option --config-cache.
# It is not useful on other systems.  If it contains results you don't
# want to keep, you may remove or edit it.
#
# config.status only pays attention to the cache file if you give it
# the --recheck option to rerun configure.
#
# `ac_cv_env_foo' variables (set or unset) will be overridden when
# loading this file, other *unset* `ac_cv_foo' will be assigned the
# following values.

```

```
_ACEOF
```

```

# The following way of writing the cache mishandles newlines in
values,
# but we know of no workaround that is simple, portable, and
efficient.
# So, we kill variables containing newlines.
# Ultrix sh set writes to stderr and can't be redirected directly,
# and sets the high bit in the cache file unless we assign to the
vars.
(
  for ac_var in `(set) 2>&1 | sed -n 's/^\([a-zA-Z_][a-zA-Z0-
9_]*\)=.*/\1/p'`; do
    eval ac_val=\${$ac_var}
    case $ac_val in #(

```

```

*${as_nl}*)
    case $ac_var in #(
        *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5
$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
    esac
    case $ac_var in #(
        _ | IFS | as_nl) ;; #(
        BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
        *) { eval $ac_var=; unset $ac_var;} ;;
    esac ;;
esac
done

(set) 2>&1 |
    case $as_nl `(ac_space=' '; set) 2>&1` in #(
        *${as_nl}ac_space=\ *)
            # `set' does not quote correctly, so add quotes: double-quote
            # substitution turns \\ \\ into \, and sed turns \ into \.
            sed -n \
            "s/'/'\\\\"'/g;

s/^\([_${as_cr_alnum}]*_cv_[_${as_cr_alnum}]*\)=\(.*\)/\1='\'2'/p"
            ;; #(
        *)
            # `set' quotes correctly as required by POSIX, so do not add
            quotes.
            sed -n "/^[_${as_cr_alnum}]*_cv_[_${as_cr_alnum}]*=/p"
            ;;
    esac |
    sort
) |
sed '
/^ac_cv_env_/b end
t clear
:clear
s/^\([^=]*\)=\(.*\)[{}].*\)/test "${\1+set}" = set || &/
t end
s/^\([^=]*\)=\(.*\)/\1=${\1=\2}/
:end' >>confcache
if diff "$cache_file" confcache >/dev/null 2>&1; then ;; else
if test -w "$cache_file"; then
if test "x$cache_file" != "x/dev/null"; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: updating cache
$cache_file" >&5
$as_echo "$as_me: updating cache $cache_file" >&6;}
if test ! -f "$cache_file" || test -h "$cache_file"; then
cat confcache >"$cache_file"
else
case $cache_file in #(
    */* | ?:* )

```

```

        mv -f confcache "$cache_file"$$ &&
        mv -f "$cache_file"$$ "$cache_file" ;; #(
            *)
        mv -f confcache "$cache_file" ;;
    esac
    fi
fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: not updating unwritable
cache $cache_file" >&5
$as_echo "$as_me: not updating unwritable cache $cache_file" >&6;}
    fi
fi
rm -f confcache

test "x$prefix" = xNONE && prefix=$ac_default_prefix
# Let make expand exec_prefix.
test "x$exec_prefix" = xNONE && exec_prefix='${prefix}'

DEFS=-DHAVE_CONFIG_H

ac_libobjs=
ac_ltlibobjs=
U=
for ac_i in : $LIB@&t@OBSJ; do test "x$ac_i" = x: && continue
# 1. Remove the extension, and $U if already installed.
ac_script='s/\$U\././;s/\.o$//;s/\.obj$//'
ac_i=`$as_echo "$ac_i" | sed "$ac_script"`
# 2. Prepend LIBOBJDIR.  When used with automake>=1.10 LIBOBJDIR
# will be set to the directory where LIBOBSJ objects are built.
as_fn_append ac_libobjs " \${LIBOBJDIR}$ac_i\$U.$ac_objext"
as_fn_append ac_ltlibobjs " \${LIBOBJDIR}$ac_i"'\$U.lo'
done
LIB@&t@OBSJ=$ac_libobjs

LTLIBOBSJ=$ac_ltlibobjs

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking that generated files
are newer than configure" >&5
$as_echo_n "checking that generated files are newer than configure...
" >&6; }
    if test -n "$am_sleep_pid"; then
        # Hide warnings about reused PIDs.
        wait $am_sleep_pid 2>/dev/null
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: done" >&5
$as_echo "done" >&6; }
    if test -n "$EXEEXT"; then
        am_EXEEXT_TRUE=
        am_EXEEXT_FALSE='#'
    else

```

```

    am__EXEEXT_TRUE='#'
    am__EXEEXT_FALSE=
fi

if test -z "${MAINTAINER_MODE_TRUE}" && test -z
"${MAINTAINER_MODE_FALSE}"; then
    as_fn_error $? "conditional \"MAINTAINER_MODE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${AMDEP_TRUE}" && test -z "${AMDEP_FALSE}"; then
    as_fn_error $? "conditional \"AMDEP\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCC_TRUE}" && test -z
"${am__fastdepCC_FALSE}"; then
    as_fn_error $? "conditional \"am__fastdepCC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BASH_COMPLETION_TRUE}" && test -z
"${DBUS_BASH_COMPLETION_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BASH_COMPLETION\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUILD_TESTS_TRUE}" && test -z
"${DBUS_BUILD_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUILD_TESTS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_GLIB_THREADS_TRUE}" && test -z
"${HAVE_GLIB_THREADS_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_GLIB_THREADS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${ENABLE_GTK_DOC_TRUE}" && test -z
"${ENABLE_GTK_DOC_FALSE}"; then
    as_fn_error $? "conditional \"ENABLE_GTK_DOC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_BUILD_HTML_TRUE}" && test -z
"${GTK_DOC_BUILD_HTML_FALSE}"; then
    as_fn_error $? "conditional \"GTK_DOC_BUILD_HTML\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5

```



```

fi
if test -z "${GTK_DOC_BUILD_PDF_TRUE}" && test -z
"${GTK_DOC_BUILD_PDF_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_BUILD_PDF\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_USE_LIBTOOL_TRUE}" && test -z
"${GTK_DOC_USE_LIBTOOL_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_USE_LIBTOOL\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${GTK_DOC_USE_REBASE_TRUE}" && test -z
"${GTK_DOC_USE_REBASE_FALSE}"; then
  as_fn_error $? "conditional \"GTK_DOC_USE_REBASE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

: "${CONFIG_STATUS=./config.status}"
ac_write_fail=0
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files $CONFIG_STATUS"
{ $as_echo "$as_me:${as_lineno-$LINENO}: creating $CONFIG_STATUS" >&5
$as_echo "$as_me: creating $CONFIG_STATUS" >&6;}
as_write_fail=0
cat >$CONFIG_STATUS <<_ASEOF || as_write_fail=1
#! $SHELL
# Generated by $as_me.
# Run this file to recreate the current configuration.
# Compiler output produced by configure, useful for debugging
# configure, is in config.log if it exists.

debug=false
ac_cs_recheck=false
ac_cs_silent=false

SHELL=\${CONFIG_SHELL-$SHELL}
export SHELL
_ASEOF
cat >>$CONFIG_STATUS <<\_ASEOF || as_write_fail=1
## ----- ##
## M4sh Initialization. ##
## ----- ##

# Be more Bourne compatible
DUALCASE=1; export DUALCASE # for MKS sh
if test -n "${ZSH_VERSION+set}" && (emulate sh) >/dev/null 2>&1; then
:

```



```

    as_echo_n='sh -c $as_echo_n_body as_echo'
fi
export as_echo_body
as_echo='sh -c $as_echo_body as_echo'
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
  PATH_SEPARATOR=:
  (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
    (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
      PATH_SEPARATOR=';'
  }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " $as_nl

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
  *[\ \/]* ) as_myself=$0 ;;
  *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
  as_myself=$0
fi
if test ! -f "$as_myself"; then
  $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
  exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in

```

```

# pre-3.0 UWIN ksh).  But do not cause bugs in bash 2.01; the "|| exit
1"
# suppresses any "Segmentation fault" message there.  '(' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
  && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr.  If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
  as_status=$1; test $as_status -eq 0 && as_status=1
  if test "$4"; then
    as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
  fi
  $as_echo "$as_me: error: $2" >&2
  as_fn_exit $as_status
} @%:@ as_fn_error

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @S|@? to STATUS, without forking.
as_fn_set_status ()
{
  return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS

```

```

@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\${as_var} = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
        {
            eval $1+=\${2}
        }'
else
    as_fn_append ()
    {
        eval $1=\${$1}\${2}
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \${(( 1 + 1 ))} = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
        {
            as_val=$(( $* ))
        }'

```

```

else
  as_fn_arith ()
  {
    as_val=`expr "$@" || test $? -eq 1`
  }
fi # as_fn_arith

if expr a : '\(a\)' >/dev/null 2>&1 &&
  test "X`expr 00001 : '.*\(...\)`" = X001; then
  as_expr=expr
else
  as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
  "X/"; then
  as_basename=basename
else
  as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]*\)/*$' \| \| \
  X"$0" : 'X\(\(\)\)$' \| \| \
  X"$0" : 'X\(\(\)\)' \| \| . 2>/dev/null ||
$as_echo X/"$0" |
  sed '/^\.*\/\([^\/]*\)\/*$/ {
    s//\1/
    q
  }
/^X\(\(\)\)$/ {
  s//\1/
  q
}
/^X\(\(\)\).*$/ {
  s//\1/
  q
}
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxyz'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS

```

```

as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*)
  case `echo 'xy\c'` in
  *c*) ECHO_T=' ';; # ECHO_T is single tab character.
  xy) ECHO_C='\c';;
  *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
     ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$$ conf$$$exe conf$$$file
if test -d conf$$$dir; then
  rm -f conf$$$dir/conf$$$file
else
  rm -f conf$$$dir
  mkdir conf$$$dir 2>/dev/null
fi
if (echo >conf$$$file) 2>/dev/null; then
  if ln -s conf$$$file conf$$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$$file conf$$$dir 2>/dev/null && test ! -f conf$$$exe
  ||
    as_ln_s='cp -pR'
  elif ln conf$$$file conf$$$ 2>/dev/null; then
    as_ln_s=ln
  else
    as_ln_s='cp -pR'
  fi
else
  as_ln_s='cp -pR'
fi
rm -f conf$$$ conf$$$exe conf$$$dir/conf$$$file conf$$$file
rmdir conf$$$dir 2>/dev/null

@%:@ as_fn_mkdir_p
@%:@ -----
@%:@ Create "@S|@as_dir" as a directory, including parents if
necessary.
as_fn_mkdir_p ()
{

```

```

case $as_dir in #(
  -*) as_dir=./$as_dir;;
esac
test -d "$as_dir" || eval $as_mkdir_p || {
  as_dirs=
  while ;; do
    case $as_dir in #(
      *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\'/g"`;;
    #'(
      *) as_qdir=$as_dir;;
    esac
    as_dirs="'$as_qdir' $as_dirs"
    as_dir=`$as_dirname -- "$as_dir" ||
$as_expr X"$as_dir" : 'X\(.*[^/]\)//*[^/][^/]*/*$' \| \
  X"$as_dir" : 'X\(//\)[^/]' \| \
  X"$as_dir" : 'X\(//\)$' \| \
  X"$as_dir" : 'X\(\/)' \| . 2>/dev/null ||
$as_echo X"$as_dir" |
  sed '/^X\(.*[^/]\)\/\/\/*[^/][^/]*\/*$/ {
    s//\1/
    q
  }
/^X\(\/\//\) [^/].*/ {
  s//\1/
  q
}
/^X\(\/\//\)$/ {
  s//\1/
  q
}
/^X\(\/\//\) .*/ {
  s//\1/
  q
}
  s/.*/./; q'`
    test -d "$as_dir" && break
  done
  test -z "$as_dirs" || eval "mkdir $as_dirs"
} || test -d "$as_dir" || as_fn_error $? "cannot create directory
$as_dir"

} @%:@ as_fn_mkdir_p
if mkdir -p . 2>/dev/null; then
  as_mkdir_p='mkdir -p "$as_dir"'
else
  test -d ./-p && rmdir ./-p
  as_mkdir_p=false
fi

```



```

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+_%pp%;s%[^_$as_cr_alnum]%%_g'"

exec 6>&1
## ----- ##
## Main body of $CONFIG_STATUS script. ##
## ----- ##
_ASEOF
test $as_write_fail = 0 && chmod +x $CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# Save the log message, to keep $0 and so on meaningful, and to
# report actual input values of CONFIG_FILES etc. instead of their
# values after options handling.
ac_log=""
This file was extended by dbus-glib $as_me 0.100.2, which was
generated by GNU Autoconf 2.69.  Invocation command line was

    CONFIG_FILES    = $CONFIG_FILES
    CONFIG_HEADERS  = $CONFIG_HEADERS
    CONFIG_LINKS    = $CONFIG_LINKS
    CONFIG_COMMANDS = $CONFIG_COMMANDS
$ $0 $@

on `(hostname || uname -n) 2>/dev/null | sed 1q`
"

_ACEOF

case $ac_config_files in *)
*) set x $ac_config_files; shift; ac_config_files=$*;;
esac

case $ac_config_headers in *)
*) set x $ac_config_headers; shift; ac_config_headers=$*;;
esac

```

```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
# Files that config.status was made for.
config_files="$ac_config_files"
config_headers="$ac_config_headers"
config_commands="$ac_config_commands"
```

_ACEOF

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
ac_cs_usage="\
`$as_me' instantiates files and other configuration actions
from templates according to the current configuration. Unless the
files
and actions are specified as TAGs, all are instantiated by default.
```

Usage: \$0 [OPTION]... [TAG]...

```
-h, --help          print this help, then exit
-V, --version       print version number and configuration settings,
then exit
--config           print configuration, then exit
-q, --quiet, --silent
do not print progress messages
-d, --debug         don't remove temporary files
--recheck          update $as_me by reconfiguring in the same
conditions
--file=FILE[:TEMPLATE]
instantiate the configuration file FILE
--header=FILE[:TEMPLATE]
instantiate the configuration header FILE
```

Configuration files:
\$config_files

Configuration headers:
\$config_headers

Configuration commands:
\$config_commands

Report bugs to
<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLib>."

_ACEOF

```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_cs_config="\`$as_echo "$ac_configure_args" | sed 's/^ //;
s/[\\\"\"\\`\\$]/\\\\\\&/g'`"
ac_cs_version="\\
dbus-glib config.status 0.100.2
configured by $0, generated by GNU Autoconf 2.69,
```

```
with options \\\"$ac_cs_config\\\"
```

Copyright (C) 2012 Free Software Foundation, Inc.
This config.status script is free software; the Free Software
Foundation
gives unlimited permission to copy, distribute and modify it."

```
ac_pwd='$ac_pwd'  
srcdir='$srcdir'  
INSTALL='$INSTALL'  
MKDIR_P='$MKDIR_P'  
AWK='$AWK'  
test -n "\\$AWK" || AWK=awk  
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1  
# The default lists apply if the user does not specify any file.  
ac_need_defaults=:  
while test $# != 0  
do  
  case $1 in  
    --*=?*)  
      ac_option=`expr "X$1" : 'X\[^\]=*\)' =`  
      ac_optarg=`expr "X$1" : 'X\[^\]=*\(.*\)'`  
      ac_shift=:  
      ;;  
    --*=)  
      ac_option=`expr "X$1" : 'X\[^\]=*\)' =`  
      ac_optarg=  
      ac_shift=:  
      ;;  
    *)  
      ac_option=$1  
      ac_optarg=$2  
      ac_shift=shift  
      ;;  
  esac  
  
  case $ac_option in  
    # Handling of the options.  
    -recheck | --recheck | --recheck | --reche | --reche | --rech | --rec | --re |  
--r)  
      ac_cs_recheck=: ;;  
    --version | --versio | --versi | --vers | --ver | --ve | --v | -V )  
      $as_echo "$ac_cs_version"; exit ;;  
    --config | --confi | --conf | --con | --co | --c )  
      $as_echo "$ac_cs_config"; exit ;;  
    --debug | --debu | --deb | --de | --d | -d )  
      debug=: ;;  
    --file | --fil | --fi | --f )  
      $ac_shift  
      case $ac_optarg in
```

```

        *\'*) ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
    ') as_fn_error $? "missing file argument" ;;
esac
as_fn_append CONFIG_FILES " '$ac_optarg'"
ac_need_defaults=false;;
--header | --heade | --head | --hea )
    $ac_shift
    case $ac_optarg in
        *\'*) ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
    esac
as_fn_append CONFIG_HEADERS " '$ac_optarg'"
ac_need_defaults=false;;
--he | --h)
    # Conflict between --help and --header
    as_fn_error $? "ambiguous option: \`$1'"
Try \`$0 --help' for more information.";;
--help | --hel | -h )
    $as_echo "$ac_cs_usage"; exit ;;
-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil | --si | --s)
    ac_cs_silent=: ;;

# This is an error.
-*) as_fn_error $? "unrecognized option: \`$1'"
Try \`$0 --help' for more information." ;;

*) as_fn_append ac_config_targets " $1"
    ac_need_defaults=false ;;

    esac
    shift
done

ac_configure_extra_args=

if $ac_cs_silent; then
    exec 6>/dev/null
    ac_configure_extra_args="$ac_configure_extra_args --silent"
fi

_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
if \${ac_cs_recheck}; then
    set X $SHELL '$0' $ac_configure_args \${ac_configure_extra_args} --no-
create --no-recursion
    shift
    \${as_echo "running CONFIG_SHELL=$SHELL \$*" } >&6
    CONFIG_SHELL='$SHELL'
    export CONFIG_SHELL
    exec "\$@"

```

fi

```
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
exec 5>>config.log
{
  echo
  sed 'h;s/./-/g;s/^\.../@%:@%:@ /;s/...$/ @%:@%:@/;p;x;p;x' <<_ASBOX
  @%:@%:@ Running $as_me. @%:@%:@
  _ASBOX
  $as_echo "$ac_log"
} >&5
```

```
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
#
# INIT-COMMANDS
#
AMDEP_TRUE="$AMDEP_TRUE" ac_aux_dir="$ac_aux_dir"
```

```
# The HP-UX ksh and POSIX shell print the target directory to stdout
# if CDPATH is set.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH
```

```
sed_quote_subst='`$sed_quote_subst`'
double_quote_subst='`$double_quote_subst`'
delay_variable_subst='`$delay_variable_subst`'
macro_version='`$ECHO "$macro_version" | $SED
"$delay_single_quote_subst"``'
macro_revision='`$ECHO "$macro_revision" | $SED
"$delay_single_quote_subst"``'
enable_shared='`$ECHO "$enable_shared" | $SED
"$delay_single_quote_subst"``'
enable_static='`$ECHO "$enable_static" | $SED
"$delay_single_quote_subst"``'
pic_mode='`$ECHO "$pic_mode" | $SED "$delay_single_quote_subst"``'
enable_fast_install='`$ECHO "$enable_fast_install" | $SED
"$delay_single_quote_subst"``'
SHELL='`$ECHO "$SHELL" | $SED "$delay_single_quote_subst"``'
ECHO='`$ECHO "$ECHO" | $SED "$delay_single_quote_subst"``'
PATH_SEPARATOR='`$ECHO "$PATH_SEPARATOR" | $SED
"$delay_single_quote_subst"``'
host_alias='`$ECHO "$host_alias" | $SED "$delay_single_quote_subst"``'
host='`$ECHO "$host" | $SED "$delay_single_quote_subst"``'
host_os='`$ECHO "$host_os" | $SED "$delay_single_quote_subst"``'
build_alias='`$ECHO "$build_alias" | $SED
"$delay_single_quote_subst"``'
build='`$ECHO "$build" | $SED "$delay_single_quote_subst"``'
build_os='`$ECHO "$build_os" | $SED "$delay_single_quote_subst"``'
SED='`$ECHO "$SED" | $SED "$delay_single_quote_subst"``'
Xsed='`$ECHO "$Xsed" | $SED "$delay_single_quote_subst"``'
```

```
GREP='`$ECHO "$GREP" | $SED "$delay_single_quote_subst"``'
EGREP='`$ECHO "$EGREP" | $SED "$delay_single_quote_subst"``'
FGREP='`$ECHO "$FGREP" | $SED "$delay_single_quote_subst"``'
LD='`$ECHO "$LD" | $SED "$delay_single_quote_subst"``'
NM='`$ECHO "$NM" | $SED "$delay_single_quote_subst"``'
LN_S='`$ECHO "$LN_S" | $SED "$delay_single_quote_subst"``'
max_cmd_len='`$ECHO "$max_cmd_len" | $SED
"$delay_single_quote_subst"``'
ac_objext='`$ECHO "$ac_objext" | $SED "$delay_single_quote_subst"``'
exeext='`$ECHO "$exeext" | $SED "$delay_single_quote_subst"``'
lt_unset='`$ECHO "$lt_unset" | $SED "$delay_single_quote_subst"``'
lt_SP2NL='`$ECHO "$lt_SP2NL" | $SED "$delay_single_quote_subst"``'
lt_NL2SP='`$ECHO "$lt_NL2SP" | $SED "$delay_single_quote_subst"``'
lt_cv_to_host_file_cmd='`$ECHO "$lt_cv_to_host_file_cmd" | $SED
"$delay_single_quote_subst"``'
lt_cv_to_tool_file_cmd='`$ECHO "$lt_cv_to_tool_file_cmd" | $SED
"$delay_single_quote_subst"``'
reload_flag='`$ECHO "$reload_flag" | $SED
"$delay_single_quote_subst"``'
reload_cmds='`$ECHO "$reload_cmds" | $SED
"$delay_single_quote_subst"``'
OBJDUMP='`$ECHO "$OBJDUMP" | $SED "$delay_single_quote_subst"``'
deplibs_check_method='`$ECHO "$deplibs_check_method" | $SED
"$delay_single_quote_subst"``'
file_magic_cmd='`$ECHO "$file_magic_cmd" | $SED
"$delay_single_quote_subst"``'
file_magic_glob='`$ECHO "$file_magic_glob" | $SED
"$delay_single_quote_subst"``'
want_nocaseglob='`$ECHO "$want_nocaseglob" | $SED
"$delay_single_quote_subst"``'
DLLTOOL='`$ECHO "$DLLTOOL" | $SED "$delay_single_quote_subst"``'
sharedlib_from_linklib_cmd='`$ECHO "$sharedlib_from_linklib_cmd" |
$SED "$delay_single_quote_subst"``'
AR='`$ECHO "$AR" | $SED "$delay_single_quote_subst"``'
AR_FLAGS='`$ECHO "$AR_FLAGS" | $SED "$delay_single_quote_subst"``'
archiver_list_spec='`$ECHO "$archiver_list_spec" | $SED
"$delay_single_quote_subst"``'
STRIP='`$ECHO "$STRIP" | $SED "$delay_single_quote_subst"``'
RANLIB='`$ECHO "$RANLIB" | $SED "$delay_single_quote_subst"``'
old_postinstall_cmds='`$ECHO "$old_postinstall_cmds" | $SED
"$delay_single_quote_subst"``'
old_postuninstall_cmds='`$ECHO "$old_postuninstall_cmds" | $SED
"$delay_single_quote_subst"``'
old_archive_cmds='`$ECHO "$old_archive_cmds" | $SED
"$delay_single_quote_subst"``'
lock_old_archive_extraction='`$ECHO "$lock_old_archive_extraction" |
$SED "$delay_single_quote_subst"``'
CC='`$ECHO "$CC" | $SED "$delay_single_quote_subst"``'
CFLAGS='`$ECHO "$CFLAGS" | $SED "$delay_single_quote_subst"``'
compiler='`$ECHO "$compiler" | $SED "$delay_single_quote_subst"``'
GCC='`$ECHO "$GCC" | $SED "$delay_single_quote_subst"``'
```

```
lt_cv_sys_global_symbol_pipe=`$ECHO "$lt_cv_sys_global_symbol_pipe" |
$SED "$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_cdecl=`$ECHO
"$lt_cv_sys_global_symbol_to_cdecl" | $SED
"$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_c_name_address=`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address" | $SED
"$delay_single_quote_subst"`
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix=`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address_lib_prefix" | $SED
"$delay_single_quote_subst"`
nm_file_list_spec=`$ECHO "$nm_file_list_spec" | $SED
"$delay_single_quote_subst"`
lt_sysroot=`$ECHO "$lt_sysroot" | $SED "$delay_single_quote_subst"`
objdir=`$ECHO "$objdir" | $SED "$delay_single_quote_subst"`
MAGIC_CMD=`$ECHO "$MAGIC_CMD" | $SED "$delay_single_quote_subst"`
lt_prog_compiler_no_builtin_flag=`$ECHO
"$lt_prog_compiler_no_builtin_flag" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_pic=`$ECHO "$lt_prog_compiler_pic" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_wl=`$ECHO "$lt_prog_compiler_wl" | $SED
"$delay_single_quote_subst"`
lt_prog_compiler_static=`$ECHO "$lt_prog_compiler_static" | $SED
"$delay_single_quote_subst"`
lt_cv_prog_compiler_c_o=`$ECHO "$lt_cv_prog_compiler_c_o" | $SED
"$delay_single_quote_subst"`
need_locks=`$ECHO "$need_locks" | $SED "$delay_single_quote_subst"`
MANIFEST_TOOL=`$ECHO "$MANIFEST_TOOL" | $SED
"$delay_single_quote_subst"`
DSYMUTIL=`$ECHO "$DSYMUTIL" | $SED "$delay_single_quote_subst"`
NMEDIT=`$ECHO "$NMEDIT" | $SED "$delay_single_quote_subst"`
LIPO=`$ECHO "$LIPO" | $SED "$delay_single_quote_subst"`
OTOOL=`$ECHO "$OTOOL" | $SED "$delay_single_quote_subst"`
OTOOL64=`$ECHO "$OTOOL64" | $SED "$delay_single_quote_subst"`
libext=`$ECHO "$libext" | $SED "$delay_single_quote_subst"`
shrext_cmds=`$ECHO "$shrext_cmds" | $SED
"$delay_single_quote_subst"`
extract_expsyms_cmds=`$ECHO "$extract_expsyms_cmds" | $SED
"$delay_single_quote_subst"`
archive_cmds_need_lc=`$ECHO "$archive_cmds_need_lc" | $SED
"$delay_single_quote_subst"`
enable_shared_with_static_runtimes=`$ECHO
"$enable_shared_with_static_runtimes" | $SED
"$delay_single_quote_subst"`
export_dynamic_flag_spec=`$ECHO "$export_dynamic_flag_spec" | $SED
"$delay_single_quote_subst"`
whole_archive_flag_spec=`$ECHO "$whole_archive_flag_spec" | $SED
"$delay_single_quote_subst"`
compiler_needs_object=`$ECHO "$compiler_needs_object" | $SED
"$delay_single_quote_subst"`
```

```
old_archive_from_new_cmds='`$ECHO "$old_archive_from_new_cmds" | $SED
"$delay_single_quote_subst"`'
old_archive_from_expsyms_cmds='`$ECHO "$old_archive_from_expsyms_cmds"
| $SED "$delay_single_quote_subst"`'
archive_cmds='`$ECHO "$archive_cmds" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds='`$ECHO "$archive_expsym_cmds" | $SED
"$delay_single_quote_subst"`'
module_cmds='`$ECHO "$module_cmds" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds='`$ECHO "$module_expsym_cmds" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld='`$ECHO "$with_gnu_ld" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag='`$ECHO "$allow_undefined_flag" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag='`$ECHO "$no_undefined_flag" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_flag_spec='`$ECHO "$hardcode_libdir_flag_spec" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_separator='`$ECHO "$hardcode_libdir_separator" | $SED
"$delay_single_quote_subst"`'
hardcode_direct='`$ECHO "$hardcode_direct" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_absolute='`$ECHO "$hardcode_direct_absolute" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L='`$ECHO "$hardcode_minus_L" | $SED
"$delay_single_quote_subst"`'
hardcode_shlibpath_var='`$ECHO "$hardcode_shlibpath_var" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic='`$ECHO "$hardcode_automatic" | $SED
"$delay_single_quote_subst"`'
inherit_rpath='`$ECHO "$inherit_rpath" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs='`$ECHO "$link_all_deplibs" | $SED
"$delay_single_quote_subst"`'
always_export_symbols='`$ECHO "$always_export_symbols" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds='`$ECHO "$export_symbols_cmds" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms='`$ECHO "$exclude_expsyms" | $SED
"$delay_single_quote_subst"`'
include_expsyms='`$ECHO "$include_expsyms" | $SED
"$delay_single_quote_subst"`'
prelink_cmds='`$ECHO "$prelink_cmds" | $SED
"$delay_single_quote_subst"`'
postlink_cmds='`$ECHO "$postlink_cmds" | $SED
"$delay_single_quote_subst"`'
file_list_spec='`$ECHO "$file_list_spec" | $SED
"$delay_single_quote_subst"`'
variables_saved_for_relink='`$ECHO "$variables_saved_for_relink" |
$SED "$delay_single_quote_subst"`'
```



```

need_lib_prefix='`$ECHO "$need_lib_prefix" | $SED
"$delay_single_quote_subst"`'
need_version='`$ECHO "$need_version" | $SED
"$delay_single_quote_subst"`'
version_type='`$ECHO "$version_type" | $SED
"$delay_single_quote_subst"`'
runpath_var='`$ECHO "$runpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_var='`$ECHO "$shlibpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_overrides_runpath='`$ECHO "$shlibpath_overrides_runpath" |
$SED "$delay_single_quote_subst"`'
libname_spec='`$ECHO "$libname_spec" | $SED
"$delay_single_quote_subst"`'
library_names_spec='`$ECHO "$library_names_spec" | $SED
"$delay_single_quote_subst"`'
soname_spec='`$ECHO "$soname_spec" | $SED
"$delay_single_quote_subst"`'
install_override_mode='`$ECHO "$install_override_mode" | $SED
"$delay_single_quote_subst"`'
postinstall_cmds='`$ECHO "$postinstall_cmds" | $SED
"$delay_single_quote_subst"`'
postuninstall_cmds='`$ECHO "$postuninstall_cmds" | $SED
"$delay_single_quote_subst"`'
finish_cmds='`$ECHO "$finish_cmds" | $SED
"$delay_single_quote_subst"`'
finish_eval='`$ECHO "$finish_eval" | $SED
"$delay_single_quote_subst"`'
hardcode_into_libs='`$ECHO "$hardcode_into_libs" | $SED
"$delay_single_quote_subst"`'
sys_lib_search_path_spec='`$ECHO "$sys_lib_search_path_spec" | $SED
"$delay_single_quote_subst"`'
sys_lib_dlsearch_path_spec='`$ECHO "$sys_lib_dlsearch_path_spec" |
$SED "$delay_single_quote_subst"`'
hardcode_action='`$ECHO "$hardcode_action" | $SED
"$delay_single_quote_subst"`'
enable_dlopen='`$ECHO "$enable_dlopen" | $SED
"$delay_single_quote_subst"`'
enable_dlopen_self='`$ECHO "$enable_dlopen_self" | $SED
"$delay_single_quote_subst"`'
enable_dlopen_self_static='`$ECHO "$enable_dlopen_self_static" | $SED
"$delay_single_quote_subst"`'
old_striplib='`$ECHO "$old_striplib" | $SED
"$delay_single_quote_subst"`'
striplib='`$ECHO "$striplib" | $SED "$delay_single_quote_subst"`'

LTCC='$LTCC'
LTCFLAGS='$LTCFLAGS'
compiler='$compiler_DEFAULT'

# A function that is used when there is no print builtin or printf.
func_fallback_echo ()

```

```

{
  eval 'cat <<_LTECHO_EOF
\$1
_LTECHO_EOF'
}

# Quote evaled strings.
for var in SHELL \
ECHO \
PATH_SEPARATOR \
SED \
GREP \
EGREP \
FGREP \
LD \
NM \
LN_S \
lt_SP2NL \
lt_NL2SP \
reload_flag \
OBJDUMP \
deplibs_check_method \
file_magic_cmd \
file_magic_glob \
want_nocaseglob \
DLLTOOL \
sharedlib_from_linklib_cmd \
AR \
AR_FLAGS \
archiver_list_spec \
STRIP \
RANLIB \
CC \
CFLAGS \
compiler \
lt_cv_sys_global_symbol_pipe \
lt_cv_sys_global_symbol_to_cdecl \
lt_cv_sys_global_symbol_to_c_name_address \
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix \
nm_file_list_spec \
lt_prog_compiler_no_builtin_flag \
lt_prog_compiler_pic \
lt_prog_compiler_wl \
lt_prog_compiler_static \
lt_cv_prog_compiler_c_o \
need_locks \
MANIFEST_TOOL \
DSYMUTIL \
NMEDIT \
LIPO \
OTOOL \
OTOOL64 \

```

```

shrex_t_cmds \
export_dynamic_flag_spec \
whole_archive_flag_spec \
compiler_needs_object \
with_gnu_ld \
allow_undefined_flag \
no_undefined_flag \
hardcode_libdir_flag_spec \
hardcode_libdir_separator \
exclude_expsyms \
include_expsyms \
file_list_spec \
variables_saved_for_relink \
libname_spec \
library_names_spec \
soname_spec \
install_override_mode \
finish_eval \
old_strip_lib \
strip_lib; do
    case `eval \\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var"\\\\\\\\\\"` in
    *[\\\\\\\\\\\`\\\\\\"\\\\\\\\\\$]*)
        eval "lt_\\$var=\\\\\\\\\\\\\\\\\\"\\\\\\\\\\`\\\\\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var\\\\\\\\\\" | \\\\\\\$SED
\\\\\\\\\\$sed_quote_subst\\\\\\\\\\"\\\\\\\\\\`\\\\\\\\\\\\\\\\\\""
        ;;
    *)
        eval "lt_\\$var=\\\\\\\\\\\\\\\\\\"\\\\\\\\\\$\\$var\\\\\\\\\\\\\\\\\\""
        ;;
    esac
done

```

```

# Double-quote double-evaluated strings.

```

```

for var in reload_cmds \
old_postinstall_cmds \
old_postuninstall_cmds \
old_archive_cmds \
extract_expsyms_cmds \
old_archive_from_new_cmds \
old_archive_from_expsyms_cmds \
archive_cmds \
archive_expsym_cmds \
module_cmds \
module_expsym_cmds \
export_symbols_cmds \
prelink_cmds \
postlink_cmds \
postinstall_cmds \
postuninstall_cmds \
finish_cmds \
sys_lib_search_path_spec \
sys_lib_dlsearch_path_spec; do
    case `eval \\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var"\\\\\\\\\\"` in

```



```

    "dbus/examples/statemachine/Makefile") CONFIG_FILES="$CONFIG_FILES
dbus/examples/statemachine/Makefile" ;;
    "test/Makefile") CONFIG_FILES="$CONFIG_FILES test/Makefile" ;;
    "test/core/Makefile") CONFIG_FILES="$CONFIG_FILES
test/core/Makefile" ;;
    "test/interfaces/Makefile") CONFIG_FILES="$CONFIG_FILES
test/interfaces/Makefile" ;;
    "test/data/valid-service-files/debug-glib.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/debug-
glib.service" ;;
    "test/data/valid-service-files/debug-echo.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/debug-
echo.service" ;;
    "test/data/valid-service-files/interfaces-test.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files/interfaces-
test.service" ;;
    "test/lib/Makefile") CONFIG_FILES="$CONFIG_FILES
test/lib/Makefile" ;;
    "test/manual/Makefile") CONFIG_FILES="$CONFIG_FILES
test/manual/Makefile" ;;
    "tools/Makefile") CONFIG_FILES="$CONFIG_FILES tools/Makefile" ;;
    "dbus-glib-1.pc") CONFIG_FILES="$CONFIG_FILES dbus-glib-1.pc" ;;
    "dbus-glib-1-uninstalled.pc") CONFIG_FILES="$CONFIG_FILES dbus-
glib-1-uninstalled.pc" ;;

```

```

    *) as_fn_error $? "invalid argument: \`${ac_config_target}'" "$LINENO"
5;;
    esac
done

```

```

# If the user did not use the arguments to specify the items to
# instantiate,
# then the envvar interface is used.  Set only those that are not.
# We use the long form for the default assignment because of an
# extremely
# bizarre bug on SunOS 4.1.3.
if $ac_need_defaults; then
    test "${CONFIG_FILES+set}" = set || CONFIG_FILES=$config_files
    test "${CONFIG_HEADERS+set}" = set || CONFIG_HEADERS=$config_headers
    test "${CONFIG_COMMANDS+set}" = set ||
CONFIG_COMMANDS=$config_commands
fi

```

```

# Have a temporary directory for convenience.  Make it in the build
# tree
# simply because there is no reason against having it here, and in
# addition,
# creating and moving files from /tmp can sometimes cause problems.
# Hook for its removal unless debugging.
# Note that there is a small window in which the directory will not be
# cleaned:

```

```

# after its creation but before its name has been assigned to `$tmp'.
$debug ||
{
  tmp= ac_tmp=
  trap 'exit_status=$?'
  : "${ac_tmp:= $tmp}"
  { test ! -d "$ac_tmp" || rm -fr "$ac_tmp"; } && exit $exit_status
' 0
  trap 'as_fn_exit 1' 1 2 13 15
}
# Create a (secure) tmp directory for tmp files.

{
  tmp=`(umask 077 && mktemp -d "./confXXXXXX") 2>/dev/null` &&
  test -d "$tmp"
} ||
{
  tmp=./conf$$-$RANDOM
  (umask 077 && mkdir "$tmp")
} || as_fn_error $? "cannot create a temporary directory in ."
"$LINENO" 5
ac_tmp=$tmp

# Set up the scripts for CONFIG_FILES section.
# No need to generate them if there are no CONFIG_FILES.
# This happens for instance with `./config.status config.h'.
if test -n "$CONFIG_FILES"; then

ac_cr=`echo X | tr X '\015'`
# On cygwin, bash can eat \r inside `` if the user requested igncr.
# But we know of no other shell where ac_cr would be empty at this
# point, so we can use a bashism as a fallback.
if test "x$ac_cr" = x; then
  eval ac_cr=\$\'\r\'
fi
ac_cs_awk_cr=`$AWK 'BEGIN { print "a\rb" }' </dev/null 2>/dev/null`
if test "$ac_cs_awk_cr" = "a${ac_cr}b"; then
  ac_cs_awk_cr='\r'
else
  ac_cs_awk_cr=$ac_cr
fi

echo 'BEGIN {' >"$ac_tmp/subs1.awk" &&
_ACEOF

{
  echo "cat >conf$$subs.awk <<_ACEOF" &&
  echo "$ac_subst_vars" | sed 's/.*&!\$\&$ac_delim/' &&
  echo "_ACEOF"
} >conf$$subs.sh ||

```

```

    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
ac_delim_num=`echo "$ac_subst_vars" | grep -c '^`
ac_delim='%!_!# '
for ac_last_try in false false false false false ;; do
  . ./conf$$subs.sh ||
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5

  ac_delim_n=`sed -n "s/.*$ac_delim\$/X/p" conf$$subs.awk | grep -c X`
  if test $ac_delim_n = $ac_delim_num; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
  else
    ac_delim="$ac_delim!$ac_delim _$ac_delim!! "
  fi
done
rm -f conf$$subs.sh

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
cat >>"$ac_tmp/subs1.awk" <<\"_ACAWK &&
_ACEOF
sed -n '
h
s/^[S["/; s/!.*"/]=/
p
g
s/^[^!]*!//
:repl
t repl
s/"$ac_delim"$//
t delim
:nl
h
s/\(.\\{148\\}\)..*/\1/
t more1
s/["\\]/\&/g; s/"/"; s/$/\n"\\
p
n
b repl
:more1
s/["\\]/\&/g; s/"/"; s/$/"\\
p
g
s/\\.\\{148\\}//
t nl
:delim
h
s/\(.\\{148\\}\)..*/\1/
t more2
s/["\\]/\&/g; s/"/"; s/$"/
p
b

```

```

:more2
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/.\{148\}//
t delim
' <conf$$subs.awk | sed '
/^[^"]/{
    N
    s/\n//
}
' >>$CONFIG_STATUS || ac_write_fail=1
rm -f conf$$subs.awk
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
_ACAWK
cat >>"\${ac_tmp}/subs1.awk" <<_ACAWK &&
    for (key in S) S_is_set[key] = 1
    FS = " "
}
{
    line = $ 0
    nfields = split(line, field, "@")
    substed = 0
    len = length(field[1])
    for (i = 2; i < nfields; i++) {
        key = field[i]
        keylen = length(key)
        if (S_is_set[key]) {
            value = S[key]
            line = substr(line, 1, len) "" value "" substr(line, len +
keylen + 3)
            len += length(value) + length(field[++i])
            substed = 1
        } else
            len += 1 + keylen
    }

    print line
}

_ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
if sed "s/\${ac_cr}//" < /dev/null > /dev/null 2>&1; then
    sed "s/\${ac_cr}\$//; s/\${ac_cr}/\${ac_cs_awk_cr}/g"
else
    cat
fi < "\${ac_tmp}/subs1.awk" > "\${ac_tmp}/subs.awk" \
    || as_fn_error $? "could not setup config files machinery" "$LINENO"
5
_ACEOF

```



```

# VPATH may cause trouble with some makes, so we remove sole
$(srcdir),
# ${srcdir} and @srcdir@ entries from VPATH if srcdir is ".", strip
leading and
# trailing colons and then remove the whole line if VPATH becomes
empty
# (actually we leave an empty line to preserve line numbers).
if test "x${srcdir}" = x.; then
  ac_vpsub='/^[ ]*VPATH[ ]*=[ ]*{/
h
s///
s/^\:/
s/[ ]*$\:/
s/:\$(srcdir):::/g
s/:\${srcdir}:::/g
s/:\@srcdir@:::/g
s/^\:*/
s/:*$//
x
s/\(=[ ]*\)\.*/\1/
G
s/\n//
s/^[^=]*=[ ]*$//
}'
fi

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
fi # test -n "$CONFIG_FILES"

# Set up the scripts for CONFIG_HEADERS section.
# No need to generate them if there are no CONFIG_HEADERS.
# This happens for instance with './config.status Makefile'.
if test -n "$CONFIG_HEADERS"; then
cat >"$ac_tmp/defines.awk" <<\_ACAWK ||
BEGIN {
\_ACEOF

# Transform confdefs.h into an awk script `defines.awk', embedded as
# here-document in config.status, that substitutes the proper values
into
# config.h.in to produce config.h.

# Create a delimiter string that does not exist in confdefs.h, to ease
# handling of long lines.
ac_delim='%!_!# '
for ac_last_try in false false ;; do
  ac_tt=`sed -n "/$ac_delim/p" confdefs.h`
  if test -z "$ac_tt"; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_HEADERS" "$LINENO" 5

```

```

else
    ac_delim="$ac_delim!$ac_delim_$ac_delim!! "
fi
done

# For the awk script, D is an array of macro values keyed by name,
# likewise P contains macro parameters if any. Preserve backslash
# newline sequences.

ac_word_re=[_$_as_cr_Letters][_$_as_cr_alnum]*
sed -n '
s/.\{148\}/&"$ac_delim"/g
t rset
:rset
s/^[ ]*#[ ]*define[ ]*[ ]*/ /
t def
d
:def
s/\\$//
t bsnl
s/["\\]/\\&/g
s/^\ ("$ac_word_re"\)\ ([[^\]]*)\ [ ]*\ (.*) /P["\1"]="\2"\
D["\1"]=" \3"/p
s/^\ ("$ac_word_re"\)[ ]*\ (.*) /D["\1"]=" \2"/p
d
:bsnl
s/["\\]/\\&/g
s/^\ ("$ac_word_re"\)\ ([[^\]]*)\ [ ]*\ (.*) /P["\1"]="\2"\
D["\1"]=" \3\\n"/p
t cont
s/^\ ("$ac_word_re"\)[ ]*\ (.*) /D["\1"]=" \2\\n"/p
t cont
d
:cont
n
s/.\{148\}/&"$ac_delim"/g
t clear
:clear
s/\\$//
t bsnlc
s/["\\]/\\&/g; s/^\ //; s/$//p
d
:bsnlc
s/["\\]/\\&/g; s/^\ //; s/$/\\n"/p
b cont
' <confdefs.h | sed '
s/"$ac_delim"/"\\
"/g' >>$CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
for (key in D) D_is_set[key] = 1
FS = " "

```

```

}
/^[ \t ]*#[ \t ]*(define|undef)[ \t ]+${_word_re}([ \t ]|\$)/ {
    line = \$0
    split(line, arg, " ")
    if (arg[1] == "#") {
        defundef = arg[2]
        mac1 = arg[3]
    } else {
        defundef = substr(arg[1], 2)
        mac1 = arg[2]
    }
    split(mac1, mac2, "(")
    macro = mac2[1]
    prefix = substr(line, 1, index(line, defundef) - 1)
    if (D_is_set[macro]) {
        # Preserve the white space surrounding the "#".
        print prefix "define", macro P[macro] D[macro]
        next
    } else {
        # Replace #undef with comments. This is necessary, for example,
        # in the case of _POSIX_SOURCE, which is predefined and required
        # on some systems where configure will not decide to define it.
        if (defundef == "undef") {
            print "/*", prefix defundef, macro, "*/"
            next
        }
    }
}
}
{ print }
_ACAWK
_ACEOF
cat >>${CONFIG_STATUS} <<\_ACEOF || ac_write_fail=1
    as_fn_error $? "could not setup config headers machinery" "$LINENO"
5
fi # test -n "${CONFIG_HEADERS}"

eval set X " :F $CONFIG_FILES :H $CONFIG_HEADERS :C
$CONFIG_COMMANDS"
shift
for ac_tag
do
    case $ac_tag in
        :[FHLC]) ac_mode=$ac_tag; continue;;
    esac
    case $ac_mode$ac_tag in
        :[FHL]*:*);;
        :L* | :C*:* ) as_fn_error $? "invalid tag \"$ac_tag\"" "$LINENO" 5;;
        :[FH]-) ac_tag=-:-;;
        :[FH]*) ac_tag=$ac_tag:$ac_tag.in;;
    esac
    ac_save_IFS=$IFS

```

```

IFS=:
set x $ac_tag
IFS=$ac_save_IFS
shift
ac_file=$1
shift

case $ac_mode in
:L) ac_source=$1;;
:[FH])
  ac_file_inputs=
  for ac_f
  do
    case $ac_f in
    -) ac_f="$ac_tmp/stdin";;
    *) # Look for the file first in the build tree, then in the
source tree
      # (if the path is not absolute). The absolute path cannot be
DOS-style,
      # because $ac_f cannot contain `:`.
      test -f "$ac_f" ||
      case $ac_f in
      [\\/$]*) false;;
      *) test -f "$srcdir/$ac_f" && ac_f="$srcdir/$ac_f";;
      esac ||
      as_fn_error 1 "cannot find input file: \`$ac_f'" "$LINENO" 5;;
    esac
    case $ac_f in *\'*) ac_f=`$as_echo "$ac_f" | sed
"s/'/'\`\\\\\\\\\\\\\\\\\'/g"`;; esac
    as_fn_append ac_file_inputs " '$ac_f'"
  done

  # Let's still pretend it is `configure' which instantiates (i.e.,
don't
  # use $as_me), people would be surprised to read:
  # /* config.h. Generated by config.status. */
  configure_input='Generated from '`
  $as_echo "$*" | sed 's|^[^:]*||;s|:[^:]*|, |g'
  `' by configure.'
  if test x"$ac_file" != x-; then
    configure_input="$ac_file. $configure_input"
    { $as_echo "$as_me:${as_lineno-$LINENO}: creating $ac_file" >&5
$as_echo "$as_me: creating $ac_file" >&6;}
  fi
  # Neutralize special characters interpreted by sed in replacement
strings.
  case $configure_input in #(
  *\\&* | *\\|* | *\\\\* )
    ac_sed_conf_input=`$as_echo "$configure_input" |
sed 's/[\\\\\\&|]/\\\\\\\\&/g'`;; #(
  *) ac_sed_conf_input=$configure_input;;
  esac

```

```

    case $ac_tag in
    *:-:* | *:-) cat >"$ac_tmp/stdin" \
        || as_fn_error $? "could not create $ac_file" "$LINENO" 5 ;;
    esac
    ;;
esac

ac_dir=`$as_dirname -- "$ac_file" ||
$as_expr X"$ac_file" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
    X"$ac_file" : 'X\(//\)[^/]' \| \
    X"$ac_file" : 'X\(//\)$' \| \
    X"$ac_file" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$ac_file" |
    sed '/^X\(.*[^/]\)\/*[^/][^/]*/*$/{
        s//\1/
        q
    }
/^X\(\\\/\)\[^/].*${
    s//\1/
    q
}
/^X\(\\\/\)$/{
    s//\1/
    q
}
/^X\(\\\/\).*${
    s//\1/
    q
}
s/.*\/./; q'`
as_dir="$ac_dir"; as_fn_mkdir_p
ac_buildidir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_buildidir_sub=. ac_top_build_prefix= ;;
*)
    ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.([\//]|||)`
    # A ".." for each directory in $ac_dir_suffix.
    ac_top_buildidir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\\/]*/|/..|g;s|/|||`
    case $ac_top_buildidir_sub in
    "") ac_top_buildidir_sub=. ac_top_build_prefix= ;;
    *) ac_top_build_prefix=$ac_top_buildidir_sub/ ;;
    esac ;;
esac
esac
ac_abs_top_buildidir=$ac_pwd
ac_abs_buildidir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_buildidir=$ac_top_build_prefix

case $srcdir in

```

```

.) # We are building in place.
  ac_srcdir=.
  ac_top_srcdir=$ac_top_builddir_sub
  ac_abs_top_srcdir=$ac_pwd ;;
[\\/* | ?:[\\/* ] # Absolute name.
  ac_srcdir=$srcdir$ac_dir_suffix;
  ac_top_srcdir=$srcdir
  ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
  ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
  ac_top_srcdir=$ac_top_build_prefix$srcdir
  ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

case $ac_mode in
:F)
#
# CONFIG_FILE
#

case $INSTALL in
[\\/* | ?:[\\/* ] ac_INSTALL=$INSTALL ;;
*) ac_INSTALL=$ac_top_build_prefix$INSTALL ;;
esac
ac_MKDIR_P=$MKDIR_P
case $MKDIR_P in
[\\/* | ?:[\\/* ] ) ;;
*/*) ac_MKDIR_P=$ac_top_build_prefix$MKDIR_P ;;
esac
_ACEOF

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# If the template does not know about datarootdir, expand it.
# FIXME: This hack should be removed a few years after 2.60.
ac_datarootdir_hack=; ac_datarootdir_seen=
ac_sed_dataroot='
/datarootdir/ {
  p
  q
}
/@datadir@/p
/@docdir@/p
/@infodir@/p
/@localedir@/p
/@mandir@/p'
case `eval "sed -n \"\$ac_sed_dataroot\" \$ac_file_inputs"` in
*datarootdir*) ac_datarootdir_seen=yes;;
*@datadir@*|*@docdir@*|*@infodir@*|*@localedir@*|*@mandir@*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file_inputs
seems to ignore the --datarootdir setting" >&5

```

```

$as_echo "$as_me: WARNING: $ac_file_inputs seems to ignore the --
datarootdir setting" >&2;}
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
  ac_datarootdir_hack='
  s@datadir@&$datadir&g
  s@docdir@&$docdir&g
  s@infodir@&$infodir&g
  s@localedir@&$localedir&g
  s@mandir@&$mandir&g
  s\\$\\{datarootdir}&$datarootdir&g' ;;
esac
_ACEOF

# Neutralize VPATH when `srcdir' = `.'.
# Shell code in configure.ac might set extrasub.
# FIXME: do we really want to maintain this feature?
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_sed_extra="$ac_vpsub
$extrasub
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
:t
/@[a-zA-Z_][a-zA-Z_0-9]*@/!b
s|@configure_input@|${ac_sed_conf_input}|;t t
s@top_builddir@&$ac_top_builddir_sub&;t t
s@top_build_prefix@&$ac_top_build_prefix&;t t
s@srcdir@&$ac_srcdir&;t t
s@abs_srcdir@&$ac_abs_srcdir&;t t
s@top_srcdir@&$ac_top_srcdir&;t t
s@abs_top_srcdir@&$ac_abs_top_srcdir&;t t
s@builddir@&$ac_builddir&;t t
s@abs_builddir@&$ac_abs_builddir&;t t
s@abs_top_builddir@&$ac_abs_top_builddir&;t t
s@INSTALL@&$ac_INSTALL&;t t
s@MKDIR_P@&$ac_MKDIR_P&;t t
$ac_datarootdir_hack
"
eval sed \`${ac_sed_extra}` "$ac_file_inputs" | $AWK -f
"$ac_tmp/subs.awk" \
  >$ac_tmp/out || as_fn_error $? "could not create $ac_file" "$LINENO"
5

test -z "$ac_datarootdir_hack$ac_datarootdir_seen" &&
  { ac_out=`sed -n '/\${datarootdir}/p' "$ac_tmp/out"`; test -n
"$ac_out"; } &&
  { ac_out=`sed -n '/^[          ]*datarootdir[          ]*:*=/p' \
    "$ac_tmp/out"`; test -z "$ac_out"; } &&
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file contains
a reference to the variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&5

```

```

$as_echo "$as_me: WARNING: $ac_file contains a reference to the
variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&2;}

rm -f "$ac_tmp/stdin"
case $ac_file in
-) cat "$ac_tmp/out" && rm -f "$ac_tmp/out";;
*) rm -f "$ac_file" && mv "$ac_tmp/out" "$ac_file";;
esac \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
;;
:H)
#
# CONFIG_HEADER
#
if test x"$ac_file" != x-; then
{
$as_echo "/* $configure_input */" \
&& eval '$AWK -f "$ac_tmp/defines.awk"' "$ac_file_inputs"
} >"$ac_tmp/config.h" \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
if diff "$ac_file" "$ac_tmp/config.h" >/dev/null 2>&1; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: $ac_file is unchanged"
>&5
$as_echo "$as_me: $ac_file is unchanged" >&6;}
else
rm -f "$ac_file"
mv "$ac_tmp/config.h" "$ac_file" \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
fi
else
$as_echo "/* $configure_input */" \
&& eval '$AWK -f "$ac_tmp/defines.awk"' "$ac_file_inputs" \
|| as_fn_error $? "could not create -" "$LINENO" 5
fi
# Compute "$ac_file"'s index in $config_headers.
_am_arg="$ac_file"
_am_stamp_count=1
for _am_header in $config_headers ;; do
case $_am_header in
$_am_arg | $_am_arg:* )
break ;;
* )
_am_stamp_count=`expr $_am_stamp_count + 1` ;;
esac
done
echo "timestamp for $_am_arg" >`$as_dirname -- "$_am_arg" ||
$as_expr X"$_am_arg" : 'X\([^/]\)\/*\([^/]\)\/*\*$' \|| \
X"$_am_arg" : 'X\(/\)\[^/]' \|| \
X"$_am_arg" : 'X\(/\)\$' \|| \
X"$_am_arg" : 'X\(/)\$' \|| . 2>/dev/null ||
$as_echo X"$_am_arg" |

```



```

sed '/^X\(.*[^\)]\)\)\)\/*[^\)]\[^)]*\/*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\[^)]\.*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\)$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\.*$/{
    s//\1/
    q
}
s/.*\/./; q'\`/stamp-h$_am_stamp_count
;;

:C) { $sas_echo "$sas_me:${as_lineno-$LINENO}: executing $ac_file
commands" >&5
$sas_echo "$sas_me: executing $ac_file commands" >&6;}
;;
esac

case $ac_file$ac_mode in
  "depfiles":C) test x"$AMDEP_TRUE" != x"" || {
# Autoconf 2.62 quotes --file arguments for eval, but not when files
# are listed without --file. Let's play safe and only enable the
eval
# if we detect the quoting.
case $CONFIG_FILES in
*\`*) eval set x "$CONFIG_FILES" ;;
*) set x $CONFIG_FILES ;;
esac
shift
for mf
do
# Strip MF so we end up with the name of the file.
mf=`echo "$mf" | sed -e 's/:.*$//'\`
# Check whether this is an Automake generated Makefile or not.
# We used to match only the files named 'Makefile.in', but
# some people rename them; so instead we look at the file content.
# Grep'ing the first line is not enough: some people post-process
# each Makefile.in and add a new line on top of each file to say
so.
# Grep'ing the whole file is not good either: AIX grep has a line
# limit of 2048, but all sed's we know have understand at least
4000.
if sed -n 's,^#.*generated by automake.*,X,p' "$mf" | grep X
>/dev/null 2>&1; then

```

```

        dirpart=`$as_dirname -- "$mf" ||
$as_expr X"$mf" : 'X\(.^[^/]\)\/*[^/][^/]*/*$' \|\ \
    X"$mf" : 'X\(/\)\ [^/]' \|\ \
    X"$mf" : 'X\(/\)\$' \|\ \
    X"$mf" : 'X\(/)\ ' \|\ . 2>/dev/null ||
$as_echo X"$mf" |
    sed '/^X\(.^[^/]\)\*\/*[^/][^/]*\/*$/{
        s//\1/
        q
    }
/^X\(\/\)\ [^/].*/{
    s//\1/
    q
}
/^X\(\/\)\$/{
    s//\1/
    q
}
/^X\(\/\).*/{
    s//\1/
    q
}
s/.*\/./; q'`
else
    continue
fi
# Extract the definition of DEPDIR, am__include, and am__quote
# from the Makefile without running 'make'.
DEPDIR=`sed -n 's/^DEPDIR = //p' < "$mf"`
test -z "$DEPDIR" && continue
am__include=`sed -n 's/^am__include = //p' < "$mf"`
test -z "am__include" && continue
am__quote=`sed -n 's/^am__quote = //p' < "$mf"`
# Find all dependency output files, they are included files with
# $(DEPDIR) in their names. We invoke sed twice because it is the
# simplest approach to changing $(DEPDIR) to its actual value in
the
# expansion.
for file in `sed -n "
    s/^$am__include $am__quote\(.*(DEPDIR).*\)$am__quote"'\$/\1/p'
<"$mf" | \
    sed -e 's/\$(DEPDIR)/'"$DEPDIR"'/g`; do
    # Make sure the directory exists.
    test -f "$dirpart/$file" && continue
    fdir=`$as_dirname -- "$file" ||
$as_expr X"$file" : 'X\(.^[^/]\)\/*[^/][^/]*/*$' \|\ \
    X"$file" : 'X\(/\)\ [^/]' \|\ \
    X"$file" : 'X\(/\)\$' \|\ \
    X"$file" : 'X\(/)\ ' \|\ . 2>/dev/null ||
$as_echo X"$file" |
    sed '/^X\(.^[^/]\)\*\/*[^/][^/]*\/*$/{
        s//\1/

```

```

        q
    }
    /^X\(\\\/\\\/)[^/].*/{
        s//\1/
        q
    }
    /^X\(\\\/\\\/)${/ {
        s//\1/
        q
    }
    /^X\(\\\/).*/{
        s//\1/
        q
    }
    s/.*\/./; q`
as_dir=$dirpart/$fdir; as_fn_mkdir_p
# echo "creating $dirpart/$file"
echo '# dummy' > "$dirpart/$file"
done
done
}
;;
"libtool":C)

# See if we are running on zsh, and set the options which allow
our
# commands through without removal of \ escapes.
if test -n "${ZSH_VERSION+set}" ; then
    setopt NO_GLOB_SUBST
fi

cfgfile="${ofile}T"
trap "$RM \"$cfgfile\"; exit 1" 1 2 15
$RM "$cfgfile"

cat <<_LT_EOF >> "$cfgfile"
#! $SHELL

# `ECHO "$ofile" | sed 's%^.*/%%'` - Provide generalized library-
building support services.
# Generated automatically by $as_me ($PACKAGE$TIMESTAMP) $VERSION
# Libtool was configured on host `(hostname || uname -n) 2>/dev/null |
sed lq`:
# NOTE: Changes made to this file will be lost: look at ltmain.sh.
#
# Copyright (C) 1996, 1997, 1998, 1999, 2000, 2001, 2003, 2004,
2005,
#           2006, 2007, 2008, 2009, 2010, 2011 Free Software
#           Foundation, Inc.
# Written by Gordon Matzigkeit, 1996
#
# This file is part of GNU Libtool.

```

```
#
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# 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

# The names of the tagged configurations supported by this script.
available_tags=""

# ### BEGIN LIBTOOL CONFIG

# Which release of libtool.m4 was used?
macro_version=$macro_version
macro_revision=$macro_revision

# Whether or not to build shared libraries.
build_libtool_libs=$enable_shared

# Whether or not to build static libraries.
build_old_libs=$enable_static

# What type of objects to build.
pic_mode=$pic_mode

# Whether or not to optimize for fast installation.
fast_install=$enable_fast_install

# Shell to use when invoking shell scripts.
SHELL=$lt_SHELL

# An echo program that protects backslashes.
ECHO=$lt_ECHO

# The PATH separator for the build system.
PATH_SEPARATOR=$lt_PATH_SEPARATOR
```

```
# The host system.
host_alias=$host_alias
host=$host
host_os=$host_os

# The build system.
build_alias=$build_alias
build=$build
build_os=$build_os

# A sed program that does not truncate output.
SED=$lt_SED

# Sed that helps us avoid accidentally triggering echo(1) options like
-n.
Xsed="\$SED -e 1s/^X//"

# A grep program that handles long lines.
GREP=$lt_GREP

# An ERE matcher.
EGREP=$lt_EGREP

# A literal string matcher.
FGREP=$lt_FGREP

# A BSD- or MS-compatible name lister.
NM=$lt_NM

# Whether we need soft or hard links.
LN_S=$lt_LN_S

# What is the maximum length of a command?
max_cmd_len=$max_cmd_len

# Object file suffix (normally "o").
objext=$ac_objext

# Executable file suffix (normally "").
exeext=$exeext

# whether the shell understands "unset".
lt_unset=$lt_unset

# turn spaces into newlines.
SP2NL=$lt_lt_SP2NL

# turn newlines into spaces.
NL2SP=$lt_lt_NL2SP

# convert \$build file names to \$host format.
```

```
to_host_file_cmd=$lt_cv_to_host_file_cmd

# convert \${build} files to toolchain format.
to_tool_file_cmd=$lt_cv_to_tool_file_cmd

# An object symbol dumper.
OBJDUMP=$lt_OBJDUMP

# Method to check whether dependent libraries are shared objects.
deplibs_check_method=$lt_deplibs_check_method

# Command to use when deplibs_check_method = "file_magic".
file_magic_cmd=$lt_file_magic_cmd

# How to find potential files when deplibs_check_method =
"file_magic".
file_magic_glob=$lt_file_magic_glob

# Find potential files using nocaseglob when deplibs_check_method =
"file_magic".
want_nocaseglob=$lt_want_nocaseglob

# DLL creation program.
DLLTOOL=$lt_DLLTOOL

# Command to associate shared and link libraries.
sharedlib_from_linklib_cmd=$lt_sharedlib_from_linklib_cmd

# The archiver.
AR=$lt_AR

# Flags to create an archive.
AR_FLAGS=$lt_AR_FLAGS

# How to feed a file listing to the archiver.
archiver_list_spec=$lt_archiver_list_spec

# A symbol stripping program.
STRIP=$lt_STRIP

# Commands used to install an old-style archive.
RANLIB=$lt_RANLIB
old_postinstall_cmds=$lt_old_postinstall_cmds
old_postuninstall_cmds=$lt_old_postuninstall_cmds

# Whether to use a lock for old archive extraction.
lock_old_archive_extraction=$lock_old_archive_extraction

# A C compiler.
LTCC=$lt_CC

# LTCC compiler flags.
```

```
LTCFLAGS=$lt_CFLAGS

# Take the output of nm and produce a listing of raw symbols and C
names.
global_symbol_pipe=$lt_lt_cv_sys_global_symbol_pipe

# Transform the output of nm in a proper C declaration.
global_symbol_to_cdecl=$lt_lt_cv_sys_global_symbol_to_cdecl

# Transform the output of nm in a C name address pair.
global_symbol_to_c_name_address=$lt_lt_cv_sys_global_symbol_to_c_name_
address

# Transform the output of nm in a C name address pair when lib prefix
is needed.
global_symbol_to_c_name_address_lib_prefix=$lt_lt_cv_sys_global_symbol
_to_c_name_address_lib_prefix

# Specify filename containing input files for \ $NM.
nm_file_list_spec=$lt_nm_file_list_spec

# The root where to search for dependent libraries, and in which our
libraries should be installed.
lt_sysroot=$lt_sysroot

# The name of the directory that contains temporary libtool files.
objdir=$objdir

# Used to examine libraries when file_magic_cmd begins with "file".
MAGIC_CMD=$MAGIC_CMD

# Must we lock files when doing compilation?
need_locks=$lt_need_locks

# Manifest tool.
MANIFEST_TOOL=$lt_MANIFEST_TOOL

# Tool to manipulate archived DWARF debug symbol files on Mac OS X.
DSYMUTIL=$lt_DSYMUTIL

# Tool to change global to local symbols on Mac OS X.
NMEDIT=$lt_NMEDIT

# Tool to manipulate fat objects and archives on Mac OS X.
LIPO=$lt_LIPO

# ldd/readelf like tool for Mach-O binaries on Mac OS X.
OTOOL=$lt_OTOOL

# ldd/readelf like tool for 64 bit Mach-O binaries on Mac OS X 10.4.
OTOOL64=$lt_OTOOL64
```

```
# Old archive suffix (normally "a").
libext=$libext

# Shared library suffix (normally ".so").
shrext_cmds=$lt_shrext_cmds

# The commands to extract the exported symbol list from a shared
archive.
extract_expsyms_cmds=$lt_extract_expsyms_cmds

# Variables whose values should be saved in libtool wrapper scripts
and
# restored at link time.
variables_saved_for_relink=$lt_variables_saved_for_relink

# Do we need the "lib" prefix for modules?
need_lib_prefix=$need_lib_prefix

# Do we need a version for libraries?
need_version=$need_version

# Library versioning type.
version_type=$version_type

# Shared library runtime path variable.
runpath_var=$runpath_var

# Shared library path variable.
shlibpath_var=$shlibpath_var

# Is shlibpath searched before the hard-coded library search path?
shlibpath_overrides_runpath=$shlibpath_overrides_runpath

# Format of library name prefix.
libname_spec=$lt_libname_spec

# List of archive names.  First name is the real one, the rest are
links.
# The last name is the one that the linker finds with -lNAME
library_names_spec=$lt_library_names_spec

# The coded name of the library, if different from the real name.
soname_spec=$lt_soname_spec

# Permission mode override for installation of shared libraries.
install_override_mode=$lt_install_override_mode

# Command to use after installation of a shared archive.
postinstall_cmds=$lt_postinstall_cmds

# Command to use after uninstallation of a shared archive.
postuninstall_cmds=$lt_postuninstall_cmds
```



```
# Commands used to finish a libtool library installation in a
directory.
finish_cmds=$lt_finish_cmds

# As "finish_cmds", except a single script fragment to be evaled but
# not shown.
finish_eval=$lt_finish_eval

# Whether we should hardcode library paths into libraries.
hardcode_into_libs=$hardcode_into_libs

# Compile-time system search path for libraries.
sys_lib_search_path_spec=$lt_sys_lib_search_path_spec

# Run-time system search path for libraries.
sys_lib_dlsearch_path_spec=$lt_sys_lib_dlsearch_path_spec

# Whether dlopen is supported.
dlopen_support=$enable_dlopen

# Whether dlopen of programs is supported.
dlopen_self=$enable_dlopen_self

# Whether dlopen of statically linked programs is supported.
dlopen_self_static=$enable_dlopen_self_static

# Commands to strip libraries.
old_striplib=$lt_old_striplib
striplib=$lt_striplib

# The linker used to build libraries.
LD=$lt_LD

# How to create reloadable object files.
reload_flag=$lt_reload_flag
reload_cmds=$lt_reload_cmds

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds

# A language specific compiler.
CC=$lt_compiler

# Is the compiler the GNU compiler?
with_gcc=$GCC

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag

# Additional compiler flags for building library objects.
```

```
pic_flag=$lt_lt_prog_compiler_pic

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_runtimes

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds

# Create a temporary old-style archive to link instead of a shared archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds
archive_expsym_cmds=$lt_archive_expsym_cmds

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds
module_expsym_cmds=$lt_module_expsym_cmds

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag
```

```
# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=${lt_hardcode_libdir_flag_spec}

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=${lt_hardcode_libdir_separator}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=${hardcode_direct}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=${hardcode_direct_absolute}

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=${hardcode_minus_L}

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=${hardcode_shlibpath_var}

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=${hardcode_automatic}

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=${inherit_rpath}

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=${link_all_deplibs}

# Set to "yes" if exported symbols are required.
always_export_symbols=${always_export_symbols}

# The commands to list exported symbols.
export_symbols_cmds=${lt_export_symbols_cmds}

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=${lt_exclude_expsyms}
```

```

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action

# ### END LIBTOOL CONFIG

_LT_EOF

    case $host_os in
    aix3*)
        cat <<\_LT_EOF >> "$cfgfile"
# AIX sometimes has problems with the GCC collect2 program.  For some
# reason, if we set the COLLECT_NAMES environment variable, the
problems
# vanish in a puff of smoke.
if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
fi
    _LT_EOF
        ;;
    esac

ltmain="$ac_aux_dir/ltmain.sh"

# We use sed instead of cat because bash on DJGPP gets confused if
# if finds mixed CR/LF and LF-only lines.  Since sed operates in
# text mode, it properly converts lines to CR/LF.  This bash problem
# is reportedly fixed, but why not run on old versions too?
sed '$q' "$ltmain" >> "$cfgfile" \
    || (rm -f "$cfgfile"; exit 1)

if test x"$xsi_shell" = xyesh; then
    sed -e '/^func_dirname ()$/,/^}/ # func_dirname /c\
func_dirname ()\
{\
\    case ${1} in\

```

```

\      */*) func_dirname_result="${1%/*}${2}" ;;\
\      * ) func_dirname_result="${3}" ;;\
\    esac\
} # Extended-shell func_dirname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_basename ()$/,/^\} # func_basename /c\
func_basename ()\
{\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_basename implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_dirname_and_basename ()$/,/^\} #
func_dirname_and_basename /c\
func_dirname_and_basename ()\
{\
\   case ${1} in\
\     */*) func_dirname_result="${1%/*}${2}" ;;\
\     * ) func_dirname_result="${3}" ;;\
\   esac\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_dirname_and_basename implementation'
"$cfgfile" > $cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_stripname ()$/,/^\} # func_stripname /c\
func_stripname ()\
{\
\   # pdksh 5.2.14 does not do ${X%$Y} correctly if both X and Y are\
\   # positional parameters, so assign one to ordinary parameter
first.\
\   func_stripname_result=${3}\
\   func_stripname_result=${func_stripname_result#"${1}"}\
\   func_stripname_result=${func_stripname_result%"${2}"}\
} # Extended-shell func_stripname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \

```

```

    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_split_long_opt ()$/,/^\^} # func_split_long_opt /c\
func_split_long_opt ()\
{\
\   func_split_long_opt_name=${1%*=*}\
\   func_split_long_opt_arg=${1#*=}\
} # Extended-shell func_split_long_opt implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_split_short_opt ()$/,/^\^} # func_split_short_opt /c\
func_split_short_opt ()\
{\
\   func_split_short_opt_arg=${1#??}\
\   func_split_short_opt_name=${1%"$func_split_short_opt_arg"}\
} # Extended-shell func_split_short_opt implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_lo2o ()$/,/^\^} # func_lo2o /c\
func_lo2o ()\
{\
\   case ${1} in\
\     *.lo) func_lo2o_result=${1%.lo}.${objext} ;;\
\     *)   func_lo2o_result=${1} ;;\
\   esac\
} # Extended-shell func_lo2o implementation' "$cfgfile" > $cfgfile.tmp
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_xform ()$/,/^\^} # func_xform /c\
func_xform ()\
{\
\   func_xform_result=${1%.*}.lo\
} # Extended-shell func_xform implementation' "$cfgfile" >
$cfgfile.tmp \

```

```

    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_arith ()$/,/^{ } # func_arith /c\
func_arith ()\
{\
    func_arith_result=$(( $* ))\
} # Extended-shell func_arith implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_len ()$/,/^{ } # func_len /c\
func_len ()\
{\
    func_len_result=${#1}\
} # Extended-shell func_len implementation' "$cfgfile" > $cfgfile.tmp
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

fi

if test x"$lt_shell_append" = xyes; then
    sed -e '/^func_append ()$/,/^{ } # func_append /c\
func_append ()\
{\
    eval "${1}+=\\${2}"\
} # Extended-shell func_append implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_append_quoted ()$/,/^{ } # func_append_quoted /c\
func_append_quoted ()\
{\
    \    func_quote_for_eval "${2}"\
    \    eval "${1}+=\\\ \\\ \\\ $func_quote_for_eval_result"\
} # Extended-shell func_append_quoted implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \

```

```

    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    # Save a `func_append' function call where possible by direct use of
'+='
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1+= "%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
else
    # Save a `func_append' function call even when '+=' is not available
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1=" $\1%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
fi

if test x"$_lt_function_replace_fail" = x":"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Unable to
substitute extended shell functions in $ofile" >&5
$as_echo "$as_me: WARNING: Unable to substitute extended shell
functions in $ofile" >&2;}
fi

    mv -f "$cfgfile" "$ofile" ||
    (rm -f "$ofile" && cp "$cfgfile" "$ofile" && rm -f "$cfgfile")
    chmod +x "$ofile"

;;

esac
done # for ac_tag

as_fn_exit 0
_ACEOF
ac_clean_files=$ac_clean_files_save

test $ac_write_fail = 0 ||
    as_fn_error $? "write failure creating $CONFIG_STATUS" "$LINENO" 5

# configure is writing to config.log, and then calls config.status.
# config.status does its own redirection, appending to config.log.
# Unfortunately, on DOS this fails, as config.log is still kept open

```



```

# by configure, so config.status won't be able to write to it; its
# output is simply discarded.  So we exec the FD to /dev/null,
# effectively closing config.log, so it can be properly (re)opened and
# appended to by config.status.  When coming back to configure, we
# need to make the FD available again.
if test "$no_create" != yes; then
  ac_cs_success=:
  ac_config_status_args=
  test "$silent" = yes &&
    ac_config_status_args="$ac_config_status_args --quiet"
  exec 5>/dev/null
  $SHELL $CONFIG_STATUS $ac_config_status_args || ac_cs_success=false
  exec 5>>config.log
  # Use ||, not &&, to avoid exiting from the if with $? = 1, which
  # would make configure fail if this is the last instruction.
  $ac_cs_success || as_fn_exit 1
fi
if test -n "$ac_unrecognized_opts" && test "$enable_option_checking"
!= no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: unrecognized
options: $ac_unrecognized_opts" >&5
$as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2;}
fi

echo "
          D-BUS GLIB BINDINGS $VERSION
          =====

prefix:                ${prefix}
exec_prefix:           ${exec_prefix}
  libdir:                ${EXPANDED_LIBDIR}
  bindir:                ${EXPANDED_BINDIR}
  sysconfdir:           ${EXPANDED_SYSCONFDIR}
  localstatedir:       ${EXPANDED_LOCALSTATEDIR}
datadir:               ${EXPANDED_DATADIR}
source code location:  ${srcdir}
compiler:              ${CC}
cflags:                ${CFLAGS}
cppflags:              ${CPPFLAGS}
"

echo "
  Maintainer mode:      ${USE_MAINTAINER_MODE}
  gcc coverage profiling:  ${enable_gcov}
  Building unit tests:  ${enable_tests}
  Building verbose mode:  ${enable_verbose_mode}
  Building assertions:   ${enable_asserts}
  Building checks:       ${enable_checks}
  Building Gtk-doc docs:  ${enable_gtk_doc}
  Bash Completion:      ${enable_bash_completion}

```

```

        Using XML parser:          ${with_xml}
        'make check' socket dir:  ${TEST_SOCKET_DIR}
"

if test x$enable_tests = xyes; then
    echo "NOTE: building with unit tests increases the size of the
installed library and renders it insecure."
fi
if test x$enable_tests = xyes -a x$enable_asserts = xno; then
    echo "NOTE: building with unit tests but without assertions
means tests may not properly report failures (this configuration is
only useful when doing something like profiling the tests)"
fi
if test x$enable_gcov = xyes; then
    echo "NOTE: building with coverage profiling is definitely for
developers only."
fi
if test x$enable_verbose_mode = xyes; then
    echo "NOTE: building with verbose mode increases library size,
may slightly increase security risk, and decreases performance."
fi
if test x$enable_asserts = xyes; then
    echo "NOTE: building with assertions increases library size
and decreases performance."
fi
if test x$enable_checks = xno; then
    echo "NOTE: building without checks for arguments passed to
public API makes it harder to debug apps using D-BUS, but will
slightly decrease D-BUS library size and _very_ slightly improve
performance."
fi

```

File = output.2.~1~

```

@%:@! /bin/sh
@%:@ Guess values for system-dependent variables and create Makefiles.
@%:@ Generated by GNU Autoconf 2.69 for dbus 1.6.8.
@%:@
@%:@ Report bugs to
<https://bugs.freedesktop.org/enter\_bug.cgi?product=dbus>.
@%:@
@%:@
@%:@ Copyright (C) 1992-1996, 1998-2012 Free Software Foundation, Inc.
@%:@
@%:@
@%:@ This configure script is free software; the Free Software
Foundation
@%:@ gives unlimited permission to copy, distribute and modify it.
## ----- ##
## M4sh Initialization. ##

```



```

    expr "X$arg" : "X\\(.*\\) $as_nl";
    arg=`expr "X$arg" : ".*$as_nl\\(.*\)`";;
    esac;
    expr "X$arg" : "X\\(.*\)" | tr -d "$as_nl"
,
    export as_echo_n_body
    as_echo_n='sh -c $as_echo_n_body as_echo'
fi
export as_echo_body
as_echo='sh -c $as_echo_body as_echo'
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
    PATH_SEPARATOR=:
    (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
        (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
            PATH_SEPARATOR=';'
    }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" " $as_nl

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
    *[\//]* ) as_myself=$0 ;;
    *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
    as_myself=$0
fi
if test ! -f "$as_myself"; then

```

```

    $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
    exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh).  But do not cause bugs in bash 2.01; the "|| exit
# 1"
# suppresses any "Segmentation fault" message there.  '(((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
    && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

# Use a proper internal environment variable to ensure we don't fall
# into an infinite loop, continuously re-executing ourselves.
if test x"${_as_can_reexec}" != xno && test "x$CONFIG_SHELL" != x;
then
    _as_can_reexec=no; export _as_can_reexec;
    # We cannot yet assume a decent shell, so we have to provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec'.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
as_fn_exit 255
fi

```

```

# We don't want this to propagate to other subprocesses.
    { _as_can_reexec=; unset _as_can_reexec;}
if test "x$CONFIG_SHELL" = x; then
    as_bourne_compatible="if test -n \"\${ZSH_VERSION+set}\" && (emulate
sh) >/dev/null 2>&1; then :
    emulate sh
    NULLCMD=:
    # Pre-4.2 versions of Zsh do word splitting on \"\${1+\"$@\"}\", which
    # is contrary to our usage.  Disable this feature.
    alias -g \"\${1+\"$@\"}\"='\"$@\"'
    setopt NO_GLOB_SUBST
else
    case \"(set -o) 2>/dev/null\" in @%:@(
*posix*) :
        set -o posix ;; @%:@(
*) :
        ;;
esac
fi
"
    as_required="as_fn_return () { (exit \$1); }
as_fn_success () { as_fn_return 0; }
as_fn_failure () { as_fn_return 1; }
as_fn_ret_success () { return 0; }
as_fn_ret_failure () { return 1; }

exitcode=0
as_fn_success || { exitcode=1; echo as_fn_success failed.; }
as_fn_failure && { exitcode=1; echo as_fn_failure succeeded.; }
as_fn_ret_success || { exitcode=1; echo as_fn_ret_success failed.; }
as_fn_ret_failure && { exitcode=1; echo as_fn_ret_failure succeeded.; }
}
if ( set x; as_fn_ret_success y && test x = \"\$1\" ); then :

else
    exitcode=1; echo positional parameters were not saved.
fi
test x\$exitcode = x0 || exit 1
test -x / || exit 1"
    as_suggested="
as_lineno_1=";as_suggested=$as_suggested$LINENO;as_suggested=$as_sugge
sted" as_lineno_1a=\$LINENO

as_lineno_2=";as_suggested=$as_suggested$LINENO;as_suggested=$as_sugge
sted" as_lineno_2a=\$LINENO
    eval 'test \"x\$as_lineno_1'\$as_run'\" !=
\"x\$as_lineno_2'\$as_run'\" &&
    test \"x\`expr \$as_lineno_1'\$as_run' + 1`\`\" =
\"x\$as_lineno_2'\$as_run'\" || exit 1
test \"\$( ( 1 + 1 ) ) = 2\" || exit 1

    test -n \"\${ZSH_VERSION+set}\${BASH_VERSION+set}\" || (

```

```
ECHO='////////////////////////////////////  
////////////////////////////////////  
////////////////////////////////////  
\\'  
    ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO  
    ECHO=\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO\$ECHO  
    PATH=/empty FPATH=/empty; export PATH FPATH  
    test \"X\`printf %s \$ECHO\`\\" = \"X\$ECHO\" \\  
        || test \"X\`print -r -- \$ECHO\`\\" = \"X\$ECHO\" ) || exit 1"  
    if (eval "$as_required") 2>/dev/null; then :  
        as_have_required=yes  
    else  
        as_have_required=no  
    fi  
    if test x$as_have_required = xyes && (eval "$as_suggested")  
2>/dev/null; then :  
  
    else  
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR  
        as_found=false  
        for as_dir in /bin$PATH_SEPARATOR/usr/bin$PATH_SEPARATOR$PATH  
        do  
            IFS=$as_save_IFS  
            test -z "$as_dir" && as_dir=.  
            as_found=:  
            case $as_dir in @%:@(  
                /*)  
                for as_base in sh bash ksh sh5; do  
                    # Try only shells that exist, to save several forks.  
                    as_shell=$as_dir/$as_base  
                    if { test -f "$as_shell" || test -f "$as_shell.exe"; } &&  
                        { $as_echo "$as_bourne_compatible"$as_required" |  
as_run=a "$as_shell"; } 2>/dev/null; then :  
                        CONFIG_SHELL=$as_shell as_have_required=yes  
                            if { $as_echo "$as_bourne_compatible"$as_suggested" |  
as_run=a "$as_shell"; } 2>/dev/null; then :  
                                break 2  
                            fi  
                        fi  
                    done;;  
                esac  
                as_found=false  
            done  
            $as_found || { if { test -f "$SHELL" || test -f "$SHELL.exe"; } &&  
                { $as_echo "$as_bourne_compatible"$as_required" | as_run=a  
"$SHELL"; } 2>/dev/null; then :  
                    CONFIG_SHELL=$SHELL as_have_required=yes  
                fi; }  
            IFS=$as_save_IFS
```

```

        if test "x$CONFIG_SHELL" != x; then :
export CONFIG_SHELL
        # We cannot yet assume a decent shell, so we have to
provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH_ENV=/dev/null
ENV=/dev/null
(unset BASH_ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in @%:@ (((
    *v*x* | *x*v* ) as_opts=-vx ;;
    *v* ) as_opts=-v ;;
    *x* ) as_opts=-x ;;
    * ) as_opts= ;;
esac
exec $CONFIG_SHELL $as_opts "$as_myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec`.
$as_echo "$0: could not re-execute with $CONFIG_SHELL" >&2
exit 255
fi

        if test x$as_have_required = xno; then :
$as_echo "$0: This script requires a shell more modern than all"
$as_echo "$0: the shells that I found on your system."
if test x${ZSH_VERSION+set} = xset ; then
    $as_echo "$0: In particular, zsh $ZSH_VERSION has bugs and should"
    $as_echo "$0: be upgraded to zsh 4.3.4 or later."
else
    $as_echo "$0: Please tell bug-autoconf@gnu.org and
$0: https://bugs.freedesktop.org/enter\_bug.cgi?product=dbus
$0: about your system, including any error possibly output
$0: before this message. Then install a modern shell, or
$0: manually run the script under such a shell if you do
$0: have one."
fi
        exit 1
fi
fi
fi
SHELL=${CONFIG_SHELL-/bin/sh}
export SHELL
# Unset more variables known to interfere with behavior of common
tools.
CLICOLOR_FORCE= GREP_OPTIONS=
unset CLICOLOR_FORCE GREP_OPTIONS

## ----- ##
## M4sh Shell Functions. ##
## ----- ##
@%:@ as_fn_unset VAR

```



```

sed '/^X\(.*[^\)]\)\)\)\/*[^\)]\[^)]*\/*$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\[^)]\.*/{
    s//\1/
    q
}
/^X\(\)\)\)\)$/{
    s//\1/
    q
}
/^X\(\)\)\)\)\.*/{
    s//\1/
    q
}
s/.*/./; q'`
test -d "$as_dir" && break
done
test -z "$as_dirs" || eval "mkdir $as_dirs"
} || test -d "$as_dir" || as_fn_error $? "cannot create directory
$as_dir"

} @%:@ as_fn_mkdir_p

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take
@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$as_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
    {
        eval $1+=\$2
    }'
else
    as_fn_append ()
    {
        eval $1=\$$1\$2
    }

```

```

    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \${(( 1 + 1 ))} = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
        {
            as_val=$(( $* ))
        }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
    as_status=$1; test $as_status -eq 0 && as_status=1
    if test "$4"; then
        as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
        $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
    fi
    $as_echo "$as_me: error: $2" >&2
    as_fn_exit $as_status
} @%:@ as_fn_error

if expr a : '\(a\)' >/dev/null 2>&1 &&
    test "X`expr 00001 : '.*\(...\)'`" = X001; then
    as_expr=expr
else
    as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
    as_basename=basename

```

```

else
  as_basename=false
fi

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]\*\)\/*$' \|| \
  X"$0" : 'X\(/\)\$' \|| \
  X"$0" : 'X\(/\)\' \|| . 2>/dev/null ||
$as_echo X/"$0" |
  sed '/^\.*\/\([^\/]\*\)\/*$/ {
    s//\1/
    q
  }
/^X\/\(\//\)\$/{
  s//\1/
  q
}
/^X\/\(\//\)\.*/{
  s//\1/
  q
}
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxy'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

as_lineno_1=$LINENO as_lineno_1a=$LINENO
as_lineno_2=$LINENO as_lineno_2a=$LINENO
eval 'test "x$as_lineno_1'$as_run'" != "x$as_lineno_2'$as_run'" &&
test "x`expr $as_lineno_1'$as_run' + 1`" = "x$as_lineno_2'$as_run'"'
|| {
# Blame Lee E. McMahon (1931-1989) for sed's syntax.  :-)
sed -n '
  p
  /[$]LINENO/=
  ' <$as_myself |
  sed '
    s/[$]LINENO.*/&-/
    t lineno
    b

```

```

        :lineno
        N
        :loop
        s/[${LINENO}\([^\$as_cr_alnum'_].*\n\)\(.*\)/\2\1\2/
        t loop
        s/-\n.*//
        ' >$as_me.lineno &&
        chmod +x "$as_me.lineno" ||
        { $as_echo "$as_me: error: cannot create $as_me.lineno; rerun with
a POSIX shell" >&2; as_fn_exit 1; }

# If we had to re-execute with $CONFIG_SHELL, we're ensured to have
# already done that, so ensure we don't try to do so again and fall
# in an infinite loop. This has already happened in practice.
_as_can_reexec=no; export _as_can_reexec
# Don't try to exec as it changes ${0}, causing all sort of problems
# (the dirname of ${0} is not the place where we might find the
# original and so on. Autoconf is especially sensitive to this).
. "$as_me.lineno"
# Exit status is that of the last command.
exit
}

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*))
  case `echo 'xy\c'` in
    *c*) ECHO_T=' ';; # ECHO_T is single tab character.
    xy) ECHO_C='\c';;
    *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
      ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$ conf$$exe conf$$file
if test -d conf$$dir; then
  rm -f conf$$dir/conf$$file
else
  rm -f conf$$dir
  mkdir conf$$dir 2>/dev/null
fi
if (echo >conf$$file) 2>/dev/null; then
  if ln -s conf$$file conf$$ 2>/dev/null; then
    as_ln_s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper
    executable.
    # In both cases, we have to default to `cp -pR'.

```

```

    ln -s conf$$.$file conf$$.$dir 2>/dev/null && test ! -f conf$$.$exe
||
    as_ln_s='cp -pR'
elif ln conf$$.$file conf$$ 2>/dev/null; then
    as_ln_s=ln
else
    as_ln_s='cp -pR'
fi
else
    as_ln_s='cp -pR'
fi
rm -f conf$$ conf$$.$exe conf$$.$dir/conf$$.$file conf$$.$file
rmdir conf$$.$dir 2>/dev/null

if mkdir -p . 2>/dev/null; then
    as_mkdir_p='mkdir -p "$as_dir"'
else
    test -d ./-p && rmdir ./-p
    as_mkdir_p=false
fi

as_test_x='test -x'
as_executable_p=as_fn_executable_p

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed 'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%%_g'"

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+%pp%;s%[^_$as_cr_alnum]%%_g'"

SHELL=${CONFIG_SHELL-/bin/sh}

test -n "$DJDIR" || exec 7<&0 </dev/null
exec 6>&1

# Name of the host.
# hostname on some systems (SVR3.2, old GNU/Linux) returns a bogus
# exit status,
# so uname gets run too.
ac_hostname=`(hostname || uname -n) 2>/dev/null | sed 1q`

#
# Initializations.
#
ac_default_prefix=/usr/local
ac_clean_files=
ac_config_libobj_dir=.
LIB@&t@OBS=
cross_compiling=no
subdirs=

```

```
MFLAGS=
MAKEFLAGS=

# Identity of this package.
PACKAGE_NAME='dbus'
PACKAGE_TARNAME='dbus'
PACKAGE_VERSION='1.6.8'
PACKAGE_STRING='dbus 1.6.8'
PACKAGE_BUGREPORT='https://bugs.freedesktop.org/enter_bug.cgi?product=
dbus'
PACKAGE_URL=''

# Factoring default headers for most tests.
ac_includes_default="\
#include <stdio.h>
#ifdef HAVE_SYS_TYPES_H
# include <sys/types.h>
#endif
#ifdef HAVE_SYS_STAT_H
# include <sys/stat.h>
#endif
#ifdef STDC_HEADERS
# include <stdlib.h>
# include <stddef.h>
#else
# ifdef HAVE_STDLIB_H
# include <stdlib.h>
# endif
#endif
#ifdef HAVE_STRING_H
# if !defined STDC_HEADERS && defined HAVE_MEMORY_H
# include <memory.h>
# endif
# include <string.h>
#endif
#ifdef HAVE_STRINGS_H
# include <strings.h>
#endif
#ifdef HAVE_INTTYPES_H
# include <inttypes.h>
#endif
#ifdef HAVE_STDINT_H
# include <stdint.h>
#endif
#ifdef HAVE_UNISTD_H
# include <unistd.h>
#endif"

ac_subst_vars='am__EXEEXT_FALSE
am__EXEEXT_TRUE
LTLIBOBJS
LIB@&t@OBS'
```

DBUS_SESSION_BUS_DEFAULT_ADDRESS
DBUS_SESSION_SOCKET_DIR
TEST_LISTEN
TEST_SOCKET_DIR
TEST_LAUNCH_HELPER_BINARY
TEST_BUS_BINARY
DBUS_TEST_EXEC
DBUS_TEST_DATA
DBUS_LIBEXECDIR
DBUS_BINDIR
DBUS_DAEMONDIR
DBUS_DATADIR
DBUS_PREFIX
DBUS_USER
DBUS_CONSOLE_OWNER_FILE
DBUS_CONSOLE_AUTH_DIR
DBUS_SYSTEM_PID_FILE
DBUS_SYSTEM_BUS_DEFAULT_ADDRESS
DBUS_SYSTEM_SOCKET
HAVE_SYSTEMD_FALSE
HAVE_SYSTEMD_TRUE
systemdsystemunitdir
DBUS_INIT_SCRIPTS_CYGWIN_FALSE
DBUS_INIT_SCRIPTS_CYGWIN_TRUE
DBUS_INIT_SCRIPTS_SLACKWARE_FALSE
DBUS_INIT_SCRIPTS_SLACKWARE_TRUE
DBUS_INIT_SCRIPTS_RED_HAT_FALSE
DBUS_INIT_SCRIPTS_RED_HAT_TRUE
EXPANDED_DATADIR
EXPANDED_LIBEXECDIR
EXPANDED_LIBDIR
EXPANDED_BINDIR
EXPANDED_SYSCONFDIR
EXPANDED_LOCALSTATEDIR
EXPANDED_PREFIX
DBUS_CAN_UPLOAD_DOCS_FALSE
DBUS_CAN_UPLOAD_DOCS_TRUE
DBUS_HAVE_MAN2HTML_FALSE
DBUS_HAVE_MAN2HTML_TRUE
MAN2HTML
DBUS_XML_DOCS_ENABLED_FALSE
DBUS_XML_DOCS_ENABLED_TRUE
XMLTO
DBUS_HAVE_XSLTPROC_FALSE
DBUS_HAVE_XSLTPROC_TRUE
XSLTPROC
DBUS_DOXYGEN_DOCS_ENABLED_FALSE
DBUS_DOXYGEN_DOCS_ENABLED_TRUE
DOXYGEN
DBUS_X_LIBS
DBUS_X_CFLAGS
X_EXTRA_LIBS

X_LIBS
X_PRE_LIBS
X_CFLAGS
LIBDBUS_LIBS
VALGRIND_LIBS
VALGRIND_CFLAGS
NETWORK_libs
ADT_LIBS
SELINUX_LIBS
HAVE_LIBAUDIT_FALSE
HAVE_LIBAUDIT_TRUE
SYSTEMD_LIBS
SYSTEMD_CFLAGS
HAVE_CONSOLE_OWNER_FILE_FALSE
HAVE_CONSOLE_OWNER_FILE_TRUE
LAUNCHD_AGENT_DIR
DBUS_ENABLE_LAUNCHD_FALSE
DBUS_ENABLE_LAUNCHD_TRUE
LAUNCHCTL
DBUS_BUS_ENABLE_KQUEUE_FALSE
DBUS_BUS_ENABLE_KQUEUE_TRUE
HAVE_LINUX_EPOLL_FALSE
HAVE_LINUX_EPOLL_TRUE
DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE
DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE
DBUS_BUS_ENABLE_INOTIFY_FALSE
DBUS_BUS_ENABLE_INOTIFY_TRUE
HAVE_SELINUX_FALSE
HAVE_SELINUX_TRUE
THREAD_LIBS
XML_LIBS
XML_CFLAGS
DBUS_USE_LIBXML_FALSE
DBUS_USE_LIBXML_TRUE
DBUS_USE_EXPAT_FALSE
DBUS_USE_EXPAT_TRUE
LIBXML_LIBS
LIBXML_CFLAGS
DBUS_PATH_OR_ABSTRACT
DBUS_INT16_TYPE
DBUS_INT32_TYPE
DBUS_HAVE_INT64
DBUS_UINT64_CONSTANT
DBUS_INT64_CONSTANT
DBUS_INT64_TYPE
R_DYNAMIC_LDFLAG
pkgpyexecdir
pyexecdir
pkgpythondir
pythondir
PYTHON_PLATFORM
PYTHON_EXEC_PREFIX

PYTHON_LIB_PREFIX
PYTHON_PREFIX
PYTHON_VERSION
PYTHON
DBUS_ENABLE_INSTALLED_TESTS_FALSE
DBUS_ENABLE_INSTALLED_TESTS_TRUE
DBUS_WITH_GLIB_FALSE
DBUS_WITH_GLIB_TRUE
DBUS_ENABLE_MODULAR_TESTS_FALSE
DBUS_ENABLE_MODULAR_TESTS_TRUE
DBUS_GLIB_LIBS
DBUS_GLIB_CFLAGS
GLIB_LIBS
GLIB_CFLAGS
DBUS_ENABLE_EMBEDDED_TESTS_FALSE
DBUS_ENABLE_EMBEDDED_TESTS_TRUE
DBUS_BUILD_TESTS_FALSE
DBUS_BUILD_TESTS_TRUE
DBUS_STATIC_BUILD_CPPFLAGS
DBUS_CYGWIN_FALSE
DBUS_CYGWIN_TRUE
DBUS_UNIX_FALSE
DBUS_UNIX_TRUE
DBUS_WINCE_FALSE
DBUS_WINCE_TRUE
DBUS_WIN_FALSE
DBUS_WIN_TRUE
WINDRES
BUILD_FILEVERSION
BUILD_TIMESTAMP
RC
PKG_CONFIG
CXXCPP
OTOOL64
OTOOL
LIPO
NMEDIT
DSYMUTIL
MANIFEST_TOOL
RANLIB
ac_ct_AR
AR
DLLTOOL
OBJDUMP
LN_S
NM
ac_ct_DUMPBIN
DUMPBIN
LD
FGREP
SED
LIBTOOL

EGREP
GREP
CPP
am__fastdepCXX_FALSE
am__fastdepCXX_TRUE
CXXDEPMODE
ac_ct_CXX
CXXFLAGS
CXX
am__fastdepCC_FALSE
am__fastdepCC_TRUE
CCDEPMODE
am__nodep
AMDEPBACKSLASH
AMDEP_FALSE
AMDEP_TRUE
am__quote
am__include
DEPDIR
OBJEXT
EXEEXT
ac_ct_CC
CPPFLAGS
LDFLAGS
CFLAGS
CC
DBUS_VERSION
DBUS_MICRO_VERSION
DBUS_MINOR_VERSION
DBUS_MAJOR_VERSION
LT_AGE
LT_REVISION
LT_CURRENT
AM_BACKSLASH
AM_DEFAULT_VERBOSITY
AM_DEFAULT_V
AM_V
MAINT
MAINTAINER_MODE_FALSE
MAINTAINER_MODE_TRUE
GETTEXT_PACKAGE
am__untar
am__tar
AMTAR
am__leading_dot
SET_MAKE
AWK
mkdir_p
MKDIR_P
INSTALL_STRIP_PROGRAM
STRIP
install_sh

MAKEINFO
AUTOHEADER
AUTOMAKE
AUTOCONF
ACLOCAL
VERSION
PACKAGE
CYGPATH_W
am__isrc
INSTALL_DATA
INSTALL_SCRIPT
INSTALL_PROGRAM
host_os
host_vendor
host_cpu
host
build_os
build_vendor
build_cpu
build
target_alias
host_alias
build_alias
LIBS
ECHO_T
ECHO_N
ECHO_C
DEFS
mandir
localedir
libdir
psdir
pdfdir
dvidir
htmldir
infodir
docdir
oldincludedir
includedir
localstatedir
sharedstatedir
sysconfdir
datadir
datarootdir
libexecdir
sbindir
bindir
program_transform_name
prefix
exec_prefix
PACKAGE_URL
PACKAGE_BUGREPORT

```
PACKAGE_STRING
PACKAGE_VERSION
PACKAGE_TARNAME
PACKAGE_NAME
PATH_SEPARATOR
SHELL'
ac_subst_files=''
ac_user_opts='
enable_option_checking
enable_maintainer_mode
enable_silent_rules
enable_dependency_tracking
enable_shared
enable_static
with_pic
enable_fast_install
with_gnu_ld
with_libtool_sysroot
enable_libtool_lock
enable_compiler_coverage
enable_compiler_optimisations
enable_developer
enable_ansi
enable_verbose_mode
enable_asserts
enable_checks
enable_xml_docs
enable_doxygen_docs
enable_abstract_sockets
enable_selinux
enable_libaudit
enable_dnotify
enable_inotify
enable_kqueue
enable_console_owner_file
enable_userdb_cache
enable_launchd
enable_systemd
with_xml
with_init_scripts
with_session_socket_dir
with_test_socket_dir
with_system_pid_file
with_system_socket
with_console_auth_dir
with_console_owner_file
with_launchd_agent_dir
with_dbus_user
with_dbus_daemon_dir
with_dbus_session_bus_default_address
enable_embedded_tests
enable_modular_tests
```

```
enable_tests
enable_installed_tests
with_64_bit
enable_epoll
with_valgrind
enable_x11_autolaunch
with_x
enable_Werror
with_systemdsystemunitdir
with_dbus_test_dir
enable_stats
'
    ac_precious_vars='build_alias
host_alias
target_alias
CC
CFLAGS
LDFLAGS
LIBS
CPPFLAGS
CXX
CXXFLAGS
CCC
CPP
CXXCPP
PKG_CONFIG
GLIB_CFLAGS
GLIB_LIBS
DBUS_GLIB_CFLAGS
DBUS_GLIB_LIBS
PYTHON
LIBXML_CFLAGS
LIBXML_LIBS
SYSTEMD_CFLAGS
SYSTEMD_LIBS
VALGRIND_CFLAGS
VALGRIND_LIBS
MAN2HTML'
```

```
# Initialize some variables set by options.
ac_init_help=
ac_init_version=false
ac_unrecognized_opts=
ac_unrecognized_sep=
# The variables have the same names as the options, with
# dashes changed to underlines.
cache_file=/dev/null
exec_prefix=NONE
no_create=
no_recursion=
prefix=NONE
```

```

program_prefix=NONE
program_suffix=NONE
program_transform_name=s,x,x,
silent=
site=
srcdir=
verbose=
x_includes=NONE
x_libraries=NONE

# Installation directory options.
# These are left unexpanded so users can "make install
exec_prefix=/foo"
# and all the variables that are supposed to be based on exec_prefix
# by default will actually change.
# Use braces instead of parens because sh, perl, etc. also accept
them.
# (The list follows the same order as the GNU Coding Standards.)
bindir='${exec_prefix}/bin'
sbindir='${exec_prefix}/sbin'
libexecdir='${exec_prefix}/libexec'
datarootdir='${prefix}/share'
datadir='${datarootdir}'
sysconfdir='${prefix}/etc'
sharedstatedir='${prefix}/com'
localstatedir='${prefix}/var'
includedir='${prefix}/include'
oldincludedir='/usr/include'
docdir='${datarootdir}/doc/${PACKAGE_TARNAME}'
infodir='${datarootdir}/info'
htmldir='${docdir}'
dvidir='${docdir}'
pdfdir='${docdir}'
psdir='${docdir}'
libdir='${exec_prefix}/lib'
localedir='${datarootdir}/locale'
mandir='${datarootdir}/man'

ac_prev=
ac_dashdash=
for ac_option
do
    # If the previous option needs an argument, assign it.
    if test -n "$ac_prev"; then
        eval $ac_prev=\$ac_option
        ac_prev=
        continue
    fi

    case $ac_option in
    *=?*) ac_optarg=`expr "X$ac_option" : '[^=]*\(.*\)'` ;;
    *)    ac_optarg= ;;

```

```

*)    ac_optarg=yes ;;
esac

# Accept the important Cygnus configure options, so we can diagnose
typos.

case $ac_dashdash$ac_option in
--)
    ac_dashdash=yes ;;

-bindir | --bindir | --bindi | --bind | --bin | --bi)
    ac_prev=bindir ;;
-bindir=* | --bindir=* | --bindi=* | --bind=* | --bin=* | --bi=*)
    bindir=$ac_optarg ;;

-build | --build | --buil | --bui | --bu)
    ac_prev=build_alias ;;
-build=* | --build=* | --buil=* | --bui=* | --bu=*)
    build_alias=$ac_optarg ;;

-cache-file | --cache-file | --cache-fil | --cache-fi \
| --cache-f | --cache- | --cache | --cach | --cac | --ca | --c)
    ac_prev=cache_file ;;
-cache-file=* | --cache-file=* | --cache-fil=* | --cache-fi=* \
| --cache-f=* | --cache-=* | --cache=* | --cach=* | --cac=* | --ca=*
| --c=*)
    cache_file=$ac_optarg ;;

--config-cache | -C)
    cache_file=config.cache ;;

-datadir | --datadir | --datadi | --datad)
    ac_prev=datadir ;;
-datadir=* | --datadir=* | --datadi=* | --datad=*)
    datadir=$ac_optarg ;;

-datarootdir | --datarootdir | --datarootdi | --datarootd | --
dataroot \
| --dataroo | --dataro | --datar)
    ac_prev=datarootdir ;;
-datarootdir=* | --datarootdir=* | --datarootdi=* | --datarootd=* \
| --dataroot=* | --dataroo=* | --dataro=* | --datar=*)
    datarootdir=$ac_optarg ;;

-disable-* | --disable-*)
    ac_useropt=`expr "x$ac_option" : 'x-*disable-\(.*\)'`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
    as_fn_error $? "invalid feature name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in

```



```

        *"
"enable_${ac_useropt}"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
disable-${ac_useropt_orig}"
        ac_unrecognized_sep=', ';;
    esac
    eval enable_${ac_useropt}=no ;;

-docdir | --docdir | --docdi | --doc | --do)
    ac_prev=docdir ;;
-docdir=* | --docdir=* | --docdi=* | --doc=* | --do=*)
    docdir=${ac_optarg} ;;

-dvidir | --dvidir | --dvidi | --dvid | --dvi | --dv)
    ac_prev=dvidir ;;
-dvidir=* | --dvidir=* | --dvidi=* | --dvid=* | --dvi=* | --dv=*)
    dvidir=${ac_optarg} ;;

-enable-* | --enable-*)
    ac_useropt=`expr "x${ac_option}" : 'x-*enable-\([^=]*\) '`
    # Reject names that are not valid shell variable names.
    expr "x${ac_useropt}" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid feature name: ${ac_useropt}"
    ac_useropt_orig=${ac_useropt}
    ac_useropt=`$as_echo "${ac_useropt}" | sed 's/[-+.]/_/g'`
    case $ac_user_opts in
        *"
"enable_${ac_useropt}"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
enable-${ac_useropt_orig}"
        ac_unrecognized_sep=', ';;
    esac
    eval enable_${ac_useropt}=\${ac_optarg} ;;

-exec-prefix | --exec_prefix | --exec-prefix | --exec-prefi \
| --exec-pref | --exec-pre | --exec-pr | --exec-p | --exec- \
| --exec | --exe | --ex)
    ac_prev=exec_prefix ;;
-exec-prefix=* | --exec_prefix=* | --exec-prefix=* | --exec-prefi=*
\
| --exec-pref=* | --exec-pre=* | --exec-pr=* | --exec-p=* | --exec-
=* \
| --exec=* | --exe=* | --ex=*)
    exec_prefix=${ac_optarg} ;;

-gas | --gas | --ga | --g)
    # Obsolete; use --with-gas.
    with_gas=yes ;;

```

```

-help | --help | --hel | --he | -h)
    ac_init_help=long ;;
-help=r* | --help=r* | --hel=r* | --he=r* | -hr*)
    ac_init_help=recursive ;;
-help=s* | --help=s* | --hel=s* | --he=s* | -hs*)
    ac_init_help=short ;;

-host | --host | --hos | --ho)
    ac_prev=host_alias ;;
-host=* | --host=* | --hos=* | --ho=*)
    host_alias=$ac_optarg ;;

-htmldir | --htmldir | --htmldi | --html | --html | --html | --html | --html)
    ac_prev=htmldir ;;
-htmldir=* | --htmldir=* | --htmldi=* | --html=* | --html=* | --
htm=* \
| --ht=*)
    htmldir=$ac_optarg ;;

-includedir | --includedir | --includedi | --included | --include \
| --includ | --includ | --includ | --includ)
    ac_prev=includedir ;;
-includedir=* | --includedir=* | --includedi=* | --included=* | --
include=* \
| --includ=* | --includ=* | --includ=* | --includ=*)
    includedir=$ac_optarg ;;

-infodir | --infodir | --infodi | --infod | --info | --inf)
    ac_prev=infodir ;;
-infodir=* | --infodir=* | --infodi=* | --infod=* | --info=* | --
inf=*)
    infodir=$ac_optarg ;;

-libdir | --libdir | --libdi | --libd)
    ac_prev=libdir ;;
-libdir=* | --libdir=* | --libdi=* | --libd=*)
    libdir=$ac_optarg ;;

-libexecdir | --libexecdir | --libexecdi | --libexecd | --libexec \
| --libexe | --libex | --libe)
    ac_prev=libexecdir ;;
-libexecdir=* | --libexecdir=* | --libexecdi=* | --libexecd=* | --
libexec=* \
| --libexe=* | --libex=* | --libe=*)
    libexecdir=$ac_optarg ;;

-localedir | --localedir | --localedi | --localed | --locale)
    ac_prev=localedir ;;
-localedir=* | --localedir=* | --localedi=* | --localed=* | --
locale=*)
    locale=$ac_optarg ;;

```

```

-localstatedir | --localstatedir | --localstatedi | --localstated \
| --localstate | --localstat | --localsta | --localst | --locals)
    ac_prev=localstatedir ;;
-localstatedir=* | --localstatedir=* | --localstatedi=* | --
localstated=* \
| --localstate=* | --localstat=* | --localsta=* | --localst=* | --
locals=*)
    localstatedir=$ac_optarg ;;

-mandir | --mandir | --mandi | --mand | --man | --ma | --m)
    ac_prev=mandir ;;
-mandir=* | --mandir=* | --mandi=* | --mand=* | --man=* | --ma=* | -
-m=*)
    mandir=$ac_optarg ;;

-nfp | --nfp | --nf)
    # Obsolete; use --without-fp.
    with_fp=no ;;

-no-create | --no-create | --no-creat | --no-crea | --no-cre \
| --no-cr | --no-c | -n)
    no_create=yes ;;

-no-recursion | --no-recursion | --no-recursio | --no-recursi \
| --no-recurs | --no-recur | --no-recu | --no-rec | --no-re | --no-
r)
    no_recursion=yes ;;

-oldincludedir | --oldincludedir | --oldincludedi | --oldincluded \
| --oldinclude | --oldinclud | --oldinclu | --oldincl | --oldinc \
| --oldin | --oldi | --old | --ol | --o)
    ac_prev=oldincludedir ;;
-oldincludedir=* | --oldincludedir=* | --oldincludedi=* | --
oldincluded=* \
| --oldinclude=* | --oldinclud=* | --oldinclu=* | --oldincl=* | --
oldinc=* \
| --oldin=* | --oldi=* | --old=* | --ol=* | --o=*)
    oldincludedir=$ac_optarg ;;

-prefix | --prefix | --prefi | --pref | --pre | --pr | --p)
    ac_prev=prefix ;;
-prefix=* | --prefix=* | --prefi=* | --pref=* | --pre=* | --pr=* | -
-p=*)
    prefix=$ac_optarg ;;

-program-prefix | --program-prefix | --program-prefi | --program-
pref \
| --program-pre | --program-pr | --program-p)
    ac_prev=program_prefix ;;
-program-prefix=* | --program-prefix=* | --program-prefi=* \

```

```

| --program-pref=* | --program-pre=* | --program-pr=* | --program-
p=*)
    program_prefix=$ac_optarg ;;

-program-suffix | --program-suffix | --program-suffi | --program-
suff \
| --program-suf | --program-su | --program-s)
    ac_prev=program_suffix ;;
-program-suffix=* | --program-suffix=* | --program-suffi=* \
| --program-suff=* | --program-suf=* | --program-su=* | --program-
s=*)
    program_suffix=$ac_optarg ;;

-program-transform-name | --program-transform-name \
| --program-transform-nam | --program-transform-na \
| --program-transform-n | --program-transform- \
| --program-transform | --program-transfor \
| --program-transfo | --program-transf \
| --program-trans | --program-tran \
| --progr-tra | --program-tr | --program-t)
    ac_prev=program_transform_name ;;
-program-transform-name=* | --program-transform-name=* \
| --program-transform-nam=* | --program-transform-na=* \
| --program-transform-n=* | --program-transform-=* \
| --program-transform=* | --program-transfor=* \
| --program-transfo=* | --program-transf=* \
| --program-trans=* | --program-tran=* \
| --progr-tra=* | --program-tr=* | --program-t=*)
    program_transform_name=$ac_optarg ;;

-pdfdir | --pdfdir | --pdfdi | --pdfd | --pdf | --pd)
    ac_prev=pdfdir ;;
-pdfdir=* | --pdfdir=* | --pdfdi=* | --pdfd=* | --pdf=* | --pd=*)
    pdfdir=$ac_optarg ;;

-psdir | --psdir | --psdi | --psd | --ps)
    ac_prev=psdir ;;
-psdir=* | --psdir=* | --psdi=* | --psd=* | --ps=*)
    psdir=$ac_optarg ;;

-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil)
    silent=yes ;;

-sbindir | --sbindir | --sbindi | --sbind | --sbin | --sbi | --sb)
    ac_prev=sbindir ;;
-sbindir=* | --sbindir=* | --sbindi=* | --sbind=* | --sbin=* \
| --sbi=* | --sb=*)
    sbindir=$ac_optarg ;;

-sharedstatedir | --sharedstatedir | --sharedstatedi \
| --sharedstated | --sharedstate | --sharedstat | --sharedsta \

```

```

| --sharedst | --shares | --shared | --share | --shar \
| --sha | --sh)
  ac_prev=sharedstatedir ;;
-sharedstatedir=* | --sharedstatedir=* | --sharedstatedi=* \
| --sharedstated=* | --sharedstate=* | --sharedstat=* | --
sharedsta=* \
| --sharedst=* | --shares=* | --shared=* | --share=* | --shar=* \
| --sha=* | --sh=*)
  sharedstatedir=$ac_optarg ;;

-site | --site | --sit)
  ac_prev=site ;;
-site=* | --site=* | --sit=*)
  site=$ac_optarg ;;

-srcdir | --srcdir | --srcdi | --srcd | --src | --sr)
  ac_prev=srcdir ;;
-srcdir=* | --srcdir=* | --srcdi=* | --srcd=* | --src=* | --sr=*)
  srcdir=$ac_optarg ;;

-sysconfdir | --sysconfdir | --sysconfdi | --sysconfd | --sysconf \
| --syscon | --sysco | --sysc | --sys | --sy)
  ac_prev=sysconfdir ;;
-sysconfdir=* | --sysconfdir=* | --sysconfdi=* | --sysconfd=* | --
sysconf=* \
| --syscon=* | --sysco=* | --sysc=* | --sys=* | --sy=*)
  sysconfdir=$ac_optarg ;;

-target | --target | --targe | --targ | --tar | --ta | --t)
  ac_prev=target_alias ;;
-target=* | --target=* | --targe=* | --targ=* | --tar=* | --ta=* | -
-t=*)
  target_alias=$ac_optarg ;;

-v | -verbose | --verbose | --verbos | --verbo | --verb)
  verbose=yes ;;

-version | --version | --versio | --versi | --vers | -V)
  ac_init_version=: ;;

-with-* | --with-*)
  ac_useropt=`expr "x$ac_option" : 'x-*with-\([^=]*\)'`
  # Reject names that are not valid shell variable names.
  expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
  as_fn_error $? "invalid package name: $ac_useropt"
  ac_useropt_orig=$ac_useropt
  ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
  case $ac_user_opts in
    *)
"with_$ac_useropt"
"*) ;;

```

```

        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--with-
$ac_useropt_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval with_$ac_useropt=\$ac_optarg ;;

-without-* | --without-*)
    ac_useropt=`expr "x$ac_option" : 'x-*without-\(.*\)'\`
    # Reject names that are not valid shell variable names.
    expr "x$ac_useropt" : ".*[^-+._$as_cr_alnum]" >/dev/null &&
        as_fn_error $? "invalid package name: $ac_useropt"
    ac_useropt_orig=$ac_useropt
    ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'\`
    case $ac_user_opts in
        *)
"with_$ac_useropt"
"*) ;;
        *)
ac_unrecognized_opts="$ac_unrecognized_opts$ac_unrecognized_sep--
without-$ac_useropt_orig"
        ac_unrecognized_sep=', ';;
    esac
    eval with_$ac_useropt=no ;;

--x)
    # Obsolete; use --with-x.
    with_x=yes ;;

-x-includes | --x-includes | --x-include | --x-includ | --x-inclu \
| --x-incl | --x-inc | --x-in | --x-i)
    ac_prev=x_includes ;;
-x-includes=* | --x-includes=* | --x-include=* | --x-includ=* | --x-
inclu=* \
| --x-incl=* | --x-inc=* | --x-in=* | --x-i=*)
    x_includes=$ac_optarg ;;

-x-libraries | --x-libraries | --x-librarie | --x-librari \
| --x-librar | --x-libra | --x-libr | --x-lib | --x-li | --x-l)
    ac_prev=x_libraries ;;
-x-libraries=* | --x-libraries=* | --x-librarie=* | --x-librari=* \
| --x-librar=* | --x-libra=* | --x-libr=* | --x-lib=* | --x-li=* | -
-x-l=*)
    x_libraries=$ac_optarg ;;

-*) as_fn_error $? "unrecognized option: \`$ac_option'
Try \`$0 --help' for more information"
    ;;

*=*)
    ac_envvar=`expr "x$ac_option" : 'x\([^=]*\)='`
    # Reject names that are not valid shell variable names.

```

```

case $ac_envvar in #(
    '' | [0-9]* | *[_$as_cr_alnum]* )
    as_fn_error $? "invalid variable name: \`$ac_envvar'" ;;
esac
eval $ac_envvar=\$ac_optarg
export $ac_envvar ;;

*)
# FIXME: should be removed in autoconf 3.0.
$as_echo "$as_me: WARNING: you should use --build, --host, --
target" >&2
expr "x$ac_option" : ".*[^_.$as_cr_alnum]" >/dev/null &&
$as_echo "$as_me: WARNING: invalid host type: $ac_option" >&2
: "${build_alias=$ac_option} ${host_alias=$ac_option}
${target_alias=$ac_option}"
;;

esac
done

if test -n "$ac_prev"; then
ac_option=--`echo $ac_prev | sed 's/_/_/g'`
as_fn_error $? "missing argument to $ac_option"
fi

if test -n "$ac_unrecognized_opts"; then
case $enable_option_checking in
    no) ;;
    fatal) as_fn_error $? "unrecognized options:
$ac_unrecognized_opts" ;;
    *)
        $as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2 ;;
esac
fi

# Check all directory arguments for consistency.
for ac_var in exec_prefix prefix bindir sbindir libexecdir
datarootdir \
    datadir sysconfdir sharedstatedir localstatedir includedir
\
    oldincludedir docdir infodir htmdir dvidir pdfdir psdir \
libdir localedir mandir
do
eval ac_val=\$$ac_var
# Remove trailing slashes.
case $ac_val in
    */ )
        ac_val=`expr "X$ac_val" : 'X\([^/]\)' \| "X$ac_val" :
'X\(.*)'`
        eval $ac_var=\$ac_val;;
esac
# Be sure to have absolute directory names.

```

```

case $ac_val in
  [\\/$]* | ?:[\\/*] ) continue;;
  NONE | ' ' ) case $ac_var in *prefix ) continue;; esac;;
esac
as_fn_error $? "expected an absolute directory name for --$ac_var:
$ac_val"
done

# There might be people who depend on the old broken behavior: ` $host '
# used to hold the argument of --host etc.
# FIXME: To remove some day.
build=$build_alias
host=$host_alias
target=$target_alias

# FIXME: To remove some day.
if test "x$host_alias" != x; then
  if test "x$build_alias" = x; then
    cross_compiling=maybe
  elif test "x$build_alias" != "x$host_alias"; then
    cross_compiling=yes
  fi
fi

ac_tool_prefix=
test -n "$host_alias" && ac_tool_prefix=$host_alias-

test "$silent" = yes && exec 6>/dev/null

ac_pwd=`pwd` && test -n "$ac_pwd" &&
ac_ls_di=`ls -di .` &&
ac_pwd_ls_di=`cd "$ac_pwd" && ls -di .` ||
  as_fn_error $? "working directory cannot be determined"
test "X$ac_ls_di" = "X$ac_pwd_ls_di" ||
  as_fn_error $? "pwd does not report name of working directory"

# Find the source files, if location was not specified.
if test -z "$srcdir"; then
  ac_srcdir_defaulted=yes
  # Try the directory containing this script, then the parent
  directory.
  ac_confdir=`$as_dirname -- "$as_myself" ||
$as_expr X"$as_myself" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$as_myself" : 'X\(//\)[^/]' \| \
  X"$as_myself" : 'X\(//\)$' \| \
  X"$as_myself" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$as_myself" |
  sed '/^X\(.*[^/]\)\/*[^/][^/]*\/*$/{
    s//\1/
  }
q

```



```

    }
    /^X\(\\\/\\\/)\ [^/].*/{
        s//\1/
        q
    }
    /^X\(\\\/\\\/)$/{
        s//\1/
        q
    }
    /^X\(\\\/)\.*/{
        s//\1/
        q
    }
    s/.*\/./; q'`
srcdir=$ac_confdir
if test ! -r "$srcdir/$ac_unique_file"; then
    srcdir=..
fi
else
    ac_srcdir_defaulted=no
fi
if test ! -r "$srcdir/$ac_unique_file"; then
    test "$ac_srcdir_defaulted" = yes && srcdir="$ac_confdir or .."
    as_fn_error $? "cannot find sources ($ac_unique_file) in $srcdir"
fi
ac_msg="sources are in $srcdir, but `cd $srcdir` does not work"
ac_abs_confdir=`(
    cd "$srcdir" && test -r "$ac_unique_file" || as_fn_error $?
"$ac_msg"
    pwd)`
# When building in place, set srcdir=.
if test "$ac_abs_confdir" = "$ac_pwd"; then
    srcdir=.
fi
# Remove unnecessary trailing slashes from srcdir.
# Double slashes in file names in object file debugging info
# mess up M-x gdb in Emacs.
case $srcdir in
*/) srcdir=`expr "X$srcdir" : 'X\([^\/]\)' \| "X$srcdir" :
'X\(.*\)'`;
esac
for ac_var in $ac_precious_vars; do
    eval ac_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_env_${ac_var}_value=\${${ac_var}_value}
    eval ac_cv_env_${ac_var}_set=\${${ac_var}_set}
    eval ac_cv_env_${ac_var}_value=\${${ac_var}_value}
done

#
# Report the --help message.
#
if test "$ac_init_help" = "long"; then

```

```
# Omit some internal or obsolete options to make the list less
imposing.
# This message is too long to be a string in the A/UX 3.1 sh.
cat <<_ACEOF
\`configure' configures dbus 1.6.8 to adapt to many kinds of systems.
```

Usage: \$0 [OPTION]... [VAR=VALUE]...

To assign environment variables (e.g., CC, CFLAGS...), specify them as VAR=VALUE. See below for descriptions of some of the useful variables.

Defaults for the options are specified in brackets.

Configuration:

```
-h, --help                display this help and exit
      --help=short        display options specific to this package
      --help=recursive    display the short help of all the included
packages
-V, --version            display version information and exit
-q, --quiet, --silent    do not print ``checking ...' messages
      --cache-file=FILE  cache test results in FILE [disabled]
-C, --config-cache      alias for ``--cache-file=config.cache'
-n, --no-create          do not create output files
      --srcdir=DIR       find the sources in DIR [configure dir or
``..']
```

Installation directories:

```
--prefix=PREFIX          install architecture-independent files in
PREFIX
                          @<:@@S|@ac_default_prefix@:>@
--exec-prefix=EPREFIX    install architecture-dependent files in
EPREFIX
                          @<:@PREFIX@:>@
```

By default, ``make install' will install all the files in
``\$ac_default_prefix/bin', ``\$ac_default_prefix/lib' etc. You can
specify
an installation prefix other than ``\$ac_default_prefix' using ``--
prefix',
for instance ``--prefix=\$HOME'.

For better control, use the options below.

Fine tuning of the installation directories:

```
--bindir=DIR             user executables [EPREFIX/bin]
--sbindir=DIR            system admin executables [EPREFIX/sbin]
--libexecdir=DIR        program executables [EPREFIX/libexec]
--sysconfdir=DIR        read-only single-machine data [PREFIX/etc]
--sharedstatedir=DIR    modifiable architecture-independent data
[PREFIX/com]
--localstatedir=DIR     modifiable single-machine data [PREFIX/var]
```

```

--libdir=DIR          object code libraries [EPREFIX/lib]
--includedir=DIR     C header files [PREFIX/include]
--oldincludedir=DIR  C header files for non-gcc [/usr/include]
--datarootdir=DIR    read-only arch.-independent data root
[PREFIX/share]
--datadir=DIR        read-only architecture-independent data
[DATAROOTDIR]
--infodir=DIR        info documentation [DATAROOTDIR/info]
--localedir=DIR      locale-dependent data [DATAROOTDIR/locale]
--mandir=DIR         man documentation [DATAROOTDIR/man]
--docdir=DIR         documentation root
@<:@DATAROOTDIR/doc/dbus@:>@
--htmldir=DIR        html documentation [DOCDIR]
--dvidir=DIR         dvi documentation [DOCDIR]
--pdfdir=DIR         pdf documentation [DOCDIR]
--psdir=DIR          ps documentation [DOCDIR]
_ACEOF

```

```
cat <<\_ACEOF
```

Program names:

```

--program-prefix=PREFIX      prepend PREFIX to installed
program names
--program-suffix=SUFFIX      append SUFFIX to installed
program names
--program-transform-name=PROGRAM  run sed PROGRAM on installed
program names

```

X features:

```

--x-includes=DIR    X include files are in DIR
--x-libraries=DIR   X library files are in DIR

```

System types:

```

--build=BUILD      configure for building on BUILD [guessed]
--host=HOST        cross-compile to build programs to run on HOST
[BUILD]

```

```
_ACEOF
```

```
fi
```

```

if test -n "$ac_init_help"; then
  case $ac_init_help in
    short | recursive ) echo "Configuration of dbus 1.6.8:>";;
    esac
  cat <<\_ACEOF

```

Optional Features:

```

--disable-option-checking  ignore unrecognized --enable/--with
options
--disable-FEATURE          do not include FEATURE (same as --enable-
FEATURE=no)
--enable-FEATURE[=ARG]    include FEATURE [ARG=yes]
--disable-maintainer-mode

```

```

useful (and
    disable make rules and dependencies not
    sometimes confusing) to the casual installer
--enable-silent-rules    less verbose build output (undo: "make V=1")
--disable-silent-rules  verbose build output (undo: "make V=0")
--enable-dependency-tracking
                        do not reject slow dependency extractors
--disable-dependency-tracking
                        speeds up one-time build
--enable-shared@<:@=PKGS@:>@  build shared libraries
@<:@default=yes@:>@
--enable-static@<:@=PKGS@:>@  build static libraries
@<:@default=yes@:>@
--enable-fast-install@<:@=PKGS@:>@
                        optimize for fast installation
@<:@default=yes@:>@
--disable-libtool-lock  avoid locking (might break parallel builds)
--enable-compiler-coverage
                        Enable generation of coverage data
--disable-compiler-optimisations
                        Disable compiler optimisations
--enable-developer      set defaults to be appropriate for a D-Bus
developer
                        instead of a distribution/end-user
--enable-ansi           enable -ansi -pedantic gcc flags
--enable-verbose-mode   support verbose debug mode
--enable-asserts        include assertion checks
--enable-checks         include sanity checks on public API
--enable-xml-docs       build XML documentation (requires xmlto)
--enable-doxygen-docs   build DOXYGEN documentation (requires
Doxygen)
--enable-abstract-sockets
                        use abstract socket namespace (linux only)
--enable-selinux        build with SELinux support
--enable-libaudit       build audit daemon support for SELinux
--enable-dnotify        build with dnotify support (linux only)
--enable-inotify        build with inotify support (linux only)
--enable-kqueue         build with kqueue support
--enable-console-owner-file
                        enable console owner file
--enable-userdb-cache   build with userdb-cache support
--enable-launchd        build with launchd auto-launch support
--enable-systemd        build with systemd at_console support
--enable-embedded-tests enable unit test code in the library and
binaries
--enable-modular-tests  enable modular regression tests (requires
GLib)
--enable-tests          enable/disable all tests, overriding
                        embedded-tests/modular-tests
--enable-installed-tests
                        enable unit test code in the library and
binaries

```

```

--enable-epoll          use epoll(4) on Linux
--enable-x11-autolaunch build with X11 auto-launch support
--disable-Werror        compile without -Werror (normally enabled in
                        development builds)
--enable-stats          enable bus daemon usage statistics

Optional Packages:
--with-PACKAGE[=ARG]    use PACKAGE [ARG=yes]
--without-PACKAGE       do not use PACKAGE (same as --with-
PACKAGE=no)
--with-pic@<:@=PKGS@:>@    try to use only PIC/non-PIC objects
@<:@default=use
                        both@:>@
--with-gnu-ld           assume the C compiler uses GNU ld
@<:@default=no@:>@
--with-libtool-sysroot=DIR Search for dependent libraries within DIR
                        (or the compiler's sysroot if not specified).
--with-xml=libxml/expat XML library to use (libxml may be named
libxml2 on
                        some systems)
--with-init-scripts=redhat
                        Style of init scripts to install
--with-session-socket-dir=dirname
                        Where to put sockets for the per-login-
session
                        message bus
--with-test-socket-dir=dirname
                        Where to put sockets for make check
--with-system-pid-file=pidfile
                        PID file for systemwide daemon
--with-system-socket=filename
                        UNIX domain socket for systemwide daemon
--with-console-auth-dir=dirname
                        directory to check for console ownership
--with-console-owner-file=filename
                        file whose owner determines current console
owner
--with-launchd-agent-dir=dirname
                        directory to put the launchd agent (default:
                        /Library/LaunchAgents)
--with-dbus-user=<user> User for running the DBUS daemon
(messagebus)
--with-dbus-daemon-dir=dirname
                        Directory for installing the DBUS daemon
--with-dbus-session-bus-default-address=nonce-
tcp:/autolaunch:/tcp:host:port
                        Transport Type to be used (default: nonce-
tcp:)
--without-64-bit        If you have to use this option, please
report it as
                        a bug

```

```

--with-valgrind      Add instrumentation to help valgrind to
understand
                    our allocator
--with-x             use the X Window System
--with-systemdsystemunitdir=DIR
                    Directory for systemd service files
--with-dbus-test-dir=dirname
                    path where the tests tools are available

```

Some influential environment variables:

```

CC                  C compiler command
CFLAGS              C compiler flags
LDFLAGS             linker flags, e.g. -L<lib dir> if you have libraries in
a
                    nonstandard directory <lib dir>
LIBS                libraries to pass to the linker, e.g. -l<library>
CPPFLAGS            (Objective) C/C++ preprocessor flags, e.g. -I<include
dir> if
                    you have headers in a nonstandard directory <include
dir>
CXX                 C++ compiler command
CXXFLAGS            C++ compiler flags
CPP                 C preprocessor
CXXCPP              C++ preprocessor
PKG_CONFIG           path to pkg-config utility
GLIB_CFLAGS         C compiler flags for GLIB, overriding pkg-config
GLIB_LIBS           linker flags for GLIB, overriding pkg-config
DBUS_GLIB_CFLAGS    C compiler flags for DBUS_GLIB, overriding pkg-config
DBUS_GLIB_LIBS      linker flags for DBUS_GLIB, overriding pkg-config
PYTHON              the Python interpreter
LIBXML_CFLAGS       C compiler flags for LIBXML, overriding pkg-config
LIBXML_LIBS         linker flags for LIBXML, overriding pkg-config
SYSTEMD_CFLAGS      C compiler flags for SYSTEMD, overriding pkg-config
SYSTEMD_LIBS        linker flags for SYSTEMD, overriding pkg-config
VALGRIND_CFLAGS     C compiler flags for VALGRIND, overriding pkg-config
VALGRIND_LIBS       linker flags for VALGRIND, overriding pkg-config
MAN2HTML            Path to man2html (optional)

```

Use these variables to override the choices made by `configure' or to help it to find libraries and programs with nonstandard names/locations.

Report bugs to

<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus>.

_ACEOF

```

ac_status=$?
fi

if test "$ac_init_help" = "recursive"; then
  # If there are subdirs, report their specific --help.
  for ac_dir in : $ac_subdirs_all; do test "x$ac_dir" = x: && continue
    test -d "$ac_dir" ||
      { cd "$srcdir" && ac_pwd=`pwd` && srcdir=. && test -d "$ac_dir";
    } ||
      continue
  ac_builddir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_builddir_sub=. ac_top_build_prefix= ;;
*)
  ac_dir_suffix=`$as_echo "$ac_dir" | sed 's|^\.([\//]||)'`
  # A ".." for each directory in $ac_dir_suffix.
  ac_top_builddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\//]*|/..|g;s|/||'`
  case $ac_top_builddir_sub in
  "") ac_top_builddir_sub=. ac_top_build_prefix= ;;
  *) ac_top_build_prefix=$ac_top_builddir_sub/ ;;
  esac ;;
esac
ac_abs_top_builddir=$ac_pwd
ac_abs_builddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_builddir=$ac_top_build_prefix

case $srcdir in
.) # We are building in place.
  ac_srcdir=.
  ac_top_srcdir=$ac_top_builddir_sub
  ac_abs_top_srcdir=$ac_pwd ;;
[\\/]*) # Absolute name.
  ac_srcdir=$srcdir$ac_dir_suffix;
  ac_top_srcdir=$srcdir
  ac_abs_top_srcdir=$srcdir ;;
*) # Relative name.
  ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
  ac_top_srcdir=$ac_top_build_prefix$srcdir
  ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

cd "$ac_dir" || { ac_status=$?; continue; }
# Check for gusted configure.
if test -f "$ac_srcdir/configure.gnu"; then
  echo &&
  $SHELL "$ac_srcdir/configure.gnu" --help=recursive
elif test -f "$ac_srcdir/configure"; then
  echo &&

```

```

        $SHELL "$ac_srcdir/configure" --help=recursive
    else
        $as_echo "$as_me: WARNING: no configuration information is in
$ac_dir" >&2
        fi || ac_status=$?
        cd "$ac_pwd" || { ac_status=$?; break; }
    done
fi

test -n "$ac_init_help" && exit $ac_status
if $ac_init_version; then
    cat <<\_ACEOF
dbus configure 1.6.8
generated by GNU Autoconf 2.69

Copyright (C) 2012 Free Software Foundation, Inc.
This configure script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it.
_ACEOF
    exit
fi

## ----- ##
## Autoconf initialization. ##
## ----- ##

@%:@ ac_fn_c_try_compile LINENO
@%:@ -----
@%:@ Try to compile conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_compile ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f conftest.$ac_objext
    if { { ac_try="$ac_compile"
case "($ac_try" in
    *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_compile") 2>conftest.err
    ac_status=$?
    if test -s conftest.err; then
        grep -v '^ *+' conftest.err >conftest.er1
        cat conftest.er1 >&5
        mv -f conftest.er1 conftest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
    test $ac_status = 0; } && {
        test -z "$ac_c_werror_flag" ||

```



```

        test ! -s confptest.err
        } && test -s confptest.$ac_objext; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' confptest.$ac_ext >&5

        ac_retval=1
fi
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_compile

@%:@ ac_fn_cxx_try_compile LINENO
@%:@ -----
@%:@ Try to compile confptest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_compile ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f confptest.$ac_objext
    if { { ac_try="$ac_compile"
case "($ac_try" in
    *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"\`\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\`\"
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_compile") 2>confptest.err
    ac_status=$?
    if test -s confptest.err; then
        grep -v '^ *+' confptest.err >confptest.er1
        cat confptest.er1 >&5
        mv -f confptest.er1 confptest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
    test $ac_status = 0; } && {
        test -z "$ac_cxx_werror_flag" ||
        test ! -s confptest.err
        } && test -s confptest.$ac_objext; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' confptest.$ac_ext >&5

        ac_retval=1
fi
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

```

```

} @%:@ ac_fn_cxx_try_compile

@%:@ ac_fn_c_try_cpp LINENO
@%:@ -----
@%:@ Try to preprocess confptest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_cpp ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if { { ac_try="$ac_cpp confptest.$ac_ext"
case "($ac_try" in
    *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
    (eval "$ac_cpp confptest.$ac_ext") 2>confptest.err
    ac_status=$?
    if test -s confptest.err; then
        grep -v '^ *+' confptest.err >confptest.er1
        cat confptest.er1 >&5
        mv -f confptest.er1 confptest.err
    fi
    $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
    test $ac_status = 0; } > confptest.i && {
        test -z "$ac_c_preproc_warn_flag$ac_c_werror_flag" ||
        test ! -s confptest.err
    }; then :
        ac_retval=0
    else
        $as_echo "$as_me: failed program was:" >&5
        sed 's/^/| /' confptest.$ac_ext >&5

        ac_retval=1
    fi
    eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
    as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_cpp

@%:@ ac_fn_c_check_header_mongrel LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists, giving a warning if it cannot be
compiled using
@%:@ the include files in INCLUDES and setting the cache variable VAR
@%:@ accordingly.
ac_fn_c_check_header_mongrel ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if eval \"\${$3+:} false; then :

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval `:${3+:} false; then :
  $as_echo_n "(cached) " >&6
fi
eval ac_res=\${3}
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
else
  # Is the header compilable?
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 usability" >&5
$as_echo_n "checking $2 usability... " >&6; }
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
  /* end confdefs.h.  */
  $4
  @%:@include <$2>
  _ACEOF
  if ac_fn_c_try_compile "$LINENO"; then :
    ac_header_compiler=yes
  else
    ac_header_compiler=no
  fi
  rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_compiler"
>&5
$as_echo "$ac_header_compiler" >&6; }

  # Is the header present?
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking $2 presence" >&5
$as_echo_n "checking $2 presence... " >&6; }
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
  /* end confdefs.h.  */
  @%:@include <$2>
  _ACEOF
  if ac_fn_c_try_cpp "$LINENO"; then :
    ac_header_preproc=yes
  else
    ac_header_preproc=no
  fi
  rm -f conftest.err conftest.i conftest.$ac_ext
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_header_preproc"
>&5
$as_echo "$ac_header_preproc" >&6; }

  # So?  What about this header?
  case $ac_header_compiler:$ac_header_preproc:$ac_c_preproc_warn_flag in
  #((
    yes:no: )
      { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: accepted by
the compiler, rejected by the preprocessor!" >&5

```

```

$as_echo "$as_me: WARNING: $2: accepted by the compiler, rejected by
the preprocessor!" >&2;}
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
  ;;
  no:yes:* )
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: present but
cannot be compiled" >&5
$as_echo "$as_me: WARNING: $2: present but cannot be compiled" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      check
for missing prerequisite headers?" >&5
$as_echo "$as_me: WARNING: $2:      check for missing prerequisite
headers?" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: see the
Autoconf documentation" >&5
$as_echo "$as_me: WARNING: $2: see the Autoconf documentation" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2:      section
\"Present But Cannot Be Compiled\"" >&5
$as_echo "$as_me: WARNING: $2:      section \"Present But Cannot Be
Compiled\"" >&2;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: proceeding
with the compiler's result" >&5
$as_echo "$as_me: WARNING: $2: proceeding with the compiler's result"
>&2;}
  ( $as_echo "## -----
----- ##
## Report this to
https://bugs.freedesktop.org/enter_bug.cgi?product=dbus ##
## -----
--- ##"
    ) | sed "s/^/$as_me: WARNING:      /" >&2
  ;;
esac
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
if eval "\${$3+:} false; then :
  $as_echo_n "(cached) " >&6
else
  eval "$3=\$ac_header_compiler"
fi
eval ac_res=\${$3}
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
fi
  eval $as_lineno_stack; ${as_lineno_stack+:} unset as_lineno

} @%:@ ac_fn_c_check_header_mongrel

@%:@ ac_fn_c_try_run LINENO

```

```

@%:@ -----
@%:@ Try to link confctest.@S|@ac_ext, and return whether this
succeeded. Assumes
@%:@ that executables *can* be run.
ac_fn_c_try_run ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  if { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } && { ac_try='./confctest$ac_exeext'
  { { case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; }; then :
  ac_retval=0
else
  $as_echo "$as_me: program exited with status $ac_status" >&5
  $as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' confctest.$ac_ext >&5

  ac_retval=$ac_status
fi
  rm -rf confctest.dSYM confctest_ipa8_confctest.oo
  eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
  as_fn_set_status $ac_retval
} @%:@ ac_fn_c_try_run

@%:@ ac_fn_c_check_header_compile LINENO HEADER VAR INCLUDES
@%:@ -----
@%:@ Tests whether HEADER exists and can be compiled using the include
files in
@%:@ INCLUDES, setting the cache variable VAR accordingly.
ac_fn_c_check_header_compile ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack

```

```

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $2" >&5
$sas_echo_n "checking for $2... " >&6; }
if eval \${$3+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
$4
@%:@include <$2>
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    eval "$3=yes"
else
    eval "$3=no"
fi
rm -f core conftest.err conftest.$sas_objext conftest.$sas_ext
fi
eval ac_res=\${$3}
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$sas_echo "$ac_res" >&6; }
    eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_header_compile

@%:@ ac_fn_c_try_link LINENO
@%:@ -----
@%:@ Try to link conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_c_try_link ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    rm -f conftest.$sas_objext conftest$sac_exeext
    if { { ac_try="$ac_link"
case "($ac_try" in
    *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
    *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$sas_me:${as_lineno-$LINENO}: $ac_try_echo\""
$sas_echo "$ac_try_echo"; } >&5
    (eval "$ac_link") 2>conftest.err
    ac_status=$?
    if test -s conftest.err; then
        grep -v '^ *+' conftest.err >conftest.er1
        cat conftest.er1 >&5
        mv -f conftest.er1 conftest.err
    fi
    $sas_echo "$sas_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
    test $ac_status = 0; } && {
        test -z "$ac_c_werror_flag" ||
        test ! -s conftest.err

```

```

        } && test -s confptest$ac_exeext && {
        test "$cross_compiling" = yes ||
        test -x confptest$ac_exeext
        }; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
    sed 's/^/| /' confptest.$ac_ext >&5

        ac_retval=1
fi
# Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
# created by the PGI compiler (confptest_ipa8_confptest.o), as it
would
# interfere with the next link command; also delete a directory that
is
# left behind by Apple's compiler. We do this before executing the
actions.
rm -rf confptest.dSYM confptest_ipa8_confptest.o
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_try_link

@%:@ ac_fn_c_check_func LINENO FUNC VAR
@%:@ -----
@%:@ Tests whether FUNC exists, setting the cache variable VAR
accordingly
ac_fn_c_check_func ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $2" >&5
$as_echo_n "checking for $2... " >&6; }
    if eval \${$3+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
/* end confdefs.h. */
/* Define $2 to an innocuous variant, in case <limits.h> declares $2.
   For example, HP-UX 11i <limits.h> declares gettimeofday. */
#define $2 innocuous_$2

/* System header to define __stub macros and hopefully few prototypes,
   which can conflict with char $2 (); below.
   Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
   <limits.h> exists even on freestanding compilers. */

#ifdef __STDC__
# include <limits.h>
#else

```

```

#include <assert.h>
#endif

#undef $2

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char $2 ();
/* The GNU C library defines this for functions which it implements
   to always fail with ENOSYS. Some functions are actually named
   something starting with __ and the normal name is an alias. */
#ifdef __stub_$2 || defined __stub___$2
choke me
#endif

int
main ()
{
return $2 ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
eval "$3=yes"
else
eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
fi
eval ac_res=\${$3
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno

} @%:@ ac_fn_c_check_func

@%:@ ac_fn_cxx_try_cpp LINENO
@%:@ -----
@%:@ Try to preprocess conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_cpp ()
{
as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
if { { ac_try="$ac_cpp conftest.$ac_ext"

```



```

case "((\$ac_try" in
  *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
  *) ac_try_echo=\$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: \$ac_try_echo\"
\$as_echo "$ac_try_echo"; } >&5
(eval "$ac_cpp conftest.$ac_ext") 2>conftest.err
ac_status=$?
if test -s conftest.err; then
  grep -v '^ *+' conftest.err >conftest.er1
  cat conftest.er1 >&5
  mv -f conftest.er1 conftest.err
fi
\$as_echo "$as_me:${as_lineno-$LINENO}: \$? = \$ac_status" >&5
test \$ac_status = 0; } > conftest.i && {
  test -z "$ac_cxx_preproc_warn_flag$ac_cxx_werror_flag" ||
  test ! -s conftest.err
}; then :
  ac_retval=0
else
  \$as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' conftest.$ac_ext >&5

  ac_retval=1
fi
eval \$as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
as_fn_set_status \$ac_retval

} @%:@ ac_fn_cxx_try_cpp

@%:@ ac_fn_cxx_try_link LINENO
@%:@ -----
@%:@ Try to link conftest.@S|@ac_ext, and return whether this
succeeded.
ac_fn_cxx_try_link ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  rm -f conftest.$ac_objext conftest$ac_exeext
  if { { ac_try="$ac_link"
case "((\$ac_try" in
  *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
  *) ac_try_echo=\$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: \$ac_try_echo\"
\$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    grep -v '^ *+' conftest.err >conftest.er1
    cat conftest.er1 >&5
    mv -f conftest.er1 conftest.err

```

```

fi
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } && {
    test -z "$ac_cxx_werror_flag" ||
    test ! -s conftest.err
    } && test -s conftest$ac_exeext && {
    test "$cross_compiling" = yes ||
    test -x conftest$ac_exeext
    }; then :
    ac_retval=0
else
    $as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

    ac_retval=1
fi
# Delete the IPA/IPO (Inter Procedural Analysis/Optimization)
information
# created by the PGI compiler (conftest_ipa8_conftest.o), as it
would
# interfere with the next link command; also delete a directory that
is
# left behind by Apple's compiler. We do this before executing the
actions.
rm -rf conftest.dSYM conftest_ipa8_conftest.o
eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_cxx_try_link

@%:@ ac_fn_c_compute_int LINENO EXPR VAR INCLUDES
@%:@ -----
@%:@ Tries to find the compile-time value of EXPR in a program that
includes
@%:@ INCLUDES, setting VAR accordingly. Returns whether the value
could be
@%:@ computed
ac_fn_c_compute_int ()
{
    as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
    if test "$cross_compiling" = yes; then
        # Depending upon the size, compute the lo and hi bounds.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !((($2) >= 0)@>@;
test_array @<:@0@>@ = 0;
return test_array @<:@0@>@;

```

```

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_lo=0 ac_mid=0
while ;; do
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !((($2) <= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_hi=$ac_mid; break
else
as_fn_arith $ac_mid + 1 && ac_lo=$as_val
if test $ac_lo -le $ac_mid; then
ac_lo= ac_hi=
break
fi
as_fn_arith 2 '*' $ac_mid + 1 && ac_mid=$as_val
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
else
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !((($2) < 0)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
ac_hi=-1 ac_mid=-1
while ;; do

```

```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !(($2) >= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_lo=$ac_mid; break
else
    as_fn_arith '(' $ac_mid ')' - 1 && ac_hi=$as_val
        if test $ac_mid -le $ac_hi; then
            ac_lo= ac_hi=
            break
        fi
        as_fn_arith 2 '*' $ac_mid && ac_mid=$as_val
    fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
else
    ac_lo= ac_hi=
    fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
# Binary search between lo and hi bounds.
while test "x$ac_lo" != "x$ac_hi"; do
    as_fn_arith '(' $ac_hi - $ac_lo ')' / 2 + $ac_lo && ac_mid=$as_val
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
$4
int
main ()
{
static int test_array @<:@1 - 2 * !(($2) <= $ac_mid)@:>@;
test_array @<:@0@:>@ = 0;
return test_array @<:@0@:>@;

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_hi=$ac_mid
else

```

```

    as_fn_arith '(' $ac_mid ')' + 1 && ac_lo=$as_val
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
done
case $ac_lo in @%:@((
?*) eval "$3=\$ac_lo"; ac_retval=0 ;;
'') ac_retval=1 ;;
esac
    else
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
static long int longval () { return $2; }
static unsigned long int ulongval () { return $2; }
@%:@include <stdio.h>
@%:@include <stdlib.h>
int
main ()
{

    FILE *f = fopen ("conftest.val", "w");
    if (! f)
        return 1;
    if (($2) < 0)
        {
            long int i = longval ();
            if (i != ($2))
                return 1;
            fprintf (f, "%ld", i);
        }
    else
        {
            unsigned long int i = ulongval ();
            if (i != ($2))
                return 1;
            fprintf (f, "%lu", i);
        }
    /* Do not output a trailing newline, as this causes \r\n confusion
       on some platforms. */
    return ferror (f) || fclose (f) != 0;

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    echo >>conftest.val; read $3 <conftest.val; ac_retval=0
else
    ac_retval=1
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
    conftest.$ac_objext conftest.beam conftest.$ac_ext

```

```

rm -f conftest.val

fi
eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno
as_fn_set_status $ac_retval

} @%:@ ac_fn_c_compute_int

@%:@ ac_fn_c_check_decl LINENO SYMBOL VAR INCLUDES
@%:@ -----
@%:@ Tests whether SYMBOL is declared in INCLUDES, setting cache
variable VAR
@%:@ accordingly.
ac_fn_c_check_decl ()
{
  as_lineno=${as_lineno-"$1"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
  as_decl_name=`echo $2|sed 's/ *(.*/'`
  as_decl_use=`echo $2|sed -e 's/(/' -e 's/)' 0&/' -e 's/,/' 0&
(/g'`
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether
$as_decl_name is declared" >&5
$as_echo_n "checking whether $as_decl_name is declared... " >&6; }
if eval `\$${$3+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
@%:@ifndef $as_decl_name
@%:@ifdef __cplusplus
  (void) $as_decl_use;
@%:@else
  (void) $as_decl_name;
@%:@endif
@%:@endif

  ;
  return 0;
}
ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  eval "$3=yes"
else
  eval "$3=no"
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
eval ac_res=\$3

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_res"
>&5
$as_echo "$ac_res" >&6; }
    eval $as_lineno_stack; ${as_lineno_stack:+} unset as_lineno

} @%:@ ac_fn_c_check_decl
cat >config.log <<_ACEOF
This file contains any messages produced by compilers while
running configure, to aid debugging if configure makes a mistake.

It was created by dbus $as_me 1.6.8, which was
generated by GNU Autoconf 2.69.  Invocation command line was

    $ $0 $@

_ACEOF
exec 5>>config.log
{
cat <<_ASUNAME
## ----- ##
## Platform. ##
## ----- ##

hostname = `(hostname || uname -n) 2>/dev/null | sed 1q`
uname -m = `(uname -m) 2>/dev/null || echo unknown`
uname -r = `(uname -r) 2>/dev/null || echo unknown`
uname -s = `(uname -s) 2>/dev/null || echo unknown`
uname -v = `(uname -v) 2>/dev/null || echo unknown`

/usr/bin/uname -p = `(/usr/bin/uname -p) 2>/dev/null || echo unknown`
/bin/uname -X      = `(/bin/uname -X) 2>/dev/null      || echo unknown`

/bin/arch          = `(/bin/arch) 2>/dev/null          || echo
unknown`
/usr/bin/arch -k   = `(/usr/bin/arch -k) 2>/dev/null   || echo
unknown`
/usr/convex/getsysinfo = `(/usr/convex/getsysinfo) 2>/dev/null || echo
unknown`
/usr/bin/hostinfo  = `(/usr/bin/hostinfo) 2>/dev/null  || echo
unknown`
/bin/machine      = `(/bin/machine) 2>/dev/null      || echo
unknown`
/usr/bin/oslevel  = `(/usr/bin/oslevel) 2>/dev/null   || echo
unknown`
/bin/universe     = `(/bin/universe) 2>/dev/null     || echo
unknown`

_ASUNAME

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do

```

```
IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  $as_echo "PATH: $as_dir"
done
IFS=$as_save_IFS

} >&5
```

```
cat >&5 <<_ACEOF
```

```
## ----- ##
## Core tests. ##
## ----- ##
```

```
_ACEOF
```

```
# Keep a trace of the command line.
# Strip out --no-create and --no-recursion so they do not pile up.
# Strip out --silent because we don't want to record it for future
runs.
# Also quote any args containing shell meta-characters.
# Make two passes to allow for proper duplicate-argument suppression.
ac_configure_args=
ac_configure_args0=
ac_configure_args1=
ac_must_keep_next=false
for ac_pass in 1 2
do
  for ac_arg
  do
    case $ac_arg in
      -no-create | --no-c* | -n | -no-recursion | --no-r*) continue ;;
      -q | -quiet | --quiet | --quie | --qui | --qu | --q \
      | -silent | --silent | --silen | --sile | --sil)
        continue ;;
      *\`*)
        ac_arg=`$as_echo "$ac_arg" | sed "s/'/\`\\\\\\\\\\\\\\\\\\`/g" ` ;;
    esac
    case $ac_pass in
      1) as_fn_append ac_configure_args0 " '$ac_arg' " ;;
      2)
        as_fn_append ac_configure_args1 " '$ac_arg' "
        if test $ac_must_keep_next = true; then
          ac_must_keep_next=false # Got value, back to normal.
        else
          case $ac_arg in
            *=* | --config-cache | -C | -disable-* | --disable-* \
            | -enable-* | --enable-* | -gas | --g* | -nfp | --nf* \
            | -q | -quiet | --q* | -silent | --sil* | -v | -verb* \
            | -with-* | --with-* | -without-* | --without-* | --x)
```



```

        case "$ac_configure_args0 " in
            "$ac_configure_args1"* " '$ac_arg' "*" ) continue ;;
        esac
        ;;
        -* ) ac_must_keep_next=true ;;
    esac
    fi
    as_fn_append ac_configure_args " '$ac_arg'"
    ;;
esac
done
done
{ ac_configure_args0=; unset ac_configure_args0;}
{ ac_configure_args1=; unset ac_configure_args1;}

# When interrupted or exit'd, cleanup temporary files, and complete
# config.log. We remove comments because anyway the quotes in there
# would cause problems or look ugly.
# WARNING: Use '\'' to represent an apostrophe within the trap.
# WARNING: Do not start the trap code with a newline, due to a FreeBSD
4.0 bug.
trap 'exit_status=$?'
    # Save into config.log some information that might help in
debugging.
    {
        echo

        $as_echo "## ----- ##"
## Cache variables. ##
## ----- ##"
        echo
        # The following way of writing the cache mishandles newlines in
values,
(
    for ac_var in `(set) 2>&1 | sed -n '\''s/^\([a-zA-Z_][a-zA-Z0-
9_]*\)=.*/\1/p'\''` ; do
        eval ac_val=\${$ac_var}
        case $ac_val in #(
            *${as_nl}*)
                case $ac_var in #(
                    *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5
$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
                esac
            case $ac_var in #(
                _ | IFS | as_nl) ;; #(
                BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
                *) { eval $ac_var=; unset $ac_var;} ;;
            esac ;;
        esac
    done
done

```



```

## ----- ##"
    echo
    cat confdefs.h
    echo
fi
test "$ac_signal" != 0 &&
    $as_echo "$as_me: caught signal $ac_signal"
    $as_echo "$as_me: exit $exit_status"
} >&5
rm -f core *.core core.conftest.* &&
rm -f -r conftest* confdefs* conf$$* $ac_clean_files &&
exit $exit_status
' 0
for ac_signal in 1 2 13 15; do
    trap 'ac_signal='$ac_signal'; as_fn_exit 1' $ac_signal
done
ac_signal=0

# confdefs.h avoids OS command line length limits that DEFS can
# exceed.
rm -f -r conftest* confdefs.h

$as_echo "/* confdefs.h */" > confdefs.h

# Predefined preprocessor variables.

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_NAME "$PACKAGE_NAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_TARNAME "$PACKAGE_TARNAME"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_VERSION "$PACKAGE_VERSION"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_STRING "$PACKAGE_STRING"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_BUGREPORT "$PACKAGE_BUGREPORT"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE_URL "$PACKAGE_URL"
_ACEOF

# Let the site file select an alternate cache file if it wants to.

```

```

# Prefer an explicitly selected file to automatically selected ones.
ac_site_file1=NONE
if test -n "$CONFIG_SITE"; then
  # We do not want a PATH search for config.site.
  case $CONFIG_SITE in @%:@(
    -*) ac_site_file1=./$CONFIG_SITE;;
    */*) ac_site_file1=$CONFIG_SITE;;
    *) ac_site_file1=./$CONFIG_SITE;;
  esac
fi
for ac_site_file in $ac_site_file1
do
  test "x$ac_site_file" = xNONE && continue
  if test /dev/null != "$ac_site_file" && test -r "$ac_site_file";
  then
    { $as_echo "$as_me:${as_lineno-$LINENO}: loading site script
$ac_site_file" >&5
$as_echo "$as_me: loading site script $ac_site_file" >&6;}
    sed 's/^\| /' "$ac_site_file" >&5
    . "$ac_site_file" \
    || { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "failed to load site script $ac_site_file
See \`config.log' for more details" "$LINENO" 5; }
  fi
done

if test -r "$cache_file"; then
  # Some versions of bash will fail to source /dev/null (special files
  # actually), so we avoid doing that. DJGPP emulates it as a regular
  file.
  if test /dev/null != "$cache_file" && test -f "$cache_file"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: loading cache
$cache_file" >&5
$as_echo "$as_me: loading cache $cache_file" >&6;}
    case $cache_file in
      [\\/]*) | ?:[\\/]*) . "$cache_file";;
      *) . "$cache_file";;
    esac
  fi
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: creating cache $cache_file"
>&5
$as_echo "$as_me: creating cache $cache_file" >&6;}
  >$cache_file
fi

# Check that the precious variables saved in the cache have kept the
same
# value.
ac_cache_corrupted=false

```

```

for ac_var in $ac_precious_vars; do
  eval ac_old_set=\$ac_cv_env_${ac_var}_set
  eval ac_new_set=\$ac_env_${ac_var}_set
  eval ac_old_val=\$ac_cv_env_${ac_var}_value
  eval ac_new_val=\$ac_env_${ac_var}_value
  case $ac_old_set,$ac_new_set in
    set,)
      { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
set to \`$ac_old_val' in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was set to \`$ac_old_val' in the
previous run" >&2;}
      ac_cache_corrupted=: ;;
    ,set)
      { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' was
not set in the previous run" >&5
$as_echo "$as_me: error: \`$ac_var' was not set in the previous run"
>&2;}
      ac_cache_corrupted=: ;;
    ,);;
  *)
    if test "x$ac_old_val" != "x$ac_new_val"; then
      # differences in whitespace do not lead to failure.
      ac_old_val_w=`echo x $ac_old_val`
      ac_new_val_w=`echo x $ac_new_val`
      if test "$ac_old_val_w" != "$ac_new_val_w"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: error: \`$ac_var' has
changed since the previous run:" >&5
$as_echo "$as_me: error: \`$ac_var' has changed since the previous
run:" >&2;}
        ac_cache_corrupted=:
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: warning: ignoring
whitespace changes in \`$ac_var' since the previous run:" >&5
$as_echo "$as_me: warning: ignoring whitespace changes in \`$ac_var'
since the previous run:" >&2;}
        eval $ac_var=\$ac_old_val
      fi
      { $as_echo "$as_me:${as_lineno-$LINENO}: former value:
\`$ac_old_val'" >&5
$as_echo "$as_me: former value:  \`$ac_old_val'" >&2;}
      { $as_echo "$as_me:${as_lineno-$LINENO}: current value:
\`$ac_new_val'" >&5
$as_echo "$as_me: current value:  \`$ac_new_val'" >&2;}
      fi;;
    esac
  # Pass precious variables to config.status.
  if test "$ac_new_set" = set; then
    case $ac_new_val in
      *\'*) ac_arg=$ac_var=`$as_echo "$ac_new_val" | sed
"s/'/'\\\\\\\\\\\\\\\\\\''/g"` ;;
      *) ac_arg=$ac_var=$ac_new_val ;;
    esac
  fi
done

```

```

    case " $ac_configure_args " in
      *" '$ac_arg' "') ;; # Avoid dups. Use of quotes ensures
accuracy.
      *) as_fn_append ac_configure_args " '$ac_arg'" ;;
    esac
  fi
done
if $ac_cache_corrupted; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "error: in `\$ac_pwd':" >&2;}
  { $as_echo "$as_me:${as_lineno-$LINENO}: error: changes in the
environment can compromise the build" >&5
$as_echo "$as_me: error: changes in the environment can compromise the
build" >&2;}
  as_fn_error $? "run `make distclean' and/or `rm $cache_file' and
start over" "$LINENO" 5
fi
## ----- ##
## Main body of script. ##
## ----- ##

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

ac_aux_dir=
for ac_dir in "$srcdir" "$srcdir/.." "$srcdir/../../.."; do
  if test -f "$ac_dir/install-sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install-sh -c"
    break
  elif test -f "$ac_dir/install.sh"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/install.sh -c"
    break
  elif test -f "$ac_dir/shtool"; then
    ac_aux_dir=$ac_dir
    ac_install_sh="$ac_aux_dir/shtool install -c"
    break
  fi
done
if test -z "$ac_aux_dir"; then
  as_fn_error $? "cannot find install-sh, install.sh, or shtool in
`$srcdir` `"$srcdir/.."` `"$srcdir/../../.."`" "$LINENO" 5
fi

# These three variables are undocumented and unsupported,

```

```

# and are intended to be withdrawn in a future Autoconf release.
# They can cause serious problems if a builder's source tree is in a
directory
# whose full name contains unusual characters.
ac_config_guess="$SHELL $ac_aux_dir/config.guess" # Please don't use
this var.
ac_config_sub="$SHELL $ac_aux_dir/config.sub" # Please don't use this
var.
ac_configure="$SHELL $ac_aux_dir/configure" # Please don't use this
var.

# Make sure we can run config.sub.
$SHELL "$ac_aux_dir/config.sub" sun4 >/dev/null 2>&1 ||
  as_fn_error $? "cannot run $SHELL $ac_aux_dir/config.sub" "$LINENO"
5

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking build system type"
>&5
$as_echo_n "checking build system type... " >&6; }
if ${ac_cv_build+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_build_alias=$build_alias
  test "x$ac_build_alias" = x &&
  ac_build_alias=`$SHELL "$ac_aux_dir/config.guess"`
  test "x$ac_build_alias" = x &&
  as_fn_error $? "cannot guess build type; you must specify one"
"$LINENO" 5
  ac_cv_build=`$SHELL "$ac_aux_dir/config.sub" $ac_build_alias` ||
  as_fn_error $? "$SHELL $ac_aux_dir/config.sub $ac_build_alias
failed" "$LINENO" 5
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_build" >&5
$as_echo "$ac_cv_build" >&6; }
case $ac_cv_build in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical build" "$LINENO" 5;;
esac
build=$ac_cv_build
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_build
shift
build_cpu=$1
build_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
build_os=$*
IFS=$ac_save_IFS

```

```
case $build_os in *\ *) build_os=`echo "$build_os" | sed 's/ /-/g'`;;
esac
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking host system type"
>&5
$as_echo_n "checking host system type... " >&6; }
if ${ac_cv_host+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$host_alias" = x; then
    ac_cv_host=$ac_cv_build
  else
    ac_cv_host=`$SHELL "$ac_aux_dir/config.sub" $host_alias` ||
    as_fn_error $? "$SHELL $ac_aux_dir/config.sub $host_alias failed"
"$LINENO" 5
  fi
fi
```

```
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_host" >&5
$as_echo "$ac_cv_host" >&6; }
case $ac_cv_host in
*-*-*) ;;
*) as_fn_error $? "invalid value of canonical host" "$LINENO" 5;;
esac
host=$ac_cv_host
ac_save_IFS=$IFS; IFS='- '
set x $ac_cv_host
shift
host_cpu=$1
host_vendor=$2
shift; shift
# Remember, the first character of IFS is used to create $*,
# except with old shells:
host_os=$*
IFS=$ac_save_IFS
case $host_os in *\ *) host_os=`echo "$host_os" | sed 's/ /-/g'`;;
esac
```

```
ac_config_headers="$ac_config_headers config.h"
```

```
am__api_version='1.12'
```

```
# Find a good install program. We prefer a C program (faster),
# so one script is as good as another. But avoid the broken or
# incompatible versions:
# SysV /etc/install, /usr/sbin/install
# SunOS /usr/etc/install
```



```

# IRIX /sbin/install
# AIX /bin/install
# AmigaOS /C/install, which installs bootblocks on floppy discs
# AIX 4 /usr/bin/installbsd, which doesn't work without a -g flag
# AFS /usr/afsws/bin/install, which mishandles nonexistent args
# SVR4 /usr/ucb/install, which tries to use the nonexistent group
"staff"
# OS/2's system install, which has a completely different semantic
# ./install, which can be erroneously created by make from
./install.sh.
# Reject install programs that cannot install multiple files.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a BSD-compatible
install" >&5
$as_echo_n "checking for a BSD-compatible install... " >&6; }
if test -z "$INSTALL"; then
if ${ac_cv_path_install+:} false; then :
  $as_echo_n "(cached) " >&6
else
  as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
  for as_dir in $PATH
  do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    # Account for people who put trailing slashes in PATH elements.
case $as_dir/ in @%:@(
  ./ | ../ | /[cC]/* | \
  /etc/* | /usr/sbin/* | /usr/etc/* | /sbin/* | /usr/afsws/bin/* | \
  ?:[\\/]os2[\\/]install[\\/] * | ?:[\\/]OS2[\\/]INSTALL[\\/] * | \
  /usr/ucb/* ) ;;
*)
  # OSF1 and SCO ODT 3.0 have their own names for install.
  # Don't use installbsd from OSF since it installs stuff as root
  # by default.
  for ac_prog in ginstall scoinst install; do
    for ac_exec_ext in ' $ac_executable_extensions; do
      if as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext"; then
        if test $ac_prog = install &&
          grep dspmsg "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
then
          # AIX install. It has an incompatible calling convention.
          :
        elif test $ac_prog = install &&
          grep pwplus "$as_dir/$ac_prog$ac_exec_ext" >/dev/null 2>&1;
then
          # program-specific install script used by HP pwplus--don't
          use.
          :
        else
          rm -rf conftest.one conftest.two conftest.dir
          echo one > conftest.one
          echo two > conftest.two
          mkdir conftest.dir

```

```

        if "$as_dir/$ac_prog$ac_exec_ext" -c conftest.one
conftest.two "`pwd`/conftest.dir" &&
        test -s conftest.one && test -s conftest.two &&
        test -s conftest.dir/conftest.one &&
        test -s conftest.dir/conftest.two
    then
        ac_cv_path_install="$as_dir/$ac_prog$ac_exec_ext -c"
        break 3
    fi
    fi
done
done
;;
esac

done
IFS=$as_save_IFS

rm -rf conftest.one conftest.two conftest.dir

fi
if test "${ac_cv_path_install+set}" = set; then
    INSTALL=$ac_cv_path_install
else
    # As a last resort, use the slow shell script.  Don't cache a
    # value for INSTALL within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    INSTALL=$ac_install_sh
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $INSTALL" >&5
$as_echo "$INSTALL" >&6; }

# Use test -z because SunOS4 sh mishandles braces in ${var-val}.
# It thinks the first close brace ends the variable substitution.
test -z "$INSTALL_PROGRAM" && INSTALL_PROGRAM='${INSTALL}'

test -z "$INSTALL_SCRIPT" && INSTALL_SCRIPT='${INSTALL}'

test -z "$INSTALL_DATA" && INSTALL_DATA='${INSTALL} -m 644'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether build
environment is sane" >&5
$as_echo_n "checking whether build environment is sane... " >&6; }
# Reject unsafe characters in $srcdir or the absolute working
directory
# name.  Accept space and tab only in the latter.
am_lf='
'
case `pwd` in

```

```

*[\|\"#\$\&\'\"$am_lf]*)
    as_fn_error $? "unsafe absolute working directory name" "$LINENO"
5;;
esac
case $srcdir in
*[\|\"#\$\&\'\"$am_lf\ \]*)
    as_fn_error $? "unsafe srcdir value: '$srcdir'" "$LINENO" 5;;
esac

# Do 'set' in a subshell so we don't clobber the current shell's
# arguments.  Must try -L first in case configure is actually a
# symlink; some systems play weird games with the mod time of symlinks
# (eg FreeBSD returns the mod time of the symlink's containing
# directory).
if (
    am_has_slept=no
    for am_try in 1 2; do
        echo "timestamp, slept: $am_has_slept" > conftest.file
        set X `ls -Lt "$srcdir/configure" conftest.file 2> /dev/null`
        if test "$*" = "X"; then
            # -L didn't work.
            set X `ls -t "$srcdir/configure" conftest.file`
            fi
            if test "$*" != "X $srcdir/configure conftest.file" \
                && test "$*" != "X conftest.file $srcdir/configure"; then

                # If neither matched, then we have a broken ls.  This can happen
                # if, for instance, CONFIG_SHELL is bash and it inherits a
                # broken ls alias from the environment.  This has actually
                # happened.  Such a system could not be considered "sane".
                as_fn_error $? "ls -t appears to fail.  Make sure there is not a
broken
alias in your environment" "$LINENO" 5
            fi
            if test "$2" = conftest.file || test $am_try -eq 2; then
                break
            fi
            # Just in case.
            sleep 1
            am_has_slept=yes
        done
        test "$2" = conftest.file
    )
then
    # Ok.
    :
else
    as_fn_error $? "newly created file is older than distributed files!
Check your system clock" "$LINENO" 5
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }

```

```

# If we didn't sleep, we still need to ensure time stamps of
config.status and
# generated files are strictly newer.
am_sleep_pid=
if grep 'slept: no' conftest.file >/dev/null 2>&1; then
  ( sleep 1 ) &
  am_sleep_pid=$!
fi

rm -f conftest.file

test "$program_prefix" != NONE &&

program_transform_name="s^&$program_prefix&;$program_transform_name"
# Use a double $ so make ignores it.
test "$program_suffix" != NONE &&

program_transform_name="s\&$program_suffix&;$program_transform_name"
# Double any \ or $.
# By default was `s,x,x', remove it if useless.
ac_script='s/[\\\$]/&&/g;s/;/s,x,x,$//'
program_transform_name=`$as_echo "$program_transform_name" | sed
"$ac_script"`

# expand $ac_aux_dir to an absolute path
am_aux_dir=`cd $ac_aux_dir && pwd`

if test x"${MISSING+set}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      MISSING="\${SHELL} \"$am_aux_dir/missing\"" ;;
    *)
      MISSING="\${SHELL} $am_aux_dir/missing" ;;
  esac
fi
# Use eval to expand $SHELL
if eval "$MISSING --run true"; then
  am_missing_run="$MISSING --run "
else
  am_missing_run=
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: 'missing' script
is too old or missing" >&5
$as_echo "$as_me: WARNING: 'missing' script is too old or missing"
>&2;}
fi

if test x"${install_sh}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      install_sh="\${SHELL} '$am_aux_dir/install-sh'" ;;
    *)
      install_sh="\${SHELL} $am_aux_dir/install-sh"

```

```

    esac
fi

# Installed binaries are usually stripped using 'strip' when the user
# run "make install-strip". However 'strip' might not be the right
# tool to use in cross-compilation environments, therefore Automake
# will honor the 'STRIP' environment variable to overrule this
program.
if test "$cross_compiling" != no; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$STRIP"; then
        ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in '' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_STRIP="${ac_tool_prefix}strip"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
        IFS=$as_save_IFS

        fi
        fi
        STRIP=$ac_cv_prog_STRIP
        if test -n "$STRIP"; then
          { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
          $as_echo "$STRIP" >&6; }
        else
          { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
          $as_echo "no" >&6; }
        fi
      fi
    fi
  fi
  if test -z "$ac_cv_prog_STRIP"; then
    ac_ct_STRIP=$STRIP
  fi

```

```

# Extract the first word of "strip", so it can be a program name
with args.
set dummy strip; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_STRIP"; then
    ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_STRIP="strip"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
if test -n "$ac_ct_STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_STRIP" = x; then
    STRIP=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    STRIP=$ac_ct_STRIP
  fi

```

```

else
  STRIP="$ac_cv_prog_STRIP"
fi

fi

INSTALL_STRIP_PROGRAM="\$(install_sh) -c -s"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for a thread-safe
mkdir -p" >&5
$as_echo_n "checking for a thread-safe mkdir -p... " >&6; }
if test -z "$MKDIR_P"; then
  if ${ac_cv_path_mkdir+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH$PATH_SEPARATOR/opt/sfw/bin
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in mkdir gmkdir; do
        for ac_exec_ext in '' $ac_executable_extensions; do
          as_fn_executable_p "$as_dir/$ac_prog$ac_exec_ext" || continue
          case `"$as_dir/$ac_prog$ac_exec_ext" --version 2>&1` in #(
            'mkdir (GNU coreutils) '* | \
            'mkdir (coreutils) '* | \
            'mkdir (fileutils) '4.1*)
            ac_cv_path_mkdir=$as_dir/$ac_prog$ac_exec_ext
            break 3;;
          esac
        done
      done
    done
    IFS=$as_save_IFS
  fi

  fi

  test -d ./--version && rmdir ./--version
  if test "${ac_cv_path_mkdir+set}" = set; then
    MKDIR_P="$ac_cv_path_mkdir -p"
  else
    # As a last resort, use the slow shell script. Don't cache a
    # value for MKDIR_P within a source directory, because that will
    # break other packages using the cache if that directory is
    # removed, or if the value is a relative name.
    MKDIR_P="$ac_install_sh -d"
  fi
fi

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $MKDIR_P" >&5
$as_echo "$MKDIR_P" >&6; }

for ac_prog in gawk mawk nawk awk
do

```

```

# Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$sas_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_AWK+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    if test -n "$AWK"; then
        ac_cv_prog_AWK="$AWK" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_AWK="$ac_prog"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
AWK=$ac_cv_prog_AWK
if test -n "$AWK"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $AWK" >&5
$sas_echo "$AWK" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$sas_echo "no" >&6; }
fi

    test -n "$AWK" && break
done

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether ${MAKE-make}
sets \$(MAKE)" >&5
$sas_echo_n "checking whether ${MAKE-make} sets \$(MAKE)... " >&6; }
set x ${MAKE-make}
ac_make=`$sas_echo "$2" | sed 's/+/p/g; s/[^a-zA-Z0-9_]/_/g'`
if eval \${ac_cv_prog_make_${ac_make}_set+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat >conftest.make <<\_ACEOF
SHELL = /bin/sh

```



```

all:
    @echo '@@@@%=%$(MAKE)=@@@@%'
_ACEOF
# GNU make sometimes prints "make[1]: Entering ...", which would
confuse us.
case `${MAKE-make} -f conftest.make 2>/dev/null` in
    *@@@@%=?*=@@@@%*)
        eval ac_cv_prog_make_${ac_make}_set=yes;;
    *)
        eval ac_cv_prog_make_${ac_make}_set=no;;
esac
rm -f conftest.make
fi
if eval test \${ac_cv_prog_make_${ac_make}_set} = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    SET_MAKE=
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    SET_MAKE="MAKE=${MAKE-make}"
fi

rm -rf .tst 2>/dev/null
mkdir .tst 2>/dev/null
if test -d .tst; then
    am__leading_dot=.
else
    am__leading_dot=_
fi
rmdir .tst 2>/dev/null

if test "`cd $srcdir && pwd`" != "`pwd`"; then
    # Use -I$(srcdir) only when $(srcdir) != ., so that make's output
    # is not polluted with repeated "-I."
    am__isrc=' -I$(srcdir)'
    # test to see if srcdir already configured
    if test -f $srcdir/config.status; then
        as_fn_error $? "source directory already configured; run \"make
distclean\" there first" "$LINENO" 5
    fi
fi

# test whether we have cygpath
if test -z "$CYGPATH_W"; then
    if (cygpath --version) >/dev/null 2>/dev/null; then
        CYGPATH_W='cygpath -w'
    else
        CYGPATH_W=echo
    fi
fi

```

```

# Define the identity of the package.
PACKAGE='dbus'
VERSION='1.6.8'

cat >>confdefs.h <<_ACEOF
@%:@define PACKAGE "$PACKAGE"
_ACEOF

cat >>confdefs.h <<_ACEOF
@%:@define VERSION "$VERSION"
_ACEOF

# Some tools Automake needs.

ACLOCAL=${ACLOCAL-"${am_missing_run}aclocal-${am__api_version}"}

AUTOCONF=${AUTOCONF-"${am_missing_run}autoconf"}

AUTOMAKE=${AUTOMAKE-"${am_missing_run}automake-${am__api_version}"}

AUTOHEADER=${AUTOHEADER-"${am_missing_run}autoheader"}

MAKEINFO=${MAKEINFO-"${am_missing_run}makeinfo"}

# For better backward compatibility.  To be removed once Automake
1.9.x
# dies out for good.  For more background, see:
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00001.html>
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00014.html>
mkdir_p='$(MKDIR_P) '

# We need awk for the "check" target.  The system "awk" is bad on
# some platforms.
# Always define AMTAR for backward compatibility.  Yes, it's still
used
# in the wild :-( We should find a proper way to deprecate it ...
AMTAR='${TAR-tar}'

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to create a
ustar tar archive" >&5
$as_echo_n "checking how to create a ustar tar archive... " >&6; }
# Loop over all known methods to create a tar archive until one works.
_am_tools='gnutar plaintar cpio pax none'
_am_tools=${am_cv_prog_tar_ustar-$_am_tools}

```

```

# Do not fold the above two line into one, because Tru64 sh and
# Solaris sh will not grok spaces in the rhs of '-'.
for _am_tool in $_am_tools
do
  case $_am_tool in
  gnutar)
    for _am_tar in tar gnutar gtar;
    do
      { echo "$as_me:$LINENO: $_am_tar --version" >&5
      ($_am_tar --version) >&5 2>&5
      ac_status=$?
      echo "$as_me:$LINENO: \ $? = $ac_status" >&5
      (exit $ac_status); } && break
    done
    am__tar="$_am_tar --format=ustar -chf - "'"$stardir"'"
    am__tar_="$_am_tar --format=ustar -chf - "'"$stardir"'"
    am__untar="$_am_tar -xf -"
    ;;
  plaintar)
    # Must skip GNU tar: if it does not support --format= it doesn't
create
    # ustar tarball either.
    (tar --version) >/dev/null 2>&1 && continue
    am__tar='tar chf - "'"$stardir"'"
    am__tar_='tar chf - "$stardir"'
    am__untar='tar xf -'
    ;;
  pax)
    am__tar='pax -L -x ustar -w "'"$stardir"'"
    am__tar_='pax -L -x ustar -w "$stardir"'
    am__untar='pax -r'
    ;;
  cpio)
    am__tar='find "'"$stardir"'" -print | cpio -o -H ustar -L'
    am__tar_='find "$stardir" -print | cpio -o -H ustar -L'
    am__untar='cpio -i -H ustar -d'
    ;;
  none)
    am__tar=false
    am__tar_=false
    am__untar=false
    ;;
  esac

# If the value was cached, stop now. We just wanted to have am__tar
# and am__untar set.
test -n "${am_cv_prog_tar_ustar}" && break

# tar/untar a dummy directory, and stop if the command works
rm -rf confptest.dir
mkdir confptest.dir
echo GrepMe > confptest.dir/file

```

```

    { echo "$as_me:$LINENO: tardir=confptest.dir && eval $am__tar_
>confptest.tar" >&5
      (tardir=confptest.dir && eval $am__tar_ >confptest.tar) >&5 2>&5
      ac_status=$?
      echo "$as_me:$LINENO: \$? = $ac_status" >&5
      (exit $ac_status); }
    rm -rf confptest.dir
    if test -s confptest.tar; then
      { echo "$as_me:$LINENO: $am__untar <confptest.tar" >&5
        ($am__untar <confptest.tar) >&5 2>&5
        ac_status=$?
        echo "$as_me:$LINENO: \$? = $ac_status" >&5
        (exit $ac_status); }
      grep GrepMe confptest.dir/file >/dev/null 2>&1 && break
    fi
  done
  rm -rf confptest.dir

if ${am_cv_prog_tar_ustar+:} false; then :
  $as_echo_n "(cached) " >&6
else
  am_cv_prog_tar_ustar=$_am_tool
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_prog_tar_ustar" >&5
$as_echo "$am_cv_prog_tar_ustar" >&6; }

```

```
GETTEXT_PACKAGE=dbus-1
```

```

cat >>confdefs.h <<_ACEOF
@%:@define GETTEXT_PACKAGE "$GETTEXT_PACKAGE"
_ACEOF

```

```

# By default, rebuild autotools files on demand; only use ./missing if
the
# user says --disable-maintainer-mode (some distributions like to do
this)

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to enable
maintainer-specific portions of Makefiles" >&5
$as_echo_n "checking whether to enable maintainer-specific portions of
Makefiles... " >&6; }
  @%:@ Check whether --enable-maintainer-mode was given.
if test "${enable_maintainer_mode+set}" = set; then :

```

```

enableval=$enable_maintainer_mode; USE_MAINTAINER_MODE=$enableval
else
  USE_MAINTAINER_MODE=yes
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$USE_MAINTAINER_MODE" >&5
$as_echo "$USE_MAINTAINER_MODE" >&6; }
  if test $USE_MAINTAINER_MODE = yes; then
    MAINTAINER_MODE_TRUE=
    MAINTAINER_MODE_FALSE='#'
else
  MAINTAINER_MODE_TRUE='#'
  MAINTAINER_MODE_FALSE=
fi

MAINT=$MAINTAINER_MODE_TRUE

@%:@ Check whether --enable-silent-rules was given.
if test "${enable_silent_rules+set}" = set; then :
  enableval=$enable_silent_rules;
fi

case $enable_silent_rules in @%:@ (((
  yes) AM_DEFAULT_VERBOSITY=0;;
  no) AM_DEFAULT_VERBOSITY=1;;
  *) AM_DEFAULT_VERBOSITY=0;;
esac
am_make=${MAKE-make}
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $am_make
supports nested variables" >&5
$as_echo_n "checking whether $am_make supports nested variables... "
>&6; }
if ${am_cv_make_support_nested_variables+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if $as_echo 'TRUE=$(BAR$(V))
BAR0=false
BAR1=true
V=1
am__doit:
  @$(TRUE)
.PHONY: am__doit' | $am_make -f - >/dev/null 2>&1; then
  am_cv_make_support_nested_variables=yes
else
  am_cv_make_support_nested_variables=no
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_make_support_nested_variables" >&5

```

```
$as_echo "$am_cv_make_support_nested_variables" >&6; }
if test $am_cv_make_support_nested_variables = yes; then
  AM_V='$ (V) '
  AM_DEFAULT_V='$ (AM_DEFAULT_VERBOSITY) '
else
  AM_V=$AM_DEFAULT_VERBOSITY
  AM_DEFAULT_V=$AM_DEFAULT_VERBOSITY
fi
AM_BACKSLASH='\'
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DAEMON_NAME "dbus-daemon"
_ACEOF
```

```
# libtool versioning - this applies to libdbus
#
# See
http://sources.redhat.com/autobook/autobook/autobook\_91.html#SEC91 for
details
#
```

```
## increment if the interface has additions, changes, removals.
LT_CURRENT=10
```

```
## increment any time the source changes; set to
## 0 if you increment CURRENT
LT_REVISION=2
```

```
## increment if any interfaces have been added; set to 0
## if any interfaces have been changed or removed. removal has
## precedence over adding, so set to 0 if both happened.
LT_AGE=7
```

```
DBUS_MAJOR_VERSION=1
DBUS_MINOR_VERSION=6
DBUS_MICRO_VERSION=8
DBUS_VERSION=1.6.8
```

```
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
```

```

ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}gcc", so it can be a
  program name with args.
  set dummy ${ac_tool_prefix}gcc; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$CC"; then
      ac_cv_prog_CC="$CC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="${ac_tool_prefix}gcc"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      CC=$ac_cv_prog_CC
      if test -n "$CC"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
        $as_echo "$CC" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi
      if test -z "$ac_cv_prog_CC"; then
        ac_ct_CC=$CC
        # Extract the first word of "gcc", so it can be a program name with
        args.
        set dummy gcc; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }

```

```

if ${ac_cv_prog_ac_ct_CC+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_CC"; then
    ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
  else
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
          ac_cv_prog_ac_ct_CC="gcc"
          $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
          break 2
        fi
      done
    done
    IFS=$as_save_IFS

    fi
    fi
    ac_ct_CC=$ac_cv_prog_ac_ct_CC
    if test -n "$ac_ct_CC"; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
      $as_echo "$ac_ct_CC" >&6; }
    else
      { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
      $as_echo "no" >&6; }
    fi

    if test "x$ac_ct_CC" = x; then
      CC=""
    else
      case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
      CC=$ac_ct_CC
    fi
  else
    CC="$ac_cv_prog_CC"
  fi

  if test -z "$CC"; then
    if test -n "$ac_tool_prefix"; then

```



```

    # Extract the first word of "${ac_tool_prefix}cc", so it can be a
program name with args.
set dummy ${ac_tool_prefix}cc; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CC+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$CC"; then
    ac_cv_prog_CC="$CC" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_CC="${ac_tool_prefix}cc"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
fi
if test -z "$CC"; then
  # Extract the first word of "cc", so it can be a program name with
args.
set dummy cc; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CC+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$CC"; then
    ac_cv_prog_CC="$CC" # Let the user override the test.

```

```

else
  ac_prog_rejected=no
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    if test "$as_dir/$ac_word$ac_exec_ext" = "/usr/ucb/cc"; then
      ac_prog_rejected=yes
      continue
    fi
    ac_cv_prog_CC="cc"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

if test $ac_prog_rejected = yes; then
  # We found a bogon in the path, so make sure we never use it.
  set dummy $ac_cv_prog_CC
  shift
  if test $#:@ != 0; then
    # We chose a different compiler from the bogus one.
    # However, it has the same basename, so the bogon will be chosen
    # first if we set CC to just the basename; use the full file name.
    shift
    ac_cv_prog_CC="$as_dir/$ac_word${1+' '}$@"
  fi
fi
fi
fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
  $as_echo "$CC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
  $as_echo "no" >&6; }
fi

fi
if test -z "$CC"; then
  if test -n "$ac_tool_prefix"; then
    for ac_prog in cl.exe
    do

```

```

    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
be a program name with args.
set dummy $ac_tool_prefix$ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CC+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$CC"; then
        ac_cv_prog_CC="$CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_CC="$ac_tool_prefix$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" >&5
$as_echo "$CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$CC" && break
done
fi
if test -z "$CC"; then
    ac_ct_CC=$CC
    for ac_prog in cl.exe
do
    # Extract the first word of "$ac_prog", so it can be a program name
with args.
set dummy $ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_CC+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_CC"; then
        ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_CC="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac_ct_CC"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as_echo "$ac_ct_CC" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$ac_ct_CC" && break
done

    if test "x$ac_ct_CC" = x; then
        CC=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        CC=$ac_ct_CC
    fi
fi

fi

```

```

test -z "$CC" && { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in
\`$ac_pwd':" >&5
$as_echo "$as_me: error: in \`$ac_pwd':" >&2;}
as_fn_error $? "no acceptable C compiler found in $PATH
See `config.log' for more details" "$LINENO" 5; }

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\`$ac_try`;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>confptest.err
  ac_status=$?
  if test -s confptest.err; then
    sed '10a\
... rest of stderr output deleted ...
    10q' confptest.err >confptest.er1
    cat confptest.er1 >&5
  fi
  rm -f confptest.er1 confptest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: ` $? = $ac_status" >&5
  test $ac_status = 0; }
done

cat confdefs.h - <<_ACEOF >>confptest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
ac_clean_files_save=$ac_clean_files
ac_clean_files="$ac_clean_files a.out a.out.dSYM a.exe b.out"
# Try to create an executable without -o first, disregard a.out.
# It will help us diagnose broken compilers, and finding out an
intuition
# of exeext.

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
compiler works" >&5
$as_echo_n "checking whether the C compiler works... " >&6; }
ac_link_default=`$as_echo "$ac_link" | sed 's/ -o *conftest[^\ ]*//'\`

# The possible output files:
ac_files="a.out conftest.exe conftest a.exe a_out.exe b.out
conftest.*"

ac_rmfiles=
for ac_file in $ac_files
do
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    * ) ac_rmfiles="$ac_rmfiles $ac_file";;
  esac
done
rm -f $ac_rmfiles

if { { ac_try="$ac_link_default"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link_default") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; }; then :
  # Autoconf-2.13 could set the ac_cv_exeext variable to `no'.
  # So ignore a value of `no', otherwise this would lead to `EXEEXT =
no'
  # in a Makefile.  We should not override ac_cv_exeext if it was
cached,
  # so that the user can short-circuit this test for compilers unknown
to
  # Autoconf.
for ac_file in $ac_files ''
do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj )
      ;;
    [ab].out )
      # We found the default executable, but exeext='' is most
      # certainly right.
      break;;
    *.* )

```

```

        if test "${ac_cv_exeext+set}" = set && test "$ac_cv_exeext" !=
no;
    then ;; else
        ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)'`
    fi
    # We set ac_cv_exeext here because the later test for it is not
    # safe: cross compilers may not add the suffix if given an `-o'
    # argument, so we may need to know it at that point already.
    # Even if this section looks crufty: it has the advantage of
    # actually working.
    break;;
* )
    break;;
esac
done
test "$ac_cv_exeext" = no && ac_cv_exeext=

else
    ac_file=''
fi
if test -z "$ac_file"; then :
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
$as_echo "$as_me: failed program was:" >&5
sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':" >&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "C compiler cannot create executables
See `config.log' for more details" "$LINENO" 5; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler
default output file name" >&5
$as_echo_n "checking for C compiler default output file name... " >&6;
}
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_file" >&5
$as_echo "$ac_file" >&6; }
ac_exeext=$ac_cv_exeext

rm -f -r a.out a.out.dSYM a.exe conftest$ac_cv_exeext b.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of
executables" >&5
$as_echo_n "checking for suffix of executables... " >&6; }
if { { ac_try="$ac_link"
case "($ac_try" in
*\"* | *`* | *\\*) ac_try_echo=\$ac_try;;
*) ac_try_echo=$ac_try;;
esac

```

```

eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }; then :
  # If both `conftest.exe' and `conftest' are `present' (well,
observable)
# catch `conftest.exe'. For instance with Cygwin, `ls conftest' will
# work properly (i.e., refer to `conftest.exe'), while it won't with
# `rm'.
for ac_file in conftest.exe conftest conftest.*; do
  test -f "$ac_file" || continue
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM | *.o | *.obj ) ;;
    *.* ) ac_cv_exeext=`expr "$ac_file" : '[^.]*(\..*)`
      break;;
    * ) break;;
  esac
done
else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \"`$ac_pwd`:"
>&5
$as_echo "$as_me: error: in \"`$ac_pwd`:" >&2;}
as_fn_error $? "cannot compute suffix of executables: cannot compile
and link
See `config.log' for more details" "$LINENO" 5; }
fi
rm -f conftest conftest$ac_cv_exeext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_exeext" >&5
$as_echo "$ac_cv_exeext" >&6; }

rm -f conftest.$ac_ext
EXEEXT=$ac_cv_exeext
ac_exeext=$EXEEXT
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
@%:@include <stdio.h>
int
main ()
{
FILE *f = fopen ("conftest.out", "w");
return ferror (f) || fclose (f) != 0;

;
return 0;
}
_ACEOF
ac_clean_files="$ac_clean_files conftest.out"
# Check that the compiler produces executables we can run. If not,
either

```



```

# the compiler is broken, or we cross compile.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are cross
compiling" >&5
$as_echo_n "checking whether we are cross compiling... " >&6; }
if test "$cross_compiling" != yes; then
  { { ac_try="$ac_link"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_link") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }
  if { ac_try='./conftest$ac_cv_exeext'
  { { case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
  test $ac_status = 0; }; }; then
    cross_compiling=no
  else
    if test "$cross_compiling" = maybe; then
      cross_compiling=yes
    else
      { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "cannot run C compiled programs.
If you meant to cross compile, use `--host'.
See `config.log' for more details" "$LINENO" 5; }
      fi
    fi
  fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $cross_compiling" >&5
$as_echo "$cross_compiling" >&6; }

rm -f conftest.$ac_ext conftest$ac_cv_exeext conftest.out
ac_clean_files=$ac_clean_files_save
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for suffix of object
files" >&5
$as_echo_n "checking for suffix of object files... " >&6; }
if ${ac_cv_objext+:} false; then :
  $as_echo_n "(cached) " >&6
else

```

```

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
rm -f conftest.o conftest.obj
if { { ac_try="$ac_compile"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compile") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \` $? = $ac_status \" >&5
  test $ac_status = 0; }; then :
  for ac_file in conftest.o conftest.obj conftest.*; do
  test -f "$ac_file" || continue;
  case $ac_file in
    *.$ac_ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg
| *.map | *.inf | *.dSYM ) ;;
    *) ac_cv_objext=`expr "$ac_file" : '.*\\.\\(.*\\)'`
       break;;
  esac
done
else
  $as_echo "$as_me: failed program was:" >&5
  sed 's/^/| /' conftest.$ac_ext >&5

{ { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':" >&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error $? "cannot compute suffix of object files: cannot compile
See `config.log' for more details" "$LINENO" 5; }
fi
rm -f conftest.$ac_cv_objext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_objext" >&5
$as_echo "$ac_cv_objext" >&6; }
OBJEXT=$ac_cv_objext
ac_objext=$OBJEXT
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C compiler" >&5
$as_echo_n "checking whether we are using the GNU C compiler... " >&6;
}
if ${ac_cv_c_compiler_gnu+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{
#ifdef __GNUC__
    choke me
#endif

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_compiler_gnu=yes
else
    ac_compiler_gnu=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_c_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_c_compiler_gnu" >&5
$as_echo "$ac_cv_c_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
    GCC=yes
else
    GCC=
fi
ac_test_CFLAGS=${CFLAGS+set}
ac_save_CFLAGS=$CFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC accepts
-g" >&5
$as_echo_n "checking whether $CC accepts -g... " >&6; }
if ${ac_cv_prog_cc_g+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_save_c_werror_flag=$ac_c_werror_flag
    ac_c_werror_flag=yes
    ac_cv_prog_cc_g=no
    CFLAGS="-g"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

```

```

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_g=yes
else
    CFLAGS=""
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :

else
    ac_c_werror_flag=$ac_save_c_werror_flag
    CFLAGS="-g"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
    ac_c_werror_flag=$ac_save_c_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cc_g" >&5
$as_echo "$ac_cv_prog_cc_g" >&6; }
if test "$ac_test_CFLAGS" = set; then
    CFLAGS=$ac_save_CFLAGS
elif test $ac_cv_prog_cc_g = yes; then
    if test "$GCC" = yes; then
        CFLAGS="-g -O2"

```

```

else
    CFLAGS="-g"
fi
else
    if test "$GCC" = yes; then
        CFLAGS="-O2"
    else
        CFLAGS=
    fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $CC option to
accept ISO C89" >&5
$as_echo_n "checking for $CC option to accept ISO C89... " >&6; }
if ${ac_cv_prog_cc_c89+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_cv_prog_cc_c89=no
ac_save_CC=$CC
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdio.h>
struct stat;
/* Most of the following tests are stolen from RCS 5.7's src/conf.sh.
*/
struct buf { int x; };
FILE * (*rcsopen) (struct buf *, struct stat *, int);
static char *e (p, i)
    char **p;
    int i;
{
    return p[i];
}
static char *f (char * (*g) (char **, int), char **p, ...)
{
    char *s;
    va_list v;
    va_start (v,p);
    s = g (p, va_arg (v,int));
    va_end (v);
    return s;
}

/* OSF 4.0 Compaq cc is some sort of almost-ANSI by default.  It has
function prototypes and stuff, but not '\xHH' hex character
constants.
These don't provoke an error unfortunately, instead are silently
treated
as 'x'.  The following induces an error, until -std is added to get
proper ANSI mode.  Curiously '\x00'!='x' always comes out true, for
an

```

```

    array size at least.  It's necessary to write '\x00'==0 to get
something
    that's true only with -std.  */
int osf4_cc_array ['\x00' == 0 ? 1 : -1];

/* IBM C 6 for AIX is almost-ANSI by default, but it replaces macro
parameters
    inside strings and character constants.  */
#define FOO(x) 'x'
int xlc6_cc_array[FOO(a) == 'x' ? 1 : -1];

int test (int i, double x);
struct s1 {int (*f) (int a);};
struct s2 {int (*f) (double a);};
int pairnames (int, char **, FILE *(*) (struct buf *, struct stat *,
int), int, int);
int argc;
char **argv;
int
main ()
{
return f (e, argv, 0) != argv[0] || f (e, argv, 1) != argv[1];
;
return 0;
}
__ACEOF
for ac_arg in ' -qlanglvl=extc89 -qlanglvl=ansi -std \
    -Ae "-Aa -D_HPUX_SOURCE" "-Xc -D__EXTENSIONS__"
do
    CC="$ac_save_CC $ac_arg"
    if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_prog_cc_c89=$ac_arg
fi
rm -f core conftest.err conftest.$ac_objext
test "x$ac_cv_prog_cc_c89" != "xno" && break
done
rm -f conftest.$ac_ext
CC=$ac_save_CC

fi
# AC_CACHE_VAL
case "x$ac_cv_prog_cc_c89" in
x)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: none needed" >&5
$as_echo "none needed" >&6; } ;;
xno)
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: unsupported" >&5
$as_echo "unsupported" >&6; } ;;
*)
    CC="$CC $ac_cv_prog_cc_c89"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_prog_cc_c89" >&5

```

```

$as_echo "$ac_cv_prog_cc_c89" >&6; } ;;
esac
if test "x$ac_cv_prog_cc_c89" != xno; then :

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
DEPDIR="`${am__leading_dot}deps"

ac_config_commands="$ac_config_commands depfiles"

am_make=${MAKE-make}
cat > confinc << 'END'
am__doit:
    @echo this is the am__doit target
.PHONY: am__doit
END
# If we don't find an include directive, just comment out the code.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for style of include
used by $am_make" >&5
$as_echo_n "checking for style of include used by $am_make... " >&6; }
am__include="#"
am__quote=
_am_result=none
# First try GNU make style include.
echo "include confinc" > confmf
# Ignore all kinds of additional output from 'make'.
case ` $am_make -s -f confmf 2> /dev/null` in #(
*the\ am__doit\ target*)
    am__include=include
    am__quote=
    _am_result=GNU
    ;;
esac
# Now try BSD make style include.
if test "$am__include" = "#"; then
    echo '.include "confinc"' > confmf
    case ` $am_make -s -f confmf 2> /dev/null` in #(
*the\ am__doit\ target*)
        am__include=.include
        am__quote=""
        _am_result=BSD
        ;;
    esac
fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $_am_result" >&5
$sas_echo "$_am_result" >&6; }
rm -f confinc confmf

@%:@ Check whether --enable-dependency-tracking was given.
if test "${enable_dependency_tracking+set}" = set; then :
  enableval=$enable_dependency_tracking;
fi

if test "x$enable_dependency_tracking" != xno; then
  am_depcomp="$ac_aux_dir/depcomp"
  AMDEPBACKSLASH='\ '
  am__nodep='_no'
fi

if test "x$enable_dependency_tracking" != xno; then
  AMDEP_TRUE=
  AMDEP_FALSE='#'
else
  AMDEP_TRUE='#'
  AMDEP_FALSE=
fi

depcc="$CC"   am_compiler_list=

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$sas_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CC_dependencies_compiler_type+set} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test -z "$AMDEP_TRUE" && test -f "$am_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf conftest.dir
    mkdir conftest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$am_depcomp" conftest.dir
    cd conftest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.

```



```

mkdir sub

am_cv_CC_dependencies_compiler_type=none
if test "$am_compiler_list" = ""; then
    am_compiler_list=`sed -n 's/^#*\([a-zA-Z0-9]*\))$/\1/p' <
./depcomp`
fi
am__universal=false
case " $depcc " in #(
    *\ -arch\ *\ -arch\ *) am__universal=true ;;
    esac

for depmode in $am_compiler_list; do
    # Setup a source with many dependencies, because some compilers
    # like to wrap large dependency lists on column 80 (with \), and
    # we should not choose a depcomp mode which is confused by this.
    #
    # We need to recreate these files for each test, as the compiler
may
    # overwrite some of them when testing with obscure command lines.
    # This happens at least with the AIX C compiler.
    : > sub/confctest.c
    for i in 1 2 3 4 5 6; do
        echo '#include "conf tst'$i'.h"' >> sub/confctest.c
        # Using ": > sub/conf tst$i.h" creates only sub/conf tst1.h with
        # Solaris 10 /bin/sh.
        echo '/* dummy */' > sub/conf tst$i.h
    done
    echo "${am__include} ${am__quote}sub/confctest.Po${am__quote}" >
confmf

    # We check with '-c' and '-o' for the sake of the "dashmstdout"
    # mode. It turns out that the SunPro C++ compiler does not
properly
    # handle '-M -o', and we need to detect this. Also, some Intel
    # versions had trouble with output in subdirs.
    am__obj=sub/confctest.${OBJEXT-o}
    am__minus_obj="-o $am__obj"
    case $depmode in
    gcc)
        # This depmode causes a compiler race in universal mode.
        test "$am__universal" = false || continue
        ;;
    nosideeffect)
        # After this tag, mechanisms are not by side-effect, so they'll
        # only be used when explicitly requested.
        if test "x$enable_dependency_tracking" = xyes; then
            continue
        else
            break
        fi
        ;;
    ;;
    )

```

```

msvc7 | msvc7msys | msvisualcpp | msvcmsys)
  # This compiler won't grok '-c -o', but also, the minuso test
has
  # not run yet.  These depmodes are late enough in the game, and
  # so weak that their functioning should not be impacted.
  am__obj=confptest.${OBJEXT-o}
  am__minus_obj=
  ;;
none) break ;;
esac
if depmode=$depmode \
  source=sub/confptest.c object=$am__obj \
  depfile=sub/confptest.Po tmpdepfile=sub/confptest.TPo \
  $$SHELL ./depcomp $depcc -c $am__minus_obj sub/confptest.c \
  >/dev/null 2>confptest.err &&
  grep sub/confftst1.h sub/confptest.Po > /dev/null 2>&1 &&
  grep sub/confftst6.h sub/confptest.Po > /dev/null 2>&1 &&
  grep $am__obj sub/confptest.Po > /dev/null 2>&1 &&
  ${MAKE-make} -s -f confmf > /dev/null 2>&1; then
  # icc doesn't choke on unknown options, it will just issue
warnings
  # or remarks (even with -Werror).  So we grep stderr for any
message
  # that says an option was ignored or not supported.
  # When given -MP, icc 7.0 and 7.1 complain thusly:
  #   icc: Command line warning: ignoring option '-M'; no argument
required
  # The diagnosis changed in icc 8.0:
  #   icc: Command line remark: option '-MP' not supported
  if (grep 'ignoring option' confptest.err ||
      grep 'not supported' confptest.err) >/dev/null 2>&1; then ;;
else
  am_cv_CC_dependencies_compiler_type=$depmode
  break
  fi
  fi
done

  cd ..
  rm -rf confptest.dir
else
  am_cv_CC_dependencies_compiler_type=none
fi

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CC_dependencies_compiler_type" >&5
$as_echo "$am_cv_CC_dependencies_compiler_type" >&6; }
CCDEPMODE=depmode=$am_cv_CC_dependencies_compiler_type

if
  test "x$enable_dependency_tracking" != xno \

```

```

    && test "$am_cv_CC_dependencies_compiler_type" = gcc3; then
    am__fastdepCC_TRUE=
    am__fastdepCC_FALSE='#'
else
    am__fastdepCC_TRUE='#'
    am__fastdepCC_FALSE=
fi

if test "x$CC" != xcc; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC and cc
understand -c and -o together" >&5
$as_echo_n "checking whether $CC and cc understand -c and -o
together... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether cc
understands -c and -o together" >&5
$as_echo_n "checking whether cc understands -c and -o together... "
>&6; }
fi
set dummy $CC; ac_cc=`$as_echo "$2" |
    sed 's/[^a-zA-Z0-9_]/_/g;s/^[0-9]/_/`
if eval \${ac_cv_prog_cc_${ac_cc}_c_o+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
# Make sure it works both with $CC and with simple cc.
# We do the test twice because some compilers refuse to overwrite an
# existing .o file with -o, though they will create one.
ac_try='$CC -c conftest.$ac_ext -o conftest2.$ac_objext >&5'
rm -f conftest2.*
if { { case "($ac_try" in
  *\"* | *\\* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\"\\$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \\$? = $ac_status" >&5
  test $ac_status = 0; } &&
  test -f conftest2.$ac_objext && { { case "($ac_try" in

```

```

*\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
*) ac_try_echo=$ac_try;;
esac
eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_try") 2>&5
  ac_status=$?
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; };
then
  eval ac_cv_prog_cc_${ac_cc}_c_o=yes
  if test "x$CC" != xcc; then
    # Test first that cc exists at all.
    if { ac_try='cc -c conftest.$ac_ext >&5'
      { { case "($ac_try" in
        *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
        *) ac_try_echo=$ac_try;;
      esac
      eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
      $as_echo "$ac_try_echo"; } >&5
        (eval "$ac_try") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; }; then
          ac_try='cc -c conftest.$ac_ext -o conftest2.$ac_objext >&5'
          rm -f conftest2.*
          if { { case "($ac_try" in
            *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
            *) ac_try_echo=$ac_try;;
          esac
          eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
          $as_echo "$ac_try_echo"; } >&5
            (eval "$ac_try") 2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
            test $ac_status = 0; } &&
              test -f conftest2.$ac_objext && { { case "($ac_try" in
                *\"* | *\\`* | *\\)* ac_try_echo=\$ac_try;;
                *) ac_try_echo=$ac_try;;
              esac
              eval ac_try_echo="\\"$as_me:${as_lineno-$LINENO}: $ac_try_echo\"
              $as_echo "$ac_try_echo"; } >&5
                (eval "$ac_try") 2>&5
                ac_status=$?
                $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
                test $ac_status = 0; };
                then
                  # cc works too.
                  :
                else
                  # cc exists but doesn't like -o.
                  eval ac_cv_prog_cc_${ac_cc}_c_o=no

```

```

        fi
    fi
    fi
else
    eval ac_cv_prog_cc_${ac_cc}_c_o=no
fi
rm -f core conftest*

fi
if eval test \${ac_cv_prog_cc_${ac_cc}_c_o} = yes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

$as_echo "@%:@define NO_MINUS_C_MINUS_O 1" >>confdefs.h

fi

# FIXME: we rely on the cache variable name because
# there is no other way.
set dummy $CC
am_cc=`echo $2 | sed 's/[^a-zA-Z0-9_]/_/g;s/^[0-9]/_/'`
eval am_t=\${ac_cv_prog_cc_${am_cc}_c_o}
if test "$am_t" != yes; then
    # Losing compiler, so override with the script.
    # FIXME: It is wrong to rewrite CC.
    # But if we don't then we get into trouble of one sort or another.
    # A longer-term fix would be to have automake use am__CC in this
case,
    # and then we could set am__CC="\$(top_srcdir)/compile \$(CC)"
    CC="$am_aux_dir/compile $CC"
fi

ac_ext=cpp
ac_cpp='$CXXCPP $CPPFLAGS'
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu
if test -z "$CXX"; then
    if test -n "$CCC"; then
        CXX=$CCC
    else
        if test -n "$ac_tool_prefix"; then
            for ac_prog in g++ c++ gpp aCC CC cxx cc++ cl.exe FCC KCC RCC xlc_r
xlc
do
                # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
be a program name with args.

```

```

set dummy $ac_tool_prefix$ac_prog; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_CXX+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$CXX"; then
    ac_cv_prog_CXX="$CXX" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_CXX="$ac_tool_prefix$ac_prog"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
CXX=$ac_cv_prog_CXX
if test -n "$CXX"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $CXX" >&5
$as_echo "$CXX" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$CXX" && break
done
fi
if test -z "$CXX"; then
  ac_ct_CXX=$CXX
  for ac_prog in g++ c++ gpp aCC CC cxx cc++ cl.exe FCC KCC RCC x1C_r
x1C
do
  # Extract the first word of "$ac_prog", so it can be a program name
with args.
  set dummy $ac_prog; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_CXX+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  if test -n "$ac_ct_CXX"; then
    ac_cv_prog_ac_ct_CXX="$ac_ct_CXX" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_CXX="$ac_prog"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_CXX=$ac_cv_prog_ac_ct_CXX
if test -n "$ac_ct_CXX"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CXX" >&5
$as_echo "$ac_ct_CXX" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_CXX" && break
done

  if test "x$ac_ct_CXX" = x; then
    CXX="g++"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    CXX=$ac_ct_CXX
  fi
fi

fi
fi

```

```

# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C++ compiler
version" >&5
set X $ac_compile
ac_compiler=$2
for ac_option in --version -v -V -qversion; do
  { { ac_try="$ac_compiler $ac_option >&5"
case "($ac_try" in
  *\"* | *\\`* | *\\*) ac_try_echo=\$ac_try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac_try_echo=\"`\$as_me:${as_lineno-$LINENO}: $ac_try_echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac_compiler $ac_option >&5") 2>conftest.err
  ac_status=$?
  if test -s conftest.err; then
    sed '10a\
... rest of stderr output deleted ...
      10q' conftest.err >conftest.er1
    cat conftest.er1 >&5
  fi
  rm -f conftest.er1 conftest.err
  $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
  test $ac_status = 0; }
done

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C++ compiler" >&5
$as_echo_n "checking whether we are using the GNU C++ compiler... "
>&6; }
if ${ac_cv_cxx_compiler_gnu+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{
#ifdef __GNUC__
  choke me
#endif

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_compiler_gnu=yes
else
  ac_compiler_gnu=no
fi

```



```

rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
ac_cv_cxx_compiler_gnu=$ac_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_cxx_compiler_gnu" >&5
$as_echo "$ac_cv_cxx_compiler_gnu" >&6; }
if test $ac_compiler_gnu = yes; then
  GXX=yes
else
  GXX=
fi
ac_test_CXXFLAGS=${CXXFLAGS+set}
ac_save_CXXFLAGS=$CXXFLAGS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CXX accepts
-g" >&5
$as_echo_n "checking whether $CXX accepts -g... " >&6; }
if ${ac_cv_prog_cxx_g+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_save_cxx_werror_flag=$ac_cxx_werror_flag
  ac_cxx_werror_flag=yes
  ac_cv_prog_cxx_g=no
  CXXFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_cv_prog_cxx_g=yes
else
  CXXFLAGS=""
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :

```

```

else
  ac_cxx_werror_flag=$ac_save_cxx_werror_flag
  CXXFLAGS="-g"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
ACEOF
if ac_fn_cxx_try_compile "$LINENO"; then :
  ac_cv_prog_cxx_g=yes
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
  ac_cxx_werror_flag=$ac_save_cxx_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cxx_g"
>&5
$as_echo "$ac_cv_prog_cxx_g" >&6; }
if test "$ac_test_CXXFLAGS" = set; then
  CXXFLAGS=$ac_save_CXXFLAGS
elif test $ac_cv_prog_cxx_g = yes; then
  if test "$GXX" = yes; then
    CXXFLAGS="-g -O2"
  else
    CXXFLAGS="-g"
  fi
else
  if test "$GXX" = yes; then
    CXXFLAGS="-O2"
  else
    CXXFLAGS=
  fi
fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

depcc="$CXX"  am_compiler_list=

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking dependency style of
$depcc" >&5
$as_echo_n "checking dependency style of $depcc... " >&6; }
if ${am_cv_CXX_dependencies_compiler_type+} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$AMDEP_TRUE" && test -f "$am_depcomp"; then
    # We make a subdir and do the tests there.  Otherwise we can end up
    # making bogus files that we don't know about and never remove.  For
    # instance it was reported that on HP-UX the gcc test will end up
    # making a dummy file named 'D' -- because '-MD' means "put the
output
    # in D".
    rm -rf confptest.dir
    mkdir confptest.dir
    # Copy depcomp to subdir because otherwise we won't find it if we're
    # using a relative directory.
    cp "$am_depcomp" confptest.dir
    cd confptest.dir
    # We will build objects and dependencies in a subdirectory because
    # it helps to detect inapplicable dependency modes.  For instance
    # both Tru64's cc and ICC support -MD to output dependencies as a
    # side effect of compilation, but ICC will put the dependencies in
    # the current directory while Tru64 will put them in the object
    # directory.
    mkdir sub

    am_cv_CXX_dependencies_compiler_type=none
    if test "$am_compiler_list" = ""; then
      am_compiler_list=`sed -n 's/^#*\([a-zA-Z0-9]*\))$/\1/p' <
./depcomp`
    fi
    am__universal=false
    case " $depcc " in #(
      *\ -arch\ *\ -arch\ *) am__universal=true ;;
    esac

    for depmode in $am_compiler_list; do
      # Setup a source with many dependencies, because some compilers
      # like to wrap large dependency lists on column 80 (with \), and
      # we should not choose a depcomp mode which is confused by this.
      #
      # We need to recreate these files for each test, as the compiler
may
      # overwrite some of them when testing with obscure command lines.
      # This happens at least with the AIX C compiler.
      : > sub/confptest.c
      for i in 1 2 3 4 5 6; do
        echo '#include "conftst'$i'.h"' >> sub/confptest.c
        # Using ": > sub/conftst$i.h" creates only sub/conftst1.h with
        # Solaris 10 /bin/sh.
        echo '/* dummy */' > sub/conftst$i.h

```

```

done
echo "${am__include} ${am__quote}sub/confptest.Po${am__quote}" >
confmf

# We check with '-c' and '-o' for the sake of the "dashmstdout"
# mode. It turns out that the SunPro C++ compiler does not
properly
# handle '-M -o', and we need to detect this. Also, some Intel
# versions had trouble with output in subdirs.
am__obj=sub/confptest.${OBJEXT-o}
am__minus_obj="-o $am__obj"
case $depmode in
gcc)
# This depmode causes a compiler race in universal mode.
test "$am__universal" = false || continue
;;
nosideeffect)
# After this tag, mechanisms are not by side-effect, so they'll
# only be used when explicitly requested.
if test "x$enable_dependency_tracking" = xyes; then
continue
else
break
fi
;;
msvc7 | msvc7msys | msvisualcpp | msvcmsys)
# This compiler won't grok '-c -o', but also, the minuso test
has
# not run yet. These depmodes are late enough in the game, and
# so weak that their functioning should not be impacted.
am__obj=confptest.${OBJEXT-o}
am__minus_obj=
;;
none) break ;;
esac
if depmode=$depmode \
source=sub/confptest.c object=$am__obj \
depfile=sub/confptest.Po tmpdepfile=sub/confptest.TPo \
$SHELL ./depcomp $depcc -c $am__minus_obj sub/confptest.c \
>/dev/null 2>confptest.err &&
grep sub/conftst1.h sub/confptest.Po > /dev/null 2>&1 &&
grep sub/conftst6.h sub/confptest.Po > /dev/null 2>&1 &&
grep $am__obj sub/confptest.Po > /dev/null 2>&1 &&
${MAKE-make} -s -f confmf > /dev/null 2>&1; then
# icc doesn't choke on unknown options, it will just issue
warnings
# or remarks (even with -Werror). So we grep stderr for any
message
# that says an option was ignored or not supported.
# When given -MP, icc 7.0 and 7.1 complain thusly:
# icc: Command line warning: ignoring option '-M'; no argument
required

```

```

# The diagnosis changed in icc 8.0:
#   icc: Command line remark: option '-MP' not supported
if (grep 'ignoring option' confptest.err ||
    grep 'not supported' confptest.err) >/dev/null 2>&1; then ;;
else
    am_cv_CXX_dependencies_compiler_type=$depmode
    break
fi
done

cd ..
rm -rf confptest.dir
else
    am_cv_CXX_dependencies_compiler_type=none
fi

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_CXX_dependencies_compiler_type" >&5
$as_echo "$am_cv_CXX_dependencies_compiler_type" >&6; }
CXXDEPMODE=depmode=$am_cv_CXX_dependencies_compiler_type

if
    test "x$enable_dependency_tracking" != xno \
    && test "$am_cv_CXX_dependencies_compiler_type" = gcc3; then
    am__fastdepCXX_TRUE=
    am__fastdepCXX_FALSE='#'
else
    am__fastdepCXX_TRUE='#'
    am__fastdepCXX_FALSE=
fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS confptest.$ac_ext >&5'
ac_link='$CC -o confptest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
confptest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to run the C
preprocessor" >&5
$as_echo_n "checking how to run the C preprocessor... " >&6; }
# On Suns, sometimes $CPP names a directory.
if test -n "$CPP" && test -d "$CPP"; then
    CPP=
fi
if test -z "$CPP"; then
    if ${ac_cv_prog_CPP+:} false; then :
        $as_echo_n "(cached) " >&6
    else

```

```

        # Double quotes because CPP needs to be expanded
        for CPP in "$CC -E" "$CC -E -traditional-cpp" "/lib/cpp"
        do
            ac_preproc_ok=false
        for ac_c_preproc_warn_flag in ' yes
        do
            # Use a header file that comes with gcc, so configuring glibc
            # with a fresh cross-compiler works.
            # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
            # <limits.h> exists even on freestanding compilers.
            # On the NeXT, cc -E runs the code through the compiler's parser,
            # not just through cpp. "Syntax error" is here to catch this case.
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

                Syntax error

        _ACEOF
        if ac_fn_c_try_cpp "$LINENO"; then :

        else
            # Broken: fails on valid input.
            continue
        fi
        rm -f conftest.err conftest.i conftest.$ac_ext

            # OK, works on sane cases.  Now check whether nonexistent headers
            # can be detected and how.
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
        _ACEOF
        if ac_fn_c_try_cpp "$LINENO"; then :
            # Broken: success on invalid input.
            continue
        else
            # Passes both tests.
            ac_preproc_ok=:
            break
        fi
        rm -f conftest.err conftest.i conftest.$ac_ext

        done
        # Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
        rm -f conftest.i conftest.err conftest.$ac_ext
        if $ac_preproc_ok; then :
            break
        fi

```

```

done
ac_cv_prog_CPP=$CPP

fi
CPP=$ac_cv_prog_CPP
else
ac_cv_prog_CPP=$CPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CPP" >&5
$as_echo "$CPP" >&6; }
ac_preproc_ok=false
for ac_c_preproc_warn_flag in '' yes
do
# Use a header file that comes with gcc, so configuring glibc
# with a fresh cross-compiler works.
# Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
# <limits.h> exists even on freestanding compilers.
# On the NeXT, cc -E runs the code through the compiler's parser,
# not just through cpp. "Syntax error" is here to catch this case.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

Syntax error

_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :

else
# Broken: fails on valid input.
continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext

# OK, works on sane cases. Now check whether nonexistent headers
# can be detected and how.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
# Broken: success on invalid input.
continue
else
# Passes both tests.
ac_preproc_ok=:
break
fi
rm -f conftest.err conftest.i conftest.$ac_ext

```

```

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :

else
  { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error $? "C preprocessor `'$CPP\' fails sanity check
See `config.log' for more details" "$LINENO" 5; }
fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS confptest.$ac_ext >&5'
ac_link='$CC -o confptest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
confptest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for grep that
handles long lines and -e" >&5
$as_echo_n "checking for grep that handles long lines and -e... " >&6;
}
if ${ac_cv_path_GREP+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$GREP"; then
    ac_path_GREP_found=false
    # Loop through the user's path and test for each of PROGMAME-LIST
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
    for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
    do
      IFS=$as_save_IFS
      test -z "$as_dir" && as_dir=.
      for ac_prog in grep ggrep; do
        for ac_exec_ext in ' $ac_executable_extensions; do
          ac_path_GREP="$as_dir/$ac_prog$ac_exec_ext"
          as_fn_executable_p "$ac_path_GREP" || continue
        # Check for GNU ac_path_GREP and select it if it is found.
        # Check for GNU $ac_path_GREP
        case `"$ac_path_GREP" --version 2>&1` in
        *GNU*)
          ac_cv_path_GREP="$ac_path_GREP" ac_path_GREP_found=;;
        *)
          ac_count=0
          $as_echo_n 0123456789 >"confptest.in"
          while :
          do
            cat "confptest.in" "confptest.in" >"confptest.tmp"
            mv "confptest.tmp" "confptest.in"

```



```

    cp "confptest.in" "confptest.nl"
    $as_echo 'GREP' >> "confptest.nl"
    "$ac_path_GREP" -e 'GREP$' -e '-(cannot match)-' < "confptest.nl"
>"confptest.out" 2>/dev/null || break
diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
as_fn_arith $ac_count + 1 && ac_count=$as_val
if test $ac_count -gt ${ac_path_GREP_max-0}; then
    # Best one so far, save it but keep looking for a better one
    ac_cv_path_GREP="$ac_path_GREP"
    ac_path_GREP_max=$ac_count
fi
# 10*(2^10) chars as input seems more than enough
test $ac_count -gt 10 && break
done
rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

    $ac_path_GREP_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_GREP"; then
    as_fn_error $? "no acceptable grep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_GREP=$GREP
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_GREP" >&5
$as_echo "$ac_cv_path_GREP" >&6; }
GREP="$ac_cv_path_GREP"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for egrep" >&5
$as_echo_n "checking for egrep... " >&6; }
if ${ac_cv_path_EGREP+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if echo a | $GREP -E '(a|b)' >/dev/null 2>&1
    then ac_cv_path_EGREP="$GREP -E"
    else
        if test -z "$EGREP"; then
            ac_path_EGREP_found=false
            # Loop through the user's path and test for each of PROGRAMME-LIST
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.

```

```

    for ac_prog in egrep; do
    for ac_exec_ext in ` $ac_executable_extensions; do
        ac_path_EGREP="$as_dir/$ac_prog$ac_exec_ext"
        as_fn_executable_p "$ac_path_EGREP" || continue
# Check for GNU ac_path_EGREP and select it if it is found.
# Check for GNU $ac_path_EGREP
case `"$ac_path_EGREP" --version 2>&1` in
*GNU*)
    ac_cv_path_EGREP="$ac_path_EGREP" ac_path_EGREP_found=;;;
*)
    ac_count=0
    $as_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $as_echo 'EGREP' >> "confptest.nl"
        "$ac_path_EGREP" 'EGREP$' < "confptest.nl" >"confptest.out"
2>/dev/null || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_EGREP_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_EGREP="$ac_path_EGREP"
            ac_path_EGREP_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

        $ac_path_EGREP_found && break 3
    done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_EGREP"; then
    as_fn_error $? "no acceptable egrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_EGREP=$EGREP
fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_EGREP"
>&5
$as_echo "$ac_cv_path_EGREP" >&6; }
EGREP="$ac_cv_path_EGREP"

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$sas_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl:} false; then :
  $sas_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_header_stdcl=yes
else
  ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$sas_objext conftest.$sas_ext

if test $ac_cv_header_stdcl = yes; then
  # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$sas_ext") 2>&5 |
  $EGREP "memchr" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$sas_ext
/* end confdefs.h. */
#include <stdlib.h>

```

```

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "free" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
  if test "$cross_compiling" = yes; then :
  :
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0x0FF) == 0x020)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
    (('a' <= (c) && (c) <= 'i') \
    || ('j' <= (c) && (c) <= 'r') \
    || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
  int i;
  for (i = 0; i < 256; i++)
    if (XOR (islower (i), ISLOWER (i))
        || toupper (i) != TOUPPER (i))
      return 2;
  return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
  ac_cv_header_stdcl=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
  conftest.$ac_objext conftest.beam conftest.$ac_ext

```

```

fi

fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdcl"
>&5
$as_echo "$ac_cv_header_stdcl" >&6; }
if test $ac_cv_header_stdcl = yes; then

$as_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

# On IRIX 5.3, sys/types and inttypes.h are conflicting.
for ac_header in sys/types.h sys/stat.h stdlib.h string.h memory.h
strings.h \
        inttypes.h stdint.h unistd.h
do :
    as_ac_Header=`$as_echo "ac_cv_header_$ac_header" | $as_tr_sh`
    ac_fn_c_check_header_compile "$LINENO" "$ac_header" "$as_ac_Header"
"$ac_includes_default"
"
    if eval test `x`"$as_ac_Header" = x"yes"; then :
        cat >>confdefs.h <<_ACEOF
        @%:@define ` $as_echo "HAVE_$ac_header" | $as_tr_cpp` 1
        _ACEOF
    fi
done

    ac_fn_c_check_header_mongrel "$LINENO" "minix/config.h"
"ac_cv_header_minix_config_h" "$ac_includes_default"
if test "x$ac_cv_header_minix_config_h" = xyes; then :
    MINIX=yes
else
    MINIX=
fi

    if test "$MINIX" = yes; then

$as_echo "@%:@define _POSIX_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _POSIX_1_SOURCE 2" >>confdefs.h

$as_echo "@%:@define _MINIX 1" >>confdefs.h

```

```

fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether it is safe
to define __EXTENSIONS__ " >&5
$as_echo_n "checking whether it is safe to define __EXTENSIONS__... "
>&6; }
if ${ac_cv_safe_to_define__extensions_+;} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#       define __EXTENSIONS__ 1
        $ac_includes_default

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_safe_to_define__extensions_=yes
else
    ac_cv_safe_to_define__extensions_=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_safe_to_define__extensions__ " >&5
$as_echo "$ac_cv_safe_to_define__extensions__ " >&6; }
test $ac_cv_safe_to_define__extensions__ = yes &&
    $as_echo "@%:@define __EXTENSIONS__ 1" >>confdefs.h

$as_echo "@%:@define _ALL_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _GNU_SOURCE 1" >>confdefs.h

$as_echo "@%:@define _POSIX_PTHREAD_SEMANTICS 1" >>confdefs.h

$as_echo "@%:@define _TANDEM_SOURCE 1" >>confdefs.h

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing strerror" >&5
$as_echo_n "checking for library containing strerror... " >&6; }
if ${ac_cv_search_strerror+;} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_func_search_save_LIBS=$LIBS

```

```

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char strerror ();
int
main ()
{
return strerror ();
    ;
    return 0;
}
_ACEOF
for ac_lib in ' cposix; do
    if test -z "$ac_lib"; then
        ac_res="none required"
    else
        ac_res=-l$ac_lib
        LIBS="-l$ac_lib $ac_func_search_save_LIBS"
    fi
    if ac_fn_c_try_link "$LINENO"; then :
        ac_cv_search_strerror=$ac_res
    fi
    rm -f core conftest.err conftest.$ac_objext \
        conftest$ac_exeext
    if ${ac_cv_search_strerror+:} false; then :
        break
    fi
done
if ${ac_cv_search_strerror+:} false; then :

else
    ac_cv_search_strerror=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_strerror" >&5
$as_echo "$ac_cv_search_strerror" >&6; }
ac_res=$ac_cv_search_strerror
if test "$ac_res" != no; then :
    test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for ANSI C header
files" >&5
$sas_echo_n "checking for ANSI C header files... " >&6; }
if ${ac_cv_header_stdcl+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_header_stdcl=yes
else
  ac_cv_header_stdcl=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test $ac_cv_header_stdcl = yes; then
  # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <string.h>

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "memchr" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <stdlib.h>

_ACEOF

```



```

if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "free" >/dev/null 2>&1; then :

else
  ac_cv_header_stdcl=no
fi
rm -f conftest*

fi

if test $ac_cv_header_stdcl = yes; then
  # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -
ansi.
  if test "$cross_compiling" = yes; then :
  :
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0xFF) == 0x20)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
    (('a' <= (c) && (c) <= 'i' \
     || ('j' <= (c) && (c) <= 'r' \
     || ('s' <= (c) && (c) <= 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) | 0x40) : (c))
#endif

#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
{
  int i;
  for (i = 0; i < 256; i++)
    if (XOR (islower (i), ISLOWER (i))
        || toupper (i) != TOUPPER (i))
      return 2;
  return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

else
  ac_cv_header_stdcl=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
  conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

```

```

fi
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdcl"
>&5
$zas_echo "$ac_cv_header_stdcl" >&6; }
if test $ac_cv_header_stdcl = yes; then

$zas_echo "@%:@define STDC_HEADERS 1" >>confdefs.h

fi

{ $zas_echo "$sas_me:${as_lineno-$LINENO}: checking for inline" >&5
$zas_echo_n "checking for inline... " >&6; }
if ${ac_cv_c_inline+:} false; then :
  $zas_echo_n "(cached) " >&6
else
  ac_cv_c_inline=no
  for ac_kw in inline __inline__ inline; do
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#ifdef __cplusplus
typedef int foo_t;
static $ac_kw foo_t static_foo () {return 0; }
$ac_kw foo_t foo () {return 0; }
#endif

ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  ac_cv_c_inline=$ac_kw
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
test "$ac_cv_c_inline" != no && break
done

fi
{ $zas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_c_inline" >&5
$zas_echo "$ac_cv_c_inline" >&6; }

case $ac_cv_c_inline in
  inline | yes) ;;
  *)
    case $ac_cv_c_inline in
      no) ac_val=;;
      *) ac_val=$ac_cv_c_inline;;
    esac
    cat >>confdefs.h <<_ACEOF
#ifdef __cplusplus
#define inline $ac_val
#endif
ACEOF
  ;;
esac

```



```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to print
strings" >&5
$as_echo_n "checking how to print strings... " >&6; }
# Test print first, because it will be a builtin if present.
if test "X`( print -r -- -n ) 2>/dev/null`" = X-n && \
    test "X`print -r -- $ECHO 2>/dev/null`" = "X$ECHO"; then
    ECHO='print -r --'
elif test "X`printf %s $ECHO 2>/dev/null`" = "X$ECHO"; then
    ECHO='printf %s\n'
else
    # Use this function as a fallback that always works.
    func_fallback_echo ()
    {
        eval 'cat <<_LTECHO_EOF
$1
_LTECHO_EOF'
    }
    ECHO='func_fallback_echo'
fi

# func_echo_all arg...
# Invoke $ECHO with all args, space-separated.
func_echo_all ()
{
    $ECHO ""
}

case "$ECHO" in
    printf*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: printf"
>&5
$as_echo "printf" >&6; } ;;
    print*) { $as_echo "$as_me:${as_lineno-$LINENO}: result: print -r"
>&5
$as_echo "print -r" >&6; } ;;
    *) { $as_echo "$as_me:${as_lineno-$LINENO}: result: cat" >&5
$as_echo "cat" >&6; } ;;
esac

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for a sed that does
not truncate output" >&5
$sas_echo_n "checking for a sed that does not truncate output... " >&6;
}
if ${ac_cv_path_SED+:} false; then :
  $sas_echo_n "(cached) " >&6
else
ac_script=s/aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa/bbbbbbbbbbbbbbbbbbbbbbbbbbb
bbbbbbbbbbbb/
  for ac_i in 1 2 3 4 5 6 7; do
    ac_script="$ac_script$sas_nl$ac_script"
  done
  echo "$ac_script" 2>/dev/null | sed 99q >conftest.sed
  { ac_script=; unset ac_script;}
  if test -z "$SED"; then
ac_path_SED_found=false
# Loop through the user's path and test for each of PROGRAMME-LIST
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_prog in sed gsed; do
    for ac_exec_ext in ' ' $ac_executable_extensions; do
      ac_path_SED="$as_dir/$ac_prog$ac_exec_ext"
      as_fn_executable_p "$ac_path_SED" || continue
# Check for GNU ac_path_SED and select it if it is found.
# Check for GNU $ac_path_SED
case `"$ac_path_SED" --version 2>&1` in
*GNU*)
  ac_cv_path_SED="$ac_path_SED" ac_path_SED_found=;;
*)
  ac_count=0
  $sas_echo_n 0123456789 >"conftest.in"
  while :
  do
    cat "conftest.in" "conftest.in" >"conftest.tmp"
    mv "conftest.tmp" "conftest.in"
    cp "conftest.in" "conftest.nl"
    $sas_echo ' ' >> "conftest.nl"
    "$ac_path_SED" -f conftest.sed < "conftest.nl" >"conftest.out"
  2>/dev/null || break
    diff "conftest.out" "conftest.nl" >/dev/null 2>&1 || break
    as_fn_arith $ac_count + 1 && ac_count=$as_val
    if test $ac_count -gt ${ac_path_SED_max-0}; then
      # Best one so far, save it but keep looking for a better one
      ac_cv_path_SED="$ac_path_SED"
      ac_path_SED_max=$ac_count
    fi
    # 10*(2^10) chars as input seems more than enough
    test $ac_count -gt 10 && break
  done
done

```

```

done
rm -f conftest.in conftest.tmp conftest.nl conftest.out;;
esac

    $ac_path_SED_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_SED"; then
    as_fn_error $? "no acceptable sed could be found in \$PATH"
"$LINENO" 5
fi
else
    ac_cv_path_SED=$SED
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_SED" >&5
$as_echo "$ac_cv_path_SED" >&6; }
SED="$ac_cv_path_SED"
rm -f conftest.sed

test -z "$SED" && SED=sed
Xsed="$SED -e 1s/^X//"

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for fgrep" >&5
$as_echo_n "checking for fgrep... " >&6; }
if ${ac_cv_path_FGREP+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if echo 'ab*c' | $GREP -F 'ab*c' >/dev/null 2>&1
    then ac_cv_path_FGREP="$GREP -F"
    else
        if test -z "$FGREP"; then
            ac_path_FGREP_found=false
            # Loop through the user's path and test for each of PROGRAMME-LIST
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.

```

```

    for ac_prog in fgrep; do
    for ac_exec_ext in ` $ac_executable_extensions; do
        ac_path_FGREP="$as_dir/$ac_prog$ac_exec_ext"
        as_fn_executable_p "$ac_path_FGREP" || continue
# Check for GNU ac_path_FGREP and select it if it is found.
# Check for GNU $ac_path_FGREP
case `"$ac_path_FGREP" --version 2>&1` in
*GNU*)
    ac_cv_path_FGREP="$ac_path_FGREP" ac_path_FGREP_found=;;;
*)
    ac_count=0
    $as_echo_n 0123456789 >"confptest.in"
    while :
    do
        cat "confptest.in" "confptest.in" >"confptest.tmp"
        mv "confptest.tmp" "confptest.in"
        cp "confptest.in" "confptest.nl"
        $as_echo 'FGREP' >> "confptest.nl"
        "$ac_path_FGREP" FGREP < "confptest.nl" >"confptest.out" 2>/dev/null
    || break
        diff "confptest.out" "confptest.nl" >/dev/null 2>&1 || break
        as_fn_arith $ac_count + 1 && ac_count=$as_val
        if test $ac_count -gt ${ac_path_FGREP_max-0}; then
            # Best one so far, save it but keep looking for a better one
            ac_cv_path_FGREP="$ac_path_FGREP"
            ac_path_FGREP_max=$ac_count
        fi
        # 10*(2^10) chars as input seems more than enough
        test $ac_count -gt 10 && break
    done
    rm -f confptest.in confptest.tmp confptest.nl confptest.out;;
esac

    $ac_path_FGREP_found && break 3
done
done
done
IFS=$as_save_IFS
if test -z "$ac_cv_path_FGREP"; then
    as_fn_error $? "no acceptable fgrep could be found in
$PATH$PATH_SEPARATOR/usr/xpg4/bin" "$LINENO" 5
fi
else
    ac_cv_path_FGREP=$FGREP
fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_FGREP"
>&5
$as_echo "$ac_cv_path_FGREP" >&6; }
FGREP="$ac_cv_path_FGREP"

```

```
test -z "$GREP" && GREP=grep
```

```
@%:@ Check whether --with-gnu-ld was given.
if test "${with_gnu_ld+set}" = set; then :
  withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes
else
  with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
$CC" >&5
$as_echo_n "checking for ld used by $CC... " >&6; }
  case $host in
    *-*-mingw*)
      # gcc leaves a trailing carriage return which upsets mingw
      ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
    *)
      ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
  esac
  case $ac_prog in
    # Accept absolute paths.
    [[\/*] | ?:[\/*]*)
      re_direlt='/[^\/*][^\/*]*/\.\./'
      # Canonicalize the pathname of ld
      ac_prog=`$ECHO "$ac_prog"| $SED 's%\\/*/%g'`
      while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
        ac_prog=`$ECHO $ac_prog| $SED "s%$re_direlt%/%"`
      done
      test -z "$LD" && LD="$ac_prog"
```



```

    ;;
    "" )
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
    *)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
    esac
elif test "$with_gnu_ld" = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.
        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
          *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break
            ;;
          *)
            test "$with_gnu_ld" != yes && break
            ;;
        esac
      fi
    done
    IFS="$lt_save_ifs"
  else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
  fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5

```

```

$as_echo "$LD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \${PATH}"
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
  $as_echo_n "(cached) " >&6
else
  # I'd rather use --version here, but apparently some GNU lds only
  accept -v.
  case `"$LD" -v 2>&1 </dev/null` in
  *GNU* | *'with BFD'*)
    lt_cv_prog_gnu_ld=yes
    ;;
  *)
    lt_cv_prog_gnu_ld=no
    ;;
  esac
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5
$as_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for BSD- or MS-
compatible name lister (nm)" >&5
$as_echo_n "checking for BSD- or MS-compatible name lister (nm)... "
>&6; }
if ${lt_cv_path_NM+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$NM"; then
    # Let the user override the test.
    lt_cv_path_NM="$NM"
  else
    lt_nm_to_check="${ac_tool_prefix}nm"
    if test -n "$ac_tool_prefix" && test "$build" = "$host"; then
      lt_nm_to_check="$lt_nm_to_check nm"
    fi
  fi

```

```

for lt_tmp_nm in $lt_nm_to_check; do
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  for ac_dir in $PATH /usr/ccs/bin/elf /usr/ccs/bin /usr/ucb /bin;
do
  IFS="$lt_save_ifs"
  test -z "$ac_dir" && ac_dir=.
  tmp_nm="$ac_dir/$lt_tmp_nm"
  if test -f "$tmp_nm" || test -f "$tmp_nm$ac_exeext" ; then
# Check to see if the nm accepts a BSD-compatible flag.
# Adding the `sed 1q' prevents false positives on HP-UX, which
says:
#   nm: unknown option "B" ignored
# Tru64's nm complains that /dev/null is an invalid object file
case `"$tmp_nm" -B /dev/null 2>&1 | sed '1q'` in
*/dev/null* | *'Invalid file or object type'*)
  lt_cv_path_NM="$tmp_nm -B"
  break
  ;;
*)
  case `"$tmp_nm" -p /dev/null 2>&1 | sed '1q'` in
*/dev/null*)
  lt_cv_path_NM="$tmp_nm -p"
  break
  ;;
*)
  lt_cv_path_NM=${lt_cv_path_NM="$tmp_nm"} # keep the first
match, but
  continue # so that we can try to find one that supports BSD
flags
  ;;
  esac
  ;;
esac
  fi
done
IFS="$lt_save_ifs"
done
: ${lt_cv_path_NM=no}
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_path_NM" >&5
$as_echo "$lt_cv_path_NM" >&6; }
if test "$lt_cv_path_NM" != "no"; then
  NM="$lt_cv_path_NM"
else
# Didn't find any BSD compatible name lister, look for dumpbin.
if test -n "$DUMPBIN"; then :
# Let the user override the test.
else
  if test -n "$ac_tool_prefix"; then
for ac_prog in dumpbin "link -dump"
do

```

```

    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
    be a program name with args.
    set dummy $ac_tool_prefix$ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_DUMPBIN+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$DUMPBIN"; then
            ac_cv_prog_DUMPBIN="$DUMPBIN" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_DUMPBIN="$ac_tool_prefix$ac_prog"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
                        $as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

            fi
            fi
            DUMPBIN=$ac_cv_prog_DUMPBIN
            if test -n "$DUMPBIN"; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DUMPBIN" >&5
                $as_echo "$DUMPBIN" >&6; }
            else
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
                $as_echo "no" >&6; }
            fi

            test -n "$DUMPBIN" && break
        done
    fi
    if test -z "$DUMPBIN"; then
        ac_ct_DUMPBIN=$DUMPBIN
        for ac_prog in dumpbin "link -dump"
        do
            # Extract the first word of "$ac_prog", so it can be a program name
            with args.
            set dummy $ac_prog; ac_word=$2
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
            $as_echo_n "checking for $ac_word... " >&6; }
            if ${ac_cv_prog_ac_ct_DUMPBIN+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_DUMPBIN"; then
        ac_cv_prog_ac_ct_DUMPBIN="$ac_ct_DUMPBIN" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DUMPBIN="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DUMPBIN=$ac_cv_prog_ac_ct_DUMPBIN
if test -n "$ac_ct_DUMPBIN"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DUMPBIN" >&5
$as_echo "$ac_ct_DUMPBIN" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    test -n "$ac_ct_DUMPBIN" && break
done

    if test "x$ac_ct_DUMPBIN" = x; then
        DUMPBIN=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        DUMPBIN=$ac_ct_DUMPBIN
    fi
fi

```

```

    case `\$DUMPBIN -symbols /dev/null 2>&1 | sed '1q'` in
    *COFF*)
        DUMPBIN="\$DUMPBIN -symbols"
        ;;
    *)
        DUMPBIN=:
        ;;
    esac
fi

if test "\$DUMPBIN" != ":"; then
    NM="\$DUMPBIN"
fi

test -z "\$NM" && NM=nm

{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: checking the name lister
(\$NM) interface" >&5
\$as_echo_n "checking the name lister (\$NM) interface... " >&6; }
if {\$lt_cv_nm_interface+:} false; then :
    \$as_echo_n "(cached) " >&6
else
    lt_cv_nm_interface="BSD nm"
    echo "int some_variable = 0;" > conftest.\$ac_ext
    (eval echo "\"\$as_me:\$LINENO: \$ac_compile\"" >&5)
    (eval "\$ac_compile" 2>conftest.err)
    cat conftest.err >&5
    (eval echo "\"\$as_me:\$LINENO: \$NM \\\"conftest.\$ac_objext\\\"\""
>&5)
    (eval "\$NM \"conftest.\$ac_objext\" 2>conftest.err > conftest.out)
    cat conftest.err >&5
    (eval echo "\"\$as_me:\$LINENO: output\"" >&5)
    cat conftest.out >&5
    if \$GREP 'External.*some_variable' conftest.out > /dev/null; then
        lt_cv_nm_interface="MS dumpbin"
    fi
    rm -f conftest*
fi
{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: result: \$lt_cv_nm_interface"
>&5
\$as_echo "\$lt_cv_nm_interface" >&6; }

{ \$as_echo "\$as_me:${as_lineno-\$LINENO}: checking whether ln -s works"
>&5
\$as_echo_n "checking whether ln -s works... " >&6; }
LN_S=\$as_ln_s
if test "\$LN_S" = "ln -s"; then

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no, using $LN_S"
>&5
$as_echo "no, using $LN_S" >&6; }
fi

# find the maximum length of command line arguments
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking the maximum length
of command line arguments" >&5
$as_echo_n "checking the maximum length of command line arguments... "
>&6; }
if ${lt_cv_sys_max_cmd_len+:} false; then :
    $as_echo_n "(cached) " >&6
else
    i=0
    teststring="ABCD"

    case $build_os in
msdosdjgpp*)
    # On DJGPP, this test can blow up pretty badly due to problems in
libc
    # (any single argument exceeding 2000 bytes causes a buffer
overrun
    # during glob expansion). Even if it were fixed, the result of
this
    # check would be larger than it should be.
    lt_cv_sys_max_cmd_len=12288;    # 12K is about right
    ;;

gnu*)
    # Under GNU Hurd, this test is not required because there is
    # no limit to the length of command line arguments.
    # Libtool will interpret -1 as no limit whatsoever
    lt_cv_sys_max_cmd_len=-1;
    ;;

cygwin* | mingw* | cegcc*)
    # On Win9x/ME, this test blows up -- it succeeds, but takes
    # about 5 minutes as the teststring grows exponentially.
    # Worse, since 9x/ME are not pre-emptively multitasking,
    # you end up with a "frozen" computer, even though with patience
    # the test eventually succeeds (with a max line length of 256k).
    # Instead, let's just punt: use the minimum linelength reported by
    # all of the supported platforms: 8192 (on NT/2K/XP).
    lt_cv_sys_max_cmd_len=8192;
    ;;

mint*)
    # On MiNT this can take a long time and run out of memory.
    lt_cv_sys_max_cmd_len=8192;

```

```

;;

amigaos*)
# On AmigaOS with pdksh, this test takes hours, literally.
# So we just punt and use a minimum line length of 8192.
lt_cv_sys_max_cmd_len=8192;
;;

netbsd* | freebsd* | openbsd* | darwin* | dragonfly*)
# This has been around since 386BSD, at least. Likely further.
if test -x /sbin/sysctl; then
  lt_cv_sys_max_cmd_len=`/sbin/sysctl -n kern.argmax`
elif test -x /usr/sbin/sysctl; then
  lt_cv_sys_max_cmd_len=`/usr/sbin/sysctl -n kern.argmax`
else
  lt_cv_sys_max_cmd_len=65536      # usable default for all BSDs
fi
# And add a safety zone
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
;;

interix*)
# We know the value 262144 and hardcode it with a safety zone
# (like BSD)
lt_cv_sys_max_cmd_len=196608
;;

os2*)
# The test takes a long time on OS/2.
lt_cv_sys_max_cmd_len=8192
;;

osf*)
# Dr. Hans Ekkehard Plesser reports seeing a kernel panic running
configure
# due to this test when exec_disable_arg_limit is 1 on Tru64. It
is not
# nice to cause kernel panics so lets avoid the loop below.
# First set a reasonable default.
lt_cv_sys_max_cmd_len=16384
#
if test -x /sbin/sysconfig; then
  case ` /sbin/sysconfig -q proc exec_disable_arg_limit` in
    *1*) lt_cv_sys_max_cmd_len=-1 ;;
  esac
fi
;;

sco3.2v5*)
  lt_cv_sys_max_cmd_len=102400
  ;;
sysv5* | sco5v6* | sysv4.2uw2*)

```



```

kargmax=`grep ARG_MAX /etc/conf/cf.d/stune 2>/dev/null`
if test -n "$kargmax"; then
    lt_cv_sys_max_cmd_len=`echo $kargmax | sed 's/.*[      ]//'\`
else
    lt_cv_sys_max_cmd_len=32768
fi
;;
*)
lt_cv_sys_max_cmd_len=`(getconf ARG_MAX) 2> /dev/null`
if test -n "$lt_cv_sys_max_cmd_len"; then
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
else
    # Make teststring a little bigger before we do anything with it.
    # a 1K string should be a reasonable start.
    for i in 1 2 3 4 5 6 7 8 ; do
        teststring=$teststring$teststring
    done
    SHELL=${SHELL-${CONFIG_SHELL-/bin/sh}}
    # If test is not a shell built-in, we'll probably end up
computing a
    # maximum length that is only half of the actual maximum length,
but
    # we can't tell.
    while { test "X"`env echo "$teststring$teststring" 2>/dev/null`
\
        = "X$teststring$teststring"; } >/dev/null 2>&1 &&
        test $i != 17 # 1/2 MB should be enough
    do
        i=`expr $i + 1`
        teststring=$teststring$teststring
    done
    # Only check the string length outside the loop.
    lt_cv_sys_max_cmd_len=`env echo "X$teststring" : ".*" 2>&1`
    teststring=
    # Add a significant safety factor because C++ compilers can tack
on
    # massive amounts of additional arguments before passing them to
the
    # linker. It appears as though 1/2 is a usable value.
    lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 2`
fi
;;
esac

fi

if test -n $lt_cv_sys_max_cmd_len ; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sys_max_cmd_len" >&5
$as_echo "$lt_cv_sys_max_cmd_len" >&6; }
else

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: none" >&5
$as_echo "none" >&6; }
fi
max_cmd_len=$lt_cv_sys_max_cmd_len

: ${CP="cp -f"}
: ${MV="mv -f"}
: ${RM="rm -f"}

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands some XSI constructs" >&5
$as_echo_n "checking whether the shell understands some XSI
constructs... " >&6; }
# Try some XSI features
xsi_shell=no
( _lt_dummy="a/b/c"
  test
"$${_lt_dummy##*/},${_lt_dummy%/*},${_lt_dummy#??}"${_lt_dummy%$_lt_du
mmy"} , \
    = c,a/b,b/c, \
    && eval 'test $(( 1 + 1 )) -eq 2 \
    && test "${#_lt_dummy}" -eq 5' ) >/dev/null 2>&1 \
    && xsi_shell=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $xsi_shell" >&5
$as_echo "$xsi_shell" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the shell
understands \"+=\\"" >&5
$as_echo_n "checking whether the shell understands \"+=\\"... " >&6; }
lt_shell_append=no
( foo=bar; set foo baz; eval "$1+=\$2" && test "$foo" = barbaz ) \
  >/dev/null 2>&1 \
  && lt_shell_append=yes
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_shell_append" >&5
$as_echo "$lt_shell_append" >&6; }

if ( (MAIL=60; unset MAIL) || exit) >/dev/null 2>&1; then
  lt_unset=unset
else
  lt_unset=false
fi

```

```

# test EBCDIC or ASCII
case `echo X|tr X '\101'` in
A) # ASCII based system
    # \n is not interpreted correctly by Solaris 8 /usr/ucb/tr
    lt_SP2NL='tr \040 \012'
    lt_NL2SP='tr \015\012 \040\040'
    ;;
*) # EBCDIC based system
    lt_SP2NL='tr \100 \n'
    lt_NL2SP='tr \r\n \100\100'
    ;;
esac

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to convert
$build file names to $host format" >&5
$sas_echo_n "checking how to convert $build file names to $host
format... " >&6; }
if ${lt_cv_to_host_file_cmd+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  case $host in
  *-*-mingw* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_host_file_cmd=func_convert_file_msys_to_w32
        ;;
      *-*-cygwin* )
        lt_cv_to_host_file_cmd=func_convert_file_cygwin_to_w32
        ;;
      * ) # otherwise, assume *nix
        lt_cv_to_host_file_cmd=func_convert_file_nix_to_w32
        ;;
    esac
  ;;
  *-*-cygwin* )
    case $build in
      *-*-mingw* ) # actually msys
        lt_cv_to_host_file_cmd=func_convert_file_msys_to_cygwin
        ;;
      *-*-cygwin* )
        lt_cv_to_host_file_cmd=func_convert_file_noop
        ;;
      * ) # otherwise, assume *nix

```

```

        lt_cv_to_host_file_cmd=func_convert_file_nix_to_cygwin
        ;;
    esac
    ;;
* ) # unhandled hosts (and "normal" native builds)
    lt_cv_to_host_file_cmd=func_convert_file_noop
    ;;
esac

fi

to_host_file_cmd=$lt_cv_to_host_file_cmd
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_to_host_file_cmd" >&5
$as_echo "$lt_cv_to_host_file_cmd" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to convert
$build file names to toolchain format" >&5
$as_echo_n "checking how to convert $build file names to toolchain
format... " >&6; }
if ${lt_cv_to_tool_file_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  #assume ordinary cross tools, or native build.
  lt_cv_to_tool_file_cmd=func_convert_file_noop
  case $host in
    *-*-mingw* )
      case $build in
        *-*-mingw* ) # actually msys
          lt_cv_to_tool_file_cmd=func_convert_file_msys_to_w32
          ;;
        esac
      ;;
    esac
  ;;
esac

fi

to_tool_file_cmd=$lt_cv_to_tool_file_cmd
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_to_tool_file_cmd" >&5
$as_echo "$lt_cv_to_tool_file_cmd" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $LD option to
reload object files" >&5

```

```

$as_echo_n "checking for $LD option to reload object files... " >&6; }
if ${lt_cv_ld_reload_flag+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_reload_flag='-r'
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_reload_flag" >&5
$as_echo "$lt_cv_ld_reload_flag" >&6; }
reload_flag=$lt_cv_ld_reload_flag
case $reload_flag in
"" | " ") ;;
*) reload_flag="$reload_flag" ;;
esac
reload_cmds='$LD$reload_flag -o $output$reload_objs'
case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
  if test "$GCC" != yes; then
    reload_cmds=false
  fi
  ;;
darwin*)
  if test "$GCC" = yes; then
    reload_cmds='$LTCC $LTCFLAGS -nostdlib ${wl}-r -o
$output$reload_objs'
  else
    reload_cmds='$LD$reload_flag -o $output$reload_objs'
  fi
  ;;
esac

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}objdump", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$OBJDUMP"; then
      ac_cv_prog_OBJDUMP="$OBJDUMP" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR

```

```

for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_OBJDUMP="${ac_tool_prefix}objdump"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
OBJDUMP=$ac_cv_prog_OBJDUMP
if test -n "$OBJDUMP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OBJDUMP" >&5
$as_echo "$OBJDUMP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OBJDUMP"; then
  ac_ct_OBJDUMP=$OBJDUMP
  # Extract the first word of "objdump", so it can be a program name
  with args.
  set dummy objdump; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OBJDUMP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OBJDUMP"; then
      ac_cv_prog_ac_ct_OBJDUMP="$ac_ct_OBJDUMP" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
          ac_cv_prog_ac_ct_OBJDUMP="objdump"
          $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5

```

```

        break 2
    fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_OBJDUMP=$ac_cv_prog_ac_ct_OBJDUMP
if test -n "$ac_ct_OBJDUMP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OBJDUMP" >&5
$as_echo "$ac_ct_OBJDUMP" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_OBJDUMP" = x; then
        OBJDUMP="false"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        OBJDUMP=$ac_ct_OBJDUMP
    fi
else
    OBJDUMP="$ac_cv_prog_OBJDUMP"
fi

test -z "$OBJDUMP" && OBJDUMP=objdump

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to recognize
dependent libraries" >&5
$as_echo_n "checking how to recognize dependent libraries... " >&6; }
if ${lt_cv_deplibs_check_method+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_file_magic_cmd='$MAGIC_CMD'
lt_cv_file_magic_test_file=

```

```

lt_cv_deplibs_check_method='unknown'
# Need to set the preceding variable on all platforms that support
# interlibrary dependencies.
# 'none' -- dependencies not supported.
# `unknown' -- same as none, but documents that we really don't know.
# 'pass_all' -- all dependencies passed with no checks.
# 'test_compile' -- check by making test program.
# 'file_magic [[regex]]' -- check by looking for files in library path
# which responds to the $file_magic_cmd with a given extended regex.
# If you have `file' or equivalent on your system and you're not sure
# whether `pass_all' will *always* work, you probably want this one.

case $host_os in
aix[4-9]*)
    lt_cv_deplibs_check_method=pass_all
    ;;

beos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

bsdi[45]*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib)'
    lt_cv_file_magic_cmd='/usr/bin/file -L'
    lt_cv_file_magic_test_file=/shlib/libc.so
    ;;

cygwin*)
    # func_win32_libid is a shell function defined in ltmain.sh
    lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86 DLL'
    lt_cv_file_magic_cmd='func_win32_libid'
    ;;

mingw* | pw32*)
    # Base MSYS/MinGW do not provide the 'file' command needed by
    # func_win32_libid shell function, so use a weaker test based on
    'objdump',
    # unless we find 'file', for example because we are cross-compiling.
    # func_win32_libid assumes BSD nm, so disallow it if using MS
    dumpbin.
    if ( test "$lt_cv_nm_interface" = "BSD nm" && file / ) >/dev/null
2>&1; then
        lt_cv_deplibs_check_method='file_magic ^x86 archive import|^x86
DLL'
        lt_cv_file_magic_cmd='func_win32_libid'
    else
        # Keep this pattern in sync with the one in func_win32_libid.
        lt_cv_deplibs_check_method='file_magic file format (pei*-
i386(.?architecture: i386)?|pe-arm-wince|pe-x86-64)'
        lt_cv_file_magic_cmd='$OBJDUMP -f'
    fi

```



```

;;

cegcc*)
# use the weaker test based on 'objdump'. See mingw*.
lt_cv_deplibs_check_method='file_magic file format pe-arm-
.*little(.*architecture: arm)?'
lt_cv_file_magic_cmd='$OBJDUMP -f'
;;

darwin* | rhapsody*)
lt_cv_deplibs_check_method=pass_all
;;

freebsd* | dragonfly*)
if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
  case $host_cpu in
    i*86 )
      # Not sure whether the presence of OpenBSD here was a mistake.
      # Let's accept both of them until this is cleared up.
      lt_cv_deplibs_check_method='file_magic
(FreeBSD|OpenBSD|DragonFly)/i[3-9]86 (compact )?demand paged shared
library'
      lt_cv_file_magic_cmd=/usr/bin/file
      lt_cv_file_magic_test_file=`echo /usr/lib/libc.so.*`
      ;;
    esac
  else
    lt_cv_deplibs_check_method=pass_all
  fi
  ;;

gnu*)
lt_cv_deplibs_check_method=pass_all
;;

haiku*)
lt_cv_deplibs_check_method=pass_all
;;

hpux10.20* | hpux11*)
lt_cv_file_magic_cmd=/usr/bin/file
case $host_cpu in
  ia64*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF-[0-
9][0-9]) shared object file - IA64'
    lt_cv_file_magic_test_file=/usr/lib/hpux32/libc.so
    ;;
  hppa*64*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|ELF[ -
][0-9][0-9]) (-bit)?( [LM]SB)? shared object( file)?[, -]* PA-RISC [0-
9]\.[0-9]'
    lt_cv_file_magic_test_file=/usr/lib/pa20_64/libc.sl

```

```

    ;;
*)
    lt_cv_deplibs_check_method='file_magic (s[0-9][0-9][0-9]|PA-
RISC[0-9]\.[0-9]) shared library'
    lt_cv_file_magic_test_file=/usr/lib/libc.sl
    ;;
esac
;;

interix[3-9]*)
# PIC code is broken on Interix 3.x, that's why |\a not |_pic\a
here
    lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so|\a)$'
    ;;

irix5* | irix6* | nonstopux*)
case $LD in
*-32|*" -32 ") libmagic=32-bit;;
*-n32|*" -n32 ") libmagic=N32;;
*-64|*" -64 ") libmagic=64-bit;;
*) libmagic=never-match;;
esac
lt_cv_deplibs_check_method=pass_all
;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
    lt_cv_deplibs_check_method=pass_all
    ;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ > /dev/null; then
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|_pic\a)$'
    else
        lt_cv_deplibs_check_method='match_pattern
/lib[^/]+(\.so|_pic\a)$'
    fi
    ;;

newos6*)
    lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(executable|dynamic lib)'
    lt_cv_file_magic_cmd=/usr/bin/file
    lt_cv_file_magic_test_file=/usr/lib/libnls.so
    ;;

*nto* | *qnx*)
    lt_cv_deplibs_check_method=pass_all
    ;;

openbsd*)

```

```

    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|\.so|_pic\.a)$'
    else
        lt_cv_deplibs_check_method='match_pattern /lib[^/]+(\.so\.[0-
9]+\.[0-9]+|_pic\.a)$'
    fi
    ;;

osf3* | osf4* | osf5*)
    lt_cv_deplibs_check_method=pass_all
    ;;

rdos*)
    lt_cv_deplibs_check_method=pass_all
    ;;

solaris*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    lt_cv_deplibs_check_method=pass_all
    ;;

sysv4 | sysv4.3*)
    case $host_vendor in
        motorola)
            lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [ML]SB
(shared object|dynamic lib) M[0-9][0-9]* Version [0-9]'
            lt_cv_file_magic_test_file=`echo /usr/lib/libc.so*`
            ;;
        ncr)
            lt_cv_deplibs_check_method=pass_all
            ;;
        sequent)
            lt_cv_file_magic_cmd='/bin/file'
            lt_cv_deplibs_check_method='file_magic ELF [0-9][0-9]*-bit [LM]SB
(shared object|dynamic lib )'
            ;;
        sni)
            lt_cv_file_magic_cmd='/bin/file'
            lt_cv_deplibs_check_method="file_magic ELF [0-9][0-9]*-bit [LM]SB
dynamic lib"
            lt_cv_file_magic_test_file=/lib/libc.so
            ;;
        siemens)
            lt_cv_deplibs_check_method=pass_all
            ;;
        pc)
            lt_cv_deplibs_check_method=pass_all
    esac

```

```

        ;;
    esac
    ;;

tpf*)
    lt_cv_deplibs_check_method=pass_all
    ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_deplibs_check_method" >&5
$as_echo "$lt_cv_deplibs_check_method" >&6; }

file_magic_glob=
want_nocaseglob=no
if test "$build" = "$host"; then
    case $host_os in
    mingw* | pw32*)
        if ( shopt | grep nocaseglob ) >/dev/null 2>&1; then
            want_nocaseglob=yes
        else
            file_magic_glob=`echo
aAbBcCdDeEfFgGhHiIjJkKlLmMnNoOpPqQrRsStTuUvVwWxXyYzZ | $SED -e
"s/\(..\) /s\/[\1]\/[\1]\/g;/g"`
        fi
    ;;
    esac
fi

file_magic_cmd=$lt_cv_file_magic_cmd
deplibs_check_method=$lt_cv_deplibs_check_method
test -z "$deplibs_check_method" && deplibs_check_method=unknown

```

```

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}dlltool", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}dlltool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_DLLTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$DLLTOOL"; then
      ac_cv_prog_DLLTOOL="$DLLTOOL" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_DLLTOOL="${ac_tool_prefix}dlltool"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      DLLTOOL=$ac_cv_prog_DLLTOOL
      if test -n "$DLLTOOL"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DLLTOOL" >&5
        $as_echo "$DLLTOOL" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      fi

      if test -z "$ac_cv_prog_DLLTOOL"; then
        ac_ct_DLLTOOL=$DLLTOOL
        # Extract the first word of "dlltool", so it can be a program name
        with args.
        set dummy dlltool; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_ac_ct_DLLTOOL+:} false; then :

```

```

    $as_echo_n "(cached) " >&6
else
    if test -n "$ac_ct_DLLTOOL"; then
        ac_cv_prog_ac_ct_DLLTOOL="$ac_ct_DLLTOOL" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DLLTOOL="dlltool"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
ac_ct_DLLTOOL=$ac_cv_prog_ac_ct_DLLTOOL
if test -n "$ac_ct_DLLTOOL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DLLTOOL" >&5
$as_echo "$ac_ct_DLLTOOL" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_ct_DLLTOOL" = x; then
        DLLTOOL="false"
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        DLLTOOL=$ac_ct_DLLTOOL
    fi
else
    DLLTOOL="$ac_cv_prog_DLLTOOL"
fi

test -z "$DLLTOOL" && DLLTOOL=dlltool

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking how to associate
runtime and link libraries" >&5
$as_echo_n "checking how to associate runtime and link libraries... "
>&6; }
if ${lt_cv_sharedlib_from_linklib_cmd+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_sharedlib_from_linklib_cmd='unknown'

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
  # two different shell functions defined in ltmain.sh
  # decide which to use based on capabilities of $DLLTOOL
  case ` $DLLTOOL --help 2>&1 ` in
*--identify-strict*)
  lt_cv_sharedlib_from_linklib_cmd=func_cygmimg_dll_for_implib
  ;;
*)
  lt_cv_sharedlib_from_linklib_cmd=func_cygmimg_dll_for_implib_fallback
  ;;
esac
  ;;
*)
  # fallback: assume linklib IS sharedlib
  lt_cv_sharedlib_from_linklib_cmd="$ECHO"
  ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_sharedlib_from_linklib_cmd" >&5
$as_echo "$lt_cv_sharedlib_from_linklib_cmd" >&6; }
sharedlib_from_linklib_cmd=$lt_cv_sharedlib_from_linklib_cmd
test -z "$sharedlib_from_linklib_cmd" &&
sharedlib_from_linklib_cmd=$ECHO

```

```

if test -n "$ac_tool_prefix"; then
  for ac_prog in ar
  do
    # Extract the first word of "$ac_tool_prefix$ac_prog", so it can
    be a program name with args.
    set dummy $ac_tool_prefix$ac_prog; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_AR+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      if test -n "$AR"; then
        ac_cv_prog_AR="$AR" # Let the user override the test.
      else
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
          IFS=$as_save_IFS
          test -z "$as_dir" && as_dir=.
          for ac_exec_ext in ' ' $ac_executable_extensions; do
            if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
              ac_cv_prog_AR="$ac_tool_prefix$ac_prog"
              $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
              break 2
            fi
          done
        done
        IFS=$as_save_IFS

        fi
        fi
        AR=$ac_cv_prog_AR
        if test -n "$AR"; then
          { $as_echo "$as_me:${as_lineno-$LINENO}: result: $AR" >&5
          $as_echo "$AR" >&6; }
        else
          { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
          $as_echo "no" >&6; }
        fi

        test -n "$AR" && break
      done
    fi
  if test -z "$AR"; then
    ac_ct_AR=$AR
    for ac_prog in ar
    do
      # Extract the first word of "$ac_prog", so it can be a program name
      with args.
      set dummy $ac_prog; ac_word=$2

```



```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_AR+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_AR"; then
    ac_cv_prog_ac_ct_AR="$ac_ct_AR" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '$ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_AR="$ac_prog"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_AR=$ac_cv_prog_ac_ct_AR
if test -n "$ac_ct_AR"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_AR" >&5
$as_echo "$ac_ct_AR" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  test -n "$ac_ct_AR" && break
done

  if test "x$ac_ct_AR" = x; then
    AR="false"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    AR=$ac_ct_AR
  fi

```

```
fi
```

```
: ${AR=ar}  
: ${AR_FLAGS=cru}
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for archiver @FILE  
support" >&5  
$as_echo_n "checking for archiver @FILE support... " >&6; }  
if ${lt_cv_ar_at_file+:} false; then :  
  $as_echo_n "(cached) " >&6  
else  
  lt_cv_ar_at_file=no  
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext  
/* end confdefs.h. */  
  
int  
main ()  
{  
  
  ;  
  return 0;  
}  
_ACEOF  
if ac_fn_c_try_compile "$LINENO"; then :  
  echo conftest.$ac_objext > conftest.lst  
  lt_ar_try='$AR $AR_FLAGS libconftest.a @conftest.lst >&5'  
  { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}:  
\"$lt_ar_try\""; } >&5  
  (eval $lt_ar_try) 2>&5  
  ac_status=$?  
  $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5  
  test $ac_status = 0; }  
  if test "$ac_status" -eq 0; then  
    # Ensure the archiver fails upon bogus file names.  
    rm -f conftest.$ac_objext libconftest.a  
    { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}: \"$lt_ar_try\"";  
} >&5  
    (eval $lt_ar_try) 2>&5  
    ac_status=$?  
    $as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5  
    test $ac_status = 0; }  
    if test "$ac_status" -ne 0; then
```

```

        lt_cv_ar_at_file=@
    fi
fi
rm -f conftest.* libconftest.a

fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ar_at_file"
>&5
$as_echo "$lt_cv_ar_at_file" >&6; }

if test "x$lt_cv_ar_at_file" = xno; then
    archiver_list_spec=
else
    archiver_list_spec=$lt_cv_ar_at_file
fi

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}strip", so it can be a
    program name with args.
    set dummy ${ac_tool_prefix}strip; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_STRIP+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$STRIP"; then
            ac_cv_prog_STRIP="$STRIP" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in ' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_STRIP="${ac_tool_prefix}strip"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

```

```

fi
fi
STRIP=$ac_cv_prog_STRIP
if test -n "$STRIP"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $STRIP" >&5
$as_echo "$STRIP" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_STRIP"; then
  ac_ct_STRIP=$STRIP
  # Extract the first word of "strip", so it can be a program name
  with args.
  set dummy strip; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_STRIP+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_STRIP"; then
      ac_cv_prog_ac_ct_STRIP="$ac_ct_STRIP" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_STRIP="strip"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS
    fi
  fi
  ac_ct_STRIP=$ac_cv_prog_ac_ct_STRIP
  if test -n "$ac_ct_STRIP"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_STRIP" >&5
$as_echo "$ac_ct_STRIP" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5

```

```

$as_echo "no" >&6; }
fi

if test "x$ac_ct_STRIP" = x; then
  STRIP=":"
else
  case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
  STRIP=$ac_ct_STRIP
fi
else
  STRIP="$ac_cv_prog_STRIP"
fi

test -z "$STRIP" && STRIP=:

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}ranlib", so it can be
  a program name with args.
  set dummy ${ac_tool_prefix}ranlib; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_RANLIB+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$RANLIB"; then
      ac_cv_prog_RANLIB="$RANLIB" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_RANLIB="${ac_tool_prefix}ranlib"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
    fi
  fi
done

```

```

done
IFS=$as_save_IFS

fi
fi
RANLIB=$ac_cv_prog_RANLIB
if test -n "$RANLIB"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $RANLIB" >&5
$as_echo "$RANLIB" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_RANLIB"; then
  ac_ct_RANLIB=$RANLIB
  # Extract the first word of "ranlib", so it can be a program name
  with args.
  set dummy ranlib; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_RANLIB+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_RANLIB"; then
      ac_cv_prog_ac_ct_RANLIB="$ac_ct_RANLIB" # Let the user override the
      test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_RANLIB="ranlib"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

fi
fi
ac_ct_RANLIB=$ac_cv_prog_ac_ct_RANLIB
if test -n "$ac_ct_RANLIB"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_RANLIB" >&5
$as_echo "$ac_ct_RANLIB" >&6; }

```

```

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_RANLIB" = x; then
    RANLIB=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    RANLIB=$ac_ct_RANLIB
  fi
else
  RANLIB="$ac_cv_prog_RANLIB"
fi

test -z "$RANLIB" && RANLIB=:

```

```

# Determine commands to create old-style static archives.
old_archive_cmds='$AR $AR_FLAGS $oldlib$oldobjs'
old_postinstall_cmds='chmod 644 $oldlib'
old_postuninstall_cmds=

if test -n "$RANLIB"; then
  case $host_os in
  openbsd*)
    old_postinstall_cmds="$old_postinstall_cmds~\`$RANLIB -t
\`$tool_oldlib"
    ;;
  *)
    old_postinstall_cmds="$old_postinstall_cmds~\`$RANLIB
\`$tool_oldlib"
    ;;
  esac
  old_archive_cmds="$old_archive_cmds~\`$RANLIB \`$tool_oldlib"
fi

case $host_os in
darwin*)
  lock_old_archive_extraction=yes ;;
*)

```

```
    lock_old_archive_extraction=no ;;  
esac
```

```
# If no C compiler was specified, use CC.  
LTCC=${LTCC-"$CC"}
```

```
# If no C compiler flags were specified, use CFLAGS.  
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}
```

```
# Allow CC to be a program name with arguments.  
compiler=$CC
```



```

# Check for command to grab the raw symbol name followed by C symbol
from nm.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking command to parse $NM
output from $compiler object" >&5
$as_echo_n "checking command to parse $NM output from $compiler
object... " >&6; }
if ${lt_cv_sys_global_symbol_pipe+:} false; then :
  $as_echo_n "(cached) " >&6
else

# These are sane defaults that work on at least a few old systems.
# [They come from Ultrix.  What could be older than Ultrix?!! ;)]

# Character class describing NM global symbol codes.
symcode=' [BCDEGRST] '

# Regexp to match symbols that can be accessed directly from C.
sympat='\( [_A-Za-z] [_A-Za-z0-9]* \)'

# Define system-specific variables.
case $host_os in
aix*)
  symcode=' [BCDT] '
  ;;
cygwin* | mingw* | pw32* | cegcc*)
  symcode=' [ABCDGISTW] '
  ;;
hpux*)
  if test "$host_cpu" = ia64; then
    symcode=' [ABCDEGRST] '
  fi
  ;;
irix* | nonstopux*)
  symcode=' [BCDEGRST] '
  ;;
osf*)
  symcode=' [BCDEGQRST] '
  ;;
solaris*)
  symcode=' [BDRT] '
  ;;
sco3.2v5*)
  symcode=' [DT] '
  ;;
sysv4.2uw2*)
  symcode=' [DT] '
  ;;
sysv5* | sco5v6* | unixware* | OpenUNIX*)
  symcode=' [ABDT] '
  ;;
sysv4)
  symcode=' [DFNSTU] '

```

```

;;
esac

# If we're using GNU nm, then use its standard symbol codes.
case `\$NM -V 2>&1` in
*GNU* | *'with BFD'*)
    symcode='[ABCDGIRSTW]' ;;
esac

# Transform an extracted symbol line into a proper C declaration.
# Some systems (esp. on ia64) link data and code symbols differently,
# so use this general approach.
lt_cv_sys_global_symbol_to_cdecl="sed -n -e 's/^T .* \\.*/extern
int \1();/p' -e 's/^\$symcode* .* \\.*/extern char \1;/p'"

# Transform an extracted symbol line into symbol name and symbol
address
lt_cv_sys_global_symbol_to_c_name_address="sed -n -e 's/^: \.([\^ ]*)[
]*\$/ {\\\"1\\\", (void *) 0},/p' -e 's/^\$symcode* \.([\^ ]*) \.([\^
]*)\$/ {\\\"2\\\", (void *) \&2},/p'"
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix="sed -n -e 's/^:
\([\^ ]*)[\ ]*\$/ {\\\"1\\\", (void *) 0},/p' -e 's/^\$symcode* \.([\^
]*)\ \.lib[\^ ]*\$/ {\\\"2\\\", (void *) \&2},/p' -e 's/^\$symcode* \.([\^
]*)\ \.([\^ ]*)\$/ {\\\"lib2\\\", (void *) \&2},/p'"

# Handle CRLF in mingw tool chain
opt_cr=
case \$build_os in
mingw*)
    opt_cr='\$ECHO 'x\{0,1\}' | tr x '\015'` # option cr in regexp
;;
esac

# Try without a prefix underscore, then with it.
for ac_symprfx in "" "_"; do

    # Transform symcode, sympat, and symprfx into a raw symbol and a C
symbol.
    symxfrm="\\1 \$ac_symprfx\\2 \\2"

    # Write the raw and C identifiers.
    if test "\$lt_cv_nm_interface" = "MS dumpbin"; then
        # Fake it for dumpbin and say T for any non-static function
        # and D for any global variable.
        # Also find C++ and __fastcall symbols from MSVC++,
        # which start with @ or ?.
        lt_cv_sys_global_symbol_pipe="\$AWK '\\"
" {last_section=section; section=\\$ 3};\\"
" /^COFF SYMBOL TABLE/{for(i in hide) delete hide[i]};"\
" /Section length .*#relocs.*(pick any){hide[last_section]=1};"\
" \\$ 0!~/External *\\|/{next};"\
" / 0+ UNDEF /{next}; / UNDEF \.([\^|])\.*()/ {next};"\

```

```

"      {if(hide[section]) next};"\
"      {f=0}; \${ 0~/\(\).*\|/{f=1}; {printf f ? \ "T \ " : \ "D \ "};"\
"      {split(\$ 0, a, /\|\\r/); split(a[2], s)};"\
"      s[1]~/^[@?]/{print s[1], s[1]; next};"\
"      s[1]~prfx {split(s[1],t,@"\"); print t[1],
substr(t[1],length(prfx))}"\
"      ' prfx=^$ac_symprfx"
else
  lt_cv_sys_global_symbol_pipe="sed -n -e 's/^[.*[
\]($symcode$symcode*\)[
]*$ac_symprfx$sympat$opt_cr$/$symxfrm/p'"
  fi
  lt_cv_sys_global_symbol_pipe="$lt_cv_sys_global_symbol_pipe | sed '/
__gnu_lto/d'"

# Check to see that the pipe works correctly.
pipe_works=no

rm -f conftest*
cat > conftest.$ac_ext <<_LT_EOF
#ifdef __cplusplus
extern "C" {
#endif
char nm_test_var;
void nm_test_func(void);
void nm_test_func(void){}
#ifdef __cplusplus
}
#endif
int main(){nm_test_var='a';nm_test_func();return(0);}
_LT_EOF

if { { eval echo "\$as_me\" : ${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me : ${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; }; then
  # Now try to grab the symbols.
  nlist=conftest.nm
  if { { eval echo "\$as_me\" : ${as_lineno-$LINENO}: \"$NM
conftest.$ac_objext \ | \"$lt_cv_sys_global_symbol_pipe" \> $nlist\""; }
>&5
(eval $NM conftest.$ac_objext \ | \"$lt_cv_sys_global_symbol_pipe" \>
$nlist) 2>&5
ac_status=$?
$as_echo "$as_me : ${as_lineno-$LINENO}: \$? = $ac_status" >&5
test $ac_status = 0; } && test -s "$nlist"; then
  # Try sorting and uniquifying the output.
  if sort "$nlist" | uniq > "$nlist.T"; then
    mv -f "$nlist.T" "$nlist"
  else

```

```

rm -f "$nlist"
fi

# Make sure that we snagged all the symbols we need.
if $GREP ' nm_test_var$' "$nlist" >/dev/null; then
if $GREP ' nm_test_func$' "$nlist" >/dev/null; then
    cat <<_LT_EOF > conftest.$ac_ext
/* Keep this code in sync between libtool.m4, ltmain, lt_system.h, and
tests. */
#if defined(_WIN32) || defined(__CYGWIN__) || defined(_WIN32_WCE)
/* DATA imports from DLLs on WIN32 con't be const, because runtime
relocations are performed -- see ld's documentation on pseudo-
relocs. */
# define LT@&t@_DLSYM_CONST
#elif defined(__osf__)
/* This system does not cope well with relocations in const data. */
# define LT@&t@_DLSYM_CONST
#else
# define LT@&t@_DLSYM_CONST const
#endif

#ifdef __cplusplus
extern "C" {
#endif

_LT_EOF
    # Now generate the symbol file.
    eval "$lt_cv_sys_global_symbol_to_cdecl" < "$nlist" | $GREP -v
main >> conftest.$ac_ext'

    cat <<_LT_EOF >> conftest.$ac_ext

/* The mapping between symbol names and symbols. */
LT@&t@_DLSYM_CONST struct {
    const char *name;
    void *address;
}
lt__PROGRAM__LTX_preloaded_symbols[] =
{
    { "@PROGRAM@", (void *) 0 },
_LT_EOF
    $SED "s/^$symcode$symcode* \(.*\) \(.*)$/ {\\"2\", (void *)
&2},/" < "$nlist" | $GREP -v main >> conftest.$ac_ext
    cat <<\_LT_EOF >> conftest.$ac_ext
    {0, (void *) 0}
};

/* This works around a problem in FreeBSD linker */
#ifdef FREEBSD_WORKAROUND
static const void *lt_preloaded_setup() {
    return lt__PROGRAM__LTX_preloaded_symbols;
}

```

```

#endif

#ifdef __cplusplus
}
#endif
_LT_EOF

# Now try linking the two files.
mv confptest.$ac_objext confftstm.$ac_objext
lt_globsym_save_LIBS=$LIBS
lt_globsym_save_CFLAGS=$CFLAGS
LIBS="confftstm.$ac_objext"
CFLAGS="$CFLAGS$lt_prog_compiler_no_builtin_flag"
if { { eval echo "\$as_me\" : ${as_lineno-$LINENO}:
\"$ac_link\""; } >&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me: ${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } && test -s confptest${ac_exeext}; then
  pipe_works=yes
  fi
  LIBS=$lt_globsym_save_LIBS
  CFLAGS=$lt_globsym_save_CFLAGS
  else
  echo "cannot find nm_test_func in $nlist" >&5
  fi
  else
  echo "cannot find nm_test_var in $nlist" >&5
  fi
  else
  echo "cannot run $lt_cv_sys_global_symbol_pipe" >&5
  fi
  else
  echo "$progname: failed program was:" >&5
  cat confptest.$ac_ext >&5
  fi
rm -rf confptest* confftst*

# Do not use the global_symbol_pipe unless it works.
if test "$pipe_works" = yes; then
  break
else
  lt_cv_sys_global_symbol_pipe=
  fi
done

fi

if test -z "$lt_cv_sys_global_symbol_pipe"; then
  lt_cv_sys_global_symbol_to_cdecl=
  fi
if test -z
"$lt_cv_sys_global_symbol_pipe$lt_cv_sys_global_symbol_to_cdecl"; then

```

```
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: failed" >&5
  $sas_echo "failed" >&6; }
else
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: ok" >&5
  $sas_echo "ok" >&6; }
fi

# Response file support.
if test "$lt_cv_nm_interface" = "MS dumpbin"; then
  nm_file_list_spec='@'
elif $NM --help 2>/dev/null | grep '[@]FILE' >/dev/null; then
  nm_file_list_spec='@'
fi
```

```
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for sysroot" >&5
  $sas_echo_n "checking for sysroot... " >&6; }
```

```
@%:@ Check whether --with-libtool-sysroot was given.
if test "${with_libtool_sysroot+set}" = set; then :
  withval=$with_libtool_sysroot;
else
  with_libtool_sysroot=no
fi
```

```
lt_sysroot=
```

```

case ${with_libtool_sysroot} in #(
  yes)
    if test "$GCC" = yes; then
      lt_sysroot=`$CC --print-sysroot 2>/dev/null`
    fi
    ;; #(
/*)
  lt_sysroot=`echo "$with_libtool_sysroot" | sed -e
"$sed_quote_subst"`
  ;; #(
no|'')
  ;; #(
*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
${with_libtool_sysroot}" >&5
$as_echo "$${with_libtool_sysroot}" >&6; }
  as_fn_error $? "The sysroot must be an absolute path." "$LINENO" 5
  ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: ${lt_sysroot:-no}"
>&5
$as_echo "$${lt_sysroot:-no}" >&6; }

```

```

@%:@ Check whether --enable-libtool-lock was given.
if test "${enable_libtool_lock+set}" = set; then :
  enableval=$enable_libtool_lock;
fi

```

```

test "x$enable_libtool_lock" != xno && enable_libtool_lock=yes

```

```

# Some flags need to be propagated to the compiler or linker for good
# libtool support.

```

```

case $host in
ia64-*-hpux*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:"
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
test $ac_status = 0; }; then
  case ` /usr/bin/file conftest.$ac_objext` in
    *ELF-32*)
      HPUX_IA64_MODE="32"
    ;;
    *ELF-64*)

```

```

        HPUX_IA64_MODE="64"
        ;;
    esac
fi
rm -rf confptest*
;;
*-*-irix6*)
# Find out which ABI we are using.
echo '#line '$LINENO' "configure"' > confptest.$ac_ext
if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }; then
    if test "$lt_cv_prog_gnu_ld" = yes; then
        case ` /usr/bin/file confptest.$ac_objext` in
            *32-bit*)
                LD="{LD-ld} -melf32bsmip"
                ;;
            *N32*)
                LD="{LD-ld} -melf32bmipn32"
                ;;
            *64-bit*)
                LD="{LD-ld} -melf64bmip"
                ;;
        esac
    else
        case ` /usr/bin/file confptest.$ac_objext` in
            *32-bit*)
                LD="{LD-ld} -32"
                ;;
            *N32*)
                LD="{LD-ld} -n32"
                ;;
            *64-bit*)
                LD="{LD-ld} -64"
                ;;
        esac
    fi
fi
rm -rf confptest*
;;

x86_64-*kfreebsd*-gnu|x86_64-*linux*|ppc*-*linux*|powerpc*-*linux*| \
s390*-*linux*|s390*-*tpf*|sparc*-*linux*)
# Find out which ABI we are using.
echo 'int i;' > confptest.$ac_ext
if { { eval echo "\"\${as_me}\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?

```



```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then
  case ` /usr/bin/file conftest.o` in
    *32-bit*)
      case $host in
        x86_64-*kfreebsd*-gnu)
          LD="${LD-ld} -m elf_i386_fbsd"
          ;;
        x86_64-*linux*)
          LD="${LD-ld} -m elf_i386"
          ;;
        ppc64-*linux*|powerpc64-*linux*)
          LD="${LD-ld} -m elf32ppclinux"
          ;;
        s390x-*linux*)
          LD="${LD-ld} -m elf_s390"
          ;;
        sparc64-*linux*)
          LD="${LD-ld} -m elf32_sparc"
          ;;
      esac
    ;;
    *64-bit*)
      case $host in
        x86_64-*kfreebsd*-gnu)
          LD="${LD-ld} -m elf_x86_64_fbsd"
          ;;
        x86_64-*linux*)
          LD="${LD-ld} -m elf_x86_64"
          ;;
        ppc*-*linux*|powerpc*-*linux*)
          LD="${LD-ld} -m elf64ppc"
          ;;
        s390*-*linux*|s390*-*tpf*)
          LD="${LD-ld} -m elf64_s390"
          ;;
        sparc*-*linux*)
          LD="${LD-ld} -m elf64_sparc"
          ;;
      esac
    ;;
  esac
fi
rm -rf conftest*
;;

*-*-sco3.2v5*)
  # On SCO OpenServer 5, we need -belf to get full-featured binaries.
  SAVE_CFLAGS="$CFLAGS"
  CFLAGS="$CFLAGS -belf"
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the C
  compiler needs -belf" >&5

```

```

$as_echo_n "checking whether the C compiler needs -belf... " >&6; }
if ${lt_cv_cc_needs_belf+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_ext=c
  ac_cpp='$CPP $CPPFLAGS'
  ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
  ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
  ac_compiler_gnu=$ac_cv_c_compiler_gnu

  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_cc_needs_belf=yes
else
  lt_cv_cc_needs_belf=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  ac_ext=c
  ac_cpp='$CPP $CPPFLAGS'
  ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
  ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
  ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_cc_needs_belf"
>&5
$as_echo "$lt_cv_cc_needs_belf" >&6; }
if test x"$lt_cv_cc_needs_belf" != x"yes"; then
  # this is probably gcc 2.8.0, egcs 1.0 or newer; no need for -belf
  CFLAGS="$SAVE_CFLAGS"
fi
;;
*-solaris*)
  # Find out which ABI we are using.
  echo 'int i;' > conftest.$ac_ext
  if { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
  (eval $ac_compile) 2>&5
  ac_status=$?

```

```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then
  case ` /usr/bin/file conftest.o` in
  *64-bit*)
    case $lt_cv_prog_gnu_ld in
    yes*)
      case $host in
      i?86-*-solaris*)
        LD="${LD-ld} -m elf_x86_64"
        ;;
      sparc*-*-solaris*)
        LD="${LD-ld} -m elf64_sparc"
        ;;
      esac
      # GNU ld 2.21 introduced _sol2 emulations. Use them if
available.
      if ${LD-ld} -V | grep _sol2 >/dev/null 2>&1; then
        LD="${LD-ld}_sol2"
      fi
      ;;
    *)
      if ${LD-ld} -64 -r -o conftest2.o conftest.o >/dev/null 2>&1;
then
        LD="${LD-ld} -64"
      fi
      ;;
    esac
  ;;
esac
fi
rm -rf conftest*
;;
esac

need_locks="$enable_libtool_lock"

if test -n "$ac_tool_prefix"; then
  # Extract the first word of "${ac_tool_prefix}mt", so it can be a
program name with args.
  set dummy ${ac_tool_prefix}mt; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$MANIFEST_TOOL"; then
      ac_cv_prog_MANIFEST_TOOL="$MANIFEST_TOOL" # Let the user override
the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_MANIFEST_TOOL="${ac_tool_prefix}mt"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
MANIFEST_TOOL=$ac_cv_prog_MANIFEST_TOOL
if test -n "$MANIFEST_TOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MANIFEST_TOOL" >&5
$as_echo "$MANIFEST_TOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_MANIFEST_TOOL"; then
  ac_ct_MANIFEST_TOOL=$MANIFEST_TOOL
  # Extract the first word of "mt", so it can be a program name with
  args.
  set dummy mt; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_MANIFEST_TOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_MANIFEST_TOOL"; then
      ac_cv_prog_ac_ct_MANIFEST_TOOL="$ac_ct_MANIFEST_TOOL" # Let the user
      override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_MANIFEST_TOOL="mt"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        fi
      done
    fi
  fi

```

```

done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_MANIFEST_TOOL=$ac_cv_prog_ac_ct_MANIFEST_TOOL
if test -n "$ac_ct_MANIFEST_TOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_ct_MANIFEST_TOOL" >&5
$as_echo "$ac_ct_MANIFEST_TOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_MANIFEST_TOOL" = x; then
    MANIFEST_TOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    MANIFEST_TOOL=$ac_ct_MANIFEST_TOOL
  fi
else
  MANIFEST_TOOL="$ac_cv_prog_MANIFEST_TOOL"
fi

test -z "$MANIFEST_TOOL" && MANIFEST_TOOL=mt
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $MANIFEST_TOOL is
a manifest tool" >&5
$as_echo_n "checking if $MANIFEST_TOOL is a manifest tool... " >&6; }
if ${lt_cv_path_manifest_tool+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_path_manifest_tool=no
  echo "$as_me:$LINENO: $MANIFEST_TOOL '-?'" >&5
  $MANIFEST_TOOL '-?' 2>conftest.err > conftest.out
  cat conftest.err >&5
  if $GREP 'Manifest Tool' conftest.out > /dev/null; then
    lt_cv_path_manifest_tool=yes
  fi
  rm -f conftest*
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_path_manifest_tool" >&5
$as_echo "$lt_cv_path_manifest_tool" >&6; }

```

```

if test "x$lt_cv_path_manifest_tool" != xyes; then
  MANIFEST_TOOL=:
fi

case $host_os in
  rhapsody* | darwin*)
    if test -n "$ac_tool_prefix"; then
      # Extract the first word of "${ac_tool_prefix}dsymutil", so it can
      be a program name with args.
      set dummy ${ac_tool_prefix}dsymutil; ac_word=$2
      { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
      $as_echo_n "checking for $ac_word... " >&6; }
      if ${ac_cv_prog_DSYMUTIL+:} false; then :
        $as_echo_n "(cached) " >&6
      else
        if test -n "$DSYMUTIL"; then
          ac_cv_prog_DSYMUTIL="$DSYMUTIL" # Let the user override the test.
        else
          as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
          for as_dir in $PATH
          do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.
            for ac_exec_ext in ' $ac_executable_extensions; do
              if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                ac_cv_prog_DSYMUTIL="${ac_tool_prefix}dsymutil"
                $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                break 2
              fi
            done
          done
          IFS=$as_save_IFS

          fi
          fi
          DSYMUTIL=$ac_cv_prog_DSYMUTIL
          if test -n "$DSYMUTIL"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DSYMUTIL" >&5
            $as_echo "$DSYMUTIL" >&6; }
          else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
            $as_echo "no" >&6; }
          fi
        fi
      fi
    fi
  fi

```

```

if test -z "$ac_cv_prog_DSYMUTIL"; then
  ac_ct_DSYMUTIL=$DSYMUTIL
  # Extract the first word of "dsymutil", so it can be a program name
  with args.
  set dummy dsymutil; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_DSYMUTIL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_DSYMUTIL"; then
      ac_cv_prog_ac_ct_DSYMUTIL="$ac_ct_DSYMUTIL" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_DSYMUTIL="dsymutil"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      ac_ct_DSYMUTIL=$ac_cv_prog_ac_ct_DSYMUTIL
      if test -n "$ac_ct_DSYMUTIL"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_DSYMUTIL"
        >&5
        $as_echo "$ac_ct_DSYMUTIL" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      if test "x$ac_ct_DSYMUTIL" = x; then
        DSYMUTIL=":"
      else
        case $cross_compiling:$ac_tool_warned in
        yes:)
          { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
          not prefixed with host triplet" >&5
          $as_echo "$as_me: WARNING: using cross tools not prefixed with host
          triplet" >&2;}
          ac_tool_warned=yes ;;

```

```

esac
    DSYMUTIL=${ac_ct_DSYMUTIL}
    fi
else
    DSYMUTIL="$ac_cv_prog_DSYMUTIL"
fi

    if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}nmedit", so it can be
a program name with args.
set dummy ${ac_tool_prefix}nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_NMEDIT+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test -n "$NMEDIT"; then
        ac_cv_prog_NMEDIT="$NMEDIT" # Let the user override the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
        ac_cv_prog_NMEDIT="${ac_tool_prefix}nmedit"
        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
    done
IFS=$as_save_IFS

fi
fi
NMEDIT=${ac_cv_prog_NMEDIT}
if test -n "$NMEDIT"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $NMEDIT" >&5
$as_echo "$NMEDIT" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_NMEDIT"; then
    ac_ct_NMEDIT=$NMEDIT
    # Extract the first word of "nmedit", so it can be a program name
with args.

```



```

set dummy nmedit; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_NMEDIT+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_NMEDIT"; then
    ac_cv_prog_ac_ct_NMEDIT="$ac_ct_NMEDIT" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_NMEDIT="nmedit"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
  done
IFS=$as_save_IFS

fi
fi
ac_ct_NMEDIT=$ac_cv_prog_ac_ct_NMEDIT
if test -n "$ac_ct_NMEDIT"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_NMEDIT" >&5
$as_echo "$ac_ct_NMEDIT" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_NMEDIT" = x; then
    NMEDIT=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    NMEDIT=$ac_ct_NMEDIT
  fi
else
  NMEDIT="$ac_cv_prog_NMEDIT"

```

```

fi

    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}lipo", so it can be a
        program name with args.
        set dummy ${ac_tool_prefix}lipo; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
        $as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_LIPO+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            if test -n "$LIPO"; then
                ac_cv_prog_LIPO="$LIPO" # Let the user override the test.
            else
                as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
                for as_dir in $PATH
                do
                    IFS=$as_save_IFS
                    test -z "$as_dir" && as_dir=.
                    for ac_exec_ext in ' ' $ac_executable_extensions; do
                        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                            ac_cv_prog_LIPO="${ac_tool_prefix}lipo"
                            $as_echo "$as_me:${as_lineno-$LINENO}: found
                            $as_dir/$ac_word$ac_exec_ext" >&5
                            break 2
                        fi
                    done
                done
                IFS=$as_save_IFS

            fi
        fi

        LIPO=$ac_cv_prog_LIPO
        if test -n "$LIPO"; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LIPO" >&5
            $as_echo "$LIPO" >&6; }
        else
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
            $as_echo "no" >&6; }
        fi
    fi

fi

if test -z "$ac_cv_prog_LIPO"; then
    ac_ct_LIPO=$LIPO
    # Extract the first word of "lipo", so it can be a program name with
    args.
    set dummy lipo; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_ac_ct_LIPO+:} false; then :
        $as_echo_n "(cached) " >&6

```

```

else
  if test -n "$ac_ct_LIPO"; then
    ac_cv_prog_ac_ct_LIPO="$ac_ct_LIPO" # Let the user override the
test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_ac_ct_LIPO="lipo"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
ac_ct_LIPO=$ac_cv_prog_ac_ct_LIPO
if test -n "$ac_ct_LIPO"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_LIPO" >&5
$as_echo "$ac_ct_LIPO" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_LIPO" = x; then
    LIPO=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    LIPO=$ac_ct_LIPO
  fi
else
  LIPO="$ac_cv_prog_LIPO"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool", so it can be a
program name with args.

```

```

set dummy ${ac_tool_prefix}otool; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_OTOOL+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$OTOOL"; then
    ac_cv_prog_OTOOL="$OTOOL" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_OTOOL="${ac_tool_prefix}otool"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
OTOOL=$ac_cv_prog_OTOOL
if test -n "$OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL" >&5
$as_echo "$OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL"; then
  ac_ct_OTOOL=$OTOOL
  # Extract the first word of "otool", so it can be a program name
  with args.
  set dummy otool; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL"; then
      ac_cv_prog_ac_ct_OTOOL="$ac_ct_OTOOL" # Let the user override the
      test.
    else

```

```

as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_OTOOL="otool"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_OTOOL=$ac_cv_prog_ac_ct_OTOOL
if test -n "$ac_ct_OTOOL"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL" >&5
$as_echo "$ac_ct_OTOOL" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_OTOOL" = x; then
    OTOOL=":"
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    OTOOL=$ac_ct_OTOOL
  fi
else
  OTOOL="$ac_cv_prog_OTOOL"
fi

  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}otool64", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}otool64; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_OTOOL64+:} false; then :
      $as_echo_n "(cached) " >&6

```

```

else
  if test -n "$OTOOL64"; then
    ac_cv_prog_OTOOL64="$OTOOL64" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_prog_OTOOL64="{ac_tool_prefix}otool64"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

fi
fi
OTOOL64=$ac_cv_prog_OTOOL64
if test -n "$OTOOL64"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $OTOOL64" >&5
$as_echo "$OTOOL64" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_prog_OTOOL64"; then
  ac_ct_OTOOL64=$OTOOL64
  # Extract the first word of "otool64", so it can be a program name
  with args.
  set dummy otool64; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_OTOOL64+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_OTOOL64"; then
      ac_cv_prog_ac_ct_OTOOL64="$ac_ct_OTOOL64" # Let the user override
the test.
    else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_OTOOL64="otool64"
            $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
    done
IFS=$sas_save_IFS

fi
fi
ac_ct_OTOOL64=$ac_cv_prog_ac_ct_OTOOL64
if test -n "$ac_ct_OTOOL64"; then
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_ct_OTOOL64" >&5
    $sas_echo "$ac_ct_OTOOL64" >&6; }
else
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $sas_echo "no" >&6; }
fi

    if test "x$ac_ct_OTOOL64" = x; then
        OTOOL64=":"
    else
        case $cross_compiling:$ac_tool_warned in
        yes:)
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
        $sas_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
        ac_tool_warned=yes ;;
        esac
        OTOOL64=$ac_ct_OTOOL64
    fi
else
    OTOOL64="$ac_cv_prog_OTOOL64"
fi

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
single_module linker flag" >&5
$as_echo_n "checking for -single_module linker flag... " >&6; }
if ${lt_cv_apple_cc_single_mod+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_apple_cc_single_mod=no
  if test -z "${LT_MULTI_MODULE}"; then
    # By default we will add the -single_module flag. You can
override
    # by either setting the environment variable LT_MULTI_MODULE
    # non-empty at configure time, or by adding -multi_module to the
    # link flags.
    rm -rf libconfptest.dylib*
    echo "int foo(void){return 1;}" > confptest.c
    echo "$LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
-dynamiclib -Wl,-single_module confptest.c" >&5
    $LTCC $LTCFLAGS $LDFLAGS -o libconfptest.dylib \
    -dynamiclib -Wl,-single_module confptest.c 2>confptest.err
    _lt_result=$?
    # If there is a non-empty error log, and "single_module"
    # appears in it, assume the flag caused a linker warning
    if test -s confptest.err && $GREP single_module confptest.err;
then
      cat confptest.err >&5
      # Otherwise, if the output was created with a 0 exit code from
      # the compiler, it worked.
      elif test -f libconfptest.dylib && test $_lt_result -eq 0; then
        lt_cv_apple_cc_single_mod=yes
      else
        cat confptest.err >&5
      fi
      rm -rf libconfptest.dylib*
      rm -f confptest.*
    fi
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_apple_cc_single_mod" >&5
$as_echo "$lt_cv_apple_cc_single_mod" >&6; }

```



```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -
exported_symbols_list linker flag" >&5
$as_echo_n "checking for -exported_symbols_list linker flag... " >&6;
}
if ${lt_cv_ld_exported_symbols_list+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_exported_symbols_list=no
  save_LDFLAGS=$LDFLAGS
  echo "_main" > conftest.sym
  LDFLAGS="$LDFLAGS -Wl,-exported_symbols_list,conftest.sym"
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  lt_cv_ld_exported_symbols_list=yes
else
  lt_cv_ld_exported_symbols_list=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_ld_exported_symbols_list" >&5
$as_echo "$lt_cv_ld_exported_symbols_list" >&6; }

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for -force_load
linker flag" >&5
$as_echo_n "checking for -force_load linker flag... " >&6; }
if ${lt_cv_ld_force_load+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_ld_force_load=no
  cat > conftest.c << _LT_EOF
int forced_loaded() { return 2;}
_LT_EOF
  echo "$LTCC $LTCFLAGS -c -o conftest.o conftest.c" >&5
  $LTCC $LTCFLAGS -c -o conftest.o conftest.c 2>&5
  echo "$AR cru libconftest.a conftest.o" >&5
  $AR cru libconftest.a conftest.o 2>&5
  echo "$RANLIB libconftest.a" >&5

```

```

        $RANLIB libconfptest.a 2>&5
        cat > confptest.c << _LT_EOF
int main() { return 0;}
_LT_EOF
        echo "$LTCC $LTCFLAGS $LDFLAGS -o confptest confptest.c -Wl,-
force_load,./libconfptest.a" >&5
        $LTCC $LTCFLAGS $LDFLAGS -o confptest confptest.c -Wl,-
force_load,./libconfptest.a 2>confptest.err
        _lt_result=$?
        if test -s confptest.err && $GREP force_load confptest.err; then
            cat confptest.err >&5
        elif test -f confptest && test $_lt_result -eq 0 && $GREP
forced_load confptest >/dev/null 2>&1 ; then
            lt_cv_ld_force_load=yes
        else
            cat confptest.err >&5
        fi
        rm -f confptest.err libconfptest.a confptest confptest.c
        rm -rf confptest.dSYM

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_ld_force_load"
>&5
$as_echo "$lt_cv_ld_force_load" >&6; }
        case $host_os in
            rhapsody* | darwin1.[012])
                _lt_dar_allow_undefined='${wl}-undefined ${wl}suppress' ;;
            darwin1.*)
                _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
            darwin*) # darwin 5.x on
                # if running on 10.5 or later, the deployment target defaults
                # to the OS version, if on x86, and 10.4, the deployment
                # target defaults to 10.4. Don't you love it?
                case ${MACOSX_DEPLOYMENT_TARGET-10.0},$host in
                    10.0,*86*-darwin8*|10.0,*-darwin[91]*)
                        _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
                ;;
                    10.[012]*)
                        _lt_dar_allow_undefined='${wl}-flat_namespace ${wl}-undefined
${wl}suppress' ;;
                    10.*)
                        _lt_dar_allow_undefined='${wl}-undefined ${wl}dynamic_lookup'
                ;;
                esac
        ;;
        esac
        ;;
esac
        if test "$lt_cv_apple_cc_single_mod" = "yes"; then
            _lt_dar_single_mod='$single_module'
        fi
        if test "$lt_cv_ld_exported_symbols_list" = "yes"; then

```

```

        _lt_dar_export_syms=' ${wl}-
exported_symbols_list,$output_objdir/${libname}-symbols.expsym'
    else
        _lt_dar_export_syms='~$NMEDIT -s $output_objdir/${libname}-
symbols.expsym ${lib}'
    fi
    if test "$DSYMUTIL" != ":" && test "$lt_cv_ld_force_load" = "no";
then
        _lt_dsymutil='~$DSYMUTIL $lib || :'
    else
        _lt_dsymutil=
    fi
    ;;
esac

```

```

for ac_header in dlfcn.h
do :
    ac_fn_c_check_header_compile "$LINENO" "dlfcn.h"
"ac_cv_header_dlfcn_h" "$ac_includes_default
"
    if test "x$ac_cv_header_dlfcn_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DLFCN_H 1
_ACEOF
    fi
done

```

```

func_stripname_cnf ()
{
    case ${2} in
        .*) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%\\\\\\$2\\$%"`;;
        *) func_stripname_result=`$ECHO "${3}" | $SED "s%^${1}%%;
s%$2\\$%"`;;
    esac
} # func_stripname_cnf

```

```

# Set options

```

```

    enable_dlopen=no

```

```
enable_win32_dll=no
```

```
    @%:@ Check whether --enable-shared was given.
if test "${enable_shared+set}" = set; then :
  enableval=$enable_shared; p=${PACKAGE-default}
  case $enableval in
    yes) enable_shared=yes ;;
    no) enable_shared=no ;;
    *)
      enable_shared=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_shared=yes
        fi
      done
      IFS="$lt_save_ifs"
      ;;
  esac
else
  enable_shared=yes
fi
```

```
    @%:@ Check whether --enable-static was given.
if test "${enable_static+set}" = set; then :
  enableval=$enable_static; p=${PACKAGE-default}
  case $enableval in
    yes) enable_static=yes ;;
    no) enable_static=no ;;
    *)
      enable_static=no
      # Look at the argument we got.  We use all the common list
separators.
      lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
      for pkg in $enableval; do
        IFS="$lt_save_ifs"
        if test "X$pkg" = "X$p"; then
          enable_static=yes
        fi
      done
```

```

        done
        IFS="$lt_save_ifs"
        ;;
    esac
else
    enable_static=yes
fi

```

```

@%:@ Check whether --with-pic was given.
if test "${with_pic+set}" = set; then :
    withval=$with_pic; lt_p=${PACKAGE-default}
    case $withval in
        yes|no) pic_mode=$withval ;;
        *)
            pic_mode=default
            # Look at the argument we got.  We use all the common list
            separators.
            lt_save_ifs="$IFS"; IFS="${IFS}$PATH_SEPARATOR,"
            for lt_pkg in $withval; do
                IFS="$lt_save_ifs"
                if test "X$lt_pkg" = "X$lt_p"; then
                    pic_mode=yes
                fi
            done
            IFS="$lt_save_ifs"
            ;;
    esac
else
    pic_mode=default
fi

```

```

test -z "$pic_mode" && pic_mode=default

```

```

@%:@ Check whether --enable-fast-install was given.
if test "${enable_fast_install+set}" = set; then :
    enableval=$enable_fast_install; p=${PACKAGE-default}

```

```
case $enableval in
yes) enable_fast_install=yes ;;
no) enable_fast_install=no ;;
*)
    enable_fast_install=no
    # Look at the argument we got. We use all the common list
separators.
    lt_save_ifs="$IFS"; IFS="{IFS}$PATH_SEPARATOR,"
    for pkg in $enableval; do
IFS="$lt_save_ifs"
if test "X$pkg" = "Xp"; then
    enable_fast_install=yes
fi
done
IFS="$lt_save_ifs"
;;
esac
else
    enable_fast_install=yes
fi
```

```
# This can be used to rebuild libtool when needed
LIBTOOL_DEPS="$ltmain"
```

```
# Always use our own libtool.
LIBTOOL='$(top_builddir) '
LIBTOOL="$LIBTOOL/${host_alias}-libtool"
```

```
test -z "$LN_S" && LN_S="ln -s"
```

```
if test -n "${ZSH_VERSION+set}" ; then  
  setopt NO_GLOB_SUBST  
fi
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for objdir" >&5  
$as_echo_n "checking for objdir... " >&6; }  
if ${lt_cv_objdir+:} false; then :  
  $as_echo_n "(cached) " >&6  
else  
  rm -f .libs 2>/dev/null  
  mkdir .libs 2>/dev/null  
  if test -d .libs; then  
    lt_cv_objdir=.libs  
  else  
    # MS-DOS does not allow filenames that begin with a dot.  
    lt_cv_objdir=_libs  
  fi  
  rmdir .libs 2>/dev/null  
fi  
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_objdir" >&5  
$as_echo "$lt_cv_objdir" >&6; }  
objdir=$lt_cv_objdir
```

```

cat >>confdefs.h <<_ACEOF
@%:@define LT_OBJDIR "$lt_cv_objdir/"
_ACEOF

case $host_os in
aix3*)
  # AIX sometimes has problems with the GCC collect2 program.  For
  some
  # reason, if we set the COLLECT_NAMES environment variable, the
  problems
  # vanish in a puff of smoke.
  if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
  fi
  ;;
esac

# Global variables:
ofile=${host_alias}-libtool
can_build_shared=yes

# All known linkers require a `.a' archive for static linking (except
MSVC,
# which needs '.lib').
libext=a

with_gnu_ld="$lt_cv_prog_gnu_ld"

old_CC="$CC"
old_CFLAGS="$CFLAGS"

# Set sane defaults for various variables
test -z "$CC" && CC=cc
test -z "$LTCC" && LTCC=$CC
test -z "$LTCFLAGS" && LTCFLAGS=$CFLAGS
test -z "$LD" && LD=ld
test -z "$ac_objext" && ac_objext=o

for cc_temp in $compiler""; do
  case $cc_temp in
    compile | *[\//]compile | ccache | *[\//]ccache ) ;;
    distcc | *[\//]distcc | purify | *[\//]purify ) ;;
    \-*) ;;
  esac
done

```



```

    *) break;;
  esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^$host_alias-%%"

# Only perform the check for file, if the check method requires it
test -z "$MAGIC_CMD" && MAGIC_CMD=file
case $deplibs_check_method in
file_magic*)
  if test "$file_magic_cmd" = '$MAGIC_CMD'; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
${ac_tool_prefix}file" >&5
$as_echo_n "checking for ${ac_tool_prefix}file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
[\\/*] | ?:[\\/*]*)
  lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
  ;;
*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
  for ac_dir in $ac_dummy; do
    IFS="$lt_save_ifs"
    test -z "$ac_dir" && ac_dir=.
    if test -f $ac_dir/${ac_tool_prefix}file; then
      lt_cv_path_MAGIC_CMD="$ac_dir/${ac_tool_prefix}file"
      if test -n "$file_magic_test_file"; then
        case $deplibs_check_method in
"file_magic" *)
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

```

```

_LT_EOF
    fi ;;
    esac
    fi
    break
    fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

if test -z "$lt_cv_path_MAGIC_CMD"; then
  if test -n "$ac_tool_prefix"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for file" >&5
$as_echo_n "checking for file... " >&6; }
if ${lt_cv_path_MAGIC_CMD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $MAGIC_CMD in
  [\\/*] | ?:[\\/*]*)
    lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
    ;;
*)
    lt_save_MAGIC_CMD="$MAGIC_CMD"
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    ac_dummy="/usr/bin$PATH_SEPARATOR$PATH"
    for ac_dir in $ac_dummy; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f $ac_dir/file; then
        lt_cv_path_MAGIC_CMD="$ac_dir/file"
        if test -n "$file_magic_test_file"; then
          case $deplibs_check_method in
          "file_magic "*)
            file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`

```

```

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
  $EGREP "$file_magic_regex" > /dev/null; then
  :
else
  cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

_LT_EOF
  fi ;;
esac
fi
break
fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac
fi

MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $MAGIC_CMD" >&5
$as_echo "$MAGIC_CMD" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

else
  MAGIC_CMD=:
fi
fi

fi
;;
esac

# Use C for the default configuration in the libtool script

lt_save_CC="$CC"
ac_ext=c

```

```

ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

# Source file extension for C test sources.
ac_ext=c

# Object file extension for compiled C test sources.
objext=o
objext=$objext

# Code to be used in simple compile tests
lt_simple_compile_test_code="int some_variable = 0;"

# Code to be used in simple link tests
lt_simple_link_test_code='int main(){return(0);}'

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# Save the default compiler, since it gets overwritten when the other
# tags are being tested, and _LT_TAGVAR(compiler, []) is a NOP.
compiler_DEFAULT=$CC

# save warnings/boilerplate of simple test code
ac_outfile=conftest.$ac_objext
echo "$lt_simple_compile_test_code" >conftest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>conftest.err
_lt_compiler_boilerplate=`cat conftest.err`
$RM conftest*

ac_outfile=conftest.$ac_objext
echo "$lt_simple_link_test_code" >conftest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >conftest.err
_lt_linker_boilerplate=`cat conftest.err`
$RM -r conftest*

```

```

if test -n "$compiler"; then

lt_prog_compiler_no_builtin_flag=

if test "$GCC" = yes; then
  case $cc_basename in
  nvcc*)
    lt_prog_compiler_no_builtin_flag=' -Xcompiler -fno-builtin' ;;
  *)
    lt_prog_compiler_no_builtin_flag=' -fno-builtin' ;;
  esac

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -fno-rtti -fno-exceptions" >&5
$as_echo_n "checking if $compiler supports -fno-rtti -fno-
exceptions... " >&6; }
if ${lt_cv_prog_compiler_rtti_exceptions+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_rtti_exceptions=no
  ac_outfile=confptest.$ac_objext
  echo "$lt_simple_compile_test_code" > confptest.$ac_ext
  lt_compiler_flag="-fno-rtti -fno-exceptions"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "confptest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*confptest\. : $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>confptest.err)
  ac_status=$?
  cat confptest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
    $SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
    if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
      lt_cv_prog_compiler_rtti_exceptions=yes
    fi
  fi
fi

```

```

$RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_rtti_exceptions" >&5
$as_echo "$lt_cv_prog_compiler_rtti_exceptions" >&6; }

if test x"$lt_cv_prog_compiler_rtti_exceptions" = xyes; then

lt_prog_compiler_no_builtin_flag="$lt_prog_compiler_no_builtin_flag -
fno-rtti -fno-exceptions"
else
:
fi

fi

lt_prog_compiler_wl=
lt_prog_compiler_pic=
lt_prog_compiler_static=

if test "$GCC" = yes; then
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_static='-static'

case $host_os in
  aix*)
    # All AIX code is PIC.
    if test "$host_cpu" = ia64; then
      # AIX 5 now supports IA64 processor
      lt_prog_compiler_static='-Bstatic'
    fi
    ;;

  amigaos*)
    case $host_cpu in
      powerpc)
        # see comment about AmigaOS4 .so support
        lt_prog_compiler_pic='-fPIC'
        ;;
      m68k)
        # FIXME: we need at least 68020 code to build shared
        libraries, but
        # adding the '-m68020' flag to GCC prevents building
        anything better,
        # like '-m68040'.

```

```

        lt_prog_compiler_pic='-m68020 -resident32 -malways-
restore-a4'
        ;;
    esac
    ;;

    beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)
        # PIC is the default for these OSes.
        ;;

    mingw* | cygwin* | pw32* | os2* | cegcc*)
        # This hack is so that the source file can tell whether it is
being
        # built for inclusion in a dll (and should export symbols for
example).
        # Although the cygwin gcc ignores -fPIC, still need this for
old-style
        # (--disable-auto-import) libraries
        lt_prog_compiler_pic='-DLL_EXPORT'
        ;;

    darwin* | rhapsody*)
        # PIC is the default on this platform
        # Common symbols not allowed in MH_DYLIB files
        lt_prog_compiler_pic='-fno-common'
        ;;

    haiku*)
        # PIC is the default for Haiku.
        # The "-static" flag exists, but is broken.
        lt_prog_compiler_static=
        ;;

    hpux*)
        # PIC is the default for 64-bit PA HP-UX, but not for 32-bit
        # PA HP-UX.  On IA64 HP-UX, PIC is the default but the pic flag
        # sets the default TLS model and affects inlining.
        case $host_cpu in
            hppa*64*)
                # +Z the default
                ;;
            *)
                lt_prog_compiler_pic='-fPIC'
                ;;
        esac
        ;;

    interix[3-9]*)
        # Interix 3.x gcc -fpic/-fPIC options generate broken code.
        # Instead, we relocate shared libraries at runtime.
        ;;

```

```

msdosdjgpp*)
    # Just because we use GCC doesn't mean we suddenly get shared
libraries
    # on systems that don't support them.
    lt_prog_compiler_can_build_shared=no
    enable_shared=no
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'
    ;;

sysv4*MP*)
    if test -d /usr/nec; then
        lt_prog_compiler_pic=-Kconform_pic
    fi
    ;;

*)
    lt_prog_compiler_pic='-fPIC'
    ;;
esac

case $cc_basename in
nvcc*) # Cuda Compiler Driver 2.2
    lt_prog_compiler_wl='-Xlinker '
    if test -n "$lt_prog_compiler_pic"; then
        lt_prog_compiler_pic="-Xcompiler $lt_prog_compiler_pic"
    fi
    ;;
esac
else
    # PORTME Check for flag to pass linker flags through the system
compiler.
    case $host_os in
aix*)
        lt_prog_compiler_wl='-Wl,'
        if test "$host_cpu" = ia64; then
            # AIX 5 now supports IA64 processor
            lt_prog_compiler_static='-Bstatic'
        else
            lt_prog_compiler_static='-bnso -bI:/lib/syscalls.exp'
        fi
        ;;
mingw* | cygwin* | pw32* | os2* | cegcc*)
        # This hack is so that the source file can tell whether it is
being

```



```

    # built for inclusion in a dll (and should export symbols for
example).
    lt_prog_compiler_pic='-DDLL_EXPORT'
    ;;

hpux9* | hpux10* | hpux11*)
    lt_prog_compiler_wl='-Wl,'
    # PIC is the default for IA64 HP-UX and 64-bit HP-UX, but
    # not for PA HP-UX.
    case $host_cpu in
    hppa*64*|ia64*)
        # +Z the default
        ;;
    *)
        lt_prog_compiler_pic='+Z'
        ;;
    esac
    # Is there a better lt_prog_compiler_static that works with the
bundled CC?
    lt_prog_compiler_static='${wl}-a ${wl}archive'
    ;;

irix5* | irix6* | nonstopux*)
    lt_prog_compiler_wl='-Wl,'
    # PIC (with -KPIC) is the default.
    lt_prog_compiler_static='-non_shared'
    ;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
    case $cc_basename in
    # old Intel for x86_64 which still supported -KPIC.
    ecc*)
        lt_prog_compiler_wl='-Wl,'
        lt_prog_compiler_pic='-KPIC'
        lt_prog_compiler_static='-static'
        ;;
    # icc used to be incompatible with GCC.
    # ICC 10 doesn't accept -KPIC any more.
    icc* | ifort*)
        lt_prog_compiler_wl='-Wl,'
        lt_prog_compiler_pic='-fPIC'
        lt_prog_compiler_static='-static'
        ;;
    # Lahey Fortran 8.1.
    lf95*)
        lt_prog_compiler_wl='-Wl,'
        lt_prog_compiler_pic='--shared'
        lt_prog_compiler_static='--static'
        ;;
    nagfor*)
        # NAG Fortran compiler
        lt_prog_compiler_wl='-Wl,-Wl,,'

```

```

lt_prog_compiler_pic='-PIC'
lt_prog_compiler_static='-Bstatic'
;;
pgcc* | pgf77* | pgf90* | pgf95* | pgfortran*)
  # Portland Group compilers (*not* the Pentium gcc compiler,
  # which looks to be a dead project)
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-fpic'
lt_prog_compiler_static='-Bstatic'
  ;;
ccc*)
  lt_prog_compiler_wl='-Wl,'
  # All Alpha code is PIC.
  lt_prog_compiler_static='-non_shared'
  ;;
xl* | bgxl* | bgf* | mpixl*)
  # IBM XL C 8.0/Fortran 10.1, 11.1 on PPC and BlueGene
lt_prog_compiler_wl='-Wl,'
lt_prog_compiler_pic='-qpik'
lt_prog_compiler_static='-qstaticlink'
  ;;
*)
case `\$CC -V 2>&1 | sed 5q` in
8.[0-3]*)
  # Sun Fortran 8.3 passes all unrecognized flags to the linker
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl=''
  ;;
*Sun\ F* | *Sun*Fortran*)
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl='-Qoption ld '
  ;;
*Sun\ C*)
  # Sun C 5.9
  lt_prog_compiler_pic='-KPIC'
  lt_prog_compiler_static='-Bstatic'
  lt_prog_compiler_wl='-Wl,'
  ;;
*Intel*\ [CF]*Compiler*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-fPIC'
  lt_prog_compiler_static='-static'
  ;;
*Portland\ Group*)
  lt_prog_compiler_wl='-Wl,'
  lt_prog_compiler_pic='-fpic'
  lt_prog_compiler_static='-Bstatic'
  ;;
esac

```

```

;;
esac
;;

newsos6)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

*nto* | *qnx*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic='-fPIC -shared'
    ;;

osf3* | osf4* | osf5*)
    lt_prog_compiler_wl='-Wl,'
    # All OSF/1 code is PIC.
    lt_prog_compiler_static='-non_shared'
    ;;

rdos*)
    lt_prog_compiler_static='-non_shared'
    ;;

solaris*)
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    case $cc_basename in
    f77* | f90* | f95* | sunf77* | sunf90* | sunf95*)
    lt_prog_compiler_wl='-Qoption ld ';;
    *)
    lt_prog_compiler_wl='-Wl, ';;
    esac
    ;;

sunos4*)
    lt_prog_compiler_wl='-Qoption ld '
    lt_prog_compiler_pic='-PIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4 | sysv4.2uw2* | sysv4.3*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

sysv4*MP*)
    if test -d /usr/nec ;then
    lt_prog_compiler_pic='-Kconform_pic'

```

```

    lt_prog_compiler_static='-Bstatic'
    fi
    ;;

sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_pic='-KPIC'
    lt_prog_compiler_static='-Bstatic'
    ;;

unicos*)
    lt_prog_compiler_wl='-Wl,'
    lt_prog_compiler_can_build_shared=no
    ;;

uts4*)
    lt_prog_compiler_pic='-pic'
    lt_prog_compiler_static='-Bstatic'
    ;;

*)
    lt_prog_compiler_can_build_shared=no
    ;;
esac
fi

case $host_os in
  # For platforms which do not support PIC, -DPIC is meaningless:
  *djgpp*)
    lt_prog_compiler_pic=
    ;;
  *)
    lt_prog_compiler_pic="$lt_prog_compiler_pic@&t@ -DPIC"
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_pic=$lt_prog_compiler_pic
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic" >&5
$as_echo "$lt_cv_prog_compiler_pic" >&6; }
lt_prog_compiler_pic=$lt_cv_prog_compiler_pic

#
# Check to make sure the PIC flag actually works.
#

```

```

if test -n "$lt_prog_compiler_pic"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_pic_works=no
  ac_outfile=conftest.$ac_objext
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext
  lt_compiler_flag="$lt_prog_compiler_pic@&t@ -DPIC"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>conftest.err)
  ac_status=$?
  cat conftest.err >&5
  echo "$as_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if test ! -s conftest.er2 || diff conftest.exp conftest.er2
>/dev/null; then
      lt_cv_prog_compiler_pic_works=yes
    fi
  fi
  $RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works" >&5
$as_echo "$lt_cv_prog_compiler_pic_works" >&6; }

if test x"$lt_cv_prog_compiler_pic_works" = xyes; then
  case $lt_prog_compiler_pic in
    "" | " *") ;;
    *) lt_prog_compiler_pic="$lt_prog_compiler_pic" ;;
  esac
else

```

```

    lt_prog_compiler_pic=
    lt_prog_compiler_can_build_shared=no
fi

fi

#
# Check to make sure the static flag actually works.
#
wl=$lt_prog_compiler_wl eval
lt_tmp_static_flag="\$lt_prog_compiler_static\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_static_works=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
  # The linker can only warn and ignore the option if not
  recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&5
    $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_static_works=yes
    fi
  else
    lt_cv_prog_compiler_static_works=yes
  fi
fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

```

```

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works" >&5
$sas_echo "$lt_cv_prog_compiler_static_works" >&6; }

if test x"$lt_cv_prog_compiler_static_works" = xyes; then
:
else
    lt_prog_compiler_static=
fi

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$sas_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o=no
    $RM -r confptest 2>/dev/null
    mkdir confptest
    cd confptest
    mkdir out
    echo "$lt_simple_compile_test_code" > confptest.$ac_ext

    lt_compiler_flag="-o out/confptest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confptest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
    (eval echo "\"$sas_me:$LINENO: $lt_compile\"" >&5)
    (eval "$lt_compile" 2>out/confptest.err)
    ac_status=$?
    cat out/confptest.err >&5
    echo "$sas_me:$LINENO: \$? = $ac_status" >&5
    if (exit $ac_status) && test -s out/confptest2.$ac_objext
    then
        # The compiler can only warn and ignore the option if not
recognized
        # So say no if there are warnings

```

```

    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
    $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
    if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
        lt_cv_prog_compiler_c_o=yes
    fi
fi
chmod u+w . 2>&5
$RM confptest*
# SGI C++ compiler will create directory out/ii_files/ for
# template instantiation
test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r confptest
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o=no
    $RM -r confptest 2>/dev/null
    mkdir confptest
    cd confptest
    mkdir out
    echo "$lt_simple_compile_test_code" > confptest.$ac_ext

    lt_compiler_flag="-o out/confptest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confptest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag :; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \

```



```

-e 's:$: $lt_compiler_flag:'`
(eval echo "\\"$as_me:$LINENO: $lt_compile\"" >&5)
(eval "$lt_compile" 2>out/confptest.err)
ac_status=$?
cat out/confptest.err >&5
echo "$as_me:$LINENO: \${?} = $ac_status" >&5
if (exit $ac_status) && test -s out/confptest2.$ac_objext
then
  # The compiler can only warn and ignore the option if not
recognized
  # So say no if there are warnings
  $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
  $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
  if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
    lt_cv_prog_compiler_c_o=yes
  fi
fi
chmod u+w . 2>&5
$RM confptest*
# SGI C++ compiler will create directory out/ii_files/ for
# template instantiation
test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
$RM out/* && rmdir out
cd ..
$RM -r confptest
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o" >&5
$as_echo "$lt_cv_prog_compiler_c_o" >&6; }

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o" = no && test "$need_locks" != no;
then
  # do not overwrite the value of need_locks provided by the user
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
  hard_links=yes
  $RM confptest*
  ln confptest.a confptest.b 2>/dev/null && hard_links=no
  touch confptest.a
  ln confptest.a confptest.b 2>&5 || hard_links=no
  ln confptest.a confptest.b 2>/dev/null && hard_links=no
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }

```

```

if test "$hard_links" = no; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: `'$CC' does not
support `'-c -o', so `make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: `'$CC' does not support `'-c -o', so `make
-j' may be unsafe" >&2;}
    need_locks=warn
fi
else
    need_locks=no
fi

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }

```

```

runpath_var=
allow_undefined_flag=
always_export_symbols=no
archive_cmds=
archive_expsym_cmds=
compiler_needs_object=no
enable_shared_with_static_runtimes=no
export_dynamic_flag_spec=
export_symbols_cmds='$NM $libobjs $convenience | $global_symbol_pipe
| $SED `'\''s/.* //'` | sort | uniq > $export_symbols'
hardcode_automatic=no
hardcode_direct=no
hardcode_direct_absolute=no
hardcode_libdir_flag_spec=
hardcode_libdir_separator=
hardcode_minus_L=no
hardcode_shlibpath_var=unsupported
inherit_rpath=no
link_all_deplibs=unknown
module_cmds=
module_expsym_cmds=
old_archive_from_new_cmds=
old_archive_from_expsyms_cmds=
thread_safe_flag_spec=
whole_archive_flag_spec=
# include_expsyms should be a list of space-separated symbols to be
*always*
# included in the symbol list
include_expsyms=
# exclude_expsyms can be an extended regexp of symbols to exclude

```

```

# it will be wrapped by ` (' and `)$', so one must not match
beginning or
# end of line. Example: `a|bc|.*d.*' will exclude the symbols `a'
and `bc',
# as well as any symbol that contains `d'.
exclude_expsyms='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'
# Although _GLOBAL_OFFSET_TABLE_ is a valid symbol C name, most
a.out
# platforms (ab)use it in PIC code, but their linkers get confused
if
# the symbol is explicitly referenced. Since portable code cannot
# rely on this symbol name, it's probably fine to never include it
in
# preloaded symbol tables.
# Exclude shared library initialization/finalization symbols.
extract_expsyms_cmds=

case $host_os in
cygwin* | mingw* | pw32* | cegcc*)
# FIXME: the MSVC++ port hasn't been tested in a loooong time
# When not using gcc, we currently assume that we are using
# Microsoft Visual C++.
if test "$GCC" != yes; then
with_gnu_ld=no
fi
;;
interix*)
# we just hope/assume this is gcc and not c89 (= MSVC++)
with_gnu_ld=yes
;;
openbsd*)
with_gnu_ld=no
;;
esac

ld_shlibs=yes

# On some targets, GNU ld is compatible enough with the native
linker
# that we're better off using the native interface for both.
lt_use_gnu_ld_interface=no
if test "$with_gnu_ld" = yes; then
case $host_os in
aix*)
# The AIX port of GNU ld has always aspired to compatibility
# with the native linker. However, as the warning in the GNU ld
# block says, versions before 2.19.5* couldn't really create
working
# shared libraries, regardless of the interface used.
case ` $LD -v 2>&1 ` in
*\ (GNU\ Binutils\)\ 2.19.5*) ;;
*\ (GNU\ Binutils\)\ 2.[2-9]*) ;;

```

```

        *\ (GNU\ Binutils)\ [3-9]*) ;;
    *)
        lt_use_gnu_ld_interface=yes
        ;;
    esac
    ;;
    *)
        lt_use_gnu_ld_interface=yes
        ;;
    esac
fi

if test "$lt_use_gnu_ld_interface" = yes; then
# If archive_cmds runs LD, not CC, wlarc should be empty
wlarc='${wl}'

# Set some defaults for GNU ld with shared library support. These
# are reset later if shared libraries are not supported. Putting
them
# here allows them to be overridden if necessary.
runpath_var=LD_RUN_PATH
hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
export_dynamic_flag_spec='${wl}--export-dynamic'
# ancient GNU ld didn't support --whole-archive et. al.
if $LD --help 2>&1 | $GREP 'no-whole-archive' > /dev/null; then
    whole_archive_flag_spec="$wlarc"--whole-archive$convenience
    "$wlarc"--no-whole-archive'
else
    whole_archive_flag_spec=
fi
supports_anon_versioning=no
case ` $LD -v 2>&1 ` in
    *GNU\ gold*) supports_anon_versioning=yes ;;
    *\ [01].* | *\ 2.[0-9].* | *\ 2.10.*) ;; # catch versions < 2.11
    *\ 2.11.93.0.2\ *) supports_anon_versioning=yes ;; # RH7.3 ...
    *\ 2.11.92.0.12\ *) supports_anon_versioning=yes ;; # Mandrake
8.2 ...
    *\ 2.11.*) ;; # other 2.11 versions
    *) supports_anon_versioning=yes ;;
    esac

# See if GNU ld supports shared libraries.
case $host_os in
aix[3-9]*)
    # On AIX/PPC, the GNU linker is very broken
    if test "$host_cpu" != ia64; then
        ld_shlibs=no
        cat <<_LT_EOF 1>&2
*** Warning: the GNU linker, at least up to release 2.19, is reported
*** to be unable to reliably create shared libraries on AIX.
*** Therefore, libtool is disabling shared libraries support.  If you

```

*** really care for shared libraries, you may want to install binutils
*** 2.20 or above, or modify your PATH so that a non-GNU linker is
found.
*** You will then need to restart the configuration process.

```
_LT_EOF
  fi
  ;;

  amigaos*)
    case $host_cpu in
      powerpc)
        # see comment about AmigaOS4 .so support
        archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds=''
        ;;
      m68k)
        archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
        hardcode_libdir_flag_spec='-L$libdir'
        hardcode_minus_L=yes
        ;;
    esac
  ;;

  beos*)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
      allow_undefined_flag=unsupported
      # Joseph Beckenbach <jrb3@best.com> says some releases of gcc
      # support --undefined. This deserves some investigation. FIXME
      archive_cmds='$CC -nostart $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    else
      ld_shlibs=no
    fi
  ;;

  cygwin* | mingw* | pw32* | cegcc*)
    # _LT_TAGVAR(hardcode_libdir_flag_spec, ) is actually
meaningless,
    # as there is no search path for DLLs.
    hardcode_libdir_flag_spec='-L$libdir'
    export_dynamic_flag_spec='${wl}--export-all-symbols'
    allow_undefined_flag=unsupported
    always_export_symbols=no
```

```

enable_shared_with_static_runtimes=yes
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\ ]*\)/\1
DATA;/s/^\.*[ ]__nm__\([^\ ]*\)\[ ]\^[^\ ]*/\1 DATA;/^\I[ ]/d;/^[AITW][
]/s/.* //'\' | sort | uniq > $export_symbols'

exclude_expsyms='[_]+GLOBAL_OFFSET_TABLE_|[_]+GLOBAL__[FID]_.*|[_]+hea
d_[A-Za-z0-9_]+_dll|[A-Za-z0-9_]+_dll_iname'

if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then
  archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
  # If the export-symbols file already is a .def file (1st line
  # is EXPORTS), use it as is; otherwise, prepend...
  archive_expsym_cmds='if test "x$SED lq $export_symbols`" =
xEXPORTS; then
  cp $export_symbols $output_objdir/$soname.def;
else
  echo EXPORTS > $output_objdir/$soname.def;
  cat $export_symbols >> $output_objdir/$soname.def;
fi~
$CC -shared $output_objdir/$soname.def $libobjs $deplibs
$compiler_flags -o $output_objdir/$soname ${wl}--enable-auto-image-
base -Xlinker --out-implib -Xlinker $lib'
else
  ld_shlibs=no
fi
;;

haiku*)
  archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
  link_all_deplibs=yes
  ;;

interix[3-9]*)
  hardcode_direct=no
  hardcode_shlibpath_var=no
  hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
  export_dynamic_flag_spec='${wl}-E'
  # Hack: On Interix 3.x, we cannot compile PIC because of a
broken gcc.
  # Instead, shared libraries are loaded at an image base
(0x10000000 by
  # default) and relocated if they conflict, which is a slow very
memory
  # consuming and fragmenting process. To avoid this, we pick a
random,
  # 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000
at link

```

```

# time. Moving up from 0x10000000 also allows more sbrk(2)
space.
    archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,`expr ${RANDOM-$$} %
4096 / 2 \* 262144 + 1342177280` -o $lib'
    archive_expsym_cmds='sed "s,^,_,," $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,`expr ${RANDOM-
$$} % 4096 / 2 \* 262144 + 1342177280` -o $lib'
    ;;

gnu* | linux* | tpf* | k*bsd*-gnu | kopensolaris*-gnu)
    tmp_diet=no
    if test "$host_os" = linux-dietlibc; then
        case $cc_basename in
            diet\ *) tmp_diet=yes;; # linux-dietlibc with static linking
(!diet-dyn)
        esac
    fi
    if $LD --help 2>&1 | $EGREP ': supported targets:.* elf' >
/dev/null \
    && test "$tmp_diet" = no
    then
        tmp_addflag=' $pic_flag'
        tmp_sharedflag='-shared'
        case $cc_basename,$host_cpu in
            pgcc*) # Portland Group C compiler
                whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\``"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\`` $wl}--no-whole-archive'
                tmp_addflag=' $pic_flag'
                ;;
            pgf77* | pgf90* | pgf95* | pgfortran*)
                # Portland Group f77 and f90 compilers
                whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\``"; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\`` $wl}--no-whole-archive'
                tmp_addflag=' $pic_flag -Mnomain' ;;
            ecc*,ia64* | icc*,ia64*) # Intel C compiler on ia64
                tmp_addflag=' -i_dynamic' ;;
            efc*,ia64* | ifort*,ia64*) # Intel Fortran compiler on ia64
                tmp_addflag=' -i_dynamic -nofor_main' ;;
            ifc* | ifort*) # Intel Fortran compiler
                tmp_addflag=' -nofor_main' ;;
            lf95*) # Lahey Fortran 8.1
                whole_archive_flag_spec=
                tmp_sharedflag='--shared' ;;
            xl[cC]* | bgxl[cC]* | mpixl[cC]*) # IBM XL C 8.0 on PPC (deal
with xlf below)

```

```

        tmp_sharedflag='-qmkshrobj'
        tmp_addflag= ;;
        nvcc*)          # Cuda Compiler Driver 2.2
            whole_archive_flag_spec='${wl}--whole-archive`for conv in
$convenience\`\`; do test -n \"$conv\" &&
new_convenience=\"\$new_convenience,$conv\"; done; func_echo_all
\"\$new_convenience\`\` ${wl}--no-whole-archive'
            compiler_needs_object=yes
            ;;
        esac
        case ` $CC -V 2>&1 | sed 5q` in
        *Sun\ C*)          # Sun C 5.9
            whole_archive_flag_spec='${wl}--whole-archive`new_convenience=;
for conv in $convenience\`\`; do test -z \"$conv\" ||
new_convenience=\"\$new_convenience,$conv\"; done; func_echo_all
\"\$new_convenience\`\` ${wl}--no-whole-archive'
            compiler_needs_object=yes
            tmp_sharedflag='-G' ;;
        *Sun\ F*)          # Sun Fortran 8.3
            tmp_sharedflag='-G' ;;
        esac
        archive_cmds='$CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname -o $lib'

        if test "x$supports_anon_versioning" = xyes; then
            archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
cat $export_symbols | sed -e "s/\(.*\)/\1;/\" >>
$output_objdir/$libname.ver~
echo "local: *; };" >> $output_objdir/$libname.ver~
$CC "'$tmp_sharedflag"'$tmp_addflag"' $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-version-script
${wl}$output_objdir/$libname.ver -o $lib'
        fi

        case $cc_basename in
        xlf* | bgf* | bgxlf* | mpixlf*)
            # IBM XL Fortran 10.1 on PPC cannot create shared libs itself
            whole_archive_flag_spec='--whole-archive$convenience --no-
whole-archive'
            hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
            archive_cmds='$LD -shared $libobjs $deplibs $linker_flags -
soname $soname -o $lib'
            if test "x$supports_anon_versioning" = xyes; then
                archive_expsym_cmds='echo "{ global:" >
$output_objdir/$libname.ver~
cat $export_symbols | sed -e "s/\(.*\)/\1;/\" >>
$output_objdir/$libname.ver~
echo "local: *; };" >> $output_objdir/$libname.ver~
$LD -shared $libobjs $deplibs $linker_flags -soname $soname
-version-script $output_objdir/$libname.ver -o $lib'
            fi
        fi

```



```

        ;;
    esac
    else
        ld_shlibs=no
    fi
    ;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable $libobjs $deplibs $linker_flags -o
$lib'
        wlarc=
    else
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    fi
    ;;

solaris*)
    if $LD -v 2>&1 | $GREP 'BFD 2\.8' > /dev/null; then
        ld_shlibs=no
        cat <<_LT_EOF 1>&2

*** Warning: The releases 2.8.* of the GNU linker cannot reliably
*** create shared libraries on Solaris systems.  Therefore, libtool
*** is disabling shared libraries support.  We urge you to upgrade GNU
*** binutils to release 2.9.1 or newer.  Another option is to modify
*** your PATH or compiler configuration so that the native linker is
*** used, and then restart.

_LT_EOF
        elif $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
            archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
        else
            ld_shlibs=no
        fi
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX*)
    case ` $LD -v 2>&1 ` in
        *\ [01].* | *\ 2.[0-9].* | *\ 2.1[0-5].*)
            ld_shlibs=no
            cat <<_LT_EOF 1>&2

```

*** Warning: Releases of the GNU linker prior to 2.16.91.0.3 can not
 *** reliably create shared libraries on SCO systems. Therefore,
 libtool
 *** is disabling shared libraries support. We urge you to upgrade GNU
 *** binutils to release 2.16.91.0.3 or newer. Another option is to
 modify
 *** your PATH or compiler configuration so that the native linker is
 *** used, and then restart.

```

_LT_EOF
;;
*)
  # For security reasons, it is highly recommended that you
always
  # use absolute paths for naming shared libraries, and exclude
the
  # DT_RUNPATH tag from executables and libraries. But doing so
  # requires that you compile everything twice, which is a pain.
  if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags
${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    else
      ld_shlibs=no
    fi
  ;;
esac
;;

sunos4*)
  archive_cmds='$LD -assert pure-text -Bshareable -o $lib $libobjs
$deplibs $linker_flags'
  wlarc=
  hardcode_direct=yes
  hardcode_shlibpath_var=no
  ;;

*)
  if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
    archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-file
$wl$export_symbols -o $lib'
    else
      ld_shlibs=no
    fi
  ;;

```

```

    ;;
esac

if test "$ld_shlibs" = no; then
    runpath_var=
    hardcode_libdir_flag_spec=
    export_dynamic_flag_spec=
    whole_archive_flag_spec=
fi
else
# PORTME fill in a description of your system's linker (not GNU
ld)
case $host_os in
aix3*)
    allow_undefined_flag=unsupported
    always_export_symbols=yes
    archive_expsym_cmds='$LD -o $output_objdir/$soname $libobjs
$deplibs $linker_flags -bE:$export_symbols -T512 -H512 -bM:SRE~$AR
$AR_FLAGS $lib $output_objdir/$soname'
    # Note: this linker hardcodes the directories in LIBPATH if
there
    # are no directories specified by -L.
    hardcode_minus_L=yes
    if test "$GCC" = yes && test -z "$lt_prog_compiler_static"; then
# Neither direct hardcoding nor static linking is supported with
a
        # broken collect2.
        hardcode_direct=unsupported
        fi
        ;;
aix[4-9]*)
    if test "$host_cpu" = ia64; then
        # On IA64, the linker does run time linking by default, so we
don't
        # have to do anything special.
        aix_use_runtimelinking=no
        exp_sym_flag='-Bexport'
        no_entry_flag=""
        else
        # If we're using GNU nm, then we don't want the "-C" option.
        # -C means demangle to AIX nm, but means don't demangle with GNU
nm
        # Also, AIX nm treats weak defined symbols like other global
        # defined symbols, whereas GNU nm marks them as "W".
        if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then
            export_symbols_cmds='$NM -Bpg $libobjs $convenience | awk '\''{
if ((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B") || (\ $ 2 == "W"))
&& (substr(\ $ 3,1,1) != ".") { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
        else

```

```

        export_symbols_cmds='$NM -BCpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B")) &&
(substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
    fi
    aix_use_runtimelinking=no

    # Test if we are trying to use run time linking or normal
    # AIX style linking. If -brtl is somewhere in LDFLAGS, we
    # need to do runtime linking.
    case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)
        for ld_flag in $LDFLAGS; do
            if (test $ld_flag = "-brtl" || test $ld_flag = "-Wl,-brtl");
then
                aix_use_runtimelinking=yes
                break
            fi
        done
    ;;
    esac

    exp_sym_flag='-bexport'
    no_entry_flag='-bnoentry'
    fi

    # When large executables or shared objects are built, AIX ld can
    # have problems creating the table of contents. If linking a
library
    # or program results in "error TOC overflow" add -mminimal-toc
to
    # CXXFLAGS/CFLAGS for g++/gcc. In the cases where that is not
    # enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

    archive_cmds=''
    hardcode_direct=yes
    hardcode_direct_absolute=yes
    hardcode_libdir_separator=':'
    link_all_deplibs=yes
    file_list_spec='${wl}-f,'

    if test "$GCC" = yes; then
    case $host_os in aix4.[012]|aix4.[012].*)
        # We only want to do this on AIX 4.2 and lower, the check
        # below for broken collect2 doesn't work under 4.3+
        collect2name=`${CC} -print-prog-name=collect2`
        if test -f "$collect2name" &&
            strings "$collect2name" | $GREP resolve_lib_name >/dev/null
        then
            # We have reworked collect2
            :
        else
            # We have old collect2

```

```

hardcode_direct=unsupported
# It fails to find uninstalled libraries when the uninstalled
# path is not listed in the libpath.  Setting hardcode_minus_L
# to unsupported forces relinking
hardcode_minus_L=yes
hardcode_libdir_flag_spec='-L$libdir'
hardcode_libdir_separator=
fi
;;
esac
shared_flag='-shared'
if test "$aix_use_runtimelinking" = yes; then
  shared_flag="$shared_flag "'${wl}-G'
fi
else
# not using gcc
if test "$host_cpu" = ia64; then
# VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3 Release
# chokes on -Wl,-G. The following line is correct:
  shared_flag='-G'
else
  if test "$aix_use_runtimelinking" = yes; then
    shared_flag='${wl}-G'
  else
    shared_flag='${wl}-bM:SRE'
  fi
fi
fi

export_dynamic_flag_spec='${wl}-bexpall'
# It seems that -bexpall does not export symbols beginning with
# underscore (_), so it is better to generate a list of symbols
to export.
always_export_symbols=yes
if test "$aix_use_runtimelinking" = yes; then
# Warning - without using the other runtime loading flags (-
brtl),
# -berok will link without error, but may produce a broken
library.
  allow_undefined_flag='-berok'
  # Determine the default libpath from the value encoded in an
  # empty executable.
  if test "${lt_cv_aix_libpath+set}" = set; then
    aix_libpath=$lt_cv_aix_libpath
  else
    if ${lt_cv_aix_libpath_+set} false; then :
      $as_echo_n "(cached) " >&6
    else
      cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int

```

```

main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0  *\([^ ]*\) *$/\1/
                P
            }
        }'
    lt_cv_aix_libpath_=`dump -H conftest$sac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_"; then
    lt_cv_aix_libpath_="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_
fi

    hardcode_libdir_flag_spec='${wl}-
bldirpath:$libdir:""$aix_libpath"
    archive_expsym_cmds='$CC -o $output_objdir/$soname $libobjs
$deplibs '"\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else ;; fi`
'"\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
    else
    if test "$host_cpu" = ia64; then
        hardcode_libdir_flag_spec='${wl}-R $libdir:/usr/lib:/lib'
        allow_undefined_flag="-z nodefs"
        archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs '"\${wl}$no_entry_flag"'
$compiler_flags ${wl}${allow_undefined_flag}
'"\${wl}$exp_sym_flag:\$export_symbols"
    else
        # Determine the default libpath from the value encoded in an

```

```

        # empty executable.
        if test "${lt_cv_aix_libpath+set}" = set; then
    aix_libpath=$lt_cv_aix_libpath
else
    if ${lt_cv_aix_libpath_+:) false; then :
        $as_echo_n "(cached) " >&6
    else
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0 *\[^\]*\)* *$/\1/
                p
            }
        }'
    lt_cv_aix_libpath_=`dump -H conftest$ac_exeext 2>/dev/null | $SED -n
-e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_=`dump -HX64 conftest$ac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    if test -z "$lt_cv_aix_libpath_"; then
        lt_cv_aix_libpath_="/usr/lib:/lib"
    fi
fi

    aix_libpath=$lt_cv_aix_libpath_
fi

        hardcode_libdir_flag_spec='${wl}-
bllibpath:$libdir:'"$aix_libpath"
        # Warning - without using the other run time loading flags,
        # -berok will link without error, but may produce a broken
library.
        no_undefined_flag=' ${wl}-bernotok'
```

```

allow_undefined_flag=' ${wl}-berok'
if test "$with_gnu_ld" = yes; then
    # We only use this code for GNU lds that support --whole-
archive.
    whole_archive_flag_spec='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
else
    # Exported symbols can be pulled into shared objects from
archives
    whole_archive_flag_spec='$convenience'
fi
archive_cmds_need_lc=yes
# This is similar to how AIX traditionally builds its shared
libraries.
archive_expsym_cmds="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
fi
fi
;;

amigaos*)
case $host_cpu in
powerpc)
    # see comment about AmigaOS4 .so support
    archive_cmds='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds=''
    ;;
m68k)
    archive_cmds='$RM $output_objdir/a2ixlibrary.data~$ECHO
"#define NAME $libname" > $output_objdir/a2ixlibrary.data~$ECHO
"#define LIBRARY_ID 1" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define VERSION $major" >> $output_objdir/a2ixlibrary.data~$ECHO
"#define REVISION $revision" >> $output_objdir/a2ixlibrary.data~$AR
$AR_FLAGS $lib $libobjs~$RANLIB $lib~(cd $output_objdir && a2ixlibrary
-32)'
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_minus_L=yes
    ;;
esac
;;

bsdi[45]*)
export_dynamic_flag_spec=-rdynamic
;;

cygwin* | mingw* | pw32* | cegcc*)
# When not using gcc, we currently assume that we are using
# Microsoft Visual C++.
# hardcode_libdir_flag_spec is actually meaningless, as there is

```



```

# no search path for DLLs.
case $cc_basename in
cl*)
# Native MSVC
hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
always_export_symbols=yes
file_list_spec='@'
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
archive_expsym_cmds='if test "x`$SED lq $export_symbols`" =
xEXPORTS; then
sed -n -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' -
e '1\\\\\\\\!p' < $export_symbols > $output_objdir/$soname.exp;
else
sed -e 's/\\\\\\\\\\\\\\\\(.*\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
$export_symbols > $output_objdir/$soname.exp;
fi~
$CC -o $tool_output_objdir$soname $libobjs $compiler_flags
$deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
IMPLIB:"$tool_output_objdir$libname.dll.lib"~
linknames='
# The linker will not automatically build a static lib if we
build a DLL.
# _LT_TAGVAR(old_archive_from_new_cmds, )='true'
enable_shared_with_static_runtimes=yes
exclude_expsyms='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_.*'
export_symbols_cmds='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\\'/^[BCDGRS][ ]/s/.*[ ]\\([^\
]*\\)/\1,DATA/' | $SED -e '\\'/^[AITW][ ]/s/.*[ ]//'\'' | sort |
uniq > $export_symbols'
# Don't use ranlib
old_postinstall_cmds='chmod 644 $oldlib'
postlink_cmds='lt_outputfile="@OUTPUT@"~
lt_tool_outputfile="@TOOL_OUTPUT@"~
case $lt_outputfile in
*.exe|*.EXE) ;;
*)
lt_outputfile="$lt_outputfile.exe"
lt_tool_outputfile="$lt_tool_outputfile.exe"
;;
esac~
if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
$MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
$RM "$lt_outputfile.manifest";

```

```

    fi'
;;
*)
# Assume MSVC wrapper
hardcode_libdir_flag_spec=' '
allow_undefined_flag=unsupported
# Tell ltmain to make .lib files, not .a files.
libext=lib
# Tell ltmain to make .dll files, not .so files.
shrext_cmds=".dll"
# FIXME: Setting linknames here is a bad hack.
archive_cmds='$CC -o $lib $libobjs $compiler_flags `func_echo_all
"$deplibs" | $SED '\''s/ -lc$//'\''` -link -dll~linknames='
# The linker will automatically build a .lib file if we build a
DLL.

old_archive_from_new_cmds='true'
# FIXME: Should let the user specify the lib program.
old_archive_cmds='lib -OUT:$oldlib$oldobjs$old_deplibs'
enable_shared_with_static_runtimes=yes
;;
esac
;;

darwin* | rhapsody*)

```

```

archive_cmds_need_lc=no
hardcode_direct=no
hardcode_automatic=yes
hardcode_shlibpath_var=unsupported
if test "$lt_cv_ld_force_load" = "yes"; then
  whole_archive_flag_spec='`for conv in $convenience\``"; do test -
n \ "$conv\`" && new_convenience=\ "$new_convenience ${wl}-
force_load,$conv\`; done; func_echo_all \ "$new_convenience\``'
else
  whole_archive_flag_spec=''
fi
link_all_deplibs=yes
allow_undefined_flag="$lt_dar_allow_undefined"
case $cc_basename in
  ifort*) _lt_dar_can_shared=yes ;;
  *) _lt_dar_can_shared=$GCC ;;
esac
if test "$lt_dar_can_shared" = "yes"; then
  output_verbose_link_cmd=func_echo_all
  archive_cmds="\$CC -dynamiclib \$allow_undefined_flag -o \$lib
\$libobjs \$deplibs \$compiler_flags -install_name \$rpath/\$soname
\$verstring $lt_dar_single_mod${_lt_dsymutil}"
  module_cmds="\$CC \$allow_undefined_flag -o \$lib -bundle
\$libobjs \$deplibs \$compiler_flags${_lt_dsymutil}"

```

```

    archive_expsym_cmds="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -dynamiclib
\$allow_undefined_flag -o \$lib \$libobjs \$deplibs \$compiler_flags -
install_name \$rpath/\$soname \$verstring
\${_lt_dar_single_mod}\${_lt_dar_export_syms}\${_lt_dsymutil}"
    module_expsym_cmds="sed -e 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC \$allow_undefined_flag
-o \$lib -bundle \$libobjs \$deplibs
\$compiler_flags\${_lt_dar_export_syms}\${_lt_dsymutil}"

else
ld_shlibs=no
fi

;;

dgux*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_shlibpath_var=no
    ;;

# FreeBSD 2.2.[012] allows us to include c++rt0.o to get C++
constructor
# support.  Future versions do this automatically, but an explicit
c++rt0.o
# does not break anything, and helps significantly (at the cost of
a little
# extra space).
freebsd2.2*)
    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags /usr/lib/c++rt0.o'
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

# Unfortunately, older versions of FreeBSD 2 do not have this
feature.
freebsd2.*)
    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_direct=yes
    hardcode_minus_L=yes
    hardcode_shlibpath_var=no
    ;;

# FreeBSD 3 and greater uses gcc -shared to do shared libraries.
freebsd* | dragonfly*)
    archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'

```

```

hardcode_libdir_flag_spec='-R$libdir'
hardcode_direct=yes
hardcode_shlibpath_var=no
;;

hpux9*)
  if test "$GCC" = yes; then
    archive_cmds='$RM $output_objdir/$soname~$CC -shared $pic_flag
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $libobjs
$deplibs $compiler_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
  else
    archive_cmds='$RM $output_objdir/$soname~$LD -b +b
$install_libdir -o $output_objdir/$soname $libobjs $deplibs
$linker_flags~test $output_objdir/$soname = $lib || mv
$output_objdir/$soname $lib'
  fi
  hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
  hardcode_libdir_separator=:
  hardcode_direct=yes

  # hardcode_minus_L: Not really in the search PATH,
  # but as the default location of the library.
  hardcode_minus_L=yes
  export_dynamic_flag_spec='${wl}-E'
  ;;

hpux10*)
  if test "$GCC" = yes && test "$with_gnu_ld" = no; then
    archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
  else
    archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
  fi
  if test "$with_gnu_ld" = no; then
    hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_direct=yes
    hardcode_direct_absolute=yes
    export_dynamic_flag_spec='${wl}-E'
    # hardcode_minus_L: Not really in the search PATH,
    # but as the default location of the library.
    hardcode_minus_L=yes
  fi
  ;;

hpux11*)
  if test "$GCC" = yes && test "$with_gnu_ld" = no; then
    case $host_cpu in
      hppa*64*)

```

```

        archive_cmds='$CC -shared ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
        ;;
        ia64*)
        archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $libobjs $deplibs $compiler_flags'
        ;;
        *)
        archive_cmds='$CC -shared $pic_flag ${wl}+h ${wl}$soname
${wl}+b ${wl}$install_libdir -o $lib $libobjs $deplibs
$compiler_flags'
        ;;
    esac
    else
    case $host_cpu in
    hppa*64*)
        archive_cmds='$CC -b ${wl}+h ${wl}$soname -o $lib $libobjs
$deplibs $compiler_flags'
        ;;
        ia64*)
        archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+nodefaulttrpath
-o $lib $libobjs $deplibs $compiler_flags'
        ;;
    *)
        # Older versions of the 11.00 compiler do not understand -b yet
        # (HP92453-01 A.11.01.20 doesn't, HP92453-01 B.11.X.35175-
35176.GP does)
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $CC
understands -b" >&5
$as_echo_n "checking if $CC understands -b... " >&6; }
if ${lt_cv_prog_compiler_b+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_b=no
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -b"
    echo "$lt_simple_link_test_code" > conftest.$ac_ext
    if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
        # The linker can only warn and ignore the option if not
recognized
        # So say no if there are warnings
        if test -s conftest.err; then
            # Append any errors to the config.log.
            cat conftest.err 1>&5
            $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
            $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
            if diff conftest.exp conftest.er2 >/dev/null; then
                lt_cv_prog_compiler_b=yes
            fi
        else
            else

```

```

        lt_cv_prog_compiler__b=yes
    fi
fi
$RM -r conftest*
LD_FLAGS="$save_LD_FLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler__b" >&5
$as_echo "$lt_cv_prog_compiler__b" >&6; }

if test x"$lt_cv_prog_compiler__b" = xyes; then
    archive_cmds='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $libobjs $deplibs $compiler_flags'
else
    archive_cmds='$LD -b +h $soname +b $install_libdir -o $lib
$libobjs $deplibs $linker_flags'
fi

;;
esac
fi
if test "$with_gnu_ld" = no; then
    hardcode_libdir_flag_spec='${wl}+b ${wl}$libdir'
    hardcode_libdir_separator=:

    case $host_cpu in
        hppa*64*|ia64*)
            hardcode_direct=no
            hardcode_shlibpath_var=no
            ;;
        *)
            hardcode_direct=yes
            hardcode_direct_absolute=yes
            export_dynamic_flag_spec='${wl}-E'

            # hardcode_minus_L: Not really in the search PATH,
            # but as the default location of the library.
            hardcode_minus_L=yes
            ;;
    esac
fi
;;

irix5* | irix6* | nonstopux*)
    if test "$GCC" = yes; then
        archive_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations -o $lib'
        # Try to use the -exported_symbol ld option, if it does not
        # work, assume that -exports_file does not work either and

```

```

    # implicitly export all symbols.
    # This should be the same for all languages, so no per-tag cache
variable.
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$host_os linker accepts -exported_symbol" >&5
$as_echo_n "checking whether the $host_os linker accepts -
exported_symbol... " >&6; }
if ${lt_cv_iris_exported_symbol+:} false; then :
    $as_echo_n "(cached) " >&6
else
    save_LDFLAGS="$LDFLAGS"
    LDFLAGS="$LDFLAGS -shared ${wl}-exported_symbol ${wl}foo
${wl}-update_registry ${wl}/dev/null"
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
int foo (void) { return 0; }
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    lt_cv_iris_exported_symbol=yes
else
    lt_cv_iris_exported_symbol=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS="$save_LDFLAGS"
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_iris_exported_symbol" >&5
$as_echo "$lt_cv_iris_exported_symbol" >&6; }
    if test "$lt_cv_iris_exported_symbol" = yes; then
        archive_expsym_cmds='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-soname ${wl}$soname `test -n "$verstring" &&
func_echo_all "${wl}-set_version ${wl}$verstring"` ${wl}-
update_registry ${wl}${output_objdir}/so_locations ${wl}-exports_file
${wl}$export_symbols -o $lib'
    fi
    else
        archive_cmds='$CC -shared $libobjs $deplibs $compiler_flags -
soname $soname `test -n "$verstring" && func_echo_all "-set_version
$verstring"` -update_registry ${output_objdir}/so_locations -o $lib'
        archive_expsym_cmds='$CC -shared $libobjs $deplibs
$compiler_flags -soname $soname `test -n "$verstring" && func_echo_all
"-set_version $verstring"` -update_registry
${output_objdir}/so_locations -exports_file $export_symbols -o $lib'
    fi
    archive_cmds_need_lc='no'
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    inherit_rpath=yes
    link_all_deplibs=yes
;;

```

```

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags' # a.out
    else
        archive_cmds='$LD -shared -o $lib $libobjs $deplibs
$linker_flags' # ELF
    fi
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_direct=yes
    hardcode_shlibpath_var=no
    ;;

newsos6)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_direct=yes
    hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
    hardcode_libdir_separator=:
    hardcode_shlibpath_var=no
    ;;

*nto* | *qnx*)
    ;;

openbsd*)
    if test -f /usr/libexec/ld.so; then
        hardcode_direct=yes
        hardcode_shlibpath_var=no
        hardcode_direct_absolute=yes
        if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
            archive_cmds='$CC -shared $pic_flag -o $lib $libobjs $deplibs
$compiler_flags'
            archive_expsym_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags ${wl}-retain-symbols-file,$export_symbols'
            hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
            export_dynamic_flag_spec='${wl}-E'
        else
            case $host_os in
                openbsd[01].* | openbsd2.[0-7] | openbsd2.[0-7].*)
                    archive_cmds='$LD -Bshareable -o $lib $libobjs $deplibs
$linker_flags'
                    hardcode_libdir_flag_spec='-R$libdir'
                    ;;
                *)
                    archive_cmds='$CC -shared $pic_flag -o $lib $libobjs
$deplibs $compiler_flags'
                    hardcode_libdir_flag_spec='${wl}-rpath,$libdir'
                    ;;
            esac
        fi
    fi

```



```

else
ld_shlibs=no
fi
;;

os2*)
hardcode_libdir_flag_spec='-L$libdir'
hardcode_minus_L=yes
allow_undefined_flag=unsupported
archive_cmds='$ECHO "LIBRARY $libname INITINSTANCE" >
$output_objdir/$libname.def~$ECHO "DESCRIPTION \"$libname\"" >>
$output_objdir/$libname.def~echo DATA >>
$output_objdir/$libname.def~echo " SINGLE NONSHARED" >>
$output_objdir/$libname.def~echo EXPORTS >>
$output_objdir/$libname.def~emxexp $libobjs >>
$output_objdir/$libname.def~$CC -Zdll -Zcrtdll -o $lib $libobjs
$deplibs $compiler_flags $output_objdir/$libname.def'
old_archive_from_new_cmds='emximp -o $output_objdir/$libname.a
$output_objdir/$libname.def'
;;

osf3*)
if test "$GCC" = yes; then
allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$verstring" && func_echo_all "${wl}-set_version ${wl}$verstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
else
allow_undefined_flag=' -expect_unresolved \*'
archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -soname $soname `test -n "$verstring" &&
func_echo_all "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
fi
archive_cmds_need_lc='no'
hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
hardcode_libdir_separator=:
;;

osf4* | osf5*) # as osf3* with the addition of -msym flag
if test "$GCC" = yes; then
allow_undefined_flag=' ${wl}-expect_unresolved ${wl}\*'
archive_cmds='$CC -shared${allow_undefined_flag} $pic_flag
$libobjs $deplibs $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$verstring" && func_echo_all "${wl}-set_version
${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
hardcode_libdir_flag_spec='${wl}-rpath ${wl}$libdir'
else
allow_undefined_flag=' -expect_unresolved \*'

```

```

        archive_cmds='$CC -shared${allow_undefined_flag} $libobjs
$deplibs $compiler_flags -msym -soname $soname `test -n "$verstring"
&& func_echo_all "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
        archive_expsym_cmds='for i in `cat $export_symbols`; do printf
"%s %s\n" -exported_symbol "\$i" >> $lib.exp; done; printf "%s\n" "-
hidden">> $lib.exp~
        $CC -shared${allow_undefined_flag} ${wl}-input ${wl}$lib.exp
$compiler_flags $libobjs $deplibs -soname $soname `test -n
"$verstring" && $ECHO "-set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib~$RM $lib.exp'

# Both c and cxx compiler support -rpath directly
hardcode_libdir_flag_spec='-rpath $libdir'
fi
archive_cmds_need_lc='no'
hardcode_libdir_separator=:
;;

solaris*)
    no_undefined_flag=' -z defs'
    if test "$GCC" = yes; then
        wlarc='${wl}'
        archive_cmds='$CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-h
${wl}$soname -o $lib $libobjs $deplibs $compiler_flags'
        archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/>" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
        $CC -shared $pic_flag ${wl}-z ${wl}text ${wl}-M ${wl}$lib.exp
${wl}-h ${wl}$soname -o $lib $libobjs $deplibs $compiler_flags~$RM
$lib.exp'
    else
        case ` $CC -V 2>&1 ` in
            *"Compilers 5.0"*)
                wlarc=''
                archive_cmds='$LD -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $linker_flags'
                archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/>" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
                $LD -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $linker_flags~$RM $lib.exp'
            ;;
            *)
                wlarc='${wl}'
                archive_cmds='$CC -G${allow_undefined_flag} -h $soname -o $lib
$libobjs $deplibs $compiler_flags'
                archive_expsym_cmds='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)/\1;/>" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
                $CC -G${allow_undefined_flag} -M $lib.exp -h $soname -o $lib
$libobjs $deplibs $compiler_flags~$RM $lib.exp'
        ;;
    esac

```

```

        ;;
    esac
    fi
    hardcode_libdir_flag_spec='-R$libdir'
    hardcode_shlibpath_var=no
    case $host_os in
    solaris2.[0-5] | solaris2.[0-5].*) ;;
    *)
        # The compiler driver will combine and reorder linker options,
        # but understands '-z linker_flag'. GCC discards it without
`$wl',
        # but is careful enough not to reorder.
        # Supported since Solaris 2.6 (maybe 2.5.1?)
        if test "$GCC" = yes; then
            whole_archive_flag_spec='${wl}-z ${wl}allextract$convenience
`${wl}-z ${wl}defaultextract'
        else
            whole_archive_flag_spec='-z allextract$convenience -z
defaultextract'
        fi
    ;;
    esac
    link_all_deplibs=yes
    ;;

sunos4*)
    if test "x$host_vendor" = xsequent; then
        # Use $CC to link under sequent, because it throws in some extra
.o
        # files that make .init and .fini sections work.
        archive_cmds='$CC -G ${wl}-h $soname -o $lib $libobjs $deplibs
$compiler_flags'
    else
        archive_cmds='$LD -assert pure-text -Bstatic -o $lib $libobjs
$deplibs $linker_flags'
    fi
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_direct=yes
    hardcode_minus_L=yes
    hardcode_shlibpath_var=no
    ;;

sysv4)
    case $host_vendor in
    sni)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=yes # is this really true???
    ;;
    siemens)
        ## LD is ld it makes a PLAMLIB
        ## CC just makes a GrossModule.

```

```

        archive_cmds='$LD -G -o $lib $libobjs $deplibs $linker_flags'
        reload_cmds='$CC -r -o $output$reload_objs'
        hardcode_direct=no
        ;;
    motorola)
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_direct=no #Motorola manual says yes, but my tests say
they lie
        ;;
    esac
    runpath_var='LD_RUN_PATH'
    hardcode_shlibpath_var=no
    ;;

sysv4.3*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_shlibpath_var=no
    export_dynamic_flag_spec='-Bexport'
    ;;

sysv4*MP*)
    if test -d /usr/nec; then
        archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
        hardcode_shlibpath_var=no
        runpath_var=LD_RUN_PATH
        hardcode_runpath_var=yes
        ld_shlibs=yes
    fi
    ;;

sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
    no_undefined_flag='${wl}-z,text'
    archive_cmds_need_lc=no
    hardcode_shlibpath_var=no
    runpath_var='LD_RUN_PATH'

    if test "$GCC" = yes; then
        archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
        archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    else
        archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
        archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    fi
    ;;

```

```

sysv5* | sco3.2v5* | sco5v6*)
    # Note: We can NOT use -z defs as we might desire, because we do
not
    # link with -lc, and that would cause any symbols used from libc
to
    # always be unresolved, which means just about no library would
    # ever link correctly.  If we're not using GNU ld we use -z text
    # though, which does catch some bad symbols but isn't as heavy-
handed
    # as -z defs.
    no_undefined_flag='${wl}-z,text'
    allow_undefined_flag='${wl}-z,nodefs'
    archive_cmds_need_lc=no
    hardcode_shlibpath_var=no
    hardcode_libdir_flag_spec='${wl}-R,$libdir'
    hardcode_libdir_separator=':'
    link_all_deplibs=yes
    export_dynamic_flag_spec='${wl}-Bexport'
    runpath_var='LD_RUN_PATH'

    if test "$GCC" = yes; then
        archive_cmds='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
        archive_expsym_cmds='$CC -shared ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    else
        archive_cmds='$CC -G ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
        archive_expsym_cmds='$CC -G ${wl}-Bexport:$export_symbols ${wl}-
h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    fi
    ;;

uts4*)
    archive_cmds='$LD -G -h $soname -o $lib $libobjs $deplibs
$linker_flags'
    hardcode_libdir_flag_spec='-L$libdir'
    hardcode_shlibpath_var=no
    ;;

*)
    ld_shlibs=no
    ;;
esac

if test x$host_vendor = xsni; then
    case $host in
        sysv4 | sysv4.2uw2* | sysv4.3* | sysv5*)
            export_dynamic_flag_spec='${wl}-Blargedynsym'
            ;;
    esac

```

```

    fi
fi

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ld_shlibs" >&5
$sas_echo "$ld_shlibs" >&6; }
test "$ld_shlibs" = no && can_build_shared=no

with_gnu_ld=$with_gnu_ld

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc" in
x|xyes)
    # Assume -lc should be added
    archive_cmds_need_lc=yes

    if test "$enable_shared" = yes && test "$GCC" = yes; then
        case $archive_cmds in
        *'~'*)
            # FIXME: we may have to deal with multi-command sequences.
            ;;
        '$CC '* )
            # Test whether the compiler implicitly links with -lc since on
some
            # systems, -lgcc has to come before -lc. If gcc already passes -
lc
            # to ld, don't add -lc before -lgcc.
            { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$sas_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }
if ${lt_cv_archive_cmds_need_lc+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    $RM conftest*
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

```

```

        if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
        (eval $ac_compile) 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; } 2>confptest.err; then
            soname=confptest
            lib=confptest
            libobjs=confptest.$ac_objext
            deplibs=
            wl=$lt_prog_compiler_wl
            pic_flag=$lt_prog_compiler_pic
            compiler_flags=-v
            linker_flags=-v
            verstring=
            output_objdir=.
            libname=confptest
            lt_save_allow_undefined_flag=$allow_undefined_flag
            allow_undefined_flag=
            if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$archive_cmds 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1\""; } >&5
            (eval $archive_cmds 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1)
            2>&5
            ac_status=$?
            $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
            test $ac_status = 0; }
            then
                lt_cv_archive_cmds_need_lc=no
            else
                lt_cv_archive_cmds_need_lc=yes
            fi
            allow_undefined_flag=$lt_save_allow_undefined_flag
        else
            cat confptest.err 1>&5
        fi
        $RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc" >&5
$as_echo "$lt_cv_archive_cmds_need_lc" >&6; }
    archive_cmds_need_lc=$lt_cv_archive_cmds_need_lc
;;
esac
fi
;;
esac

```



```
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }

if test "$GCC" = yes; then
  case $host_os in
    darwin*) lt_awk_arg="/^libraries:/,/LR/" ;;
    *) lt_awk_arg="/^libraries:/" ;;
  esac
fi
```

```

case $host_os in
  mingw* | cegcc*) lt_sed_strip_eq="s,=\([A-Za-z]:\),\1,g" ;;
  *) lt_sed_strip_eq="s,=/,/,g" ;;
esac
lt_search_path_spec=`$CC -print-search-dirs | awk $lt_awk_arg | $SED
-e "s/^libraries://" -e $lt_sed_strip_eq`
case $lt_search_path_spec in
*\;* )
  # if the path contains ";" then we assume it to be the separator
  # otherwise default to the standard path separator (i.e. ":") - it
is
  # assumed that no part of a normal pathname contains ";" but that
should
  # okay in the real world where ";" in dirpaths is itself
problematic.
  lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED 's/;/
/g'`
  ;;
*)
  lt_search_path_spec=`$ECHO "$lt_search_path_spec" | $SED
"s/$PATH_SEPARATOR/ /g"`
  ;;
esac
# Ok, now we have the path, separated by spaces, we can step through
it
# and add multilib dir if necessary.
lt_tmp_lt_search_path_spec=
lt_multi_os_dir=`$CC $CPPFLAGS $CFLAGS $LDFLAGS -print-multi-os-
directory 2>/dev/null`
for lt_sys_path in $lt_search_path_spec; do
  if test -d "$lt_sys_path/$lt_multi_os_dir"; then
    lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path/$lt_multi_os_dir"
  else
    test -d "$lt_sys_path" && \
      lt_tmp_lt_search_path_spec="$lt_tmp_lt_search_path_spec
$lt_sys_path"
  fi
done
lt_search_path_spec=`$ECHO "$lt_tmp_lt_search_path_spec" | awk '
BEGIN {RS=" "; FS="|\n";} {
lt_foo="";
lt_count=0;
for (lt_i = NF; lt_i > 0; lt_i--) {
  if ($lt_i != "" && $lt_i != ".") {
    if ($lt_i == "..") {
      lt_count++;
    } else {
      if (lt_count == 0) {
        lt_foo="/" $lt_i lt_foo;
      } else {
        lt_count--;

```

```

    }
  }
}
if (lt_foo != "") { lt_freq[lt_foo]++; }
if (lt_freq[lt_foo] == 1) { print lt_foo; }
}'`
# AWK program above erroneously prepends '/' to C:/dos/paths
# for these hosts.
case $host_os in
mingw* | cegcc*) lt_search_path_spec=`$ECHO "$lt_search_path_spec"
|\
    $SED 's,/\/([A-Za-z]:\),\1,g'` ;;
esac
sys_lib_search_path_spec=`$ECHO "$lt_search_path_spec" | $lt_NL2SP`
else
sys_lib_search_path_spec="/lib /usr/lib /usr/local/lib"
fi
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
finish_eval=
shlibpath_var=
shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
aix3*)
version_type=linux # correct to gnu/linux during the next big
refactor
library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
shlibpath_var=LIBPATH

# AIX 3 has no versioning support, so we append a major version to
the name.
soname_spec='${libname}${release}${shared_ext}$major'
;;

```

```

aix[4-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    hardcode_into_libs=yes
    if test "$host_cpu" = ia64; then
        # AIX 5 supports IA64
        library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'
        shlibpath_var=LD_LIBRARY_PATH
    else
        # With GCC up to 2.95.x, collect2 would create an import file
        # for dependence libraries. The import file would start with
        # the line `#! .'. This would cause the generated library to
        # depend on `.', always an invalid library. This was fixed in
        # development snapshots of GCC prior to 3.0.
        case $host_os in
            aix4 | aix4.[01] | aix4.[01].*)
                if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)'
                    echo ' yes '
                    echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
                    :
                else
                    can_build_shared=no
                fi
            ;;
        esac
        # AIX (on Power*) has no versioning support, so currently we can
not hardcode correct
        # soname into executable. Probably we can add versioning support
to
        # collect2, so additional links can be useful in future.
        if test "$aix_use_runtimelinking" = yes; then
            # If using run time linking (on AIX 4.2 or later) use
lib<name>.so
            # instead of lib<name>.a to let people know that these are not
            # typical AIX shared libraries.
            library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        else
            # We preserve .a as extension for shared libraries through
AIX4.2
            # and later when we are not doing run time linking.
            library_names_spec='${libname}${release}.a $libname.a'
            soname_spec='${libname}${release}${shared_ext}$major'
        fi
        shlibpath_var=LIBPATH
    fi
;;

```

```

amigaos*)
  case $host_cpu in
  powerpc)
    # Since July 2007 AmigaOS4 officially supports .so libraries.
    # When compiling the executable, add -use-dynld -Lsobjs: to the
    compileline.
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    ;;
  m68k)
    library_names_spec='$libname.ixlibrary $libname.a'
    # Create ${libname}_ixlibrary.a entries in /sys/libs.
    finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
'\''s%^.*\/\([^\/]*\)\.ixlibrary$%\1%'\''`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
    ;;
  esac
  ;;

beos*)
  library_names_spec='${libname}${shared_ext}'
  dynamic_linker="$host_os ld.so"
  shlibpath_var=LIBRARY_PATH
  ;;

bsdi[45]*)
  version_type=linux # correct to gnu/linux during the next big
refactor
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  finish_cmds='PATH="$PATH:/sbin" ldconfig $libdir'
  shlibpath_var=LD_LIBRARY_PATH
  sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
  sys_lib_dldsearch_path_spec="/shlib /usr/lib /usr/local/lib"
  # the default ld.so.conf also contains /usr/contrib/lib and
  # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
  # libtool to hard-code these into programs
  ;;

cygwin* | mingw* | pw32* | cegcc*)
  version_type=windows
  shrext_cmds=".dll"
  need_version=no
  need_lib_prefix=no

```

```

case $GCC,$cc_basename in
yes,*)
# gcc
library_names_spec='$libname.dll.a'
# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\''i; echo
\${dlname}'\''`~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dlname} \${dldir}/\${dlname}~
chmod a+x \${dldir}/\${dlname}~
if test -n '\''$striplib'\'' && test -n '\''$striplib'\''; then
eval '\''$striplib \${dldir}/\${dlname}'\'' || exit \ $?;
fi'
postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\''`~
dlpath=$dir/\${dldll}~
$RM \${dlpath}'
shlibpath_overrides_runpath=yes

case $host_os in
cygwin*)
# Cygwin DLLs use 'cyg' prefix rather than 'lib'
soname_spec=`echo \${libname} | sed -e 's/^lib/cyg/'``echo
\${release} | $SED -e 's/[.]/-/g'`\${versuffix}\${shared_ext}'

sys_lib_search_path_spec="$sys_lib_search_path_spec
/usr/lib/w32api"
;;
mingw* | cegcc*)
# MinGW DLLs use traditional 'lib' prefix
soname_spec='\${libname}`echo \${release} | $SED -e 's/[.]/-
/g'`\${versuffix}\${shared_ext}'
;;
pw32*)
# pw32 DLLs use 'pw' prefix rather than 'lib'
library_names_spec=`echo \${libname} | sed -e 's/^lib/pw/'``echo
\${release} | $SED -e 's/[.]/-/g'`\${versuffix}\${shared_ext}'
;;
esac
dynamic_linker='Win32 ld.exe'
;;

*,cl*)
# Native MSVC
libname_spec='$name'
soname_spec='\${libname}`echo \${release} | $SED -e 's/[.]/-
/g'`\${versuffix}\${shared_ext}'
library_names_spec='\${libname}.dll.lib'

case $build_os in

```

```

mingw*)
    sys_lib_search_path_spec=
    lt_save_ifs=$IFS
    IFS=';'
    for lt_path in $LIB
    do
        IFS=$lt_save_ifs
        # Let DOS variable expansion print the short 8.3 style file
name.
        lt_path=`cd "$lt_path" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si"`
        sys_lib_search_path_spec="$sys_lib_search_path_spec $lt_path"
    done
    IFS=$lt_save_ifs
    # Convert to MSYS style.
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\\\\\\\|/|g' -e 's| \\([a-zA-Z]\\\\):| /\\1|g' -e 's|^| |`
    ;;
cygwin*)
    # Convert to unix form, then to dos form, then back to unix form
    # but this time dos style (no spaces!) so that the unix form
looks
    # like /cygdrive/c/PROGRA~1:/cygdr...
    sys_lib_search_path_spec=`cygpath --path --unix "$LIB"`
    sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null`
    sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g"`
    ;;
*)
    sys_lib_search_path_spec="$LIB"
    if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zA-Z]:/'
>/dev/null; then
        # It is most probably a Windows format PATH.
        sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's;/;/g'`
    else
        sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g"`
    fi
    # FIXME: find the short name or the path components, as spaces
are
    # common. (e.g. "Program Files" -> "PROGRA~1")
    ;;
esac

# DLL is installed to $(libdir)/../bin by postinstall_cmds
postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\\'. $dir/\\'\${base_file}'\\'i; echo
\${dlname}'\\'~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~

```



```

        $install_prog $dir/$dlname \${dldir}/$dlname'
    postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\``'. $file; echo
\${dlname}'\``~
        dlpath=$dir/\${dldll}~
        $RM \${dlpath}'
    shlibpath_overrides_runpath=yes
    dynamic_linker='Win32 link.exe'
    ;;

*)
    # Assume MSVC wrapper
    library_names_spec='${libname}`echo ${release} | $SED -e 's/[.]/-
/g`${versuffix}${shared_ext} $libname.lib'
    dynamic_linker='Win32 ld.exe'
    ;;
esac
# FIXME: first we should search . and the directory the executable
is in
shlibpath_var=PATH
;;

darwin* | rhapsody*)
    dynamic_linker="$host_os dyld"
    version_type=darwin
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${major}${shared_ext}
${libname}${shared_ext}'
    soname_spec='${libname}${release}${major}${shared_ext}'
    shlibpath_overrides_runpath=yes
    shlibpath_var=DYLD_LIBRARY_PATH
    shrext_cmds='`test $.module = .yes && echo .so || echo .dylib`'

    sys_lib_search_path_spec="$sys_lib_search_path_spec /usr/local/lib"
    sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
    ;;

dgux*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}${versuffix}
${libname}${release}${shared_ext}${major} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}${major}'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

freebsd* | dragonfly*)
    # DragonFly does not have a.out.  When/if they implement a new
    # versioning mechanism, adjust this.
    if test -x /usr/bin/objformat; then

```

```

    objformat=`/usr/bin/objformat`
else
    case $host_os in
        freebsd[23].*) objformat=aout ;;
        *) objformat=elf ;;
    esac
fi
version_type=freebsd-$objformat
case $version_type in
    freebsd-elf*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
        need_version=no
        need_lib_prefix=no
        ;;
    freebsd-*)
        library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname${shared_ext}$versuffix'
        need_version=yes
        ;;
esac
shlibpath_var=LD_LIBRARY_PATH
case $host_os in
    freebsd2.*)
        shlibpath_overrides_runpath=yes
        ;;
    freebsd3.[01]* | freebsdelf3.[01]*)
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
    freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
    freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
        shlibpath_overrides_runpath=no
        hardcode_into_libs=yes
        ;;
    *) # from 4.6 on, and DragonFly
        shlibpath_overrides_runpath=yes
        hardcode_into_libs=yes
        ;;
esac
;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no

```

```

hardcode_into_libs=yes
;;

haiku*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in
    ia64*)
        shrext_cmds='.so'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.so"
        shlibpath_var=LD_LIBRARY_PATH
        shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        soname_spec='${libname}${release}${shared_ext}$major'
        if test "X$HPUX_IA64_MODE" = X32; then
            sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
        else
            sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
        fi
        sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
    ;;
    hppa*64*)
        shrext_cmds='.sl'
        hardcode_into_libs=yes
        dynamic_linker="$host_os dld.sl"
        shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'

```

```

soname_spec='${libname}${release}${shared_ext}$major'
sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
*)
shrext_cmds='.sl'
dynamic_linker="$host_os dld.sl"
shlibpath_var=SHLIB_PATH
shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=no
hardcode_into_libs=yes
;;

irix5* | irix6* | nonstopux*)
case $host_os in
nonstopux*) version_type=nonstopux ;;
*)
if test "$lt_cv_prog_gnu_ld" = yes; then
version_type=linux # correct to gnu/linux during the next
big refactor
else
version_type=irix
fi ;;
esac
need_lib_prefix=no
need_version=no
soname_spec='${libname}${release}${shared_ext}$major'

```

```

library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext} $libname${shared_ext}'
case $host_os in
  irix5* | nonstopux*)
    libsuff= shlibsuff=
    ;;
  *)
    case $LD in # libtool.m4 will add one of these switches to LD
      *-32|*" -32 " | *-melf32bsmip|*" -melf32bsmip ")
        libsuff= shlibsuff= libmagic=32-bit;;
      *-n32|*" -n32 " | *-melf32bmipn32|*" -melf32bmipn32 ")
        libsuff=32 shlibsuff=N32 libmagic=N32;;
      *-64|*" -64 " | *-melf64bmip|*" -melf64bmip ")
        libsuff=64 shlibsuff=64 libmagic=64-bit;;
    *) libsuff= shlibsuff= libmagic=never-match;;
    esac
    ;;
  esac
shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
shlibpath_overrides_runpath=no
sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
/usr/local/lib${libsuff}"
sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
hardcode_into_libs=yes
;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)
  dynamic_linker=no
  ;;

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
  version_type=linux # correct to gnu/linux during the next big
refactor
  need_lib_prefix=no
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
  shlibpath_var=LD_LIBRARY_PATH
  shlibpath_overrides_runpath=no

  # Some binutils ld are patched to set DT_RUNPATH
  if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    lt_cv_shlibpath_overrides_runpath=no
    save_LDFLAGS=$LDFLAGS
    save_libdir=$libdir

```

```

eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl\"; \
    LDFLAGS=\"\$LDFLAGS $hardcode_libdir_flag_spec\"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    if ($OBJDUMP -p conftest$ac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
        lt_cv_shlibpath_overrides_runpath=yes
    fi
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    LDFLAGS=$save_LDFLAGS
    libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.
# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
    lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \$2)); skip = 1; } { if (!skip) print \$0; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ ]*hwcap[ ]*/d;s/[: , ]/
/g;s/=[^=]*$/;/s/=[^= ]* / /g;s/"//g;/^$/d' | tr '\n' ' '`
    sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker. Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.
dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)

```



```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        case $host_os in
            openbsd2.[89] | openbsd2.[89].*)
                shlibpath_overrides_runpath=no
                ;;
            *)
                shlibpath_overrides_runpath=yes
                ;;
        esac
    else
        shlibpath_overrides_runpath=yes
    fi
    ;;

os2*)
    libname_spec='$name'
    shrext_cmds=".dll"
    need_lib_prefix=no
    library_names_spec='$libname${shared_ext} $libname.a'
    dynamic_linker='OS/2 ld.exe'
    shlibpath_var=LIBPATH
    ;;

osf3* | osf4* | osf5*)
    version_type=osf
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
    sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
    ;;

rdos*)
    dynamic_linker=no
    ;;

solaris*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'

```



```

soname_spec='${libname}${release}${shared_ext}$major'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
# ldd complains unless libraries are executable
postinstall_cmds='chmod +x $lib'
;;

sunos4*)
    version_type=sunos
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
    ;;

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)
            shlibpath_overrides_runpath=no
            need_lib_prefix=no
            runpath_var=LD_RUN_PATH
            ;;
        siemens)
            need_lib_prefix=no
            ;;
        motorola)
            need_lib_prefix=no
            need_version=no
            shlibpath_overrides_runpath=no
            sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
            ;;
    esac
    ;;

sysv4*MP*)
    if test -d /usr/nec ;then
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='$libname${shared_ext}.$versuffix
$libname${shared_ext}.$major $libname${shared_ext}'

```

```

    soname_spec='${libname}${shared_ext}.$major'
    shlibpath_var=LD_LIBRARY_PATH
fi
;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
            ;;
        esac
    fi
    sys_lib_dlsearch_path_spec='/usr/lib'
;;

tpf*)
    # TPF is a cross-target only. Preferred cross-host = GNU/Linux.
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

uts4*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

*)

```

```
dynamic_linker=no
;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then
  variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec}" = set; then
  sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec}" = set; then
  sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi
```



```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking how to hardcode
library paths into programs" >&5
$as_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action=
if test -n "$hardcode_libdir_flag_spec" ||
    test -n "$runpath_var" ||
    test "X$hardcode_automatic" = "Xyes" ; then

    # We can hardcode non-existent directories.
    if test "$hardcode_direct" != no &&
        # If the only mechanism to avoid hardcoding is shlibpath_var, we
        # have to relink, otherwise we might link with an installed
library
        # when we should be linking with a yet-to-be-installed one
        ## test "$_LT_TAGVAR(hardcode_shlibpath_var, )" != no &&
        test "$hardcode_minus_L" != no; then
        # Linking always hardcodes the temporary library directory.
        hardcode_action=relink
    else
        # We can link without hardcoding, and we can hardcode nonexistent
dirs.
        hardcode_action=immediate
    fi
else
    # We cannot hardcode anything, or else we can only hardcode existing
# directories.
    hardcode_action=unsupported
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hardcode_action" >&5
$as_echo "$hardcode_action" >&6; }

if test "$hardcode_action" = relink ||
    test "$inherit_rpath" = yes; then
    # Fast installation is not supported
    enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
    test "$enable_shared" = no; then
    # Fast installation is not necessary
    enable_fast_install=needless
fi

```

```

if test "x$enable_dlopen" != xyes; then
enable_dlopen=unknown
enable_dlopen_self=unknown
enable_dlopen_self_static=unknown
else
lt_cv_dlopen=no
lt_cv_dlopen_libs=

case $host_os in
beos*)
lt_cv_dlopen="load_add_on"
lt_cv_dlopen_libs=
lt_cv_dlopen_self=yes
;;

mingw* | pw32* | cegcc*)
lt_cv_dlopen="LoadLibrary"
lt_cv_dlopen_libs=
;;

cygwin*)
lt_cv_dlopen="dlopen"
lt_cv_dlopen_libs=
;;

darwin*)
# if libdl is installed we need to link against it
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else

    lt_cv_dlopen="dyld"
    lt_cv_dlopen_libs=
    lt_cv_dlopen_self=yes

fi

;;

*)
    ac_fn_c_check_func "$LINENO" "shl_load" "ac_cv_func_shl_load"
if test "x$ac_cv_func_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for shl_load in -
ldld" >&5
$as_echo_n "checking for shl_load in -ldld... " >&6; }
if ${ac_cv_lib_dld_shl_load+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char shl_load ();
int
main ()

```

```

{
return shl_load ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_dld_shl_load=yes
else
    ac_cv_lib_dld_shl_load=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_shl_load" >&5
$as_echo "$ac_cv_lib_dld_shl_load" >&6; }
if test "x$ac_cv_lib_dld_shl_load" = xyes; then :
    lt_cv_dlopen="shl_load" lt_cv_dlopen_libs="-ldld"
else
    ac_fn_c_check_func "$LINENO" "dlopen" "ac_cv_func_dlopen"
if test "x$ac_cv_func_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
ldl" >&5
$as_echo_n "checking for dlopen in -ldl... " >&6; }
if ${ac_cv_lib_dl_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-ldl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :

```



```

    ac_cv_lib_dl_dlopen=yes
else
    ac_cv_lib_dl_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_lib_dl_dlopen"
>&5
$as_echo "$ac_cv_lib_dl_dlopen" >&6; }
if test "x$ac_cv_lib_dl_dlopen" = xyes; then :
    lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dlopen in -
lsvld" >&5
$as_echo_n "checking for dlopen in -lsvld... " >&6; }
if ${ac_cv_lib_svld_dlopen+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lsvld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dlopen ();
int
main ()
{
return dlopen ();
;
return 0;
}
ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_svld_dlopen=yes
else
    ac_cv_lib_svld_dlopen=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_svld_dlopen" >&5
$as_echo "$ac_cv_lib_svld_dlopen" >&6; }

```

```

if test "x$ac_cv_lib_svld_dlopen" = xyes; then :
  lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-lsvld"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dld_link in -
ldld" >&5
$as_echo_n "checking for dld_link in -ldld... " >&6; }
if ${ac_cv_lib_dld_dld_link+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-ldld $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dld_link ();
int
main ()
{
return dld_link ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_dld_dld_link=yes
else
  ac_cv_lib_dld_dld_link=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dld_dld_link" >&5
$as_echo "$ac_cv_lib_dld_dld_link" >&6; }
if test "x$ac_cv_lib_dld_dld_link" = xyes; then :
  lt_cv_dlopen="dld_link" lt_cv_dlopen_libs="-ldld"
fi

fi

fi

```

```

fi

fi

fi

;;
esac

if test "x$lt_cv_dlopen" != xno; then
  enable_dlopen=yes
else
  enable_dlopen=no
fi

case $lt_cv_dlopen in
dlopen)
  save_CPPFLAGS="$CPPFLAGS"
  test "x$ac_cv_header_dlfcn_h" = xyes && CPPFLAGS="$CPPFLAGS -
DHAVE_DLFCN_H"

  save_LDFLAGS="$LDFLAGS"
  wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$export_dynamic_flag_spec\`"

  save_LIBS="$LIBS"
  LIBS="$lt_cv_dlopen_libs $LIBS"

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
program can dlopen itself" >&5
$as_echo_n "checking whether a program can dlopen itself... " >&6; }
if ${lt_cv_dlopen_self+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    lt_cv_dlopen_self=cross
  else
    lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
    lt_status=$lt_dlunknown
    cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"
#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

#ifdef RTLD_GLOBAL

```

```

# define LT_DLGLOBAL          RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL        DL_GLOBAL
# else
#   define LT_DLGLOBAL        0
# endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
# ifdef RTLD_LAZY
#   define LT_DLLAZY_OR_NOW    RTLD_LAZY
# else
#   ifdef DL_LAZY
#     define LT_DLLAZY_OR_NOW  DL_LAZY
#   else
#     ifdef RTLD_NOW
#       define LT_DLLAZY_OR_NOW RTLD_NOW
#     else
#       ifdef DL_NOW
#         define LT_DLLAZY_OR_NOW DL_NOW
#       else
#         define LT_DLLAZY_OR_NOW 0
#       endif
#     endif
#   endif
# endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#ifdef __GNUC__ && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
  void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
  int status = $lt_dlunknown;

  if (self)
    {
      if (dlsym (self,"fnord"))      status = $lt_dlno_uscore;
      else
        {
          if (dlsym( self,"_fnord")) status = $lt_dlneed_uscore;
          else puts (dlerror ());
        }
    }
}

```

```

        /* dlclose (self); */
    }
else
    puts (dlerror ());

return status;
}
_LT_EOF
if { { eval echo "\$as_me\":"${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self=no ;;
    esac
else :
    # compilation failed
    lt_cv_dlopen_self=no
fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_dlopen_self"
>&5
$as_echo "$lt_cv_dlopen_self" >&6; }

    if test "x$lt_cv_dlopen_self" = xyes; then
        wl=$lt_prog_compiler_wl eval LDFLAGS="\$LDFLAGS
$lt_prog_compiler_static\"
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether a
statically linked program can dlopen itself" >&5
$as_echo_n "checking whether a statically linked program can dlopen
itself... " >&6; }
if ${lt_cv_dlopen_self_static+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if test "$cross_compiling" = yes; then :
        lt_cv_dlopen_self_static=cross
    else
        lt_dlunknown=0; lt_dlno_uscore=1; lt_dlneed_uscore=2
        lt_status=$lt_dlunknown
        cat > conftest.$ac_ext <<_LT_EOF
#line $LINENO "configure"

```

```

#include "confdefs.h"

#if HAVE_DLFCN_H
#include <dlfcn.h>
#endif

#include <stdio.h>

#ifdef RTLD_GLOBAL
# define LT_DLGLOBAL      RTLD_GLOBAL
#else
# ifdef DL_GLOBAL
#   define LT_DLGLOBAL      DL_GLOBAL
# else
#   define LT_DLGLOBAL      0
# endif
#endif

/* We may have to define LT_DLLAZY_OR_NOW in the command line if we
   find out it does not work in some platform. */
#ifndef LT_DLLAZY_OR_NOW
# ifdef RTLD_LAZY
#   define LT_DLLAZY_OR_NOW      RTLD_LAZY
# else
#   ifdef DL_LAZY
#     define LT_DLLAZY_OR_NOW      DL_LAZY
#   else
#     ifdef RTLD_NOW
#       define LT_DLLAZY_OR_NOW RTLD_NOW
#     else
#       ifdef DL_NOW
#         define LT_DLLAZY_OR_NOW      DL_NOW
#       else
#         define LT_DLLAZY_OR_NOW      0
#       endif
#     endif
#   endif
# endif
#endif

/* When -fvisibility=hidden is used, assume the code has been annotated
   correspondingly for the symbols needed. */
#if defined(__GNUC__) && (((__GNUC__ == 3) && (__GNUC_MINOR__ >= 3))
|| (__GNUC__ > 3))
int fnord () __attribute__((visibility("default")));
#endif

int fnord () { return 42; }
int main ()
{
    void *self = dlopen (0, LT_DLGLOBAL|LT_DLLAZY_OR_NOW);
    int status = $lt_dlunknown;

```

```

if (self)
{
    if (dlsym (self,"fnord"))          status = $lt_dlno_uscore;
    else
    {
        if (dlsym( self,"_fnord"))    status = $lt_dlneed_uscore;
        else puts (dlerror ());
    }
    /* dlclose (self); */
}
else
    puts (dlerror ());

return status;
}
_LT_EOF
if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"$ac_link\""; }
>&5
(eval $ac_link) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; } && test -s conftest${ac_exeext} 2>/dev/null;
then
    (./conftest; exit; ) >&5 2>/dev/null
    lt_status=$?
    case x$lt_status in
        x$lt_dlno_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlneed_uscore) lt_cv_dlopen_self_static=yes ;;
        x$lt_dlunknown|x*) lt_cv_dlopen_self_static=no ;;
    esac
else :
    # compilation failed
    lt_cv_dlopen_self_static=no
fi
fi
rm -fr conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_dlopen_self_static" >&5
$as_echo "$lt_cv_dlopen_self_static" >&6; }
fi

    CPPFLAGS="$save_CPPFLAGS"
    LDFLAGS="$save_LDFLAGS"
    LIBS="$save_LIBS"
    ;;
esac

case $lt_cv_dlopen_self in

```

```

yes|no) enable_dlopen_self=$lt_cv_dlopen_self ;;
*) enable_dlopen_self=unknown ;;
esac

case $lt_cv_dlopen_self_static in
yes|no) enable_dlopen_self_static=$lt_cv_dlopen_self_static ;;
*) enable_dlopen_self_static=unknown ;;
esac
fi

striplib=
old_striplib=
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether stripping
libraries is possible" >&5
$as_echo_n "checking whether stripping libraries is possible... " >&6;
}
if test -n "$STRIP" && $STRIP -V 2>&1 | $GREP "GNU strip" >/dev/null;
then
  test -z "$old_striplib" && old_striplib="$STRIP --strip-debug"
  test -z "$striplib" && striplib="$STRIP --strip-unnneeded"
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
# FIXME - insert some real tests, host_os isn't really good enough
case $host_os in
darwin*)
  if test -n "$STRIP" ; then
    striplib="$STRIP -x"
    old_striplib="$STRIP -S"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi
;;

```



```

*)
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  ;;
esac
fi

# Report which library types will actually be built
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if libtool
supports shared libraries" >&5
$as_echo_n "checking if libtool supports shared libraries... " >&6; }
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $scan_build_shared"
>&5
$as_echo "$scan_build_shared" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
shared libraries" >&5
$as_echo_n "checking whether to build shared libraries... " >&6; }
test "$scan_build_shared" = "no" && enable_shared=no

# On AIX, shared libraries and static libraries use the same
namespace, and
# are all built from PIC.
case $host_os in
aix3*)
  test "$enable_shared" = yes && enable_static=no
  if test -n "$RANLIB"; then
    archive_cmds="$archive_cmds~\${RANLIB} \$lib"
    postinstall_cmds='${RANLIB} $lib'
  fi
  ;;

aix[4-9]*)
  if test "$host_cpu" != ia64 && test "$aix_use_runtimelinking" = no
; then
    test "$enable_shared" = yes && enable_static=no
  fi
  ;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_shared" >&5
$as_echo "$enable_shared" >&6; }

```

```

    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build
static libraries" >&5
$sas_echo_n "checking whether to build static libraries... " >&6; }
    # Make sure either enable_shared or enable_static is yes.
    test "$enable_shared" = yes || enable_static=yes
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $enable_static" >&5
$sas_echo "$enable_static" >&6; }

```

```

fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

CC="$lt_save_CC"

    if test -n "$CXX" && ( test "X$CXX" != "Xno" &&
    ( (test "X$CXX" = "Xg++" && `g++ -v >/dev/null 2>&1` ) ||
    (test "X$CXX" != "Xg++")) ) ; then
    ac_ext=cpp
ac_cpp='$CXXCPP $CPPFLAGS'
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking how to run the C++
preprocessor" >&5
$sas_echo_n "checking how to run the C++ preprocessor... " >&6; }
if test -z "$CXXCPP"; then
    if ${ac_cv_prog_CXXCPP+:} false; then :
        $sas_echo_n "(cached) " >&6
    else
        # Double quotes because CXXCPP needs to be expanded
        for CXXCPP in "$CXX -E" "/lib/cpp"
        do
            ac_preproc_ok=false
        for ac_cxx_preproc_warn_flag in ' yes
        do
            # Use a header file that comes with gcc, so configuring glibc
            # with a fresh cross-compiler works.
            # Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
            # <limits.h> exists even on freestanding compilers.
            # On the NeXT, cc -E runs the code through the compiler's parser,
            # not just through cpp. "Syntax error" is here to catch this case.
            cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

```

```

@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif

                Syntax error

_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :

else
    # Broken: fails on valid input.
    continue
fi
rm -f confptest.err confptest.i confptest.$ac_ext

    # OK, works on sane cases.  Now check whether nonexistent headers
    # can be detected and how.
    cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h.  */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :
    # Broken: success on invalid input.
    continue
else
    # Passes both tests.
    ac_preproc_ok=:
    break
fi
rm -f confptest.err confptest.i confptest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f confptest.i confptest.err confptest.$ac_ext
if $ac_preproc_ok; then :
    break
fi

    done
    ac_cv_prog_CXXCPP=$CXXCPP

fi
CXXCPP=$ac_cv_prog_CXXCPP
else
    ac_cv_prog_CXXCPP=$CXXCPP
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $CXXCPP" >&5
$as_echo "$CXXCPP" >&6; }
ac_preproc_ok=false
for ac_cxx_preproc_warn_flag in ' yes
do
    # Use a header file that comes with gcc, so configuring glibc

```

```

# with a fresh cross-compiler works.
# Prefer <limits.h> to <assert.h> if __STDC__ is defined, since
# <limits.h> exists even on freestanding compilers.
# On the NeXT, cc -E runs the code through the compiler's parser,
# not just through cpp. "Syntax error" is here to catch this case.
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@ifdef __STDC__
@%:@ include <limits.h>
@%:@else
@%:@ include <assert.h>
@%:@endif
                Syntax error

_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :

else
    # Broken: fails on valid input.
    continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext

    # OK, works on sane cases.  Now check whether nonexistent headers
    # can be detected and how.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <ac_nonexistent.h>
_ACEOF
if ac_fn_cxx_try_cpp "$LINENO"; then :
    # Broken: success on invalid input.
    continue
else
    # Passes both tests.
    ac_preproc_ok=:
    break
fi
rm -f conftest.err conftest.i conftest.$ac_ext

done
# Because of `break', _AC_PREPROC_IFELSE's cleaning code was skipped.
rm -f conftest.i conftest.err conftest.$ac_ext
if $ac_preproc_ok; then :

else
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in \`${ac_pwd}':"
    >&5
    $as_echo "$as_me: error: in \`${ac_pwd}':" >&2;}
    as_fn_error $? "C++ preprocessor \`${CXXCPP}` fails sanity check
    See \`${config.log}` for more details" "$LINENO" 5; }
fi

ac_ext=c

```

```

ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

else
  _lt_caught_CXX_error=yes
fi

ac_ext=cpp
ac_cpp='$CXXCPP $CPPFLAGS'
ac_compile='$CXX -c $CXXFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CXX -o conftest$ac_exeext $CXXFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_cxx_compiler_gnu

archive_cmds_need_lc_CXX=no
allow_undefined_flag_CXX=
always_export_symbols_CXX=no
archive_expsym_cmds_CXX=
compiler_needs_object_CXX=no
export_dynamic_flag_spec_CXX=
hardcode_direct_CXX=no
hardcode_direct_absolute_CXX=no
hardcode_libdir_flag_spec_CXX=
hardcode_libdir_separator_CXX=
hardcode_minus_L_CXX=no
hardcode_shlibpath_var_CXX=unsupported
hardcode_automatic_CXX=no
inherit_rpath_CXX=no
module_cmds_CXX=
module_expsym_cmds_CXX=
link_all_deplibs_CXX=unknown
old_archive_cmds_CXX=$old_archive_cmds
reload_flag_CXX=$reload_flag
reload_cmds_CXX=$reload_cmds
no_undefined_flag_CXX=
whole_archive_flag_spec_CXX=
enable_shared_with_static_runtimes_CXX=no

# Source file extension for C++ test sources.
ac_ext=cpp

# Object file extension for compiled C++ test sources.
objext=o
objext_CXX=$objext

# No sense in running all these tests if we already determined that
# the CXX compiler isn't working.  Some variables (like enable_shared)
# are currently assumed to apply to all compilers on this platform,

```

```

# and will be corrupted by setting them based on a non-working
compiler.
if test "$lt_caught_CXX_error" != yes; then
  # Code to be used in simple compile tests
  lt_simple_compile_test_code="int some_variable = 0;"

  # Code to be used in simple link tests
  lt_simple_link_test_code='int main(int, char *[]) { return(0); }'

  # ltmain only uses $CC for tagged configurations so make sure $CC is
  set.

```

```

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

```

```

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

```

```

# Allow CC to be a program name with arguments.
compiler=$CC

```

```

# save warnings/boilerplate of simple test code
ac_outfile=conftest.$ac_objext
echo "$lt_simple_compile_test_code" >conftest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>conftest.err
_lt_compiler_boilerplate=`cat conftest.err`
$RM conftest*

```

```

ac_outfile=conftest.$ac_objext
echo "$lt_simple_link_test_code" >conftest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >conftest.err
_lt_linker_boilerplate=`cat conftest.err`
$RM -r conftest*

```

```

# Allow CC to be a program name with arguments.
lt_save_CC=$CC
lt_save_CFLAGS=$CFLAGS
lt_save_LD=$LD
lt_save_GCC=$GCC
GCC=$GXX
lt_save_with_gnu_ld=$with_gnu_ld
lt_save_path_LD=$lt_cv_path_LD
if test -n "${lt_cv_prog_gnu_ldcxx+set}"; then
  lt_cv_prog_gnu_ld=$lt_cv_prog_gnu_ldcxx

```

```

else
  $as_unset lt_cv_prog_gnu_ld
fi
if test -n "${lt_cv_path_LDCXX+set}"; then
  lt_cv_path_LD=$lt_cv_path_LDCXX
else
  $as_unset lt_cv_path_LD
fi
test -z "${LDCXX+set}" || LD=$LDCXX
CC=${CXX-"c++"}
CFLAGS=$CXXFLAGS
compiler=$CC
compiler_CXX=$CC
for cc_temp in $compiler""; do
case $cc_temp in
  compile | *[\//]compile | ccache | *[\//]ccache ) ;;
  distcc | *[\//]distcc | purify | *[\//]purify ) ;;
  \-*) ;;
  *) break;;
esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^\$host_alias-%%"`

if test -n "$compiler"; then
  # We don't want -fno-exception when compiling C++ code, so set the
  # no_builtin_flag separately
  if test "$GXX" = yes; then
    lt_prog_compiler_no_builtin_flag_CXX=' -fno-builtin'
  else
    lt_prog_compiler_no_builtin_flag_CXX=
  fi

  if test "$GXX" = yes; then
    # Set up default GNU C++ configuration

```

@%:@ Check whether --with-gnu-ld was given.

```

if test "${with_gnu_ld+set}" = set; then :
  withval=$with_gnu_ld; test "$withval" = no || with_gnu_ld=yes
else
  with_gnu_ld=no
fi

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for ld used by
$CC" >&5
$as_echo_n "checking for ld used by $CC... " >&6; }
  case $host in

```

```

*-*-mingw*)
  # gcc leaves a trailing carriage return which upsets mingw
  ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
*)
  ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
esac
case $ac_prog in
  # Accept absolute paths.
  [\\/] * | ?:[\\/] *)
    re_direlt=' /^[^/][^/]* / \. \. / '
    # Canonicalize the pathname of ld
    ac_prog=`$ECHO "$ac_prog" | $SED 's%\\\\\%/g'`
    while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
      ac_prog=`$ECHO $ac_prog | $SED "s%$re_direlt%/"`
    done
    test -z "$LD" && LD="$ac_prog"
    ;;
  "")
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
  *)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
esac
elif test "$with_gnu_ld" = yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNU ld" >&5
$as_echo_n "checking for GNU ld... " >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for non-GNU ld"
>&5
$as_echo_n "checking for non-GNU ld... " >&6; }
fi
if ${lt_cv_path_LD+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
        lt_cv_path_LD="$ac_dir/$ac_prog"
        # Check to see if the program is GNU ld.  I'd rather use --
version,
        # but apparently some variants of GNU ld only accept -v.
        # Break only if it was the GNU/non-GNU ld that we prefer.
        case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
          *GNU* | *'with BFD'*)
            test "$with_gnu_ld" != no && break

```



```

        ;;
        *)
        test "$with_gnu_ld" != yes && break
        ;;
    esac
fi
done
IFS="$lt_save_ifs"
else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
fi
fi

LD="$lt_cv_path_LD"
if test -n "$LD"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LD" >&5
$as_echo "$LD" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi
test -z "$LD" && as_fn_error $? "no acceptable ld found in \$PATH"
"$LINENO" 5
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if the linker ($LD)
is GNU ld" >&5
$as_echo_n "checking if the linker ($LD) is GNU ld... " >&6; }
if ${lt_cv_prog_gnu_ld+:} false; then :
    $as_echo_n "(cached) " >&6
else
    # I'd rather use --version here, but apparently some GNU lds only
    accept -v.
    case ` $LD -v 2>&1 </dev/null` in
    *GNU* | *'with BFD'*)
        lt_cv_prog_gnu_ld=yes
        ;;
    *)
        lt_cv_prog_gnu_ld=no
        ;;
    esac
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $lt_cv_prog_gnu_ld"
>&5
$as_echo "$lt_cv_prog_gnu_ld" >&6; }
with_gnu_ld=$lt_cv_prog_gnu_ld

```

```

# Check if GNU C++ uses GNU ld as the underlying linker, since
the
# archiving commands below assume that GNU ld is being used.
if test "$with_gnu_ld" = yes; then
    archive_cmds_CXX='$CC $pic_flag -shared -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $wl$soname -o $lib'
    archive_expsym_cmds_CXX='$CC $pic_flag -shared -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $wl$soname ${wl}-retain-symbols-file $wl$export_symbols -
o $lib'

    hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
    export_dynamic_flag_spec_CXX='${wl}--export-dynamic'

# If archive_cmds runs LD, not CC, wlarc should be empty
# XXX I think wlarc can be eliminated in ltcf-cxx, but I need
to
#     investigate it a little bit more. (MM)
wlarc='${wl}'

# ancient GNU ld didn't support --whole-archive et. al.
if eval "`$CC -print-prog-name=ld` --help 2>&1" |
$GREP 'no-whole-archive' > /dev/null; then
    whole_archive_flag_spec_CXX="$wlarc"--whole-
archive$convenience "'$wlarc"--no-whole-archive'
    else
        whole_archive_flag_spec_CXX=
    fi
else
    with_gnu_ld=no
    wlarc=

# A generic and very simple default shared library creation
# command for GNU C++ for the case where it uses the native
# linker, instead of GNU ld.  If possible, this setting should
# be overridden to take advantage of the native linker features
on
# the platform it is being used on.
archive_cmds_CXX='$CC -shared -nostdlib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o $lib'
fi

# Commands to make compiler produce verbose output that lists
# what "hidden" libraries, object files and flags are used when
# linking a shared library.
output_verbose_link_cmd='$CC -shared $CFLAGS -v conftest.$objext
2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'

else
    GXX=no
    with_gnu_ld=no

```

```

    wlarc=
fi

# PORTME: fill in a description of your system's C++ link
characteristics
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }
ld_shlibs_CXX=yes
case $host_os in
aix3*)
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
;;
aix[4-9]*)
if test "$host_cpu" = ia64; then
# On IA64, the linker does run time linking by default, so
we don't
# have to do anything special.
aix_use_runtimelinking=no
exp_sym_flag='-Bexport'
no_entry_flag=""
else
aix_use_runtimelinking=no

# Test if we are trying to use run time linking or normal
# AIX style linking. If -brtl is somewhere in LDFLAGS, we
# need to do runtime linking.
case $host_os in aix4.[23]|aix4.[23].*|aix[5-9]*)
for ld_flag in $LDFLAGS; do
case $ld_flag in
*-brtl*)
aix_use_runtimelinking=yes
break
;;
esac
done
;;
esac

exp_sym_flag='-bexport'
no_entry_flag='-bnoentry'
fi

# When large executables or shared objects are built, AIX ld
can
# have problems creating the table of contents. If linking a
library
# or program results in "error TOC overflow" add -mminimal-toc
to
# CXXFLAGS/CFLAGS for g++/gcc. In the cases where that is not

```

```

# enough to fix the problem, add -Wl,-bbigtoc to LDFLAGS.

archive_cmds_CXX=''
hardcode_direct_CXX=yes
hardcode_direct_absolute_CXX=yes
hardcode_libdir_separator_CXX=':'
link_all_deplibs_CXX=yes
file_list_spec_CXX='${wl}-f,'

if test "$GXX" = yes; then
  case $host_os in aix4.[012]|aix4.[012].*)
    # We only want to do this on AIX 4.2 and lower, the check
    # below for broken collect2 doesn't work under 4.3+
    collect2name=`${CC} -print-prog-name=collect2`
    if test -f "$collect2name" &&
       strings "$collect2name" | $GREP resolve_lib_name >/dev/null
    then
      # We have reworked collect2
      :
    else
      # We have old collect2
      hardcode_direct_CXX=unsupported
      # It fails to find uninstalled libraries when the uninstalled
      # path is not listed in the libpath.  Setting
hardcode_minus_L
      # to unsupported forces relinking
      hardcode_minus_L_CXX=yes
      hardcode_libdir_flag_spec_CXX='-L$libdir'
      hardcode_libdir_separator_CXX=
    fi
  esac
  shared_flag='-shared'
  if test "$aix_use_runtimelinking" = yes; then
    shared_flag="$shared_flag "'${wl}-G'
  fi
  else
    # not using gcc
    if test "$host_cpu" = ia64; then
      # VisualAge C++, Version 5.5 for AIX 5L for IA-64, Beta 3
Release
      # chokes on -Wl,-G. The following line is correct:
      shared_flag='-G'
    else
      if test "$aix_use_runtimelinking" = yes; then
        shared_flag='${wl}-G'
      else
        shared_flag='${wl}-bM:SRE'
      fi
    fi
  fi

  fi

  export_dynamic_flag_spec_CXX='${wl}-bexpall'

```

```

        # It seems that -bexpall does not export symbols beginning
with
        # underscore (_), so it is better to generate a list of
symbols to
        # export.
        always_export_symbols_CXX=yes
        if test "$aix_use_runtimelinking" = yes; then
            # Warning - without using the other runtime loading flags (-
brtl),
            # -berok will link without error, but may produce a broken
library.
            allow_undefined_flag_CXX='-berok'
            # Determine the default libpath from the value encoded in an
empty
            # executable.
            if test "${lt_cv_aix_libpath+set}" = set; then
                aix_libpath=$lt_cv_aix_libpath
            else
                if ${lt_cv_aix_libpath__CXX+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
        /Import File Strings/,/^$/ {
            /^0/ {
                s/^0  *\[^\]*\)* *$/\1/
                p
            }
        }'
    lt_cv_aix_libpath__CXX=`dump -H conftest$ac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath__CXX"; then
        lt_cv_aix_libpath__CXX=`dump -HX64 conftest$ac_exeext 2>/dev/null
| $SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
if test -z "$lt_cv_aix_libpath__CXX"; then

```

```

    lt_cv_aix_libpath__CXX="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath__CXX
fi

    hardcode_libdir_flag_spec_CXX='${wl}-
bllibpath:$libdir:'"$aix_libpath"

    archive_expsym_cmds_CXX='$CC -o $output_objdir/$soname
$libobjs $deplibs '"\${wl}$no_entry_flag"' $compiler_flags `if test
"x${allow_undefined_flag}" != "x"; then func_echo_all
"${wl}${allow_undefined_flag}"; else ;; fi`
'"\${wl}$exp_sym_flag:\$export_symbols $shared_flag"
    else
        if test "$host_cpu" = ia64; then
            hardcode_libdir_flag_spec_CXX='${wl}-R $libdir:/usr/lib:/lib'
            allow_undefined_flag_CXX="-z nodefs"
            archive_expsym_cmds_CXX="\${CC} $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs '"\${wl}$no_entry_flag"'
$compiler_flags ${wl}${allow_undefined_flag}
'"\${wl}$exp_sym_flag:\$export_symbols"
        else
            # Determine the default libpath from the value encoded in an
            # empty executable.
            if test "${lt_cv_aix_libpath+set}" = set; then
                aix_libpath=$lt_cv_aix_libpath
            else
                if ${lt_cv_aix_libpath__CXX+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :

    lt_aix_libpath_sed='
    /Import File Strings/,/^$/ {
        /^0/ {
            s/^0 *\[^\]*\ *$/\1/
            p
        }
    }

```

```

    }'
    lt_cv_aix_libpath_CXX=`dump -H confptest$sac_exeext 2>/dev/null |
$SED -n -e "$lt_aix_libpath_sed"`
    # Check for a 64-bit object if we didn't find anything.
    if test -z "$lt_cv_aix_libpath_CXX"; then
        lt_cv_aix_libpath_CXX=`dump -HX64 confptest$sac_exeext 2>/dev/null
| $SED -n -e "$lt_aix_libpath_sed"`
    fi
fi
rm -f core conftest.err conftest.$sac_objext \
conftest$sac_exeext conftest.$sac_ext
if test -z "$lt_cv_aix_libpath_CXX"; then
    lt_cv_aix_libpath_CXX="/usr/lib:/lib"
fi

fi

aix_libpath=$lt_cv_aix_libpath_CXX
fi

    hardcode_libdir_flag_spec_CXX='${wl}-
bllibpath:$libdir:"$aix_libpath"
    # Warning - without using the other run time loading flags,
    # -berok will link without error, but may produce a broken
library.
    no_undefined_flag_CXX=' ${wl}-bernotok'
    allow_undefined_flag_CXX=' ${wl}-berok'
    if test "$with_gnu_ld" = yes; then
        # We only use this code for GNU lds that support --whole-
archive.
        whole_archive_flag_spec_CXX='${wl}--whole-
archive$convenience ${wl}--no-whole-archive'
    else
        # Exported symbols can be pulled into shared objects from
archives
        whole_archive_flag_spec_CXX='$convenience'
    fi
    archive_cmds_need_lc_CXX=yes
    # This is similar to how AIX traditionally builds its shared
# libraries.
    archive_expsym_cmds_CXX="\$CC $shared_flag" -o
$output_objdir/$soname $libobjs $deplibs ${wl}-bnoentry
$compiler_flags ${wl}-bE:$export_symbols${allow_undefined_flag}~$AR
$AR_FLAGS $output_objdir/$libname$release.a $output_objdir/$soname'
    fi
fi
;;

beos*)
    if $LD --help 2>&1 | $GREP ': supported targets:.* elf' >
/dev/null; then
        allow_undefined_flag_CXX=unsupported

```

```

        # Joseph Beckenbach <jrb3@best.com> says some releases of gcc
        # support --undefined. This deserves some investigation.
FIXME
    archive_cmds_CXX='$CC -nostart $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
    else
        ld_shlibs_CXX=no
    fi
;;

chorus*)
    case $cc_basename in
        *)
            # FIXME: insert proper C++ library support
            ld_shlibs_CXX=no
        ;;
    esac
    ;;

cygwin* | mingw* | pw32* | cegcc*)
case $GXX,$cc_basename in
,cl* | no,cl*)
    # Native MSVC
    # hardcode_libdir_flag_spec is actually meaningless, as there
is
    # no search path for DLLs.
    hardcode_libdir_flag_spec_CXX=' '
    allow_undefined_flag_CXX=unsupported
    always_export_symbols_CXX=yes
    file_list_spec_CXX='@'
    # Tell ltmain to make .lib files, not .a files.
    libext=lib
    # Tell ltmain to make .dll files, not .so files.
    shrext_cmds=".dll"
    # FIXME: Setting linknames here is a bad hack.
    archive_cmds_CXX='$CC -o $output_objdir/$soname $libobjs
$compiler_flags $deplibs -Wl,-dll~linknames='
    archive_expsym_cmds_CXX='if test "x`$SED 1q $export_symbols`" =
xEXPORTS; then
        $SED -n -e 's/\\\\\\\\\\\\\\\\(.*)\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -
EXPORT:\\\\\\\\\\\\\\\\1/' -e '1\\\\\\\\!p' < $export_symbols >
$output_objdir/$soname.exp;
    else
        $SED -e 's/\\\\\\\\\\\\\\\\(.*)\\\\\\\\\\\\\\\\)/-link\\\\\\\\ -EXPORT:\\\\\\\\\\\\\\\\1/' <
$export_symbols > $output_objdir/$soname.exp;
    fi~
    $CC -o $tool_output_objdir$soname $libobjs $compiler_flags
$deplibs "@$tool_output_objdir$soname.exp" -Wl,-DLL,-
IMPLIB:"$tool_output_objdir$libname.dll.lib"~
    linknames='
    # The linker will not automatically build a static lib if we
    build a DLL.

```



```

# _LT_TAGVAR(old_archive_from_new_cmds, CXX)='true'
enable_shared_with_static_runtimes_CXX=yes
# Don't use ranlib
old_postinstall_cmds_CXX='chmod 644 $oldlib'
postlink_cmds_CXX='lt_outputfile="@OUTPUT@"~
  lt_tool_outputfile="@TOOL_OUTPUT@"~
  case $lt_outputfile in
    *.exe|*.EXE) ;;
    *)
      lt_outputfile="$lt_outputfile.exe"
      lt_tool_outputfile="$lt_tool_outputfile.exe"
    ;;
  esac~
  func_to_tool_file "$lt_outputfile"~
  if test "$MANIFEST_TOOL" != ":" && test -f
"$lt_outputfile.manifest"; then
    $MANIFEST_TOOL -manifest "$lt_tool_outputfile.manifest" -
outputresource:"$lt_tool_outputfile" || exit 1;
    $RM "$lt_outputfile.manifest";
  fi'
;;
*)
# g++
# _LT_TAGVAR(hardcode_libdir_flag_spec, CXX) is actually
meaningless,
# as there is no search path for DLLs.
hardcode_libdir_flag_spec_CXX='-L$libdir'
export_dynamic_flag_spec_CXX='${wl}--export-all-symbols'
allow_undefined_flag_CXX=unsupported
always_export_symbols_CXX=no
enable_shared_with_static_runtimes_CXX=yes

if $LD --help 2>&1 | $GREP 'auto-import' > /dev/null; then
  archive_cmds_CXX='$CC -shared -nostdlib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
  # If the export-symbols file already is a .def file (1st line
  # is EXPORTS), use it as is; otherwise, prepend...
  archive_expsym_cmds_CXX='if test "x`$SED 1q $export_symbols`"
= xEXPORTS; then
    cp $export_symbols $output_objdir/$soname.def;
  else
    echo EXPORTS > $output_objdir/$soname.def;
    cat $export_symbols >> $output_objdir/$soname.def;
  fi~
  $CC -shared -nostdlib $output_objdir/$soname.def
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags -o
$output_objdir/$soname ${wl}--enable-auto-image-base -Xlinker --out-
implib -Xlinker $lib'
else
  ld_shlibs_CXX=no

```

```

        fi
        ;;
    esac
    ;;
    darwin* | rhapsody*)

    archive_cmds_need_lc_CXX=no
    hardcode_direct_CXX=no
    hardcode_automatic_CXX=yes
    hardcode_shlibpath_var_CXX=unsupported
    if test "$lt_cv_ld_force_load" = "yes"; then
        whole_archive_flag_spec_CXX='`for conv in $convenience\`; do
test -n \"\$conv\" && new_convenience=\"\$new_convenience ${wl}-
force_load,\"$conv\"; done; func_echo_all \"\$new_convenience\` ``'
    else
        whole_archive_flag_spec_CXX=''
    fi
    link_all_deplibs_CXX=yes
    allow_undefined_flag_CXX=\"$lt_dar_allow_undefined\"
    case $cc_basename in
        ifort*) _lt_dar_can_shared=yes ;;
        *) _lt_dar_can_shared=$GCC ;;
    esac
    if test "$lt_dar_can_shared" = "yes"; then
        output_verbose_link_cmd=func_echo_all
        archive_cmds_CXX="\$CC -dynamiclib \$allow_undefined_flag -o \$lib
\$libobjs \$deplibs \$compiler_flags -install_name \$rpath/\$soname
\$verstring \$lt_dar_single_mod${_lt_dsymutil}"
        module_cmds_CXX="\$CC \$allow_undefined_flag -o \$lib -bundle
\$libobjs \$deplibs \$compiler_flags${_lt_dsymutil}"
        archive_expsym_cmds_CXX="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -dynamiclib
\$allow_undefined_flag -o \$lib \$libobjs \$deplibs \$compiler_flags -
install_name \$rpath/\$soname \$verstring
\${_lt_dar_single_mod}\${_lt_dar_export_syms}\${_lt_dsymutil}"
        module_expsym_cmds_CXX="sed -e 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC \$allow_undefined_flag
-o \$lib -bundle \$libobjs \$deplibs
\$compiler_flags\${_lt_dar_export_syms}\${_lt_dsymutil}"
        if test "$lt_cv_apple_cc_single_mod" != "yes"; then
            archive_cmds_CXX="\$CC -r -keep_private_externs -nostdlib -o
\${lib}-master.o \$libobjs~\$CC -dynamiclib \$allow_undefined_flag -o
\$lib \${lib}-master.o \$deplibs \$compiler_flags -install_name
\$rpath/\$soname \$verstring\${_lt_dsymutil}"
            archive_expsym_cmds_CXX="sed 's,^,_, ' < \$export_symbols >
\$output_objdir/\${libname}-symbols.expsym~\$CC -r -
keep_private_externs -nostdlib -o \${lib}-master.o \$libobjs~\$CC -
dynamiclib \$allow_undefined_flag -o \$lib \${lib}-master.o \$deplibs
\$compiler_flags -install_name \$rpath/\$soname
\$verstring\${_lt_dar_export_syms}\${_lt_dsymutil}"
        fi
    fi

```

```

fi

else
ld_shlibs_CXX=no
fi

;;

dgux*)
  case $cc_basename in
    ec++*)
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
    ghcx*)
      # Green Hills C++ Compiler
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
    *)
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
  esac
;;

freebsd2.*)
  # C++ shared libraries reported to be fairly broken before
  # switch to ELF
  ld_shlibs_CXX=no
  ;;

freebsd-elf*)
  archive_cmds_need_lc_CXX=no
  ;;

freebsd* | dragonfly*)
  # FreeBSD 3 and later use GNU C++ and GNU ld with standard ELF
  # conventions
  ld_shlibs_CXX=yes
  ;;

gnu*)
  ;;

haiku*)
  archive_cmds_CXX='$CC -shared $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
  link_all_deplibs_CXX=yes
  ;;

hpux9*)

```

```

hardcode_libdir_flag_spec_CXX='${wl}+b ${wl}$libdir'
hardcode_libdir_separator_CXX=:
export_dynamic_flag_spec_CXX='${wl}-E'
hardcode_direct_CXX=yes
hardcode_minus_L_CXX=yes # Not in the search PATH,
                          # but as the default
                          # location of the library.

case $cc_basename in
  CC*)
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
  aCC*)
    archive_cmds_CXX='$RM $output_objdir/$soname~$CC -b
${wl}+b ${wl}$install_libdir -o $output_objdir/$soname $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags~test
$output_objdir/$soname = $lib || mv $output_objdir/$soname $lib'
    # Commands to make compiler produce verbose output that
lists
    # what "hidden" libraries, object files and flags are used
when
    # linking a shared library.
    #
    # There doesn't appear to be a way to prevent this
compiler from
    # explicitly linking system object files so we need to
strip them
    # from the output so that they don't get included in the
library
    # dependencies.
    output_verbose_link_cmd='templist=`($CC -b $CFLAGS -v
conftest.$objext 2>&1) | $EGREP "\-L" `; list=""; for z in $templist;
do case $z in conftest.$objext) list="$list $z";; *.objext);; *)
list="$list $z";;esac; done; func_echo_all "$list"'
    ;;
  *)
    if test "$GXX" = yes; then
      archive_cmds_CXX='$RM $output_objdir/$soname~$CC -shared
-nostdlib $pic_flag ${wl}+b ${wl}$install_libdir -o
$output_objdir/$soname $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags~test $output_objdir/$soname = $lib ||
mv $output_objdir/$soname $lib'
    else
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
    fi
    ;;
  esac
;;
)

hpux10*|hpux11*)

```

```

if test $with_gnu_ld = no; then
hardcode_libdir_flag_spec_CXX='${wl}+b ${wl}$libdir'
hardcode_libdir_separator_CXX=:

    case $host_cpu in
        hppa*64*|ia64*)
            ;;
        *)
            export_dynamic_flag_spec_CXX='${wl}-E'
            ;;
    esac
fi
case $host_cpu in
    hppa*64*|ia64*)
        hardcode_direct_CXX=no
        hardcode_shlibpath_var_CXX=no
        ;;
    *)
        hardcode_direct_CXX=yes
        hardcode_direct_absolute_CXX=yes
        hardcode_minus_L_CXX=yes # Not in the search PATH,
                                # but as the default
                                # location of the library.
        ;;
esac

case $cc_basename in
    CC*)
        # FIXME: insert proper C++ library support
        ld_shlibs_CXX=no
        ;;
    aCC*)
        case $host_cpu in
            hppa*64*)
                archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname -o $lib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags'
                ;;
            ia64*)
                archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname
${wl}+nodefaulttrpath -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
                ;;
            *)
                archive_cmds_CXX='$CC -b ${wl}+h ${wl}$soname ${wl}+b
${wl}$install_libdir -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
                ;;
        esac
        # Commands to make compiler produce verbose output that lists
        # what "hidden" libraries, object files and flags are used
when
        # linking a shared library.

```

```

#
# There doesn't appear to be a way to prevent this compiler
from
# explicitly linking system object files so we need to strip
them
# from the output so that they don't get included in the
library
# dependencies.
output_verbose_link_cmd='templist=`($CC -b $CFLAGS -v
conftest.$objext 2>&1) | $GREP "\-L" `; list=""; for z in $templist; do
case $z in conftest.$objext) list="$list $z";; *. $objext);; *)
list="$list $z";; esac; done; func_echo_all "$list"
;;
*)
if test "$GXX" = yes; then
if test $with_gnu_ld = no; then
case $host_cpu in
hppa*64*)
archive_cmds_CXX='$CC -shared -nostdlib -fPIC ${wl}+h
${wl}$soname -o $lib $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags'
;;
ia64*)
archive_cmds_CXX='$CC -shared -nostdlib $pic_flag
${wl}+h ${wl}$soname ${wl}+nodefaulttrpath -o $lib $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags'
;;
*)
archive_cmds_CXX='$CC -shared -nostdlib $pic_flag
${wl}+h ${wl}$soname ${wl}+b ${wl}$install_libdir -o $lib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags'
;;
esac
fi
else
# FIXME: insert proper C++ library support
ld_shlibs_CXX=no
fi
;;
esac
;;

interix[3-9]*)
hardcode_direct_CXX=no
hardcode_shlibpath_var_CXX=no
hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
export_dynamic_flag_spec_CXX='${wl}-E'
# Hack: On Interix 3.x, we cannot compile PIC because of a broken
gcc.
# Instead, shared libraries are loaded at an image base
(0x10000000 by

```

```

# default) and relocated if they conflict, which is a slow very
memory
# consuming and fragmenting process. To avoid this, we pick a
random,
# 256 KiB-aligned image base between 0x50000000 and 0x6FFC0000 at
link
# time. Moving up from 0x10000000 also allows more sbrk(2)
space.
archive_cmds_CXX='$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--image-base,`expr ${RANDOM-$$} %
4096 / 2 \* 262144 + 1342177280` -o $lib'
archive_expsym_cmds_CXX='sed "s,^,_" $export_symbols
>$output_objdir/$soname.expsym~$CC -shared $pic_flag $libobjs $deplibs
$compiler_flags ${wl}-h,$soname ${wl}--retain-symbols-
file,$output_objdir/$soname.expsym ${wl}--image-base,`expr ${RANDOM-
$$} % 4096 / 2 \* 262144 + 1342177280` -o $lib'
;;
irix5* | irix6*)
case $cc_basename in
CC*)
# SGI C++
archive_cmds_CXX='$CC -shared -all -multigot $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -soname $soname
`test -n "$verstring" && func_echo_all "--set_version $verstring"` -
update_registry ${output_objdir}/so_locations -o $lib'

# Archives containing C++ object files must be created using
# "CC -ar", where "CC" is the IRIX C++ compiler. This is
# necessary to make sure instantiated templates are included
# in the archive.
old_archive_cmds_CXX='$CC -ar -WR,-u -o $oldlib $oldobjs'
;;
*)
if test "$GXX" = yes; then
if test "$with_gnu_ld" = no; then
archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname `test -n "$verstring" && func_echo_all
"${wl}-set_version ${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
else
archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname `test -n "$verstring" && func_echo_all
"${wl}-set_version ${wl}$verstring"` -o $lib'
fi
fi
link_all_deplibs_CXX=yes
;;
esac
hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
hardcode_libdir_separator_CXX=:

```

```

inherit_rpath_CXX=yes
;;

linux* | k*bsd*-gnu | kopensolaris*-gnu)
case $cc_basename in
  KCC*)
    # Kuck and Associates, Inc. (KAI) C++ Compiler

    # KCC will only create a shared library if the output file
    # ends with ".so" (or ".sl" for HP-UX), so rename the library
    # to its proper name (with version) after linking.
    archive_cmds_CXX='tempext=`echo $shared_ext | $SED -e
\'\'s/\([^\()0-9A-Za-z{}]\)/\\\\\\\\1/g\'\'`; templib=`echo $lib | $SED -e
"s/\${tempext}\.*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib}; mv
\${templib} $lib'

    archive_expsym_cmds_CXX='tempext=`echo $shared_ext | $SED -e
\'\'s/\([^\()0-9A-Za-z{}]\)/\\\\\\\\1/g\'\'`; templib=`echo $lib | $SED -e
"s/\${tempext}\.*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib} ${wl}-
retain-symbols-file,$export_symbols; mv \${templib} $lib'
    # Commands to make compiler produce verbose output that lists
    # what "hidden" libraries, object files and flags are used
when
    # linking a shared library.
    #
    # There doesn't appear to be a way to prevent this compiler
from
    # explicitly linking system object files so we need to strip
them
    # from the output so that they don't get included in the
library
    # dependencies.
    output_verbose_link_cmd='templist=`$CC $CFLAGS -v
conftest.$objext -o libconftest$shared_ext 2>&1 | $GREP "ld" `; rm -f
libconftest$shared_ext; list=""; for z in $templist; do case $z in
conftest.$objext) list="$list $z";; *.objext);; *) list="$list
$z";; esac; done; func_echo_all "$list"'

    hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
    export_dynamic_flag_spec_CXX='${wl}--export-dynamic'

    # Archives containing C++ object files must be created using
    # "CC -Bstatic", where "CC" is the KAI C++ compiler.
    old_archive_cmds_CXX='$CC -Bstatic -o $oldlib $oldobjs'
;;
icpc* | ecpc* )
    # Intel C++
    with_gnu_ld=yes
    # version 8.0 and above of icpc choke on multiply defined
symbols

```



```

and
    # if we add $predep_objects and $postdep_objects, however 7.1
    # earlier do not add the objects themselves.
    case ` $CC -V 2>&1 ` in
        *"Version 7."*)
            archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib'
            archive_expsym_cmds_CXX='$CC -shared $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags ${wl}-soname
$wl$soname ${wl}-retain-symbols-file $wl$export_symbols -o $lib'
            ;;
        *) # Version 8.0 or newer
            tmp_idyn=
            case $host_cpu in
                ia64*) tmp_idyn=' -i_dynamic';;
            esac
            archive_cmds_CXX='$CC -shared"$tmp_idyn"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname -o $lib'
            archive_expsym_cmds_CXX='$CC -shared"$tmp_idyn"' $libobjs
$deplibs $compiler_flags ${wl}-soname $wl$soname ${wl}-retain-symbols-
file $wl$export_symbols -o $lib'
            ;;
        esac
            archive_cmds_need_lc_CXX=no
            hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
            export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
            whole_archive_flag_spec_CXX='${wl}--whole-archive$convenience
${wl}--no-whole-archive'
            ;;
        pgCC* | pgcpp*)
            # Portland Group C++ compiler
            case ` $CC -V ` in
                *pgCC\ [1-5].* | *pgcpp\ [1-5].*)
                    prelink_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir $objs
$libobjs $compile_deplibs~
compile_command="$compile_command `find $tpldir -name \*.o
| sort | $NL2SP`"'
                    old_archive_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir
$oldobjs$old_deplibs~
$AR $AR_FLAGS $oldlib$oldobjs$old_deplibs `find $tpldir -
name \*.o | sort | $NL2SP`~
$RANLIB $oldlib'
                    archive_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir
$predep_objects $libobjs $deplibs $convenience $postdep_objects~

```

```

        $CC -shared $pic_flag $predep_objects $libobjs $deplibs
`find $tpldir -name \*.o | sort | $NL2SP` $postdep_objects
$compiler_flags ${wl}-soname ${wl}$soname -o $lib'
        archive_expsym_cmds_CXX='tpldir=Template.dir~
rm -rf $tpldir~
$CC --prelink_objects --instantiation_dir $tpldir
$predep_objects $libobjs $deplibs $convenience $postdep_objects~
$CC -shared $pic_flag $predep_objects $libobjs $deplibs
`find $tpldir -name \*.o | sort | $NL2SP` $postdep_objects
$compiler_flags ${wl}-soname ${wl}$soname ${wl}-retain-symbols-file
${wl}$export_symbols -o $lib'
        ;;
*) # Version 6 and above use weak symbols
        archive_cmds_CXX='$CC -shared $pic_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags ${wl}-soname
${wl}$soname -o $lib'
        archive_expsym_cmds_CXX='$CC -shared $pic_flag
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname ${wl}$soname ${wl}-retain-symbols-file
${wl}$export_symbols -o $lib'
        ;;
esac

        hardcode_libdir_flag_spec_CXX='${wl}--rpath ${wl}$libdir'
        export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
        whole_archive_flag_spec_CXX='${wl}--whole-archive`for conv in
$convenience\""; do test -n \"$conv\" &&
new_convenience=\"$new_convenience,$conv\"; done; func_echo_all
\"$new_convenience\"` ${wl}--no-whole-archive'
        ;;
cxx*)
        # Compaq C++
        archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib'
        archive_expsym_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-soname $wl$soname -o
$lib ${wl}-retain-symbols-file $wl$export_symbols'

        runpath_var=LD_RUN_PATH
        hardcode_libdir_flag_spec_CXX='--rpath $libdir'
        hardcode_libdir_separator_CXX=:

        # Commands to make compiler produce verbose output that lists
        # what "hidden" libraries, object files and flags are used
when
        # linking a shared library.
        #
        # There doesn't appear to be a way to prevent this compiler
from
        # explicitly linking system object files so we need to strip
them

```

```

        # from the output so that they don't get included in the
library
        # dependencies.
        output_verbose_link_cmd='templist=`$CC -shared $CFLAGS -v
confstest.$objext 2>&1 | $GREP "ld"`; templist=`func_echo_all
"$templist" | $SED "s/\(^.*ld.*\)\( .*ld .*$\)/\1/"`; list=""; for z
in $templist; do case $z in confstest.$objext) list="$list $z";;
*.$objext);; *) list="$list $z";;esac; done; func_echo_all "X$list" |
$Xsed'
;;
xl* | mpixl* | bgxl*)
# IBM XL 8.0 on PPC, with GNU ld
hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
export_dynamic_flag_spec_CXX='${wl}--export-dynamic'
archive_cmds_CXX='$CC -qmksrobj $libobjs $deplibs
$compiler_flags ${wl}-soname $wl$soname -o $lib'
if test "x$supports_anon_versioning" = xyes; then
    archive_expsym_cmds_CXX='echo "{ global:" >
$output_objdir/$libname.ver~
cat $export_symbols | sed -e "s/\(.*\)/\1;/" >>
$output_objdir/$libname.ver~
echo "local: *; };" >> $output_objdir/$libname.ver~
$CC -qmksrobj $libobjs $deplibs $compiler_flags ${wl}-
soname $wl$soname ${wl}-version-script
${wl}$output_objdir/$libname.ver -o $lib'
fi
;;
*)
case ` $CC -V 2>&1 | sed 5q` in
*Sun\ C*)
    # Sun C++ 5.9
    no_undefined_flag_CXX=' -zdefs'
    archive_cmds_CXX='$CC -G${allow_undefined_flag} -h$soname -
o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags'
    archive_expsym_cmds_CXX='$CC -G${allow_undefined_flag} -
h$soname -o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags ${wl}-retain-symbols-file ${wl}$export_symbols'
    hardcode_libdir_flag_spec_CXX='-R$libdir'
    whole_archive_flag_spec_CXX='${wl}--whole-
archive`new_convenience=; for conv in $convenience\`; do test -z
\`${conv}\` || new_convenience=\`${new_convenience,$conv}\`; done;
func_echo_all \`${new_convenience}\` ${wl}--no-whole-archive'
    compiler_needs_object_CXX=yes

    # Not sure whether something based on
    # $CC $CFLAGS -v confstest.$objext -o libconfstest$shared_ext
2>&1

    # would be better.
    output_verbose_link_cmd='func_echo_all'

```

```

        # Archives containing C++ object files must be created
using
        # "CC -xar", where "CC" is the Sun C++ compiler. This is
        # necessary to make sure instantiated templates are
included
        # in the archive.
        old_archive_cmds_CXX='$CC -xar -o $oldlib $oldobjs'
        ;;
    esac
    ;;
esac
;;

lynxos*)
    # FIXME: insert proper C++ library support
ld_shlibs_CXX=no
;;

m88k*)
    # FIXME: insert proper C++ library support
ld_shlibs_CXX=no
;;

mvs*)
    case $cc_basename in
        cxx*)
            # FIXME: insert proper C++ library support
ld_shlibs_CXX=no
            ;;
        *)
            # FIXME: insert proper C++ library support
ld_shlibs_CXX=no
            ;;
    esac
;;

netbsd*)
    if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
        archive_cmds_CXX='$LD -Bshareable -o $lib $predep_objects
$libobjs $deplibs $postdep_objects $linker_flags'
        wlarc=
        hardcode_libdir_flag_spec_CXX='-R$libdir'
        hardcode_direct_CXX=yes
        hardcode_shlibpath_var_CXX=no
    fi
    # Workaround some broken pre-1.5 toolchains
output_verbose_link_cmd='$CC -shared $CFLAGS -v conftest.$objext
2>&1 | $GREP conftest.$objext | $SED -e "s:-lgcc -lc -lgcc::"'
    ;;

*nto* | *qnx*)
    ld_shlibs_CXX=yes

```

```

;;

openbsd2*)
    # C++ shared libraries are fairly broken
    ld_shlibs_CXX=no
;;

openbsd*)
if test -f /usr/libexec/ld.so; then
    hardcode_direct_CXX=yes
    hardcode_shlibpath_var_CXX=no
    hardcode_direct_absolute_CXX=yes
    archive_cmds_CXX='$CC -shared $pic_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -o $lib'
    hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
    if test -z "`echo __ELF__ | $CC -E - | grep __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        archive_expsym_cmds_CXX='$CC -shared $pic_flag
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-retain-symbols-file,$export_symbols -o $lib'
        export_dynamic_flag_spec_CXX='${wl}-E'
        whole_archive_flag_spec_CXX="$wlarc"'--whole-
archive$convenience "'$wlarc"'--no-whole-archive'
    fi
    output_verbose_link_cmd=func_echo_all
else
    ld_shlibs_CXX=no
fi
;;

osf3* | osf4* | osf5*)
    case $cc_basename in
        KCC*)
            # Kuck and Associates, Inc. (KAI) C++ Compiler

            # KCC will only create a shared library if the output file
            # ends with ".so" (or ".sl" for HP-UX), so rename the library
            # to its proper name (with version) after linking.
            archive_cmds_CXX='tempext=`echo $shared_ext | $SED -e
'\''s/\([^\()0-9A-Za-z{\}]\)/\\\\\\1/g'\''`; templib=`echo "$lib" | $SED
-e "s/\${tempext}\.*/.so/"`; $CC $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags --soname $soname -o \${templib}; mv
\${templib} $lib'

            hardcode_libdir_flag_spec_CXX='${wl}-rpath,$libdir'
            hardcode_libdir_separator_CXX=:

            # Archives containing C++ object files must be created using
            # the KAI C++ compiler.
            case $host in
                osf3*) old_archive_cmds_CXX='$CC -Bstatic -o $oldlib
$oldobjs' ;;

```

```

        *) old_archive_cmds_CXX='$CC -o $oldlib $oldobjs' ;;
    esac
    ;;
    RCC*)
    # Rational C++ 2.4.1
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
    cxx*)
    case $host in
        osf3*)
            allow_undefined_flag_CXX=' ${wl}-expect_unresolved
${wl}\*'
            archive_cmds_CXX='$CC -shared${allow_undefined_flag}
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-soname $soname `test -n "$verstring" && func_echo_all "${wl}-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
            hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
            ;;
        *)
            allow_undefined_flag_CXX=' -expect_unresolved \*'
            archive_cmds_CXX='$CC -shared${allow_undefined_flag}
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags -
msym -soname $soname `test -n "$verstring" && func_echo_all "-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib'
            archive_expsym_cmds_CXX='for i in `cat $export_symbols`;
do printf "%s %s\n" -exported_symbol "\$i" >> $lib.exp; done~
            echo "-hidden">> $lib.exp~
            $CC -shared$allow_undefined_flag $predep_objects
$libobjs $deplibs $postdep_objects $compiler_flags -msym -soname
$soname ${wl}-input ${wl}$lib.exp `test -n "$verstring" && $ECHO "-
set_version $verstring"` -update_registry
${output_objdir}/so_locations -o $lib~
            $RM $lib.exp'
            hardcode_libdir_flag_spec_CXX='-rpath $libdir'
            ;;
    esac

    hardcode_libdir_separator_CXX=:

    # Commands to make compiler produce verbose output that lists
    # what "hidden" libraries, object files and flags are used
when
    # linking a shared library.
    #
    # There doesn't appear to be a way to prevent this compiler
from
    # explicitly linking system object files so we need to strip
them

```

```

        # from the output so that they don't get included in the
library
        # dependencies.
        output_verbose_link_cmd='templist=`$CC -shared $CFLAGS -v
confptest.$objext 2>&1 | $GREP "ld" | $GREP -v "ld:"`;
templist=`func_echo_all "$templist" | $SED "s/\(^.*ld.*\)\(
.*ld.*$\)/\1/"`; list=""; for z in $templist; do case $z in
confptest.$objext) list="$list $z";; *.$objext);; *) list="$list
$z";;esac; done; func_echo_all "$list"
        ;;
*)
    if test "$GXX" = yes && test "$with_gnu_ld" = no; then
        allow_undefined_flag_CXX=' ${wl}-expect_unresolved ${wl}\*'
        case $host in
            osf3*)
                archive_cmds_CXX='$CC -shared -nostdlib
${allow_undefined_flag} $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags ${wl}-soname ${wl}$soname `test -n
"$verstring" && func_echo_all "${wl}-set_version ${wl}$verstring"`
${wl}-update_registry ${wl}${output_objdir}/so_locations -o $lib'
                ;;
            *)
                archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
${allow_undefined_flag} $predep_objects $libobjs $deplibs
$postdep_objects $compiler_flags ${wl}-msym ${wl}-soname ${wl}$soname
`test -n "$verstring" && func_echo_all "${wl}-set_version
${wl}$verstring"` ${wl}-update_registry
${wl}${output_objdir}/so_locations -o $lib'
                ;;
        esac

        hardcode_libdir_flag_spec_CXX='${wl}-rpath ${wl}$libdir'
        hardcode_libdir_separator_CXX=:

        # Commands to make compiler produce verbose output that
lists
        # what "hidden" libraries, object files and flags are used
when
        # linking a shared library.
        output_verbose_link_cmd='$CC -shared $CFLAGS -v
confptest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'

    else
        # FIXME: insert proper C++ library support
        ld_shlibs_CXX=no
    fi
    ;;
esac
;;

psos*)
    # FIXME: insert proper C++ library support

```

```

ld_shlibs_CXX=no
;;

sunos4*)
case $cc_basename in
  CC*)
    # Sun C++ 4.x
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
  lcc*)
    # Lucid
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
  *)
    # FIXME: insert proper C++ library support
    ld_shlibs_CXX=no
    ;;
esac
;;

solaris*)
case $cc_basename in
  CC* | sunCC*)
    # Sun C++ 4.2, 5.x and Centerline C++
    archive_cmds_need_lc_CXX=yes
    no_undefined_flag_CXX='-zdefs'
    archive_cmds_CXX='$CC -G${allow_undefined_flag} -h$soname -o
$lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags'
    archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -G${allow_undefined_flag} ${wl}-M ${wl}$lib.exp -
h$soname -o $lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags~$RM $lib.exp'

    hardcode_libdir_flag_spec_CXX='-R$libdir'
    hardcode_shlibpath_var_CXX=no
    case $host_os in
      solaris2.[0-5] | solaris2.[0-5].*) ;;
      *)
        # The compiler driver will combine and reorder linker
options,
        # but understands '-z linker_flag'.
        # Supported since Solaris 2.6 (maybe 2.5.1?)
        whole_archive_flag_spec_CXX='-z alleextract$convenience -z
defaultextract'
        ;;
    esac
    link_all_deplibs_CXX=yes

```



```

output_verbose_link_cmd='func_echo_all'

# Archives containing C++ object files must be created using
# "CC -xar", where "CC" is the Sun C++ compiler. This is
# necessary to make sure instantiated templates are included
# in the archive.
old_archive_cmds_CXX='$CC -xar -o $oldlib $oldobjs'
;;
gcx*)
# Green Hills C++ Compiler
archive_cmds_CXX='$CC -shared $predep_objects $libobjs
$deplibs $postdep_objects $compiler_flags ${wl}-h $wl$soname -o $lib'

# The C++ compiler must be used to create the archive.
old_archive_cmds_CXX='$CC $LDFLAGS -archive -o $oldlib
$oldobjs'
;;
*)
# GNU C++ compiler with Solaris linker
if test "$GXX" = yes && test "$with_gnu_ld" = no; then
  no_undefined_flag_CXX=' ${wl}-z ${wl}defs'
  if $CC --version | $GREP -v '^2\.7' > /dev/null; then
    archive_cmds_CXX='$CC -shared $pic_flag -nostdlib
$LDFLAGS $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags ${wl}-h $wl$soname -o $lib'
    archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -shared $pic_flag -nostdlib ${wl}-M $wl$lib.exp -o
$lib $predep_objects $libobjs $deplibs $postdep_objects
$compiler_flags~$RM $lib.exp'

# Commands to make compiler produce verbose output that
lists
# what "hidden" libraries, object files and flags are
used when
# linking a shared library.
output_verbose_link_cmd='$CC -shared $CFLAGS -v
conftest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"'
else
# g++ 2.7 appears to require '-G' NOT '-shared' on this
# platform.
archive_cmds_CXX='$CC -G -nostdlib $LDFLAGS
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags
${wl}-h $wl$soname -o $lib'
archive_expsym_cmds_CXX='echo "{ global:" > $lib.exp~cat
$export_symbols | $SED -e "s/\(.*\)\/\1;/\" >> $lib.exp~echo "local: *;
};" >> $lib.exp~
$CC -G -nostdlib ${wl}-M $wl$lib.exp -o $lib
$predep_objects $libobjs $deplibs $postdep_objects $compiler_flags~$RM
$lib.exp'

```

```

        # Commands to make compiler produce verbose output that
lists      # what "hidden" libraries, object files and flags are
used when  # linking a shared library.
           output_verbose_link_cmd='$CC -G $CFLAGS -v
conftest.$objext 2>&1 | $GREP -v "^Configured with:" | $GREP "\-L"
           fi

           hardcode_libdir_flag_spec_CXX='${wl}-R $wl$libdir'
           case $host_os in
solaris2.[0-5] | solaris2.[0-5].*) ;;
*)
           whole_archive_flag_spec_CXX='${wl}-z
${wl}allextract$convenience ${wl}-z ${wl}defaultextract'
           ;;
           esac
           fi
           ;;
           esac
           ;;

sysv4*uw2* | sysv5OpenUNIX* | sysv5UnixWare7.[01].[10]* |
unixware7* | sco3.2v5.0.[024]*)
           no_undefined_flag_CXX='${wl}-z,text'
           archive_cmds_need_lc_CXX=no
           hardcode_shlibpath_var_CXX=no
           runpath_var='LD_RUN_PATH'

           case $cc_basename in
CC*)
           archive_cmds_CXX='$CC -G ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
           archive_expsym_cmds_CXX='$CC -G ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
           ;;
*)
           archive_cmds_CXX='$CC -shared ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
           archive_expsym_cmds_CXX='$CC -shared ${wl}-
Bexport:$export_symbols ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
           ;;
           esac
           ;;

sysv5* | sco3.2v5* | sco5v6*)
# Note: We can NOT use -z defs as we might desire, because we do
not
# link with -lc, and that would cause any symbols used from libc
to

```

```

# always be unresolved, which means just about no library would
# ever link correctly.  If we're not using GNU ld we use -z text
# though, which does catch some bad symbols but isn't as heavy-
handed
# as -z defs.
no_undefined_flag_CXX='${wl}-z,text'
allow_undefined_flag_CXX='${wl}-z,nodefs'
archive_cmds_need_lc_CXX=no
hardcode_shlibpath_var_CXX=no
hardcode_libdir_flag_spec_CXX='${wl}-R,$libdir'
hardcode_libdir_separator_CXX=':'
link_all_deplibs_CXX=yes
export_dynamic_flag_spec_CXX='${wl}-Bexport'
runpath_var='LD_RUN_PATH'

case $cc_basename in
  CC*)
    archive_cmds_CXX='$CC -G ${wl}-h,$soname -o $lib $libobjs
$deplibs $compiler_flags'
    archive_expsym_cmds_CXX='$CC -G ${wl}-Bexport:$export_symbols
${wl}-h,$soname -o $lib $libobjs $deplibs $compiler_flags'
    old_archive_cmds_CXX='$CC -Tprelink_objects $oldobjs~
'"$old_archive_cmds_CXX"
    reload_cmds_CXX='$CC -Tprelink_objects $reload_objs~
'"$reload_cmds_CXX"
    ;;
  *)
    archive_cmds_CXX='$CC -shared ${wl}-h,$soname -o $lib
$libobjs $deplibs $compiler_flags'
    archive_expsym_cmds_CXX='$CC -shared ${wl}-
Bexport:$export_symbols ${wl}-h,$soname -o $lib $libobjs $deplibs
$compiler_flags'
    ;;
esac
;;

tandem*)
  case $cc_basename in
    NCC*)
      # NonStop-UX NCC 3.20
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
    *)
      # FIXME: insert proper C++ library support
      ld_shlibs_CXX=no
      ;;
  esac
  ;;

vxworks*)
  # FIXME: insert proper C++ library support

```

```

        ld_shlibs_CXX=no
        ;;

    *)
        # FIXME: insert proper C++ library support
        ld_shlibs_CXX=no
        ;;
esac

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs_CXX"
>&5
$as_echo "$ld_shlibs_CXX" >&6; }
    test "$ld_shlibs_CXX" = no && can_build_shared=no

    GCC_CXX="$GXX"
    LD_CXX="$LD"

    ## CAVEAT EMPTOR:
    ## There is no encapsulation within the following macros, do not
change
    ## the running order or otherwise move them around unless you know
exactly
    ## what you are doing...
    # Dependencies to place before and after the object being linked:
predep_objects_CXX=
postdep_objects_CXX=
predeps_CXX=
postdeps_CXX=
compiler_lib_search_path_CXX=

cat > conftest.$ac_ext <<_LT_EOF
class Foo
{
public:
    Foo (void) { a = 0; }
private:
    int a;
};
_LT_EOF

_lt_libdeps_save_CFLAGS=$CFLAGS
case "$CC $CFLAGS" in
*\ -flto*\ *) CFLAGS="$CFLAGS -fno-lto" ;;
*\ -fwhopr*\ *) CFLAGS="$CFLAGS -fno-whopr" ;;
*\ -fuse-linker-plugin*\ *) CFLAGS="$CFLAGS -fno-use-linker-plugin" ;;
esac

if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}: \"\$ac_compile\"";
} >&5
    (eval $ac_compile) 2>&5
    ac_status=$?

```

```

$as_echo "$as_me:${as_lineno-$LINENO}: \ $? = $ac_status" >&5
test $ac_status = 0; }]; then
# Parse the compiler output and extract the necessary
# objects, libraries and library flags.

# Sentinel used to keep track of whether or not we are before
# the conftest object file.
pre_test_object_deps_done=no

for p in `eval "$output_verbose_link_cmd"`; do
  case ${prev}${p} in

    -L* | -R* | -l*)
      # Some compilers place space between "-{L,R}" and the path.
      # Remove the space.
      if test $p = "-L" ||
         test $p = "-R"; then
        prev=$p
        continue
      fi

      # Expand the sysroot to ease extracting the directories later.
      if test -z "$prev"; then
        case $p in
          -L*) func_stripname_cnf '-L' '' "$p"; prev=-L;
p=$func_stripname_result ;;
          -R*) func_stripname_cnf '-R' '' "$p"; prev=-R;
p=$func_stripname_result ;;
          -l*) func_stripname_cnf '-l' '' "$p"; prev=-l;
p=$func_stripname_result ;;
        esac
      fi
      case $p in
        =*) func_stripname_cnf '=' '' "$p";
p=$lt_sysroot$func_stripname_result ;;
      esac
      if test "$pre_test_object_deps_done" = no; then
        case ${prev} in
          -L | -R)
            # Internal compiler library paths should come after those
            # provided the user. The postdeps already come after the
            # user supplied libs so there is no need to process them.
            if test -z "$compiler_lib_search_path_CXX"; then
              compiler_lib_search_path_CXX="${prev}${p}"
            else
              compiler_lib_search_path_CXX="$func_stripname_cnf ${prev}${p}"
            fi
          ;;
        esac
      fi
      ;;
  esac
done

compiler_lib_search_path_CXX="$func_stripname_cnf ${prev}${p}"
pre_test_object_deps_done=yes
done

if test "$pre_test_object_deps_done" = no; then
  # The "-l" case would never come before the object being
  # linked, so don't bother handling this case.

```

```

    esac
    else
    if test -z "$postdeps_CXX"; then
        postdeps_CXX="${prev}${p}"
    else
        postdeps_CXX="${postdeps_CXX} ${prev}${p}"
    fi
    fi
    prev=
    ;;

*.lto.$objext) ;; # Ignore GCC LTO objects
*.$objext)
    # This assumes that the test object file only shows up
    # once in the compiler output.
    if test "$p" = "confest.$objext"; then
        pre_test_object_deps_done=yes
        continue
    fi

    if test "$pre_test_object_deps_done" = no; then
    if test -z "$predep_objects_CXX"; then
        predep_objects_CXX="$p"
    else
        predep_objects_CXX="$predep_objects_CXX $p"
    fi
    else
    if test -z "$postdep_objects_CXX"; then
        postdep_objects_CXX="$p"
    else
        postdep_objects_CXX="$postdep_objects_CXX $p"
    fi
    fi
    ;;

*) ;; # Ignore the rest.

    esac
done

# Clean up.
rm -f a.out a.exe
else
    echo "libtool.m4: error: problem compiling CXX test program"
fi

$RM -f confest.$objext
CFLAGS=$_lt_libdeps_save_CFLAGS

# PORTME: override above test on systems where it is broken
case $host_os in
interix[3-9]*)

```

```

# Interix 3.5 installs completely hosed .la files for C++, so rather
than
# hack all around it, let's just trust "g++" to DTRT.
predep_objects_CXX=
postdep_objects_CXX=
postdeps_CXX=
;;

linux*)
case ` $CC -V 2>&1 | sed 5q ` in
*Sun\ C*)
# Sun C++ 5.9

# The more standards-conforming stlport4 library is
# incompatible with the Cstd library. Avoid specifying
# it if it's in CXXFLAGS. Ignore libCrun as
# -library=stlport4 depends on it.
case " $CXX $CXXFLAGS " in
*" -library=stlport4 ")
solaris_use_stlport4=yes
;;
esac

if test "$solaris_use_stlport4" != yes; then
postdeps_CXX='-library=Cstd -library=Crun'
fi
;;
esac
;;

solaris*)
case $cc_basename in
CC* | sunCC*)
# The more standards-conforming stlport4 library is
# incompatible with the Cstd library. Avoid specifying
# it if it's in CXXFLAGS. Ignore libCrun as
# -library=stlport4 depends on it.
case " $CXX $CXXFLAGS " in
*" -library=stlport4 ")
solaris_use_stlport4=yes
;;
esac

# Adding this requires a known-good setup of shared libraries for
# Sun compiler versions before 5.6, else PIC objects from an old
# archive will be linked into the output, leading to subtle bugs.
if test "$solaris_use_stlport4" != yes; then
postdeps_CXX='-library=Cstd -library=Crun'
fi
;;
esac
;;

```

```
esac
```

```
case " $postdeps_CXX " in
*" -lc "*) archive_cmds_need_lc_CXX=no ;;
esac
  compiler_lib_search_dirs_CXX=
if test -n "${compiler_lib_search_path_CXX}"; then
  compiler_lib_search_dirs_CXX=`echo " ${compiler_lib_search_path_CXX}"
| ${SED} -e 's! -L! !g' -e 's!^ !!'`
fi
```

```
  lt_prog_compiler_wl_CXX=
lt_prog_compiler_pic_CXX=
lt_prog_compiler_static_CXX=
```

```
# C++ specific cases for pic, static, wl, etc.
if test "$GXX" = yes; then
  lt_prog_compiler_wl_CXX='-Wl,'
  lt_prog_compiler_static_CXX='-static'
```



```

case $host_os in
aix*)
    # All AIX code is PIC.
    if test "$host_cpu" = ia64; then
    # AIX 5 now supports IA64 processor
    lt_prog_compiler_static_CXX='-Bstatic'
    fi
    ;;

amigaos*)
    case $host_cpu in
    powerpc)
        # see comment about AmigaOS4 .so support
        lt_prog_compiler_pic_CXX='-fPIC'
        ;;
    m68k)
        # FIXME: we need at least 68020 code to build shared
libraries, but
        # adding the '-m68020' flag to GCC prevents building
anything better,
        # like '-m68040'.
        lt_prog_compiler_pic_CXX='-m68020 -resident32 -malways-
restore-a4'
        ;;
    esac
    ;;

beos* | irix5* | irix6* | nonstopux* | osf3* | osf4* | osf5*)
    # PIC is the default for these OSes.
    ;;

mingw* | cygwin* | os2* | pw32* | cegcc*)
    # This hack is so that the source file can tell whether it is
being
    # built for inclusion in a dll (and should export symbols for
example).
    # Although the cygwin gcc ignores -fPIC, still need this for
old-style
    # (--disable-auto-import) libraries
    lt_prog_compiler_pic_CXX='-DDLL_EXPORT'
    ;;

darwin* | rhapsody*)
    # PIC is the default on this platform
    # Common symbols not allowed in MH_DYLIB files
    lt_prog_compiler_pic_CXX='-fno-common'
    ;;

*djgpp*)
    # DJGPP does not support shared libraries at all
    lt_prog_compiler_pic_CXX=
    ;;

haiku*)
    # PIC is the default for Haiku.
    # The "-static" flag exists, but is broken.

```

```

    lt_prog_compiler_static_CXX=
    ;;
interix[3-9]*)
    # Interix 3.x gcc -fpic/-fPIC options generate broken code.
    # Instead, we relocate shared libraries at runtime.
    ;;
sysv4*MP*)
    if test -d /usr/nec; then
    lt_prog_compiler_pic_CXX=-Kconform_pic
    fi
    ;;
hpux*)
    # PIC is the default for 64-bit PA HP-UX, but not for 32-bit
    # PA HP-UX. On IA64 HP-UX, PIC is the default but the pic flag
    # sets the default TLS model and affects inlining.
    case $host_cpu in
    hppa*64*)
    ;;
    *)
    lt_prog_compiler_pic_CXX='-fPIC'
    ;;
    esac
    ;;
*qnx* | *nto*)
    # QNX uses GNU C++, but need to define -shared option too,
otherwise
    # it will coredump.
    lt_prog_compiler_pic_CXX='-fPIC -shared'
    ;;
*)
    lt_prog_compiler_pic_CXX='-fPIC'
    ;;
    esac
else
    case $host_os in
    aix[4-9]*)
    # All AIX code is PIC.
    if test "$host_cpu" = ia64; then
    # AIX 5 now supports IA64 processor
    lt_prog_compiler_static_CXX='-Bstatic'
    else
    lt_prog_compiler_static_CXX='-bnso -bI:/lib/syscalls.exp'
    fi
    ;;
    chorus*)
    case $cc_basename in
    cxch68*)
    # Green Hills C++ Compiler
    # _LT_TAGVAR(lt_prog_compiler_static, CXX)="--
no_auto_instantiation -u __main -u __premain -u __abort -r
$COOL_DIR/lib/libOrb.a $MVME_DIR/lib/CC/libC.a
$MVME_DIR/lib/classix/libcx.s.a"

```

```

    ;;
esac
;;
mingw* | cygwin* | os2* | pw32* | cegcc*)
# This hack is so that the source file can tell whether it is
being
# built for inclusion in a dll (and should export symbols for
example).
lt_prog_compiler_pic_CXX='-DDLL_EXPORT'
;;
dgux*)
case $cc_basename in
ec+*)
    lt_prog_compiler_pic_CXX='-KPIC'
    ;;
ghcx*)
    # Green Hills C++ Compiler
    lt_prog_compiler_pic_CXX='-pic'
    ;;
*)
    ;;
esac
;;
freebsd* | dragonfly*)
# FreeBSD uses GNU C++
;;
hpux9* | hpux10* | hpux11*)
case $cc_basename in
CC*)
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_static_CXX='${wl}-a ${wl}archive'
    if test "$host_cpu" != ia64; then
        lt_prog_compiler_pic_CXX='+Z'
    fi
    ;;
aCC*)
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_static_CXX='${wl}-a ${wl}archive'
    case $host_cpu in
hppa*64*|ia64*)
        # +Z the default
        ;;
*)
        lt_prog_compiler_pic_CXX='+Z'
        ;;
esac
    ;;
*)
    ;;
esac
;;
interix*)

```

```

# This is c89, which is MS Visual C++ (no shared libs)
# Anyone wants to do a port?
;;
irix5* | irix6* | nonstopux*)
case $cc_basename in
  CC*)
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_static_CXX='-non_shared'
    # CC pic flag -KPIC is the default.
    ;;
  *)
    ;;
esac
;;
linux* | k*bsd*-gnu | kopensolaris*-gnu)
case $cc_basename in
  KCC*)
    # KAI C++ Compiler
    lt_prog_compiler_wl_CXX='--backend -Wl,'
    lt_prog_compiler_pic_CXX='-fPIC'
    ;;
  ecpc* )
    # old Intel C++ for x86_64 which still supported -KPIC.
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_pic_CXX='-KPIC'
    lt_prog_compiler_static_CXX='-static'
    ;;
  icpc* )
    # Intel C++, used to be incompatible with GCC.
    # ICC 10 doesn't accept -KPIC any more.
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_pic_CXX='-fPIC'
    lt_prog_compiler_static_CXX='-static'
    ;;
  pgCC* | pgcpp*)
    # Portland Group C++ compiler
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_pic_CXX='-fpic'
    lt_prog_compiler_static_CXX='-Bstatic'
    ;;
  cxx*)
    # Compaq C++
    # Make sure the PIC flag is empty.  It appears that all Alpha
    # Linux and Compaq Tru64 Unix objects are PIC.
    lt_prog_compiler_pic_CXX=
    lt_prog_compiler_static_CXX='-non_shared'
    ;;
  xlc* | xlc* | bgxl[cC]* | mpixl[cC]*)
    # IBM XL 8.0, 9.0 on PPC and BlueGene
    lt_prog_compiler_wl_CXX='-Wl,'
    lt_prog_compiler_pic_CXX='-qpik'
    lt_prog_compiler_static_CXX='-qstaticlink'

```

```

    ;;
*)
  case `\$CC -V 2>&1 | sed 5q` in
  *Sun\ C*)
    # Sun C++ 5.9
    lt_prog_compiler_pic_CXX='-KPIC'
    lt_prog_compiler_static_CXX='-Bstatic'
    lt_prog_compiler_wl_CXX='-Qoption ld '
    ;;
  esac
  ;;
esac
;;
lynxos*)
;;
m88k*)
;;
mvs*)
case \$cc_basename in
  cxx*)
    lt_prog_compiler_pic_CXX='-W c,exportall'
    ;;
*)
  ;;
esac
;;
netbsd*)
;;
*qnx* | *nto*)
  # QNX uses GNU C++, but need to define -shared option too,
otherwise
  # it will coredump.
  lt_prog_compiler_pic_CXX='-fPIC -shared'
  ;;
osf3* | osf4* | osf5*)
case \$cc_basename in
  KCC*)
    lt_prog_compiler_wl_CXX='--backend -Wl,'
    ;;
  RCC*)
    # Rational C++ 2.4.1
    lt_prog_compiler_pic_CXX='-pic'
    ;;
  cxx*)
    # Digital/Compaq C++
    lt_prog_compiler_wl_CXX='-Wl,'
    # Make sure the PIC flag is empty. It appears that all Alpha
    # Linux and Compaq Tru64 Unix objects are PIC.
    lt_prog_compiler_pic_CXX=
    lt_prog_compiler_static_CXX='-non_shared'
    ;;
*)

```

```

        ;;
    esac
    ;;
    psos*)
    ;;
    solaris*)
    case $cc_basename in
        CC* | sunCC*)
            # Sun C++ 4.2, 5.x and Centerline C++
            lt_prog_compiler_pic_CXX='-KPIC'
            lt_prog_compiler_static_CXX='-Bstatic'
            lt_prog_compiler_wl_CXX='-Qoption ld '
            ;;
        gcx*)
            # Green Hills C++ Compiler
            lt_prog_compiler_pic_CXX='-PIC'
            ;;
        *)
            ;;
    esac
    ;;
    sunos4*)
    case $cc_basename in
        CC*)
            # Sun C++ 4.x
            lt_prog_compiler_pic_CXX='-pic'
            lt_prog_compiler_static_CXX='-Bstatic'
            ;;
        lcc*)
            # Lucid
            lt_prog_compiler_pic_CXX='-pic'
            ;;
        *)
            ;;
    esac
    ;;
    sysv5* | unixware* | sco3.2v5* | sco5v6* | OpenUNIX*)
    case $cc_basename in
        CC*)
            lt_prog_compiler_wl_CXX='-Wl,'
            lt_prog_compiler_pic_CXX='-KPIC'
            lt_prog_compiler_static_CXX='-Bstatic'
            ;;
    esac
    ;;
    tandem*)
    case $cc_basename in
        NCC*)
            # NonStop-UX NCC 3.20
            lt_prog_compiler_pic_CXX='-KPIC'
            ;;
        *)

```

```

        ;;
    esac
    ;;
    vxworks*)
    ;;
    *)
    lt_prog_compiler_can_build_shared_CXX=no
    ;;
esac
fi

case $host_os in
# For platforms which do not support PIC, -DPIC is meaningless:
*djgpp*)
    lt_prog_compiler_pic_CXX=
    ;;
*)
    lt_prog_compiler_pic_CXX="$lt_prog_compiler_pic_CXX@&t@ -DPIC"
    ;;
esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $compiler option
to produce PIC" >&5
$as_echo_n "checking for $compiler option to produce PIC... " >&6; }
if ${lt_cv_prog_compiler_pic_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_CXX=$lt_prog_compiler_pic_CXX
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_CXX" >&5
$as_echo "$lt_cv_prog_compiler_pic_CXX" >&6; }
lt_prog_compiler_pic_CXX=$lt_cv_prog_compiler_pic_CXX

#
# Check to make sure the PIC flag actually works.
#
if test -n "$lt_prog_compiler_pic_CXX"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler PIC
flag $lt_prog_compiler_pic_CXX works" >&5
$as_echo_n "checking if $compiler PIC flag $lt_prog_compiler_pic_CXX
works... " >&6; }
if ${lt_cv_prog_compiler_pic_works_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_pic_works_CXX=no
    ac_outfile=conftest.$ac_objext
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext
    lt_compiler_flag="$lt_prog_compiler_pic_CXX@&t@ -DPIC"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "conftest.", or (3) at the end.

```

```

# Note that $ac_compile itself does not contain backslashes and
begins
# with a dollar sign (not a hyphen), so the echo should work
correctly.
# The option is referenced via a variable to avoid confusing sed.
lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
(eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&5)
(eval "$lt_compile" 2>confptest.err)
ac_status=$?
cat confptest.err >&5
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
if (exit $ac_status) && test -s "$ac_outfile"; then
# The compiler can only warn and ignore the option if not
recognized
# So say no if there are warnings other than the usual output.
$ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >confptest.exp
$SED '/^$/d; /^ *+/d' confptest.err >confptest.er2
if test ! -s confptest.er2 || diff confptest.exp confptest.er2
>/dev/null; then
lt_cv_prog_compiler_pic_works_CXX=yes
fi
fi
$RM confptest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_pic_works_CXX" >&5
$as_echo "$lt_cv_prog_compiler_pic_works_CXX" >&6; }

if test x"$lt_cv_prog_compiler_pic_works_CXX" = xyes; then
case $lt_prog_compiler_pic_CXX in
"" | " *") ;;
*) lt_prog_compiler_pic_CXX="$lt_prog_compiler_pic_CXX" ;;
esac
else
lt_prog_compiler_pic_CXX=
lt_prog_compiler_can_build_shared_CXX=no
fi
fi

#
# Check to make sure the static flag actually works.
#

```



```

wl=$lt_prog_compiler_wl_CXX eval
lt_tmp_static_flag="\$lt_prog_compiler_static_CXX\"
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler static
flag $lt_tmp_static_flag works" >&5
$as_echo_n "checking if $compiler static flag $lt_tmp_static_flag
works... " >&6; }
if ${lt_cv_prog_compiler_static_works_CXX+:} false; then :
  $as_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_static_works_CXX=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $lt_tmp_static_flag"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest$ac_exeext;
then
  # The linker can only warn and ignore the option if not
  recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&5
    $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_static_works_CXX=yes
    fi
  else
    lt_cv_prog_compiler_static_works_CXX=yes
  fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_static_works_CXX" >&5
$as_echo "$lt_cv_prog_compiler_static_works_CXX" >&6; }

if test x"$lt_cv_prog_compiler_static_works_CXX" = xyes; then
:
else
  lt_prog_compiler_static_CXX=
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$ac_objext" >&5
$as_echo_n "checking if $compiler supports -c -o file.$ac_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o_CXX+:} false; then :

```

```

    $sas_echo_n "(cached) " >&6
else
    lt_cv_prog_compiler_c_o_CXX=no
    $RM -r confptest 2>/dev/null
    mkdir confptest
    cd confptest
    mkdir out
    echo "$lt_simple_compile_test_code" > confptest.$ac_ext

    lt_compiler_flag="-o out/confptest2.$ac_objext"
    # Insert the option either (1) after the last *FLAGS variable, or
    # (2) before a word containing "confptest.", or (3) at the end.
    # Note that $ac_compile itself does not contain backslashes and
begins
    # with a dollar sign (not a hyphen), so the echo should work
correctly.
    lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*confptest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
    (eval echo "\"\`$as_me:$LINENO: $lt_compile\`" >&5)
    (eval "$lt_compile" 2>out/confptest.err)
    ac_status=$?
    cat out/confptest.err >&5
    echo "$as_me:$LINENO: `\$? = $ac_status`" >&5
    if (exit $ac_status) && test -s out/confptest2.$ac_objext
    then
        # The compiler can only warn and ignore the option if not
recognized
        # So say no if there are warnings
        $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >
out/confptest.exp
        $SED '/^$/d; /^ *+/d' out/confptest.err >out/confptest.er2
        if test ! -s out/confptest.er2 || diff out/confptest.exp
out/confptest.er2 >/dev/null; then
            lt_cv_prog_compiler_c_o_CXX=yes
        fi
    fi
    chmod u+w . 2>&5
    $RM confptest*
    # SGI C++ compiler will create directory out/ii_files/ for
    # template instantiation
    test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
    $RM out/* && rmdir out
    cd ..
    $RM -r confptest
    $RM confptest*

fi
{ $sas_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o_CXX" >&5
$sas_echo "$lt_cv_prog_compiler_c_o_CXX" >&6; }

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking if $compiler
supports -c -o file.$sas_objext" >&5
$sas_echo_n "checking if $compiler supports -c -o file.$sas_objext... "
>&6; }
if ${lt_cv_prog_compiler_c_o_CXX+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  lt_cv_prog_compiler_c_o_CXX=no
  $RM -r conftest 2>/dev/null
  mkdir conftest
  cd conftest
  mkdir out
  echo "$lt_simple_compile_test_code" > conftest.$sas_ext

  lt_compiler_flag="-o out/conftest2.$sas_objext"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $sas_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  lt_compile=`echo "$sas_compile" | $SED \
-e 's:.*FLAGS}\{0,1}\ :&$lt_compiler_flag ;; t' \
-e 's: [^ ]*conftest\.: $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
  (eval echo "\"\$sas_me:$LINENO: $lt_compile\"" >&5)
  (eval "$lt_compile" 2>out/conftest.err)
  ac_status=$?
  cat out/conftest.err >&5
  echo "$sas_me:$LINENO: \$? = $ac_status" >&5
  if (exit $ac_status) && test -s out/conftest2.$sas_objext
  then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings
    $ECHO "$lt_compiler_boilerplate" | $SED '/^$/d' >
out/conftest.exp
    $SED '/^$/d; /^ *+/d' out/conftest.err >out/conftest.er2
    if test ! -s out/conftest.er2 || diff out/conftest.exp
out/conftest.er2 >/dev/null; then
      lt_cv_prog_compiler_c_o_CXX=yes
    fi
  fi
  chmod u+w . 2>&5
  $RM conftest*
  # SGI C++ compiler will create directory out/ii_files/ for
  # template instantiation
  test -d out/ii_files && $RM out/ii_files/* && rmdir out/ii_files
  $RM out/* && rmdir out

```

```

    cd ..
    $RM -r conftest
    $RM conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$lt_cv_prog_compiler_c_o_CXX" >&5
$as_echo "$lt_cv_prog_compiler_c_o_CXX" >&6; }

hard_links="nottested"
if test "$lt_cv_prog_compiler_c_o_CXX" = no && test "$need_locks" !=
no; then
    # do not overwrite the value of need_locks provided by the user
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking if we can lock
with hard links" >&5
$as_echo_n "checking if we can lock with hard links... " >&6; }
    hard_links=yes
    $RM conftest*
    ln conftest.a conftest.b 2>/dev/null && hard_links=no
    touch conftest.a
    ln conftest.a conftest.b 2>&5 || hard_links=no
    ln conftest.a conftest.b 2>/dev/null && hard_links=no
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $hard_links" >&5
$as_echo "$hard_links" >&6; }
    if test "$hard_links" = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: `\$CC' does not
support \'-c -o', so `make -j' may be unsafe" >&5
$as_echo "$as_me: WARNING: `\$CC' does not support \'-c -o', so `make
-j' may be unsafe" >&2;}
        need_locks=warn
    fi
else
    need_locks=no
fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether the
$compiler linker ($LD) supports shared libraries" >&5
$as_echo_n "checking whether the $compiler linker ($LD) supports
shared libraries... " >&6; }

    export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED '\''s/.* //'\' | sort | uniq >
$export_symbols'
    exclude_expsyms_CXX='_GLOBAL_OFFSET_TABLE_|_GLOBAL__F[ID]_.*'
    case $host_os in
aix[4-9]*)
        # If we're using GNU nm, then we don't want the "-C" option.

```

```

# -C means demangle to AIX nm, but means don't demangle with GNU
nm
# Also, AIX nm treats weak defined symbols like other global
defined
# symbols, whereas GNU nm marks them as "W".
if $NM -V 2>&1 | $GREP 'GNU' > /dev/null; then
    export_symbols_cmds_CXX='$NM -Bpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B") || (\ $ 2 ==
"W")) && (substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
else
    export_symbols_cmds_CXX='$NM -BCpg $libobjs $convenience | awk
'\''{ if (((\ $ 2 == "T") || (\ $ 2 == "D") || (\ $ 2 == "B")) &&
(substr(\ $ 3,1,1) != ".")) { print \ $ 3 } }'\'' | sort -u >
$export_symbols'
fi
;;
pw32*)
    export_symbols_cmds_CXX="$ltdll_cmds"
    ;;
cygwin* | mingw* | cegcc*)
    case $cc_basename in
    cl*)

exclude_expsyms_CXX='_NULL_IMPORT_DESCRIPTOR|_IMPORT_DESCRIPTOR_.*'
        ;;
    *)
        export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED -e '\''/^([BCDGRS])[ ]/s/.*[ ]\([^\ ]*\)/\1
DATA;/s/^\.*[ ]__nm__\([^\ ]*\)/\1[ ]*\/*\1 DATA;/^I[ ]/d;/^[AITW][
]/s/.*/\1'\'' | sort | uniq > $export_symbols'

exclude_expsyms_CXX='[_]+GLOBAL_OFFSET_TABLE_|[_]+GLOBAL__[FID]_.*|[_]
+head_[A-Za-z0-9_]+_dll|[A-Za-z0-9_]+_dll_iname'
        ;;
    esac
    ;;
    *)
        export_symbols_cmds_CXX='$NM $libobjs $convenience |
$global_symbol_pipe | $SED '\''s/.*/\1'\'' | sort | uniq >
$export_symbols'
        ;;
    esac

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ld_shlibs_CXX" >&5
$as_echo "$ld_shlibs_CXX" >&6; }
test "$ld_shlibs_CXX" = no && can_build_shared=no

with_gnu_ld_CXX=$with_gnu_ld

```

```

#
# Do we need to explicitly link libc?
#
case "x$archive_cmds_need_lc_CXX" in
x|xyes)
    # Assume -lc should be added
    archive_cmds_need_lc_CXX=yes

    if test "$enable_shared" = yes && test "$GCC" = yes; then
        case $archive_cmds_CXX in
        *'~'*)
            # FIXME: we may have to deal with multi-command sequences.
            ;;
        '$CC '* )
            # Test whether the compiler implicitly links with -lc since on
some
            # systems, -lgcc has to come before -lc. If gcc already passes -
lc
            # to ld, don't add -lc before -lgcc.
            { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -lc
should be explicitly linked in" >&5
$as_echo_n "checking whether -lc should be explicitly linked in... "
>&6; }
if ${lt_cv_archive_cmds_need_lc_CXX+:} false; then :
    $as_echo_n "(cached) " >&6
else
    $RM conftest*
    echo "$lt_simple_compile_test_code" > conftest.$ac_ext

    if { { eval echo "\"\`$as_me\`":${as_lineno-$LINENO}:
\"$ac_compile\""; } >&5
(eval $ac_compile) 2>&5
ac_status=$?
$as_echo "$as_me:${as_lineno-$LINENO}: \`$? = $ac_status" >&5
test $ac_status = 0; } 2>conftest.err; then
    soname=conftest
    lib=conftest
    libobjs=conftest.$ac_objext
    deplibs=
    wl=$lt_prog_compiler_wl_CXX
    pic_flag=$lt_prog_compiler_pic_CXX
    compiler_flags=-v
    linker_flags=-v
    verstring=
    output_objdir=.
    libname=conftest
    lt_save_allow_undefined_flag=$allow_undefined_flag_CXX
    allow_undefined_flag_CXX=

```

```

        if { { eval echo "\"\$as_me\":${as_lineno-$LINENO}:
\"$archive_cmds_CXX 2\>\&1 \|| $GREP \" -lc \" \>/dev/null 2\>\&1\""; }
>&5
    (eval $archive_cmds_CXX 2\>\&1 \|| $GREP \" -lc \" \>/dev/null
2\>\&1) 2>&5
    ac_status=$?
    $as_echo \"$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
    test $ac_status = 0; }
    then
        lt_cv_archive_cmds_need_lc_CXX=no
    else
        lt_cv_archive_cmds_need_lc_CXX=yes
    fi
    allow_undefined_flag_CXX=$lt_save_allow_undefined_flag
else
    cat conftest.err 1>&5
fi
$RM conftest*

fi
{ $as_echo \"$as_me:${as_lineno-$LINENO}: result:
$lt_cv_archive_cmds_need_lc_CXX" >&5
$as_echo \"$lt_cv_archive_cmds_need_lc_CXX" >&6; }
    archive_cmds_need_lc_CXX=$lt_cv_archive_cmds_need_lc_CXX
    ;;
esac
fi
;;
esac

```

```
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking dynamic linker
characteristics" >&5
$as_echo_n "checking dynamic linker characteristics... " >&6; }
```

```
library_names_spec=
libname_spec='lib$name'
soname_spec=
shrext_cmds=".so"
postinstall_cmds=
postuninstall_cmds=
finish_cmds=
finish_eval=
shlibpath_var=
```



```

shlibpath_overrides_runpath=unknown
version_type=none
dynamic_linker="$host_os ld.so"
sys_lib_dlsearch_path_spec="/lib /usr/lib"
need_lib_prefix=unknown
hardcode_into_libs=no

# when you set need_version to no, make sure it does not cause -
set_version
# flags to be left without arguments
need_version=unknown

case $host_os in
aix3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname.a'
    shlibpath_var=LIBPATH

    # AIX 3 has no versioning support, so we append a major version to
the name.
    soname_spec='${libname}${release}${shared_ext}$major'
    ;;

aix[4-9]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    hardcode_into_libs=yes
    if test "$host_cpu" = ia64; then
        # AIX 5 supports IA64
        library_names_spec='${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext}$versuffix $libname${shared_ext}'
        shlibpath_var=LD_LIBRARY_PATH
    else
        # With GCC up to 2.95.x, collect2 would create an import file
# for dependence libraries. The import file would start with
# the line `#! .'. This would cause the generated library to
# depend on `.', always an invalid library. This was fixed in
# development snapshots of GCC prior to 3.0.
        case $host_os in
aix4 | aix4.[01] | aix4.[01].*)
            if { echo '#if __GNUC__ > 2 || (__GNUC__ == 2 && __GNUC_MINOR__
>= 97)';
                echo ' yes '
                echo '#endif'; } | ${CC} -E - | $GREP yes > /dev/null; then
:
            else
                can_build_shared=no
            fi
        *)
            can_build_shared=no
        esac
    fi

```

```

        ;;
    esac
    # AIX (on Power*) has no versioning support, so currently we can
not hardcode correct
    # soname into executable. Probably we can add versioning support
to
    # collect2, so additional links can be useful in future.
    if test "$aix_use_runtimelinking" = yes; then
        # If using run time linking (on AIX 4.2 or later) use
lib<name>.so
        # instead of lib<name>.a to let people know that these are not
        # typical AIX shared libraries.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    else
        # We preserve .a as extension for shared libraries through
AIX4.2
        # and later when we are not doing run time linking.
        library_names_spec='${libname}${release}.a $libname.a'
        soname_spec='${libname}${release}${shared_ext}$major'
    fi
    shlibpath_var=LIBPATH
fi
;;

amigaos*)
    case $host_cpu in
    powerpc)
        # Since July 2007 AmigaOS4 officially supports .so libraries.
        # When compiling the executable, add -use-dynld -Lsobjs: to the
compileline.
        library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
        ;;
    m68k)
        library_names_spec='$libname.ixlibrary $libname.a'
        # Create ${libname}_ixlibrary.a entries in /sys/libs.
        finish_eval='for lib in `ls $libdir/*.ixlibrary 2>/dev/null`; do
libname=`func_echo_all "$lib" | $SED
'\''s%^\./\([^/]*\)\.ixlibrary$%\1%\''`; test $RM
/sys/libs/${libname}_ixlibrary.a; $show "cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a"; cd /sys/libs && $LN_S $lib
${libname}_ixlibrary.a || exit 1; done'
        ;;
    esac
;;

beos*)
    library_names_spec='${libname}${shared_ext}'
    dynamic_linker="$host_os ld.so"
    shlibpath_var=LIBRARY_PATH
;;

```

```

bsdi[45]*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/shlib /usr/lib /usr/X11/lib
/usr/contrib/lib /lib /usr/local/lib"
    sys_lib_dlsearch_path_spec="/shlib /usr/lib /usr/local/lib"
    # the default ld.so.conf also contains /usr/contrib/lib and
    # /usr/X11R6/lib (/usr/X11 is a link to /usr/X11R6), but let us
allow
    # libtool to hard-code these into programs
    ;;

cygwin* | mingw* | pw32* | cegcc*)
    version_type=windows
    shrext_cmds=".dll"
    need_version=no
    need_lib_prefix=no

    case $GCC,$cc_basename in
    yes,*)
        # gcc
        library_names_spec='$libname.dll.a'
        # DLL is installed to $(libdir)/../bin by postinstall_cmds
        postinstall_cmds='base_file=`basename \${file}`~
dlpath=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\''i; echo
\${dlname}'\''`~
dldir=$destdir/`dirname \${dlpath}`~
test -d \${dldir} || mkdir -p \${dldir}~
$install_prog $dir/\${dlname} \${dldir}/\${dlname}~
chmod a+x \${dldir}/\${dlname}~
if test -n '\''$striplib'\'' && test -n '\''$striplib'\''; then
    eval '\''$striplib \${dldir}/\${dlname}'\'' || exit \${?};
fi'
        postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\''`~
dlpath=$dir/\${dldll}~
$RM \${dlpath}'
        shlibpath_overrides_runpath=yes

    case $host_os in
    cygwin*)
        # Cygwin DLLs use 'cyg' prefix rather than 'lib'
        soname_spec=`echo ${libname} | sed -e 's/^lib/cyg/'``echo
${release} | $SED -e 's/[.]/-/g'`${versuffix}${shared_ext}'

```

```

;;
mingw* | cegcc*)
  # MinGW DLLs use traditional 'lib' prefix
  soname_spec='${libname}`echo ${release} | $SED -e 's/[.]/-/
/g'`${versuffix}${shared_ext}'
  ;;
pw32*)
  # pw32 DLLs use 'pw' prefix rather than 'lib'
  library_names_spec=`echo ${libname} | sed -e 's/^lib/pw/'``echo
${release} | $SED -e 's/[.]/-/g'`${versuffix}${shared_ext}'
  ;;
esac
dynamic_linker='Win32 ld.exe'
;;

*,cl*)
  # Native MSVC
  libname_spec='$name'
  soname_spec='${libname}`echo ${release} | $SED -e 's/[.]/-
/g'`${versuffix}${shared_ext}'
  library_names_spec='${libname}.dll.lib'

case $build_os in
mingw*)
  sys_lib_search_path_spec=
  lt_save_ifs=$IFS
  IFS=';'
  for lt_path in $LIB
  do
    IFS=$lt_save_ifs
    # Let DOS variable expansion print the short 8.3 style file
name.
    lt_path=`cd "$lt_path" 2>/dev/null && cmd //C "for %i in (".")
do @echo %~si"`
    sys_lib_search_path_spec="$sys_lib_search_path_spec $lt_path"
  done
  IFS=$lt_save_ifs
  # Convert to MSYS style.
  sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
sed -e 's|\\|/|g' -e 's| \\\([a-zA-Z]\\|\\):|/\\1|g' -e 's|^|/'`
  ;;
cygwin*)
  # Convert to unix form, then to dos form, then back to unix form
  # but this time dos style (no spaces!) so that the unix form
looks
  # like /cygdrive/c/PROGRA~1:/cygdr...
  sys_lib_search_path_spec=`cygpath --path --unix "$LIB"`
  sys_lib_search_path_spec=`cygpath --path --dos
"$sys_lib_search_path_spec" 2>/dev/null`
  sys_lib_search_path_spec=`cygpath --path --unix
"$sys_lib_search_path_spec" | $SED -e "s/$PATH_SEPARATOR/ /g"`
  ;;

```

```

*)
  sys_lib_search_path_spec="$LIB"
  if $ECHO "$sys_lib_search_path_spec" | $GREP '[c-zA-Z]:/'
>/dev/null; then
    # It is most probably a Windows format PATH.
    sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e 's/;/ /g'`
    else
      sys_lib_search_path_spec=`$ECHO "$sys_lib_search_path_spec" |
$SED -e "s/$PATH_SEPARATOR/ /g"`
      fi
    # FIXME: find the short name or the path components, as spaces
are
    # common. (e.g. "Program Files" -> "PROGRA~1")
    ;;
  esac

  # DLL is installed to $(libdir)/../bin by postinstall_cmds
  postinstall_cmds='base_file=`basename \${file}`~
  dlpath=`$SHELL 2>&1 -c '\''. $dir/\'''\${base_file}'\'''\`i; echo
\${dlname}'\'''\`~
  dldir=$destdir/`dirname \${dlpath}`~
  test -d \${dldir} || mkdir -p \${dldir}~
  $install_prog $dir/\${dlname} \${dldir}/\${dlname}'
  postuninstall_cmds='dldll=`$SHELL 2>&1 -c '\''. $file; echo
\${dlname}'\'''\`~
  dlpath=$dir/\${dldll}~
  $RM \${dlpath}'
  shlibpath_overrides_runpath=yes
  dynamic_linker='Win32 link.exe'
  ;;

*)
  # Assume MSVC wrapper
  library_names_spec='${libname}`echo ${release} | $SED -e 's/[.]*/-
/g'`${versuffix}${shared_ext} $libname.lib'
  dynamic_linker='Win32 ld.exe'
  ;;
esac
# FIXME: first we should search . and the directory the executable
is in
shlibpath_var=PATH
;;

darwin* | rhapsody*)
dynamic_linker="$host_os dyld"
version_type=darwin
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${major}${shared_ext}
${libname}${shared_ext}'
soname_spec='${libname}${release}${major}${shared_ext}'

```

```

shlibpath_overrides_runpath=yes
shlibpath_var=DYLD_LIBRARY_PATH
shrext_cmds='`test .$module = .yes && echo .so || echo .dylib`'

sys_lib_dlsearch_path_spec='/usr/local/lib /lib /usr/lib'
;;

dgux*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname$shared_ext'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

freebsd* | dragonfly*)
    # DragonFly does not have a.out.  When/if they implement a new
    # versioning mechanism, adjust this.
    if test -x /usr/bin/objformat; then
        objformat=`/usr/bin/objformat`
    else
        case $host_os in
            freebsd[23].*) objformat=aout ;;
            *) objformat=elf ;;
        esac
    fi
    version_type=freebsd-$objformat
    case $version_type in
        freebsd-elf*)
            library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
            need_version=no
            need_lib_prefix=no
            ;;
        freebsd-*)
            library_names_spec='${libname}${release}${shared_ext}$versuffix
$libname${shared_ext}$versuffix'
            need_version=yes
            ;;
    esac
    shlibpath_var=LD_LIBRARY_PATH
    case $host_os in
        freebsd2.*)
            shlibpath_overrides_runpath=yes
            ;;
        freebsd3.[01]* | freebsdelf3.[01]*)
            shlibpath_overrides_runpath=yes
            hardcode_into_libs=yes
            ;;
    esac

```

```

freebsd3.[2-9]* | freebsdelf3.[2-9]* | \
freebsd4.[0-5] | freebsdelf4.[0-5] | freebsd4.1.1 | freebsdelf4.1.1)
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;
*) # from 4.6 on, and DragonFly
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    ;;
esac
;;

gnu*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

haiku*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    dynamic_linker="$host_os runtime_loader"
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}${major} ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    sys_lib_dlsearch_path_spec='/boot/home/config/lib /boot/common/lib
/boot/system/lib'
    hardcode_into_libs=yes
    ;;

hpux9* | hpux10* | hpux11*)
    # Give a soname corresponding to the major version so that dld.sl
refuses to
    # link against other versions.
    version_type=sunos
    need_lib_prefix=no
    need_version=no
    case $host_cpu in
    ia64*)
        shrext_cmds='.so'
        hardcode_into_libs=yes

```

```

dynamic_linker="$host_os dld.so"
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
if test "X$HPUX_IA64_MODE" = X32; then
    sys_lib_search_path_spec="/usr/lib/hpux32 /usr/local/lib/hpux32
/usr/local/lib"
else
    sys_lib_search_path_spec="/usr/lib/hpux64 /usr/local/lib/hpux64"
fi
sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
hppa*64*)
shrext_cmds='.sl'
hardcode_into_libs=yes
dynamic_linker="$host_os dld.sl"
shlibpath_var=LD_LIBRARY_PATH # How should we handle SHLIB_PATH
shlibpath_overrides_runpath=yes # Unless +noenvvar is specified.
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
sys_lib_search_path_spec="/usr/lib/pa20_64 /usr/ccs/lib/pa20_64"
sys_lib_dlsearch_path_spec=$sys_lib_search_path_spec
;;
*)
shrext_cmds='.sl'
dynamic_linker="$host_os dld.sl"
shlibpath_var=SHLIB_PATH
shlibpath_overrides_runpath=no # +s is required to enable
SHLIB_PATH
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'
;;
esac
# HP-UX runs *really* slowly unless shared libraries are mode 555,
...
postinstall_cmds='chmod 555 $lib'
# or fails outright, so override atomically:
install_override_mode=555
;;

interix[3-9]*)
version_type=linux # correct to gnu/linux during the next big
refactor
need_lib_prefix=no
need_version=no
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
soname_spec='${libname}${release}${shared_ext}$major'

```



```

dynamic_linker='Interix 3.x ld.so.1 (PE, like ELF)'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=no
hardcode_into_libs=yes
;;

irix5* | irix6* | nonstopux*)
  case $host_os in
    nonstopux*) version_type=nonstopux ;;
    *)
      if test "$lt_cv_prog_gnu_ld" = yes; then
        version_type=linux # correct to gnu/linux during the next
big refactor
      else
        version_type=irix
      fi ;;
  esac
  need_lib_prefix=no
  need_version=no
  soname_spec='${libname}${release}${shared_ext}$major'
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major
${libname}${release}${shared_ext} $libname${shared_ext}'
  case $host_os in
    irix5* | nonstopux*)
      libsuff= shlibsuff=
      ;;
    *)
      case $LD in # libtool.m4 will add one of these switches to LD
*-32|*" -32 " | *-melf32bsmip|*" -melf32bsmip ")
        libsuff= shlibsuff= libmagic=32-bit;;
*-n32|*" -n32 " | *-melf32bmipn32|*" -melf32bmipn32 ")
        libsuff=32 shlibsuff=N32 libmagic=N32;;
*-64|*" -64 " | *-melf64bmip|*" -melf64bmip ")
        libsuff=64 shlibsuff=64 libmagic=64-bit;;
*) libsuff= shlibsuff= libmagic=never-match;;
      esac
      ;;
  esac
  shlibpath_var=LD_LIBRARY${shlibsuff}_PATH
  shlibpath_overrides_runpath=no
  sys_lib_search_path_spec="/usr/lib${libsuff} /lib${libsuff}
/usr/local/lib${libsuff}"
  sys_lib_dlsearch_path_spec="/usr/lib${libsuff} /lib${libsuff}"
  hardcode_into_libs=yes
  ;;

# No shared lib support for Linux oldld, aout, or coff.
linux*oldld* | linux*aout* | linux*coff*)
  dynamic_linker=no
  ;;

```

```

# This must be glibc/ELF.
linux* | k*bsd*-gnu | kopensolaris*-gnu)
  version_type=linux # correct to gnu/linux during the next big
refactor
  need_lib_prefix=no
  need_version=no
  library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
  soname_spec='${libname}${release}${shared_ext}$major'
  finish_cmds='PATH="\$PATH:/sbin" ldconfig -n $libdir'
  shlibpath_var=LD_LIBRARY_PATH
  shlibpath_overrides_runpath=no

  # Some binutils ld are patched to set DT_RUNPATH
  if ${lt_cv_shlibpath_overrides_runpath+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    lt_cv_shlibpath_overrides_runpath=no
    save_LDFLAGS=$LDFLAGS
    save_libdir=$libdir
    eval "libdir=/foo; wl=\"\$lt_prog_compiler_wl_CXX\"; \
      LDFLAGS=\"\$LDFLAGS $hardcode_libdir_flag_spec_CXX\""
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

  ;
  return 0;
}
_ACEOF
if ac_fn_cxx_try_link "$LINENO"; then :
  if ($OBJDUMP -p conftest$ac_exeext) 2>/dev/null | grep
"RUNPATH.*$libdir" >/dev/null; then :
    lt_cv_shlibpath_overrides_runpath=yes
  fi
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
  LDFLAGS=$save_LDFLAGS
  libdir=$save_libdir

fi

shlibpath_overrides_runpath=$lt_cv_shlibpath_overrides_runpath

# This implies no fast_install, which is unacceptable.
# Some rework will be needed to allow for fast_install
# before this can be enabled.
hardcode_into_libs=yes

```

```

# Append ld.so.conf contents to the search path
if test -f /etc/ld.so.conf; then
    lt_ld_extra=`awk '/^include / { system(sprintf("cd /etc; cat %s
2>/dev/null", \2)); skip = 1; } { if (!skip) print \$0; skip = 0; }'
< /etc/ld.so.conf | $SED -e 's/#.*//;/^[ ]*hwcap[ ]/d;s/[: , ]/
/g;s/=[^=]*$//;s/=[^= ]* / /g;s/"//g;/^$/d' | tr '\n' ' '`
    sys_lib_dlsearch_path_spec="/lib /usr/lib $lt_ld_extra"
fi

# We used to test for /lib/ld.so.1 and disable shared libraries on
# powerpc, because MkLinux only supported shared libraries with the
# GNU dynamic linker. Since this was broken with cross compilers,
# most powerpc-linux boxes support dynamic linking these days and
# people can always --disable-shared, the test was removed, and we
# assume the GNU/Linux dynamic linker is in use.
dynamic_linker='GNU/Linux ld.so'
;;

netbsd*)
version_type=sunos
need_lib_prefix=no
need_version=no
if echo __ELF__ | $CC -E - | $GREP __ELF__ >/dev/null; then
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="$PATH:/sbin" ldconfig -m $libdir'
    dynamic_linker='NetBSD (a.out) ld.so'
else
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major ${libname}${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    dynamic_linker='NetBSD ld.elf_so'
fi
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
hardcode_into_libs=yes
;;

newsos6)
version_type=linux # correct to gnu/linux during the next big
refactor
library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
shlibpath_var=LD_LIBRARY_PATH
shlibpath_overrides_runpath=yes
;;

*nto* | *qnx*)
version_type=qnx
need_lib_prefix=no
need_version=no

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
    ${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    dynamic_linker='ldqnx.so'
    ;;

openbsd*)
    version_type=sunos
    sys_lib_dlsearch_path_spec="/usr/lib"
    need_lib_prefix=no
    # Some older versions of OpenBSD (3.3 at least) *do* need versioned
    libs.
    case $host_os in
        openbsd3.3 | openbsd3.3.*)    need_version=yes ;;
        *)                            need_version=no  ;;
    esac
    library_names_spec='${libname}${release}${shared_ext}$versuffix
    ${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/sbin" ldconfig -m $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    if test -z "`echo __ELF__ | $CC -E - | $GREP __ELF__`" || test
"$host_os-$host_cpu" = "openbsd2.8-powerpc"; then
        case $host_os in
            openbsd2.[89] | openbsd2.[89].*)
                shlibpath_overrides_runpath=no
                ;;
            *)
                shlibpath_overrides_runpath=yes
                ;;
        esac
    else
        shlibpath_overrides_runpath=yes
    fi
    ;;

os2*)
    libname_spec='$name'
    shrext_cmds=".dll"
    need_lib_prefix=no
    library_names_spec='$libname${shared_ext} $libname.a'
    dynamic_linker='OS/2 ld.exe'
    shlibpath_var=LIBPATH
    ;;

osf3* | osf4* | osf5*)
    version_type=osf
    need_lib_prefix=no
    need_version=no
    soname_spec='${libname}${release}${shared_ext}$major'

```

```

    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    sys_lib_search_path_spec="/usr/shlib /usr/ccs/lib /usr/lib/cmplrs/cc
/usr/lib /usr/local/lib /var/shlib"
    sys_lib_dlsearch_path_spec="$sys_lib_search_path_spec"
    ;;

rdos*)
    dynamic_linker=no
    ;;

solaris*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    # ldd complains unless libraries are executable
    postinstall_cmds='chmod +x $lib'
    ;;

sunos4*)
    version_type=sunos
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${shared_ext}$versuffix'
    finish_cmds='PATH="\$PATH:/usr/etc" ldconfig $libdir'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    if test "$with_gnu_ld" = yes; then
        need_lib_prefix=no
    fi
    need_version=yes
    ;;

sysv4 | sysv4.3*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    case $host_vendor in
        sni)
            shlibpath_overrides_runpath=no
            need_lib_prefix=no
            runpath_var=LD_RUN_PATH

```

```

        ;;
siemens)
    need_lib_prefix=no
    ;;
motorola)
    need_lib_prefix=no
    need_version=no
    shlibpath_overrides_runpath=no
    sys_lib_search_path_spec='/lib /usr/lib /usr/ccs/lib'
    ;;
esac
;;

sysv4*MP*)
    if test -d /usr/nec ;then
        version_type=linux # correct to gnu/linux during the next big
refactor
        library_names_spec='$libname${shared_ext}.$versuffix
$libname${shared_ext}.$major $libname${shared_ext}'
        soname_spec='$libname${shared_ext}.$major'
        shlibpath_var=LD_LIBRARY_PATH
    fi
    ;;

sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    version_type=freebsd-elf
    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext} $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=yes
    hardcode_into_libs=yes
    if test "$with_gnu_ld" = yes; then
        sys_lib_search_path_spec='/usr/local/lib /usr/gnu/lib /usr/ccs/lib
/usr/lib /lib'
    else
        sys_lib_search_path_spec='/usr/ccs/lib /usr/lib'
        case $host_os in
            sco3.2v5*)
                sys_lib_search_path_spec="$sys_lib_search_path_spec /lib"
            ;;
        esac
    fi
    sys_lib_dlsearch_path_spec='/usr/lib'
    ;;

tpf*)
    # TPF is a cross-target only. Preferred cross-host = GNU/Linux.
    version_type=linux # correct to gnu/linux during the next big
refactor

```

```

    need_lib_prefix=no
    need_version=no
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    shlibpath_var=LD_LIBRARY_PATH
    shlibpath_overrides_runpath=no
    hardcode_into_libs=yes
    ;;

uts4*)
    version_type=linux # correct to gnu/linux during the next big
refactor
    library_names_spec='${libname}${release}${shared_ext}$versuffix
${libname}${release}${shared_ext}$major $libname${shared_ext}'
    soname_spec='${libname}${release}${shared_ext}$major'
    shlibpath_var=LD_LIBRARY_PATH
    ;;

*)
    dynamic_linker=no
    ;;
esac
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dynamic_linker" >&5
$as_echo "$dynamic_linker" >&6; }
test "$dynamic_linker" = no && can_build_shared=no

variables_saved_for_relink="PATH $shlibpath_var $runpath_var"
if test "$GCC" = yes; then
    variables_saved_for_relink="$variables_saved_for_relink
GCC_EXEC_PREFIX COMPILER_PATH LIBRARY_PATH"
fi

if test "${lt_cv_sys_lib_search_path_spec+set}" = set; then
    sys_lib_search_path_spec="$lt_cv_sys_lib_search_path_spec"
fi
if test "${lt_cv_sys_lib_dlsearch_path_spec+set}" = set; then
    sys_lib_dlsearch_path_spec="$lt_cv_sys_lib_dlsearch_path_spec"
fi

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking how to hardcode
library paths into programs" >&5
$as_echo_n "checking how to hardcode library paths into programs... "
>&6; }
hardcode_action_CXX=
if test -n "$hardcode_libdir_flag_spec_CXX" ||
    test -n "$runpath_var_CXX" ||
    test "X$hardcode_automatic_CXX" = "Xyes" ; then

# We can hardcode non-existent directories.
if test "$hardcode_direct_CXX" != no &&
    # If the only mechanism to avoid hardcoding is shlibpath_var, we
    # have to relink, otherwise we might link with an installed
library
    # when we should be linking with a yet-to-be-installed one
    ## test "$_LT_TAGVAR(hardcode_shlibpath_var, CXX)" != no &&
    test "$hardcode_minus_L_CXX" != no; then
    # Linking always hardcodes the temporary library directory.
    hardcode_action_CXX=relink
else
    # We can link without hardcoding, and we can hardcode nonexisting
dirs.
    hardcode_action_CXX=immediate
fi
else
# We cannot hardcode anything, or else we can only hardcode existing
# directories.
hardcode_action_CXX=unsupported

```



```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $hardcode_action_CXX"
>&5
$as_echo "$hardcode_action_CXX" >&6; }

if test "$hardcode_action_CXX" = relink ||
    test "$inherit_rpath_CXX" = yes; then
    # Fast installation is not supported
    enable_fast_install=no
elif test "$shlibpath_overrides_runpath" = yes ||
    test "$enable_shared" = no; then
    # Fast installation is not necessary
    enable_fast_install=needless
fi

fi # test -n "$compiler"

CC=$lt_save_CC
CFLAGS=$lt_save_CFLAGS
LDCXX=$LD
LD=$lt_save_LD
GCC=$lt_save_GCC
with_gnu_ld=$lt_save_with_gnu_ld
lt_cv_path_LDCXX=$lt_cv_path_LD
lt_cv_path_LD=$lt_save_path_LD
lt_cv_prog_gnu_ldcxx=$lt_cv_prog_gnu_ld
lt_cv_prog_gnu_ld=$lt_save_with_gnu_ld
fi # test "$_lt_caught_CXX_error" != yes

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

```

```

ac_config_commands="$ac_config_commands libtool"

# Only expand once:

@%:@ Check whether --enable-compiler-coverage was given.
if test "${enable_compiler_coverage+set}" = set; then :
  enableval=$enable_compiler_coverage; if test
"x$enable_compiler_coverage" = "xyes"; then
    if test "x$GCC" = "xyes"; then
      CFLAGS="$CFLAGS -fprofile-arcs -ftest-coverage"
    fi
  fi
fi

@%:@ Check whether --enable-compiler-optimisations was given.
if test "${enable_compiler_optimisations+set}" = set; then :
  enableval=$enable_compiler_optimisations; if test
"x$enable_compiler_optimisations" = "xno"; then
    CFLAGS=`echo "$CFLAGS" | sed -e "s/ -O[1-9]*\b/ -O0/g"`
  fi
fi

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
    be a program name with args.
    set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_PKG_CONFIG+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      case $PKG_CONFIG in
      [\\/]*)
        ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
        with a path.
        ;;
      *)
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
  fi
done
done
IFS=$as_save_IFS

;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
  ac_pt_PKG_CONFIG=$PKG_CONFIG
  # Extract the first word of "pkg-config", so it can be a program
  name with args.
  set dummy pkg-config; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    case $ac_pt_PKG_CONFIG in
    [\\/] * | ?:[\\/] *)
      ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
      override the test with a path.
    ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_path_ac_pt_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
>&5
$as_echo "$ac_pt_PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_pt_PKG_CONFIG" = x; then
        PKG_CONFIG=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        PKG_CONFIG=$ac_pt_PKG_CONFIG
    fi
else
    PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=0.9.0
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
$as_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }
    if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    fi
fi

```

```

        PKG_CONFIG=""
    fi

fi

# Initialize libtool

if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}windres", so it can be
    a program name with args.
    set dummy ${ac_tool_prefix}windres; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_prog_RC+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        if test -n "$RC"; then
            ac_cv_prog_RC="$RC" # Let the user override the test.
        else
            as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
            for as_dir in $PATH
            do
                IFS=$as_save_IFS
                test -z "$as_dir" && as_dir=.
                for ac_exec_ext in '' $ac_executable_extensions; do
                    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
                        ac_cv_prog_RC="${ac_tool_prefix}windres"
                        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
                        break 2
                    fi
                done
            done
            IFS=$as_save_IFS

        fi
    fi
    RC=$ac_cv_prog_RC
    if test -n "$RC"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $RC" >&5
        $as_echo "$RC" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
    fi

fi

fi

if test -z "$ac_cv_prog_RC"; then
    ac_ct_RC=$RC
    # Extract the first word of "windres", so it can be a program name
    with args.

```

```

set dummy windres; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_prog_ac_ct_RC+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test -n "$ac_ct_RC"; then
    ac_cv_prog_ac_ct_RC="$ac_ct_RC" # Let the user override the test.
  else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_prog_ac_ct_RC="windres"
      $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

fi
fi
ac_ct_RC=$ac_cv_prog_ac_ct_RC
if test -n "$ac_ct_RC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_RC" >&5
$as_echo "$ac_ct_RC" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  if test "x$ac_ct_RC" = x; then
    RC=""
  else
    case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    RC=$ac_ct_RC
  fi
else
  RC="$ac_cv_prog_RC"
fi

```

```

# Source file extension for RC test sources.
ac_ext=rc

# Object file extension for compiled RC test sources.
objext=o
objext_RC=$objext

# Code to be used in simple compile tests
lt_simple_compile_test_code='sample MENU { MENUITEM "&Soup", 100,
CHECKED }'

# Code to be used in simple link tests
lt_simple_link_test_code="$lt_simple_compile_test_code"

# ltmain only uses $CC for tagged configurations so make sure $CC is
set.

# If no C compiler was specified, use CC.
LTCC=${LTCC-"$CC"}

# If no C compiler flags were specified, use CFLAGS.
LTCFLAGS=${LTCFLAGS-"$CFLAGS"}

# Allow CC to be a program name with arguments.
compiler=$CC

# save warnings/boilerplate of simple test code
ac_outfile=confptest.$ac_objext
echo "$lt_simple_compile_test_code" >confptest.$ac_ext
eval "$ac_compile" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d'
>confptest.err
_lt_compiler_boilerplate=`cat confptest.err`
$RM confptest*

ac_outfile=confptest.$ac_objext
echo "$lt_simple_link_test_code" >confptest.$ac_ext
eval "$ac_link" 2>&1 >/dev/null | $SED '/^$/d; /^ *+/d' >confptest.err
_lt_linker_boilerplate=`cat confptest.err`
$RM -r confptest*

# Allow CC to be a program name with arguments.

```

```

lt_save_CC="$CC"
lt_save_CFLAGS=$CFLAGS
lt_save_GCC=$GCC
GCC=
CC=${RC-"windres"}
CFLAGS=
compiler=$CC
compiler_RC=$CC
for cc_temp in $compiler""; do
  case $cc_temp in
    compile | *[\//]compile | ccache | *[\//]ccache ) ;;
    distcc | *[\//]distcc | purify | *[\//]purify ) ;;
    \-*) ;;
    *) break;;
  esac
done
cc_basename=`$ECHO "$cc_temp" | $SED "s%.*/%%; s%^\$host_alias-%%"`

lt_cv_prog_compiler_c_o_RC=yes

if test -n "$compiler"; then
  :

fi

GCC=$lt_save_GCC
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

CC=$lt_save_CC
CFLAGS=$lt_save_CFLAGS

# Set some internal variables depending on the platform for later use.
dbus_win=no
dbus_cygwin=no
dbus_unix=no
case "${host}" in
  *-mingw32ce*)
    dbus_win=yes
    dbus_wince=yes
    ;;
  *-mingw32*)
    dbus_win=yes
    ;;
  *-cygwin*)

```



```

        dbus_cygwin=yes
        dbus_unix=yes
    ;;
*)
    dbus_unix=yes
    ;;
esac

# Special defines for certain platforms
if test "$dbus_win" = yes; then

$as_echo "@%:@define DBUS_WIN 1" >>confdefs.h

    BUILD_TIMESTAMP=`date --iso-8601=minutes`

    # Assume DBUS_VERSION is always three numbers
    BUILD_FILEVERSION=`echo "$DBUS_VERSION" | sed -e 's/\./,/g'`,0

    if test -n "$ac_tool_prefix"; then
        # Extract the first word of "${ac_tool_prefix}windres", so it can be
        a program name with args.
        set dummy ${ac_tool_prefix}windres; ac_word=$2
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_prog_WINDRES+:} false; then :
            $as_echo_n "(cached) " >&6
        else
            if test -n "$WINDRES"; then
                ac_cv_prog_WINDRES="$WINDRES" # Let the user override the test.
            else
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
        if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_WINDRES="${ac_tool_prefix}windres"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$as_save_IFS

fi
fi
WINDRES=$ac_cv_prog_WINDRES
if test -n "$WINDRES"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $WINDRES" >&5
$as_echo "$WINDRES" >&6; }

```

```

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi

if test -z "$ac_cv_prog_WINDRES"; then
  ac_ct_WINDRES=$WINDRES
  # Extract the first word of "windres", so it can be a program name
  with args.
  set dummy windres; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_ac_ct_WINDRES+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$ac_ct_WINDRES"; then
      ac_cv_prog_ac_ct_WINDRES="$ac_ct_WINDRES" # Let the user override
      the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_ac_ct_WINDRES="windres"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

    fi
  fi
  ac_ct_WINDRES=$ac_cv_prog_ac_ct_WINDRES
  if test -n "$ac_ct_WINDRES"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_WINDRES" >&5
$as_echo "$ac_ct_WINDRES" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi

  if test "x$ac_ct_WINDRES" = x; then
    WINDRES="no"
  else
    case $cross_compiling:$ac_tool_warned in

```

```

yes:)
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$sas_echo "$sas_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
    WINDRES=$ac_ct_WINDRES
    fi
else
    WINDRES="$ac_cv_prog_WINDRES"
fi

    if test "$WINDRES" = no; then
        as_fn_error $? "*** Could not find an implementation of windres
in your PATH." "$LINENO" 5
    fi
    if test "$dbus_wince" = yes; then

$sas_echo "@%:@define DBUS_WINCE 1" >>confdefs.h

$sas_echo "@%:@define _WIN32_WCE 0x0502" >>confdefs.h

    fi
else

$sas_echo "@%:@define DBUS_UNIX 1" >>confdefs.h

fi
if test "$dbus_cygwin" = yes; then

$sas_echo "@%:@define DBUS_CYGWIN 1" >>confdefs.h

fi

    if test "$dbus_win" = yes; then
        DBUS_WIN_TRUE=
        DBUS_WIN_FALSE='#'
    else
        DBUS_WIN_TRUE='#'
        DBUS_WIN_FALSE=
    fi

    if test "$dbus_wince" = yes; then
        DBUS_WINCE_TRUE=
        DBUS_WINCE_FALSE='#'
    else
        DBUS_WINCE_TRUE='#'
        DBUS_WINCE_FALSE=
    fi
fi

```

```

if test "$dbus_unix" = yes; then
    DBUS_UNIX_TRUE=
    DBUS_UNIX_FALSE='#'
else
    DBUS_UNIX_TRUE='#'
    DBUS_UNIX_FALSE=
fi

if test "$dbus_cygwin" = yes; then
    DBUS_CYGWIN_TRUE=
    DBUS_CYGWIN_FALSE='#'
else
    DBUS_CYGWIN_TRUE='#'
    DBUS_CYGWIN_FALSE=
fi

# this must come first: other options use this to set their defaults
@%:@ Check whether --enable-developer was given.
if test "${enable_developer+set}" = set; then :
    enableval=$enable_developer;
else
    enable_developer=no
fi

DBUS_STATIC_BUILD_CPPFLAGS=
if test "x$enable_shared" = xno; then
    # On Windows, linking against the static library requires special
    effort
    # to turn off DLL import/export processing. We normally link some
    things
    # against the dynamic library, but if we're not building that,
    we'll
    # have to link everything statically.
    DBUS_STATIC_BUILD_CPPFLAGS=-DDBUS_STATIC_BUILD
fi

@%:@ Check whether --enable-ansi was given.
if test "${enable_ansi+set}" = set; then :
    enableval=$enable_ansi; enable_ansi=$enableval
else
    enable_ansi=no
fi

@%:@ Check whether --enable-verbose-mode was given.
if test "${enable_verbose_mode+set}" = set; then :
    enableval=$enable_verbose_mode; enable_verbose_mode=$enableval
else
    enable_verbose_mode=$enable_developer
fi

```

```
@%:@ Check whether --enable-asserts was given.
if test "${enable_asserts+set}" = set; then :
  enableval=$enable_asserts; enable_asserts=$enableval
else
  enable_asserts=$enable_developer
fi

@%:@ Check whether --enable-checks was given.
if test "${enable_checks+set}" = set; then :
  enableval=$enable_checks; enable_checks=$enableval
else
  enable_checks=yes
fi

@%:@ Check whether --enable-xml-docs was given.
if test "${enable_xml_docs+set}" = set; then :
  enableval=$enable_xml_docs; enable_xml_docs=$enableval
else
  enable_xml_docs=auto
fi

@%:@ Check whether --enable-doxygen-docs was given.
if test "${enable_doxygen_docs+set}" = set; then :
  enableval=$enable_doxygen_docs; enable_doxygen_docs=$enableval
else
  enable_doxygen_docs=auto
fi

@%:@ Check whether --enable-abstract-sockets was given.
if test "${enable_abstract_sockets+set}" = set; then :
  enableval=$enable_abstract_sockets;
enable_abstract_sockets=$enableval
else
  enable_abstract_sockets=auto
fi

@%:@ Check whether --enable-selinux was given.
if test "${enable_selinux+set}" = set; then :
  enableval=$enable_selinux; enable_selinux=$enableval
else
  enable_selinux=auto
fi

@%:@ Check whether --enable-libaudit was given.
if test "${enable_libaudit+set}" = set; then :
  enableval=$enable_libaudit; enable_libaudit=$enableval
else
  enable_libaudit=auto
fi

@%:@ Check whether --enable-dnotify was given.
```

```
if test "${enable_dnotify+set}" = set; then :
    enableval=$enable_dnotify; enable_dnotify=$enableval
else
    enable_dnotify=auto
fi

@%:@ Check whether --enable-inotify was given.
if test "${enable_inotify+set}" = set; then :
    enableval=$enable_inotify; enable_inotify=$enableval
else
    enable_inotify=auto
fi

@%:@ Check whether --enable-kqueue was given.
if test "${enable_kqueue+set}" = set; then :
    enableval=$enable_kqueue; enable_kqueue=$enableval
else
    enable_kqueue=auto
fi

@%:@ Check whether --enable-console-owner-file was given.
if test "${enable_console_owner_file+set}" = set; then :
    enableval=$enable_console_owner_file;
enable_console_owner_file=$enableval
else
    enable_console_owner_file=auto
fi

@%:@ Check whether --enable-userdb-cache was given.
if test "${enable_userdb_cache+set}" = set; then :
    enableval=$enable_userdb_cache; enable_userdb_cache=$enableval
else
    enable_userdb_cache=yes
fi

@%:@ Check whether --enable-launchd was given.
if test "${enable_launchd+set}" = set; then :
    enableval=$enable_launchd; enable_launchd=$enableval
else
    enable_launchd=auto
fi

@%:@ Check whether --enable-systemd was given.
if test "${enable_systemd+set}" = set; then :
    enableval=$enable_systemd; enable_systemd=$enableval
else
    enable_systemd=auto
fi

@%:@ Check whether --with-xml was given.
```

```
if test "${with_xml+set}" = set; then :
    withval=$with_xml;
fi
```

```
@%:@ Check whether --with-init-scripts was given.
if test "${with_init_scripts+set}" = set; then :
    withval=$with_init_scripts;
fi
```

```
@%:@ Check whether --with-session-socket-dir was given.
if test "${with_session_socket_dir+set}" = set; then :
    withval=$with_session_socket_dir;
fi
```

```
@%:@ Check whether --with-test-socket-dir was given.
if test "${with_test_socket_dir+set}" = set; then :
    withval=$with_test_socket_dir;
fi
```

```
@%:@ Check whether --with-system-pid-file was given.
if test "${with_system_pid_file+set}" = set; then :
    withval=$with_system_pid_file;
fi
```

```
@%:@ Check whether --with-system-socket was given.
if test "${with_system_socket+set}" = set; then :
    withval=$with_system_socket;
fi
```

```
@%:@ Check whether --with-console-auth-dir was given.
if test "${with_console_auth_dir+set}" = set; then :
    withval=$with_console_auth_dir;
fi
```

```
@%:@ Check whether --with-console-owner-file was given.
if test "${with_console_owner_file+set}" = set; then :
    withval=$with_console_owner_file;
fi
```

```
@%:@ Check whether --with-launchd-agent-dir was given.
if test "${with_launchd_agent_dir+set}" = set; then :
    withval=$with_launchd_agent_dir;
fi
```

```

@%:@ Check whether --with-dbus_user was given.
if test "${with_dbus_user+set}" = set; then :
  withval=$with_dbus_user;
fi

@%:@ Check whether --with-dbus_daemon_dir was given.
if test "${with_dbus_daemon_dir+set}" = set; then :
  withval=$with_dbus_daemon_dir;
fi

@%:@ Check whether --with-dbus_session_bus_default_address was given.
if test "${with_dbus_session_bus_default_address+set}" = set; then :
  withval=$with_dbus_session_bus_default_address;
with_dbus_session_bus_default_address=$withval
else
  with_dbus_session_bus_default_address=nonce-tcp:
fi

@%:@ Check whether --enable-embedded-tests was given.
if test "${enable_embedded_tests+set}" = set; then :
  enableval=$enable_embedded_tests;
else
  enable_embedded_tests=$enable_developer
fi

@%:@ Check whether --enable-modular-tests was given.
if test "${enable_modular_tests+set}" = set; then :
  enableval=$enable_modular_tests;
else
  enable_modular_tests=auto
fi

# --enable-tests overrides both --enable-embedded-tests and
# --enable-modular-tests
@%:@ Check whether --enable-tests was given.
if test "${enable_tests+set}" = set; then :
  enableval=$enable_tests;
  if test "x$enableval" = xyes; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage was
requested with --enable-tests=yes" >&5
$as_echo "$as_me: Full test coverage was requested with --enable-
tests=yes" >&6;}
    { $as_echo "$as_me:${as_lineno-$LINENO}: This has many
dependencies (GLib, dbus-glib, Python)" >&5
$as_echo "$as_me: This has many dependencies (GLib, dbus-glib,
Python)" >&6;}
  fi
  enable_embedded_tests=$enableval

```



```

    enable_modular_tests=$enableval
fi

# DBUS_ENABLE_EMBEDDED_TESTS controls unit tests built in to .c files
# and also some stuff in the test/ subdir. DBUS_BUILD_TESTS was an
older
# name for this.
if test "x$enable_embedded_tests" = xyes; then
    DBUS_BUILD_TESTS_TRUE=
    DBUS_BUILD_TESTS_FALSE='#'
else
    DBUS_BUILD_TESTS_TRUE='#'
    DBUS_BUILD_TESTS_FALSE=
fi

if test "x$enable_embedded_tests" = xyes; then
    DBUS_ENABLE_EMBEDDED_TESTS_TRUE=
    DBUS_ENABLE_EMBEDDED_TESTS_FALSE='#'
else
    DBUS_ENABLE_EMBEDDED_TESTS_TRUE='#'
    DBUS_ENABLE_EMBEDDED_TESTS_FALSE=
fi

if test "x$enable_embedded_tests" = xyes; then

$as_echo "@%:@define DBUS_ENABLE_EMBEDDED_TESTS 1" >>confdefs.h

$as_echo "@%:@define DBUS_BUILD_TESTS 1" >>confdefs.h

fi

# DBUS_ENABLE_MODULAR_TESTS controls tests that work based on public
API.
# These use GTest, from GLib, because life's too short. They're
enabled by
# default (unless you don't have GLib), because they don't bloat the
library
# or binaries.

with_glib=yes

if test "x$enable_modular_tests" != xno; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GLIB" >&5
$as_echo_n "checking for GLIB... " >&6; }

if test -n "$GLIB_CFLAGS"; then
    pkg_cv_GLIB_CFLAGS="$GLIB_CFLAGS"

```

```

elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"glib-2.0 >= 2.24, gio-2.0 >= 2.24\""; } >&5
        ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.24, gio-2.0 >=
2.24") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_GLIB_CFLAGS=`$PKG_CONFIG --cflags "glib-2.0 >= 2.24, gio-2.0
>= 2.24" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
if test -n "$GLIB_LIBS"; then
    pkg_cv_GLIB_LIBS="$GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"glib-2.0 >= 2.24, gio-2.0 >= 2.24\""; } >&5
        ($PKG_CONFIG --exists --print-errors "glib-2.0 >= 2.24, gio-2.0 >=
2.24") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_GLIB_LIBS=`$PKG_CONFIG --libs "glib-2.0 >= 2.24, gio-2.0 >=
2.24" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "glib-2.0 >= 2.24, gio-2.0 >= 2.24" 2>&1`
    else
        GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors "glib-2.0 >=
2.24, gio-2.0 >= 2.24" 2>&1`

```

```

        fi
        # Put the nasty error message in config.log where it belongs
        echo "$GLIB_PKG_ERRORS" >&5

        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
            if test "x$enable_modular_tests" = xyes; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires GLib" >&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires GLib" >&6;}
                as_fn_error $? "$GLIB_ERRORS" "$LINENO" 5
            else # assumed to be "auto"
                with_glib=no
            fi
        elif test $pkg_failed = untried; then
            if test "x$enable_modular_tests" = xyes; then
                { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires GLib" >&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires GLib" >&6;}
                as_fn_error $? "$GLIB_ERRORS" "$LINENO" 5
            else # assumed to be "auto"
                with_glib=no
            fi
        else
            GLIB_CFLAGS=$pkg_cv_GLIB_CFLAGS
            GLIB_LIBS=$pkg_cv_GLIB_LIBS
            { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
            :
        fi
        # If dbus-gmain.[ch] returned to libdbus then we wouldn't need this

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS_GLIB" >&5
$as_echo_n "checking for DBUS_GLIB... " >&6; }

if test -n "$DBUS_GLIB_CFLAGS"; then
    pkg_cv_DBUS_GLIB_CFLAGS="$DBUS_GLIB_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
--print-errors \"dbus-glib-1\""; } >&5
        ($PKG_CONFIG --exists --print-errors "dbus-glib-1") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_CFLAGS=`$PKG_CONFIG --cflags "dbus-glib-1"
2>/dev/null`
    else
        pkg_failed=yes

```

```

fi
else
    pkg_failed=untried
fi
if test -n "$DBUS_GLIB_LIBS"; then
    pkg_cv_DBUS_GLIB_LIBS="$DBUS_GLIB_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"dbus-glib-1\""; } >&5
        ($PKG_CONFIG --exists --print-errors "dbus-glib-1") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_DBUS_GLIB_LIBS=`$PKG_CONFIG --libs "dbus-glib-1" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "dbus-glib-1" 2>&1`
    else
        DBUS_GLIB_PKG_ERRORS=`$PKG_CONFIG --print-errors "dbus-
glib-1" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$DBUS_GLIB_PKG_ERRORS" >&5

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        if test "x$enable_modular_tests" = xyes; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--
enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib"
>&5
$as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --
enable-tests=yes) requires dbus-glib" >&6;}
            as_fn_error $? "$DBUS_GLIB_ERRORS" "$LINENO" 5
        else # assumed to be "auto"
            with_glib=no

```

```

    fi
elif test $pkg_failed = untried; then
    if test "x$enable_modular_tests" = xyes; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib"
        >&5
        $as_echo "$as_me: Full test coverage (--enable-modular-tests=yes or --enable-tests=yes) requires dbus-glib" >&6;}
        as_fn_error $? "$DBUS_GLIB_ERRORS" "$LINENO" 5
    else # assumed to be "auto"
        with_glib=no
    fi
else
    DBUS_GLIB_CFLAGS=$pkg_cv_DBUS_GLIB_CFLAGS
    DBUS_GLIB_LIBS=$pkg_cv_DBUS_GLIB_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
    $as_echo "yes" >&6; }
    :
fi
fi
if test "x$enable_modular_tests" != xno; then

$as_echo "@%:@define DBUS_ENABLE_MODULAR_TESTS 1" >>confdefs.h

fi
    if test "x$enable_modular_tests" != xno; then
        DBUS_ENABLE_MODULAR_TESTS_TRUE=
        DBUS_ENABLE_MODULAR_TESTS_FALSE='#'
    else
        DBUS_ENABLE_MODULAR_TESTS_TRUE='#'
        DBUS_ENABLE_MODULAR_TESTS_FALSE=
    fi
fi

if test "x$with_glib" != xno; then

$as_echo "@%:@define DBUS_WITH_GLIB 1" >>confdefs.h

fi
    if test "x$with_glib" != xno; then
        DBUS_WITH_GLIB_TRUE=
        DBUS_WITH_GLIB_FALSE='#'
    else
        DBUS_WITH_GLIB_TRUE='#'
        DBUS_WITH_GLIB_FALSE=
    fi
fi

@%:@ Check whether --enable-installed-tests was given.
if test "${enable_installed_tests+set}" = set; then :
    enableval=$enable_installed_tests;
else

```

```

    enable_installed_tests=no
fi

if test "x$enable_installed_tests" = xyes; then
    DBUS_ENABLE_INSTALLED_TESTS_TRUE=
    DBUS_ENABLE_INSTALLED_TESTS_FALSE='#'
else
    DBUS_ENABLE_INSTALLED_TESTS_TRUE='#'
    DBUS_ENABLE_INSTALLED_TESTS_FALSE=
fi

if test "x$enable_tests" = xyes; then
    # full test coverage is required, Python is a hard dependency
    { $as_echo "$as_me:${as_lineno-$LINENO}: Full test coverage (--enable-tests=yes) requires Python, dbus-python, pygobject" >&5
$as_echo "$as_me: Full test coverage (--enable-tests=yes) requires Python, dbus-python, pygobject" >&6;}

        if test -n "$PYTHON"; then
            # If the user set $PYTHON, use it and don't search something
            else.
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $PYTHON version is >= 2.6" >&5
$as_echo_n "checking whether $PYTHON version is >= 2.6... " >&6; }
                prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
                if { echo "$as_me:$LINENO: $PYTHON -c "$prog"" >&5
($PYTHON -c "$prog") >&5 2>&5
                ac_status=$?
                echo "$as_me:$LINENO: \ $? = $ac_status" >&5
                (exit $ac_status); }; then :
                    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
                else
                    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
                    as_fn_error $? "Python interpreter is too old"
"$LINENO" 5
                fi
            fi
        fi

```

```

    am_display_PYTHON=$PYTHON
else
    # Otherwise, try each interpreter until we find one that
satisfies
    # VERSION.
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for a Python
interpreter with version >= 2.6" >&5
$sas_echo_n "checking for a Python interpreter with version >= 2.6... "
>&6; }
if ${am_cv_pathless_PYTHON+:} false; then :
    $sas_echo_n "(cached) " >&6
else

    for am_cv_pathless_PYTHON in python python2 python3 python3.3
python3.2 python3.1 python3.0 python2.7 python2.6 python2.5 python2.4
python2.3 python2.2 python2.1 python2.0 none; do
        test "$am_cv_pathless_PYTHON" = none && break
        prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
        if { echo "$sas_me:$LINENO: $am_cv_pathless_PYTHON -c "$prog"" >&5
($am_cv_pathless_PYTHON -c "$prog") >&5 2>&5
        ac_status=$?
        echo "$sas_me:$LINENO: \ $? = $ac_status" >&5
        (exit $ac_status); }; then :
            break
        fi
    done
fi
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_pathless_PYTHON" >&5
$sas_echo "$am_cv_pathless_PYTHON" >&6; }
    # Set $PYTHON to the absolute path of $am_cv_pathless_PYTHON.
    if test "$am_cv_pathless_PYTHON" = none; then
        PYTHON=:
    else
        # Extract the first word of "$am_cv_pathless_PYTHON", so it
can be a program name with args.
        set dummy $am_cv_pathless_PYTHON; ac_word=$2
        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$sas_echo_n "checking for $ac_word... " >&6; }
        if ${ac_cv_path_PYTHON+:} false; then :
            $sas_echo_n "(cached) " >&6
        else
            case $PYTHON in
                [\\/] * | ? : [\\/] *)

```

```

    ac_cv_path_PYTHON="$PYTHON" # Let the user override the test with a
path.
    ;;
*)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
    IFS=$as_save_IFS
    test -z "$as_dir" && as_dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
    ac_cv_path_PYTHON="$as_dir/$ac_word$ac_exec_ext"
    $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
    break 2
    fi
done
    done
IFS=$as_save_IFS

    ;;
esac
fi
PYTHON=$ac_cv_path_PYTHON
if test -n "$PYTHON"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PYTHON" >&5
$as_echo "$PYTHON" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    fi
    am_display_PYTHON=$am_cv_pathless_PYTHON
fi

if test "$PYTHON" = :; then
    as_fn_error $? "no suitable Python interpreter found" "$LINENO"
5
else

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON version" >&5
$as_echo_n "checking for $am_display_PYTHON version... " >&6; }
if ${am_cv_python_version+:} false; then :
    $as_echo_n "(cached) " >&6
else
    am_cv_python_version=`$PYTHON -c "import sys;
sys.stdout.write(sys.version[:3])"`

```



```

fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_version" >&5
$sas_echo "$am_cv_python_version" >&6; }
PYTHON_VERSION=$am_cv_python_version

PYTHON_PREFIX='${prefix}'

PYTHON_LIB_PREFIX='${libdir}'

PYTHON_EXEC_PREFIX='${exec_prefix}'

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON platform" >&5
$sas_echo_n "checking for $am_display_PYTHON platform... " >&6; }
if ${am_cv_python_platform+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  am_cv_python_platform=`$PYTHON -c "import sys;
sys.stdout.write(sys.platform)"`
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_platform" >&5
$sas_echo "$am_cv_python_platform" >&6; }
PYTHON_PLATFORM=$am_cv_python_platform

# Just factor out some code duplication.
am_python_setup_sysconfig="\
import sys
# Prefer sysconfig over distutils.sysconfig, for better compatibility
# with python 3.x. See automake bug#10227.
try:
    import sysconfig
except ImportError:
    can_use_sysconfig = 0
else:
    can_use_sysconfig = 1
# Can't use sysconfig in CPython 2.7, since it's broken in
virtualenvs:
# <https://github.com/pypa/virtualenv/issues/118>
try:
    from platform import python_implementation
    if python_implementation() == 'CPython' and sys.version[:3] ==
'2.7':
        can_use_sysconfig = 0
except ImportError:
    pass"

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON script directory" >&5
$sas_echo_n "checking for $am_display_PYTHON script directory... " >&6;
}
if ${am_cv_python_pythondir+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test "x$prefix" = xNONE
  then
    am_py_prefix=$ac_default_prefix
  else
    am_py_prefix=$prefix
  fi
  am_cv_python_pythondir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('purelib',
vars={'base': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(0, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
  case $am_cv_python_pythondir in
  $am_py_prefix*)
    am__strip_prefix=`echo "$am_py_prefix" | sed 's|.|.|g'`
    am_cv_python_pythondir=`echo "$am_cv_python_pythondir" | sed
"s,^$am__strip_prefix,$PYTHON_PREFIX,"`
    ;;
  *)
    case $am_py_prefix in
    /usr|/System*) ;;
    *)
am_cv_python_pythondir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
    ;;
  esac
    ;;
  esac
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_pythondir" >&5
$sas_echo "$am_cv_python_pythondir" >&6; }
pythondir=$am_cv_python_pythondir

pkgpythondir=\${pythondir}/$PACKAGE

```

```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON extension module directory" >&5
$sas_echo_n "checking for $am_display_PYTHON extension module
directory... " >&6; }
if ${am_cv_python_pyexecdir+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  if test "x$exec_prefix" = xNONE
  then
    am_py_exec_prefix=$am_py_prefix
  else
    am_py_exec_prefix=$exec_prefix
  fi
  am_cv_python_pyexecdir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('platlib',
vars={'platbase': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(1, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
  echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
  case $am_cv_python_pyexecdir in
  $am_py_exec_prefix*)
    am__strip_prefix=`echo "$am_py_exec_prefix" | sed 's|.|.|g'`
    am_cv_python_pyexecdir=`echo "$am_cv_python_pyexecdir" | sed
"s,^$am__strip_prefix,$PYTHON_EXEC_PREFIX,"`
    ;;
  *)
    case $am_py_exec_prefix in
    /usr|/System*) ;;
    *)
am_cv_python_pyexecdir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
        ;;
    esac
        ;;
    esac
  fi
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_pyexecdir" >&5
$sas_echo "$am_cv_python_pyexecdir" >&6; }
  pyexecdir=$am_cv_python_pyexecdir

pkgpyexecdir=\${pyexecdir}/$PACKAGE

```

```

fi

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for Python modules
for full test coverage" >&5
$as_echo_n "checking for Python modules for full test coverage... "
>&6; }
    if "$PYTHON" -c "import dbus, gobject, dbus.mainloop.glib"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        as_fn_error $? "cannot import dbus, gobject, dbus.mainloop.glib
Python modules" "$LINENO" 5
    fi
else
    # --enable-tests not given: do not abort if Python is missing

        if test -n "$PYTHON"; then
            # If the user set $PYTHON, use it and don't search something
            else.
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether
$PYTHON version is >= 2.6" >&5
$as_echo_n "checking whether $PYTHON version is >= 2.6... " >&6; }
                prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
                if { echo "$as_me:$LINENO: $PYTHON -c "$prog"" >&5
($PYTHON -c "$prog") >&5 2>&5
                ac_status=$?
                echo "$as_me:$LINENO: \$? = $ac_status" >&5
                (exit $ac_status); }; then :
                    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
                else
                    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }

```

```

                                as_fn_error $? "Python interpreter is too old"
"$LINENO" 5
fi
    am_display_PYTHON=$PYTHON
else
    # Otherwise, try each interpreter until we find one that
satisfies
    # VERSION.
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for a Python
interpreter with version >= 2.6" >&5
$as_echo_n "checking for a Python interpreter with version >= 2.6... "
>&6; }
if ${am_cv_pathless_PYTHON+:} false; then :
    $as_echo_n "(cached) " >&6
else

    for am_cv_pathless_PYTHON in python python2 python3 python3.3
python3.2 python3.1 python3.0 python2.7 python2.6 python2.5 python2.4
python2.3 python2.2 python2.1 python2.0 none; do
        test "$am_cv_pathless_PYTHON" = none && break
        prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '2.6'.split('.'))) + [0, 0, 0]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[i]
sys.exit(sys.hexversion < minverhex)"
        if { echo "$as_me:$LINENO: $am_cv_pathless_PYTHON -c "$prog"" >&5
($am_cv_pathless_PYTHON -c "$prog") >&5 2>&5
ac_status=$?
echo "$as_me:$LINENO: \ $? = $ac_status" >&5
(exit $ac_status); }; then :
            break
        fi
    done
fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_pathless_PYTHON" >&5
$as_echo "$am_cv_pathless_PYTHON" >&6; }
    # Set $PYTHON to the absolute path of $am_cv_pathless_PYTHON.
    if test "$am_cv_pathless_PYTHON" = none; then
        PYTHON=:
    else
        # Extract the first word of "$am_cv_pathless_PYTHON", so it
can be a program name with args.
set dummy $am_cv_pathless_PYTHON; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_PYTHON+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  case $PYTHON in
    [\\/* | ?:[\\/*]*)
      ac_cv_path_PYTHON="$PYTHON" # Let the user override the test with a
path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_PYTHON="$as_dir/$ac_word$ac_exec_ext"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

  ;;
esac
fi
PYTHON=$ac_cv_path_PYTHON
if test -n "$PYTHON"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PYTHON" >&5
$as_echo "$PYTHON" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

  fi
  am_display_PYTHON=$am_cv_pathless_PYTHON
fi

if test "$PYTHON" = :; then
  :
else

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON version" >&5
$as_echo_n "checking for $am_display_PYTHON version... " >&6; }
if ${am_cv_python_version+:} false; then :
  $as_echo_n "(cached) " >&6
else

```

```

    am_cv_python_version=`$PYTHON -c "import sys;
sys.stdout.write(sys.version[:3])"`
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_version" >&5
$as_echo "$am_cv_python_version" >&6; }
PYTHON_VERSION=$am_cv_python_version

PYTHON_PREFIX='${prefix}'

PYTHON_LIB_PREFIX='${libdir}'

PYTHON_EXEC_PREFIX='${exec_prefix}'

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON platform" >&5
$as_echo_n "checking for $am_display_PYTHON platform... " >&6; }
if ${am_cv_python_platform+:} false; then :
  $as_echo_n "(cached) " >&6
else
  am_cv_python_platform=`$PYTHON -c "import sys;
sys.stdout.write(sys.platform)"`
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result:
$am_cv_python_platform" >&5
$as_echo "$am_cv_python_platform" >&6; }
PYTHON_PLATFORM=$am_cv_python_platform

# Just factor out some code duplication.
am_python_setup_sysconfig="\
import sys
# Prefer sysconfig over distutils.sysconfig, for better compatibility
# with python 3.x. See automake bug#10227.
try:
    import sysconfig
except ImportError:
    can_use_sysconfig = 0
else:
    can_use_sysconfig = 1
# Can't use sysconfig in CPython 2.7, since it's broken in
virtualenvs:
# <https://github.com/pypa/virtualenv/issues/118>
try:
    from platform import python_implementation
    if python_implementation() == 'CPython' and sys.version[:3] ==
'2.7':
        can_use_sysconfig = 0

```

```

except ImportError:
    pass"

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON script directory" >&5
$as_echo_n "checking for $am_display_PYTHON script directory... " >&6;
}
if ${am_cv_python_pythondir+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$prefix" = xNONE
  then
    am_py_prefix=$ac_default_prefix
  else
    am_py_prefix=$prefix
  fi
  am_cv_python_pythondir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('purelib',
vars={'base': '$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(0, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
case $am_cv_python_pythondir in
$am_py_prefix*)
  am__strip_prefix=`echo "$am_py_prefix" | sed 's|.|.|g'`
  am_cv_python_pythondir=`echo "$am_cv_python_pythondir" | sed
"s,^$am__strip_prefix,$PYTHON_PREFIX," `
  ;;
*)
  case $am_py_prefix in
  /usr|/System*) ;;
  *)
am_cv_python_pythondir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
  ;;
  esac
  ;;
  esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_pythondir" >&5
$as_echo "$am_cv_python_pythondir" >&6; }
pythondir=$am_cv_python_pythondir

```



```

pkgpythondir=\${pythondir}/${PACKAGE}

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
$am_display_PYTHON extension module directory" >&5
$as_echo_n "checking for $am_display_PYTHON extension module
directory... " >&6; }
if ${am_cv_python_pyexecdir+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "x$exec_prefix" = xNONE
  then
    am_py_exec_prefix=$am_py_prefix
  else
    am_py_exec_prefix=$exec_prefix
  fi
  am_cv_python_pyexecdir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
  sitedir = sysconfig.get_path('platlib',
vars={'platbase':'$am_py_prefix'})
else:
  from distutils import sysconfig
  sitedir = sysconfig.get_python_lib(1, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)" ||
echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages"
case $am_cv_python_pyexecdir in
$am_py_exec_prefix*)
  am__strip_prefix=`echo "$am_py_exec_prefix" | sed 's|.|.|g'|`
  am_cv_python_pyexecdir=`echo "$am_cv_python_pyexecdir" | sed
"s,^$am__strip_prefix,$PYTHON_EXEC_PREFIX,"`
  ;;
*)
  case $am_py_exec_prefix in
/usr|/System*) ;;
*)
am_cv_python_pyexecdir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
  ;;
esac
  ;;
esac

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$am_cv_python_pyexecdir" >&5
$as_echo "$am_cv_python_pyexecdir" >&6; }
pyexecdir=$am_cv_python_pyexecdir

```

```

pkgpyexecdir=\${pyexecdir}/$PACKAGE

fi

fi

if test x$enable_verbose_mode = xyes; then
$as_echo "@%:@define DBUS_ENABLE_VERBOSE_MODE 1" >>confdefs.h
fi

if test x$enable_asserts = xno; then
$as_echo "@%:@define DBUS_DISABLE_ASSERT 1" >>confdefs.h

    DISABLE_UNUSED_WARNINGS="unused-label"
    R_DYNAMIC_LDFLAG=""
else
    # -rdynamic is needed for glibc's backtrace_symbols to work.
    # No clue how much overhead this adds, but it's useful
    # to do this on any assertion failure,
    # so for now it's enabled anytime asserts are (currently not
    # in production builds).

    # To get -rdynamic you pass -export-dynamic to libtool.
$as_echo "@%:@define DBUS_BUILT_R_DYNAMIC 1" >>confdefs.h

    R_DYNAMIC_LDFLAG=-export-dynamic
fi

if test x$enable_checks = xno; then
$as_echo "@%:@define DBUS_DISABLE_CHECKS 1" >>confdefs.h

$as_echo "@%:@define G_DISABLE_CHECKS 1" >>confdefs.h

    DISABLE_UNUSED_WARNINGS="unused-label"
fi

if test x$enable_userdb_cache = xyes; then
$as_echo "@%:@define DBUS_ENABLE_USERDB_CACHE 1" >>confdefs.h
fi

```

```

if test x$enable_compiler_coverage = xyes; then
    ## so that config.h changes when you toggle gcov support

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_GCOV_ENABLED 1
_ACEOF

fi

# glibc21.m4 serial 3

# Test for the GNU C Library, version 2.1 or newer.
# From Bruno Haible.

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether we are using
the GNU C Library 2.1 or newer" >&5
$as_echo_n "checking whether we are using the GNU C Library 2.1 or
newer... " >&6; }
if ${ac_cv_gnu_library_2_1+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <features.h>
#ifdef __GNU_LIBRARY__
  #if ((__GLIBC__ == 2 && __GLIBC_MINOR__ >= 1) || (__GLIBC__ > 2))
    Lucky GNU user
  #endif
#endif

_ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "Lucky GNU user" >/dev/null 2>&1; then :
  ac_cv_gnu_library_2_1=yes
else
  ac_cv_gnu_library_2_1=no
fi
rm -f conftest*

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_gnu_library_2_1" >&5
$as_echo "$ac_cv_gnu_library_2_1" >&6; }

#### Integer sizes

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects

```

```

# declarations like `int a3[sizeof (unsigned char) >= 0];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of char" >&5
$as_echo_n "checking size of char... " >&6; }
if ${ac_cv_sizeof_char+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (char))"
"ac_cv_sizeof_char" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_char" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in ``$ac_pwd':"
>&5
$as_echo "$as_me: error: in ``$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (char)
See `config.log' for more details" "$LINENO" 5; }
    else
      ac_cv_sizeof_char=0
    fi
  fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_char"
>&5
$as_echo "$ac_cv_sizeof_char" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_CHAR $ac_cv_sizeof_char
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[sizeof (unsigned char) >= 0];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of short" >&5
$as_echo_n "checking size of short... " >&6; }
if ${ac_cv_sizeof_short+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (short))"
"ac_cv_sizeof_short" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_short" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in ``$ac_pwd':"
>&5
$as_echo "$as_me: error: in ``$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (short)

```

```

See `config.log' for more details" "$LINENO" 5; }
    else
        ac_cv_sizeof_short=0
    fi
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_short"
>&5
$as_echo "$ac_cv_sizeof_short" >&6; }

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_SHORT $ac_cv_sizeof_short
_ACEOF

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of long" >&5
$as_echo_n "checking size of long... " >&6; }
if ${ac_cv_sizeof_long+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (long))"
"ac_cv_sizeof_long" "$ac_includes_default"; then :
else
    if test "$ac_cv_type_long" = yes; then
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (long)
See `config.log' for more details" "$LINENO" 5; }
        else
            ac_cv_sizeof_long=0
        fi
    fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_long"
>&5
$as_echo "$ac_cv_sizeof_long" >&6; }

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_LONG $ac_cv_sizeof_long
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of int" >&5
$as_echo_n "checking size of int... " >&6; }
if ${ac_cv_sizeof_int+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (int))"
"ac_cv_sizeof_int" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_int" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (int)
See `config.log' for more details" "$LINENO" 5; }
    else
      ac_cv_sizeof_int=0
    fi
  fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_int"
>&5
$as_echo "$ac_cv_sizeof_int" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_INT $ac_cv_sizeof_int
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of void *" >&5
$as_echo_n "checking size of void *... " >&6; }
if ${ac_cv_sizeof_void_p+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (void *))"
"ac_cv_sizeof_void_p" "$ac_includes_default"; then :

else
  if test "$ac_cv_type_void_p" = yes; then

```

```

    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (void *)
See `config.log' for more details" "$LINENO" 5; }
    else
        ac_cv_sizeof_void_p=0
    fi
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_sizeof_void_p"
>&5
$as_echo "$ac_cv_sizeof_void_p" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_VOID_P $ac_cv_sizeof_void_p
_ACEOF

```

```

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of long long"
>&5
$as_echo_n "checking size of long long... " >&6; }
if ${ac_cv_sizeof_long_long+:} false; then :
    $as_echo_n "(cached) " >&6
else
    if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (long long))"
"ac_cv_sizeof_long_long" "$ac_includes_default"; then :

else
    if test "$ac_cv_type_long_long" = yes; then
        { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
>&5
$as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (long long)
See `config.log' for more details" "$LINENO" 5; }
        else
            ac_cv_sizeof_long_long=0
        fi
    fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_sizeof_long_long" >&5
$as_echo "$ac_cv_sizeof_long_long" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF_LONG_LONG $ac_cv_sizeof_long_long
_ACEOF

# The cast to long int works around a bug in the HP C Compiler
# version HP92453-01 B.11.11.23709.GP, which incorrectly rejects
# declarations like `int a3[[(sizeof (unsigned char)) >= 0]];'.
# This bug is HP SR number 8606223364.
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking size of __int64" >&5
$as_echo_n "checking size of __int64... " >&6; }
if ${ac_cv_sizeof__int64+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if ac_fn_c_compute_int "$LINENO" "(long int) (sizeof (__int64))"
"ac_cv_sizeof__int64" "$ac_includes_default"; then :

else
  if test "$ac_cv_type__int64" = yes; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `'$ac_pwd':"
>&5
$as_echo "$as_me: error: in `'$ac_pwd':" >&2;}
as_fn_error 77 "cannot compute sizeof (__int64)
See `config.log' for more details" "$LINENO" 5; }
    else
      ac_cv_sizeof__int64=0
    fi
  fi

fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_sizeof__int64" >&5
$as_echo "$ac_cv_sizeof__int64" >&6; }

```

```

cat >>confdefs.h <<_ACEOF
@%:@define SIZEOF___INT64 $ac_cv_sizeof__int64
_ACEOF

```

```

@%:@ Check whether --with-64-bit was given.
if test "${with_64_bit+set}" = set; then :
  withval=$with_64_bit;
else
  with_64_bit=yes
fi

```



```

### See what our 64 bit type is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 64-bit integer type"
>&5
$as_echo_n "checking 64-bit integer type... " >&6; }

case 8 in
$ac_cv_sizeof_int)
  dbusint64=int
  dbusint64_constant='(val) '
  dbusuint64_constant='(val) '
  dbusint64_printf_modifier='"" '
  ;;
$ac_cv_sizeof_long)
  dbusint64=long
  dbusint64_constant='(val##L) '
  dbusuint64_constant='(val##UL) '
  dbusint64_printf_modifier='"l" '
  ;;
$ac_cv_sizeof_long_long)
  dbusint64='long long'
  dbusint64_constant='(val##LL) '
  dbusuint64_constant='(val##ULL) '
  # Ideally we discover what the format is, but this is
  # only used in verbose mode, so eh...
  if test x"$ac_cv_gnu_library_2_1" = xyes; then
    dbusint64_printf_modifier='"ll" '
  fi
  ;;
$ac_cv_sizeof__int64)
  dbusint64=__int64
  dbusint64_constant='(val##i64) '
  dbusuint64_constant='(val##ui64) '
  # See above case
  if test x"$ac_cv_gnu_library_2_1" = xyes; then
    dbusint64_printf_modifier='"ll" '
  fi
  ;;
esac

if test "x$with_64_bit" = xno; then :

    DBUS_INT64_TYPE="no_int64_type_detected"
    DBUS_HAVE_INT64=0
    DBUS_INT64_CONSTANT=
    DBUS_UINT64_CONSTANT=
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: disabled via
--without-64-bit" >&5
$as_echo "disabled via --without-64-bit" >&6; }

elif test -z "$dbusint64"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not found" >&5

```

```
$as_echo "not found" >&6; }
  as_fn_error $? "Could not find a 64-bit integer type.
```

Please report a bug here with details of your platform and compiler:

http://bugs.freedesktop.org/enter_bug.cgi?product=DBus&component=core

To compile D-Bus with all 64-bit integer types removed (not recommended), use the option `"--without-64-bit"`.

This option is likely to be removed in future, unless you report that your platform needs it." "\$LINENO" 5

```
else
```

```
    DBUS_INT64_TYPE="$dbusint64"
    DBUS_HAVE_INT64=1
    DBUS_INT64_CONSTANT="$dbusint64_constant"
    DBUS_UINT64_CONSTANT="$dbusuint64_constant"
    if test x"$dbusint64_printf_modifier" != x; then
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_INT64_PRINTF_MODIFIER $dbusint64_printf_modifier
_ACEOF
```

```
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT64_TYPE" >&5
$as_echo "$DBUS_INT64_TYPE" >&6; }
```

```
fi
```

```
### see what 32-bit int is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 32-bit integer type"
>&5
$as_echo_n "checking 32-bit integer type... " >&6; }
```

```
case 4 in
$ac_cv_sizeof_short)
  dbusint32=short
  ;;
$ac_cv_sizeof_int)
  dbusint32=int
  ;;
```

```

$ac_cv_sizeof_long)
    dbusint32=long
    ;;
esac

if test -z "$dbusint32" ; then
    DBUS_INT32_TYPE="no_int32_type_detected"
    as_fn_error $? "No 32-bit integer type found" "$LINENO" 5
else
    DBUS_INT32_TYPE="$dbusint32"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT32_TYPE" >&5
$as_echo "$DBUS_INT32_TYPE" >&6; }
fi

### see what 16-bit int is called
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking 16-bit integer type"
>&5
$as_echo_n "checking 16-bit integer type... " >&6; }

case 2 in
$ac_cv_sizeof_short)
    dbusint16=short
    ;;
$ac_cv_sizeof_int)
    dbusint16=int
    ;;
esac

if test -z "$dbusint16" ; then
    DBUS_INT16_TYPE="no_int16_type_detected"
    as_fn_error $? "No 16-bit integer type found" "$LINENO" 5
else
    DBUS_INT16_TYPE="$dbusint16"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$DBUS_INT16_TYPE" >&5
$as_echo "$DBUS_INT16_TYPE" >&6; }
fi

## byte order
case $host_os in
darwin*)
    # check at compile-time, so that it is possible to build
universal
    # (with multiple architectures at once on the compile line)

    ;;
*)

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether
byte ordering is bigendian" >&5
$as_echo_n "checking whether byte ordering is bigendian... " >&6; }
if ${ac_cv_c_bigendian+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_cv_c_bigendian=unknown
  # See if we're dealing with a universal compiler.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#endif __APPLE_CC__
  not a universal capable compiler
#endif
typedef int dummy;

_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :

  # Check for potential -arch flags.  It is not universal unless
  # there are at least two -arch flags with different values.
  ac_arch=
  ac_prev=
  for ac_word in $CC $CFLAGS $CPPFLAGS $LDFLAGS; do
    if test -n "$ac_prev"; then
      case $ac_word in
        i?86 | x86_64 | ppc | ppc64)
          if test -z "$ac_arch" || test "$ac_arch" = "$ac_word";
then
            ac_arch=$ac_word
          else
            ac_cv_c_bigendian=universal
            break
          fi
        ;;
      esac
      ac_prev=
    elif test "x$ac_word" = "x-arch"; then
      ac_prev=arch
    fi
  done

fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
if test $ac_cv_c_bigendian = unknown; then
  # See if sys/param.h defines the BYTE_ORDER macro.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <sys/types.h>
#include <sys/param.h>

int
main ()
{

```

```

#if ! (defined BYTE_ORDER && defined BIG_ENDIAN \
      && defined LITTLE_ENDIAN && BYTE_ORDER && BIG_ENDIAN \
      && LITTLE_ENDIAN)
    bogus endian macros
#endif

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    # It does; now see whether it defined to BIG_ENDIAN or not.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <sys/types.h>
    #include <sys/param.h>

int
main ()
{
#if BYTE_ORDER != BIG_ENDIAN
    not big endian
#endif

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_c_bigendian=yes
else
    ac_cv_c_bigendian=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
if test $ac_cv_c_bigendian = unknown; then
    # See if <limits.h> defines _LITTLE_ENDIAN or _BIG_ENDIAN (e.g.,
Solaris).
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <limits.h>

int
main ()
{
#if ! (defined _LITTLE_ENDIAN || defined _BIG_ENDIAN)
    bogus endian macros
#endif

;

```

```

    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    # It does; now see whether it defined to _BIG_ENDIAN or not.
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <limits.h>

int
main ()
{
#ifdef _BIG_ENDIAN
    not big endian
#endif

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    ac_cv_c_bigendian=yes
else
    ac_cv_c_bigendian=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
if test $ac_cv_c_bigendian = unknown; then
    # Compile a test program.
    if test "$cross_compiling" = yes; then :
        # Try to guess by grepping values from an object file.
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
short int ascii_mm[] =
    { 0x4249, 0x4765, 0x6E44, 0x6961, 0x6E53, 0x7953, 0 };
short int ascii_ii[] =
    { 0x694C, 0x5454, 0x656C, 0x6E45, 0x6944, 0x6E61, 0 };
int use_ascii (int i) {
    return ascii_mm[i] + ascii_ii[i];
}
short int ebcdic_ii[] =
    { 0x89D3, 0xE3E3, 0x8593, 0x95C5, 0x89C4, 0x9581, 0 };
short int ebcdic_mm[] =
    { 0xC2C9, 0xC785, 0x95C4, 0x8981, 0x95E2, 0xA8E2, 0 };
int use_ebcdic (int i) {
    return ebcdic_mm[i] + ebcdic_ii[i];
}
extern int foo;

int

```

```

main ()
{
return use_ascii (foo) == use_ebcdic (foo);
;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
if grep BIGenDianSyS conftest.$ac_objext >/dev/null; then
ac_cv_c_bigendian=yes
fi
if grep LiTTleEnDian conftest.$ac_objext >/dev/null ; then
if test "$ac_cv_c_bigendian" = unknown; then
ac_cv_c_bigendian=no
else
# finding both strings is unlikely to happen, but who
knows?
ac_cv_c_bigendian=unknown
fi
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
else
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$ac_includes_default
int
main ()
{

/* Are we little or big endian? From Harbison&Steele. */
union
{
long int l;
char c[sizeof (long int)];
} u;
u.l = 1;
return u.c[sizeof (long int) - 1] == 1;

;
return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
ac_cv_c_bigendian=no
else
ac_cv_c_bigendian=yes
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

```

```

        fi
    fi
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_c_bigendian"
    >&5
    $sas_echo "$ac_cv_c_bigendian" >&6; }
    case $ac_cv_c_bigendian in #(
        yes)
            $sas_echo "@%:@define WORDS_BIGENDIAN 1" >>confdefs.h
    ;; #(
        no)
            ;; #(
        universal)

$sas_echo "@%:@define AC_APPLE_UNIVERSAL_BUILD 1" >>confdefs.h

        ;; #(
    *)
        as_fn_error $? "unknown endianness
    presetting ac_cv_c_bigendian=no (or yes) will help" "$LINENO" 5 ;;
    esac

        ;;

esac

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for an
implementation of va_copy()" >&5
$sas_echo_n "checking for an implementation of va_copy()... " >&6; }
if ${dbus_cv_va_copy+:} false; then :
    $sas_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdlib.h>
    static void f (int i, ...) {
        va_list args1, args2;
        va_start (args1, i);
        va_copy (args2, args1);
        if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
            exit (1);
        va_end (args1); va_end (args2);
    }
    int main() {
        f (0, 42);
        return 0;
    }
ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_cv_va_copy=yes
else
    dbus_cv_va_copy=no

```



```

fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv_va_copy" >&5
$as_echo "$dbus_cv_va_copy" >&6; }
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for an
implementation of __va_copy()" >&5
$as_echo_n "checking for an implementation of __va_copy()... " >&6; }
if ${dbus_cv__va_copy+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdlib.h>
static void f (int i, ...) {
  va_list args1, args2;
  va_start (args1, i);
  __va_copy (args2, args1);
  if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
    exit (1);
  va_end (args1); va_end (args2);
}
int main() {
  f (0, 42);
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  dbus_cv__va_copy=yes
else
  dbus_cv__va_copy=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv__va_copy"
>&5
$as_echo "$dbus_cv__va_copy" >&6; }

if test "x$dbus_cv_va_copy" = "xyes"; then
  dbus_va_copy_func=va_copy
else if test "x$dbus_cv__va_copy" = "xyes"; then
  dbus_va_copy_func=__va_copy
fi
fi

if test -n "$dbus_va_copy_func"; then

```

```

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_VA_COPY $dbus_va_copy_func
_ACEOF

fi

ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether va_lists can
be copied by value" >&5
$as_echo_n "checking whether va_lists can be copied by value... " >&6;
}
if ${dbus_cv_va_val_copy+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    dbus_cv_va_val_copy=yes
  else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

    #include <stdarg.h>
    #include <stdlib.h>

int
main ()
{

    static void f (int i, ...) {
    va_list args1, args2;
    va_start (args1, i);
    args2 = args1;
    if (va_arg (args2, int) != 42 || va_arg (args1, int) != 42)
        exit (1);
    va_end (args1); va_end (args2);
    }

    int main() {
        f (0, 42);
        return 0;
    }

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :

```

```

    dbus_cv_va_val_copy=yes
else
    dbus_cv_va_val_copy=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_cv_va_val_copy"
>&5
$as_echo "$dbus_cv_va_val_copy" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$sac_ext >&5'
ac_link='$CC -o conftest$sac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$sac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test "x$dbus_cv_va_val_copy" = "xno"; then

$as_echo "@%:@define DBUS_VA_COPY_AS_ARRAY 1" >>confdefs.h

fi

#### Atomic integers

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC knows
__sync_sub_and_fetch()" >&5
$as_echo_n "checking whether $CC knows __sync_sub_and_fetch()... "
>&6; }
if ${dbus_cv_sync_sub_and_fetch+:} false; then :
  $as_echo_n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >>conftest.$sac_ext
/* end confdefs.h. */

int
main ()
{
int a = 4; int b = __sync_sub_and_fetch(&a, 4); exit(b);
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  dbus_cv_sync_sub_and_fetch=yes
else

```

```

    dbus_cv_sync_sub_and_fetch=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_cv_sync_sub_and_fetch" >&5
$as_echo "$dbus_cv_sync_sub_and_fetch" >&6; }

if test "x$dbus_cv_sync_sub_and_fetch" = "xyes" ; then
    have_sync=1
else
    have_sync=0
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_USE_SYNC $have_sync
_ACEOF

#### Various functions
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing socket" >&5
$as_echo_n "checking for library containing socket... " >&6; }
if ${ac_cv_search_socket+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char socket ();
int
main ()
{
return socket ();
    ;
    return 0;
}
_ACEOF
for ac_lib in ' socket network; do
    if test -z "$ac_lib"; then
        ac_res="none required"
    else

```

```

        ac_res=-l$ac_lib
        LIBS="-l$ac_lib $ac_func_search_save_LIBS"
    fi
    if ac_fn_c_try_link "$LINENO"; then :
        ac_cv_search_socket=$ac_res
    fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
    if ${ac_cv_search_socket+:} false; then :
        break
    fi
done
if ${ac_cv_search_socket+:} false; then :

else
    ac_cv_search_socket=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_search_socket"
>&5
$as_echo "$ac_cv_search_socket" >&6; }
ac_res=$ac_cv_search_socket
if test "$ac_res" != no; then :
    test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"

fi

ac_fn_c_check_func "$LINENO" "gethostbyname"
"ac_cv_func_gethostbyname"
if test "x$ac_cv_func_gethostbyname" = xyes; then :

else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for gethostbyname
in -lnsl" >&5
$as_echo_n "checking for gethostbyname in -lnsl... " >&6; }
    if ${ac_cv_lib_nsl_gethostbyname+:} false; then :
        $as_echo_n "(cached) " >&6
    else
        ac_check_lib_save_LIBS=$LIBS
        LIBS="-lnsl $LIBS"
        cat confdefs.h - <<_ACEOF >conftest.$ac_ext
        /* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();

```

```

int
main ()
{
return gethostbyname ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_nsl_gethostbyname=yes
else
ac_cv_lib_nsl_gethostbyname=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_nsl_gethostbyname" >&5
$as_echo "$ac_cv_lib_nsl_gethostbyname" >&6; }
if test "x$ac_cv_lib_nsl_gethostbyname" = xyes; then :
cat >>confdefs.h <<_ACEOF
@%:@define HAVE_LIBNSL 1
_ACEOF

LIBS="-lnsl $LIBS"

fi

fi

for ac_func in vsnprintf vasprintf nanosleep usleep setenv clearenv
unsetenv socketpair getgrouplist fpathconf setrlimit poll setlocale
localeconv strtoll strtoull issetugid getresuid
do :
as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\${$as_ac_var}\" = x\"yes\"; then :
cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1
_ACEOF

fi
done

for ac_header in syslog.h
do :
ac_fn_c_check_header_mongrel "$LINENO" "syslog.h"
"ac_cv_header_syslog_h" "$ac_includes_default"
if test "x$ac_cv_header_syslog_h" = xyes; then :

```

```

    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYSLOG_H 1
_ACEOF

fi

done

if test "x$ac_cv_header_syslog_h" = "xyes"; then
    ac_fn_c_check_decl "$LINENO" "LOG_PERROR"
"ac_cv_have_decl_LOG_PERROR" "#include <syslog.h>
"
if test "x$ac_cv_have_decl_LOG_PERROR" = xyes; then :
    ac_have_decl=1
else
    ac_have_decl=0
fi

cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DECL_LOG_PERROR $ac_have_decl
_ACEOF

fi

#### Check for broken poll; taken from Glib's configure

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for broken poll" >&5
$as_echo_n "checking for broken poll... " >&6; }
if test "$cross_compiling" = yes; then :
    broken_poll="no (cross compiling)"
else
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <stdlib.h>
#include <fcntl.h>
#include <poll.h>
#ifdef HAVE_SYS_POLL_H
#include <sys/poll.h>
#endif
int main(void) {
    struct pollfd fds[1];
    int fd;
    fd = open("/dev/null", 1);
    fds[0].fd = fd;
    fds[0].events = POLLIN;
    fds[0].revents = 0;
    if (poll(fds, 1, 0) < 0 || (fds[0].revents & POLLNVAL) != 0) {
        exit(1); /* Does not work for devices -- fail */
    }
    exit(0);
}

```

```

_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    broken_poll=no
else
    broken_poll=yes

$as_echo "@%:@define BROKEN_POLL 1" >>confdefs.h

fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
    conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $broken_poll" >&5
$as_echo "$broken_poll" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for dirfd" >&5
$as_echo_n "checking for dirfd... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$sac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <dirent.h>

int
main ()
{

DIR *dirp;
dirp = opendir(".");
dirfd(dirp);
closedir(dirp);

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_have_dirfd=yes
else
    dbus_have_dirfd=no
fi
rm -f core conftest.err conftest.$sac_objext \
    conftest$sac_exeext conftest.$sac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_dirfd" >&5
$as_echo "$dbus_have_dirfd" >&6; }
if test "$dbus_have_dirfd" = yes; then

$as_echo "@%:@define HAVE_DIRFD 1" >>confdefs.h

else

```



```

        { $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for DIR *dirp-
>dd_fd" >&5
$as_echo_n "checking for DIR *dirp->dd_fd... " >&6; }
        cat confdefs.h - <<_ACEOF >confptest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <dirent.h>

int
main ()
{

DIR *dirp;
int fd;
dirp = opendir(".");
fd = dirp->dd_fd;
closedir(dirp);

        ;
        return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    dbus_have_ddfd=yes
else
    dbus_have_ddfd=no
fi
rm -f core confptest.err confptest.$ac_objext \
    confptest.$ac_exeext confptest.$ac_ext
    { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $dbus_have_ddfd"
>&5
$as_echo "$dbus_have_ddfd" >&6; }
    if test "$dbus_have_ddfd" = yes; then

$as_echo "@%:@define HAVE_DDFD 1" >>confdefs.h

        fi
fi

for ac_header in sys/resource.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "sys/resource.h"
"ac_cv_header_sys_resource_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_resource_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_RESOURCE_H 1
_ACEOF

fi

done

```

```

for ac_header in dirent.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "dirent.h"
"ac_cv_header_dirent_h" "$ac_includes_default"
if test "x$ac_cv_header_dirent_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DIRENT_H 1
_ACEOF

fi

done

for ac_header in execinfo.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "execinfo.h"
"ac_cv_header_execinfo_h" "$ac_includes_default"
if test "x$ac_cv_header_execinfo_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXECINFO_H 1
_ACEOF
    for ac_func in backtrace
do :
    ac_fn_c_check_func "$LINENO" "backtrace" "ac_cv_func_backtrace"
if test "x$ac_cv_func_backtrace" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_BACKTRACE 1
_ACEOF

fi
done

fi

done

for ac_header in errno.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "errno.h"
"ac_cv_header_errno_h" "$ac_includes_default"
if test "x$ac_cv_header_errno_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_ERRNO_H 1
_ACEOF

fi

done

```

```

for ac_header in signal.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "signal.h"
"ac_cv_header_signal_h" "$ac_includes_default"
if test "x$ac_cv_header_signal_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SIGNAL_H 1
    _ACEOF

fi

done

for ac_header in locale.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "locale.h"
"ac_cv_header_locale_h" "$ac_includes_default"
if test "x$ac_cv_header_locale_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_LOCALE_H 1
    _ACEOF

fi

done

for ac_header in byteswap.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "byteswap.h"
"ac_cv_header_byteswap_h" "$ac_includes_default"
if test "x$ac_cv_header_byteswap_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_BYTESWAP_H 1
    _ACEOF

fi

done

for ac_header in unistd.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "unistd.h"
"ac_cv_header_unistd_h" "$ac_includes_default"
if test "x$ac_cv_header_unistd_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_UNISTD_H 1
    _ACEOF

```

```

fi

done

for ac_header in ws2tcpip.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "ws2tcpip.h"
    "ac_cv_header_ws2tcpip_h" "$ac_includes_default"
    if test "x$ac_cv_header_ws2tcpip_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_WS2TCPIP_H 1
    _ACEOF

fi

done

for ac_header in wsapi.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "wsapi.h"
    "ac_cv_header_wsapi_h" "$ac_includes_default"
    if test "x$ac_cv_header_wsapi_h" = xyes; then :
        cat >>confdefs.h <<_ACEOF
@%:@define HAVE_WSAPI_H 1
    _ACEOF

fi

done

# Add -D_POSIX_PTHREAD_SEMANTICS if on Solaris
#
case $host_os in
    solaris*)
        CFLAGS="$CFLAGS -D_POSIX_PTHREAD_SEMANTICS" ;;
esac

# checking for a posix version of getpwnam_r
# if we are cross compiling and can not run the test
# assume getpwnam_r is the posix version
# it is up to the person cross compiling to change
# this behavior if desired
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

```

```

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for posix
getpwnam_r" >&5
$as_echo_n "checking for posix getpwnam_r... " >&6; }
if ${ac_cv_func_posix_getpwnam_r+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :
    ac_cv_func_posix_getpwnam_r=yes

else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <errno.h>
#include <pwd.h>

int
main ()
{

    char buffer[10000];
    struct passwd pwd, *pwptr = &pwd;
    int error;
    errno = 0;
    error = getpwnam_r ("", &pwd, buffer,
                      sizeof (buffer), &pwptr);
    return (error < 0 && errno == ENOSYS)
        || error == ENOSYS;

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
  ac_cv_func_posix_getpwnam_r=yes
else
  ac_cv_func_posix_getpwnam_r=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac_exeext \
conftest.$ac_objext conftest.beam conftest.$ac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_func_posix_getpwnam_r" >&5
$as_echo "$ac_cv_func_posix_getpwnam_r" >&6; }
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'

```

```

ac_compiler_gnu=$ac_cv_c_compiler_gnu

if test "$ac_cv_func_posix_getpwnam_r" = yes; then

$as_echo "@%:@define HAVE_POSIX_GETPWNAM_R 1" >>confdefs.h

else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for nonposix
getpwnam_r" >&5
$as_echo_n "checking for nonposix getpwnam_r... " >&6; }
if ${ac_cv_func_nonposix_getpwnam_r+:} false; then :
    $as_echo_n "(cached) " >&6
else
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <pwd.h>
int
main ()
{
char buffer[10000];

        struct passwd pwd;
        getpwnam_r ("", &pwd, buffer,
                    sizeof (buffer));

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_func_nonposix_getpwnam_r=yes
else
    ac_cv_func_nonposix_getpwnam_r=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_func_nonposix_getpwnam_r" >&5
$as_echo "$ac_cv_func_nonposix_getpwnam_r" >&6; }
    if test "$ac_cv_func_nonposix_getpwnam_r" = yes; then

$as_echo "@%:@define HAVE_NONPOSIX_GETPWNAM_R 1" >>confdefs.h

        fi
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether socklen_t is
defined" >&5
$as_echo_n "checking whether socklen_t is defined... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

```

```

#include <sys/types.h>
#include <sys/socket.h>
#include <netdb.h>

int
main ()
{

socklen_t foo;
foo = 1;

    ;
    return 0;
}
__ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    dbus_have_socklen_t=yes
else
    dbus_have_socklen_t=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $dbus_have_socklen_t"
>&5
$as_echo "$dbus_have_socklen_t" >&6; }

if test "x$dbus_have_socklen_t" = "xyes"; then

$as_echo "@%:@define HAVE_SOCKLEN_T 1" >>confdefs.h

fi

for ac_header in sys/uio.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "sys/uio.h"
"ac_cv_header_sys_uio_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_uio_h" = xyes; then :
    cat >>confdefs.h <<__ACEOF
@%:@define HAVE_SYS_UIO_H 1
__ACEOF
    for ac_func in writev
do :
    ac_fn_c_check_func "$LINENO" "writev" "ac_cv_func_writev"
if test "x$ac_cv_func_writev" = xyes; then :
    cat >>confdefs.h <<__ACEOF
@%:@define HAVE_WRITEV 1
__ACEOF

fi
done

fi

```

done

```
for ac_header in sys/syslimits.h
do :
  ac_fn_c_check_header_mongrel "$LINENO" "sys/syslimits.h"
"ac_cv_header_sys_syslimits_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_syslimits_h" = xyes; then :
  cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_SYSLIMITS_H 1
_ACEOF
```

fi

done

```
ac_fn_c_check_decl "$LINENO" "MSG_NOSIGNAL"
"ac_cv_have_decl_MSG_NOSIGNAL" " #include <sys/types.h>
#include <sys/socket.h>
"
if test "x$ac_cv_have_decl_MSG_NOSIGNAL" = xyes; then :
  ac_have_decl=1
else
  ac_have_decl=0
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define HAVE_DECL_MSG_NOSIGNAL $ac_have_decl
_ACEOF
```

```
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for ISO C99 varargs
macros in C" >&5
$as_echo_n "checking for ISO C99 varargs macros in C... " >&6; }
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
```

```
int
main ()
{

int a(int p1, int p2, int p3);
#define call_a(...) a(1, __VA_ARGS__)
call_a(2,3);

;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  dbus_have_iso_c_varargs=yes
```



```

else
  dbus_have_iso_c_varargs=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_iso_c_varargs" >&5
$as_echo "$dbus_have_iso_c_varargs" >&6; }

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for GNUC varargs
macros" >&5
$as_echo_n "checking for GNUC varargs macros... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

int a(int p1, int p2, int p3);
#define call_a(params...) a(1,params)
call_a(2,3);

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  dbus_have_gnuc_varargs=yes
else
  dbus_have_gnuc_varargs=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_gnuc_varargs" >&5
$as_echo "$dbus_have_gnuc_varargs" >&6; }

if test x$dbus_have_iso_c_varargs = xyes; then

$as_echo "@%:@define HAVE_ISO_VARARGS 1" >>confdefs.h

fi
if test x$dbus_have_gnuc_varargs = xyes; then

$as_echo "@%:@define HAVE_GNUC_VARARGS 1" >>confdefs.h

fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for struct msgcred"
>&5
$as_echo_n "checking for struct msgcred... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

```

```

#include <sys/types.h>
#include <sys/socket.h>

int
main ()
{

struct cmsgcred cred;

cred.cmcred_pid = 0;

;
return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  dbus_have_struct_cmsgcred=yes
else
  dbus_have_struct_cmsgcred=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$dbus_have_struct_cmsgcred" >&5
$as_echo "$dbus_have_struct_cmsgcred" >&6; }

if test x$dbus_have_struct_cmsgcred = xyes; then

$as_echo "@%:@define HAVE_CMSGCRED 1" >>confdefs.h

fi

for ac_func in getpeerucred getpeereid
do :
  as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\${$as_ac_var}\" = x"yes"; then :
  cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1
_ACEOF

fi
done

for ac_func in pipe2 accept4
do :
  as_ac_var=`$as_echo "ac_cv_func_$ac_func" | $as_tr_sh`
ac_fn_c_check_func "$LINENO" "$ac_func" "$as_ac_var"
if eval test \"x\${$as_ac_var}\" = x"yes"; then :
  cat >>confdefs.h <<_ACEOF
@%:@define ` $as_echo "HAVE_$ac_func" | $as_tr_cpp` 1

```

```

 ACEOF

fi
done

#### Abstract sockets

if test x$enable_abstract_sockets = xauto; then
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'
ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

warn_on_xcompile=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking abstract socket
namespace" >&5
$as_echo_n "checking abstract socket namespace... " >&6; }
if ${ac_cv_have_abstract_sockets+:} false; then :
  $as_echo_n "(cached) " >&6
else
  if test "$cross_compiling" = yes; then :

      ac_cv_have_abstract_sockets=no
      warn_on_xcompile=yes

  else
    cat confdefs.h - << ACEOF >conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <stdlib.h>
#include <string.h>
#include <stdio.h>
#include <sys/socket.h>
#include <sys/un.h>
#include <errno.h>

int
main ()
{

  size_t slen;
  int listen_fd;
  struct sockaddr_un addr;

  listen_fd = socket (PF_UNIX, SOCK_STREAM, 0);

  if (listen_fd < 0)

```

```

    {
        fprintf (stderr, "socket() failed: %s\n", strerror (errno));
        exit (1);
    }

    memset (&addr, '\0', sizeof (addr));
    addr.sun_family = AF_UNIX;
    strcpy (addr.sun_path, "X/tmp/dbus-fake-socket-path-used-in-
configure-test");
    /* SUN_LEN uses strlen() so need to calculate it before adding \0 at
the
* beginning.
*/
    slen = SUN_LEN(&addr);
    addr.sun_path[0] = '\0'; /* this is what makes it abstract */

    if (bind (listen_fd, (struct sockaddr*) &addr, slen) < 0)
    {
        fprintf (stderr, "Abstract socket namespace bind() failed:
%s\n",
                strerror (errno));
        exit (1);
    }
    else
        exit (0);

;
    return 0;
}
_ACEOF
if ac_fn_c_try_run "$LINENO"; then :
    ac_cv_have_abstract_sockets=yes
else
    ac_cv_have_abstract_sockets=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$sac_exeext \
conftest.$sac_objext conftest.beam conftest.$sac_ext
fi

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$sac_cv_have_abstract_sockets" >&5
$as_echo "$ac_cv_have_abstract_sockets" >&6; }
if test x$warn_on_xcompile = xyes ; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Cannot check for
abstract sockets when cross-compiling, please use --enable-abstract-
sockets" >&5
$as_echo "$as_me: WARNING: Cannot check for abstract sockets when
cross-compiling, please use --enable-abstract-sockets" >&2;}
fi
ac_ext=c
ac_cpp='$CPP $CPPFLAGS'

```

```

ac_compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac_ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS
conftest.$ac_ext $LIBS >&5'
ac_compiler_gnu=$ac_cv_c_compiler_gnu

fi

if test x$enable_abstract_sockets = xyes; then
  if test x$ac_cv_have_abstract_sockets = xno; then
    as_fn_error $? "Abstract sockets explicitly required, and support
not detected." "$LINENO" 5
  fi
fi

if test x$enable_abstract_sockets = xno; then
  ac_cv_have_abstract_sockets=no;
fi

if test x$ac_cv_have_abstract_sockets = xyes ; then
  DBUS_PATH_OR_ABSTRACT=abstract

$as_echo "@%:@define HAVE_ABSTRACT_SOCKETS 1" >>confdefs.h

else
  DBUS_PATH_OR_ABSTRACT=path
fi

# this is used in addresses to prefer abstract, e.g.
# unix:path=/foo or unix:abstract=/foo

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
  if test -n "$ac_tool_prefix"; then
    # Extract the first word of "${ac_tool_prefix}pkg-config", so it can
    be a program name with args.
    set dummy ${ac_tool_prefix}pkg-config; ac_word=$2
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
    $as_echo_n "checking for $ac_word... " >&6; }
    if ${ac_cv_path_PKG_CONFIG+:} false; then :
      $as_echo_n "(cached) " >&6
    else
      case $PKG_CONFIG in
        [\\/]*)
          ac_cv_path_PKG_CONFIG="$PKG_CONFIG" # Let the user override the test
          with a path.
          ;;
        *)
          as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
          for as_dir in $PATH
          do

```

```

IFS=$as_save_IFS
test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"
  $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
  break 2
fi
done
done
IFS=$as_save_IFS

;;
esac
fi
PKG_CONFIG=$ac_cv_path_PKG_CONFIG
if test -n "$PKG_CONFIG"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $PKG_CONFIG" >&5
$as_echo "$PKG_CONFIG" >&6; }
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

fi
if test -z "$ac_cv_path_PKG_CONFIG"; then
  ac_pt_PKG_CONFIG=$PKG_CONFIG
  # Extract the first word of "pkg-config", so it can be a program
name with args.
set dummy pkg-config; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_ac_pt_PKG_CONFIG+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $ac_pt_PKG_CONFIG in
  [\\/] * | ?:[\\/] *)
    ac_cv_path_ac_pt_PKG_CONFIG="$ac_pt_PKG_CONFIG" # Let the user
override the test with a path.
  ;;
  *)
    as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in ' $ac_executable_extensions; do
if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
  ac_cv_path_ac_pt_PKG_CONFIG="$as_dir/$ac_word$ac_exec_ext"

```

```

        $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
        break 2
    fi
done
done
IFS=$as_save_IFS

;;
esac
fi
ac_pt_PKG_CONFIG=$ac_cv_path_ac_pt_PKG_CONFIG
if test -n "$ac_pt_PKG_CONFIG"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_pt_PKG_CONFIG"
>&5
$as_echo "$ac_pt_PKG_CONFIG" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

    if test "x$ac_pt_PKG_CONFIG" = x; then
        PKG_CONFIG=""
    else
        case $cross_compiling:$ac_tool_warned in
yes:)
{ $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: using cross tools
not prefixed with host triplet" >&5
$as_echo "$as_me: WARNING: using cross tools not prefixed with host
triplet" >&2;}
ac_tool_warned=yes ;;
esac
        PKG_CONFIG=$ac_pt_PKG_CONFIG
    fi
else
    PKG_CONFIG="$ac_cv_path_PKG_CONFIG"
fi

fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=0.9.0
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking pkg-config is
at least version $_pkg_min_version" >&5
$as_echo_n "checking pkg-config is at least version
$_pkg_min_version... " >&6; }
    if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    fi
fi

```

```

        PKG_CONFIG=""
    fi

fi

#### Sort out XML library

# see what we have
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
XML_ParserCreate_MM in -lexpat" >&5
$as_echo_n "checking for XML_ParserCreate_MM in -lexpat... " >&6; }
if ${ac_cv_lib_expat_XML_ParserCreate_MM+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lexpat $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char XML_ParserCreate_MM ();
int
main ()
{
return XML_ParserCreate_MM ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_expat_XML_ParserCreate_MM=yes
else
    ac_cv_lib_expat_XML_ParserCreate_MM=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_expat_XML_ParserCreate_MM" >&5
$as_echo "$ac_cv_lib_expat_XML_ParserCreate_MM" >&6; }
if test "x$ac_cv_lib_expat_XML_ParserCreate_MM" = xyes; then :
    for ac_header in expat.h
do :
    ac_fn_c_check_header_mongrel "$LINENO" "expat.h"
"ac_cv_header_expat_h" "$ac_includes_default"
if test "x$ac_cv_header_expat_h" = xyes; then :

```



```

    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_EXPAT_H 1
_ACEOF
    have_expat=true
else
    have_expat=false
fi

done

else
    have_expat=false
fi

# see what we want to use
dbus_use_libxml=false
dbus_use_expat=false
if test x$with_xml = xexpat; then
    if ! $have_expat ; then
        as_fn_error $? "Explicitly requested expat but expat not
found" "$LINENO" 5
    fi
    dbus_use_expat=true
elif test x$with_xml = xlibxml; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for LIBXML" >&5
$as_echo_n "checking for LIBXML... " >&6; }

if test -n "$LIBXML_CFLAGS"; then
    pkg_cv_LIBXML_CFLAGS="$LIBXML_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"libxml-2.0 >= 2.6.0\""; } >&5
        ($PKG_CONFIG --exists --print-errors "libxml-2.0 >= 2.6.0") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_LIBXML_CFLAGS=`$PKG_CONFIG --cflags "libxml-2.0 >= 2.6.0"
2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test -n "$LIBXML_LIBS"; then
    pkg_cv_LIBXML_LIBS="$LIBXML_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \

```

```

    { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG --exists -
-print-errors \"libxml-2.0 >= 2.6.0\""; } >&5
    ($PKG_CONFIG --exists --print-errors "libxml-2.0 >= 2.6.0") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \${? = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_LIBXML_LIBS=`$PKG_CONFIG --libs "libxml-2.0 >= 2.6.0"
2>/dev/null`
else
    pkg_failed=yes
fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi
    if test $_pkg_short_errors_supported = yes; then
        LIBXML_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "libxml-2.0 >= 2.6.0" 2>&1`
    else
        LIBXML_PKG_ERRORS=`$PKG_CONFIG --print-errors "libxml-2.0
>= 2.6.0" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$LIBXML_PKG_ERRORS" >&5

    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
        have_libxml=false
elif test $pkg_failed = untried; then
    have_libxml=false
else
    LIBXML_CFLAGS=$pkg_cv_LIBXML_CFLAGS
    LIBXML_LIBS=$pkg_cv_LIBXML_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    have_libxml=true
fi
    if ! $have_libxml ; then
        as_fn_error $? "Explicitly requested libxml but libxml not
found" "$LINENO" 5
    fi
    dbus_use_libxml=true
else

```

```

        ### expat is the default because libxml can't currently
survive
        ### our brutal OOM-handling unit test setup.
        ### http://bugzilla.gnome.org/show_bug.cgi?id=109368
        if test x$have_expat = xfalse; then
            as_fn_error $? "Could not find expat.h, check
config.log for failed attempts" "$LINENO" 5
        fi
        ### By default, only use Expat since it's tested and known to
work. If you're a
        ### general-purpose OS vendor, please don't enable libxml. For
embedded use
        ### if your OS is built around libxml, that's another case.
        dbus_use_expat=true
    fi

    if $dbus_use_expat; then
        DBUS_USE_EXPAT_TRUE=
        DBUS_USE_EXPAT_FALSE='#'
    else
        DBUS_USE_EXPAT_TRUE='#'
        DBUS_USE_EXPAT_FALSE=
    fi

    if $dbus_use_libxml; then
        DBUS_USE_LIBXML_TRUE=
        DBUS_USE_LIBXML_FALSE='#'
    else
        DBUS_USE_LIBXML_TRUE='#'
        DBUS_USE_LIBXML_FALSE=
    fi

    if $dbus_use_expat; then
        XML_LIBS=-lexpat
        XML_CFLAGS=
    fi
    if $dbus_use_libxml; then
        XML_LIBS=$LIBXML_LIBS
        XML_CFLAGS=$LIBXML_CFLAGS
    fi

# Thread lib detection
ac_fn_c_check_func "$LINENO" "pthread_cond_timedwait"
"ac_cv_func_pthread_cond_timedwait"
if test "x$ac_cv_func_pthread_cond_timedwait" = xyes; then :
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
pthread_cond_timedwait in -lpthread" >&5
$as_echo_n "checking for pthread_cond_timedwait in -lpthread... " >&6;
}

```

```

if ${ac_cv_lib_pthread_pthread_cond_timedwait+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lpthread $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char pthread_cond_timedwait ();
int
main ()
{
return pthread_cond_timedwait ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_pthread_pthread_cond_timedwait=yes
else
  ac_cv_lib_pthread_pthread_cond_timedwait=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_pthread_pthread_cond_timedwait" >&5
$as_echo "$ac_cv_lib_pthread_pthread_cond_timedwait" >&6; }
if test "x$ac_cv_lib_pthread_pthread_cond_timedwait" = xyes; then :
  THREAD_LIBS="-lpthread"
fi

fi

save_libs="$LIBS"
LIBS="$LIBS $THREAD_LIBS"
ac_fn_c_check_func "$LINENO" "pthread_condattr_setclock"
"ac_cv_func_pthread_condattr_setclock"
if test "x$ac_cv_func_pthread_condattr_setclock" = xyes; then :
  have_pthread_condattr_setclock=true
else
  have_pthread_condattr_setclock=false
fi

if test x$have_pthread_condattr_setclock = xtrue; then

```

```

        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for library
containing clock_getres" >&5
$as_echo_n "checking for library containing clock_getres... " >&6; }
if ${ac_cv_search_clock_getres+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_func_search_save_LIBS=$LIBS
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char clock_getres ();
int
main ()
{
return clock_getres ();
  ;
  return 0;
}
_ACEOF
for ac_lib in ' ' rt; do
  if test -z "$ac_lib"; then
    ac_res="none required"
  else
    ac_res=-l$ac_lib
    LIBS="-l$ac_lib $ac_func_search_save_LIBS"
  fi
  if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_search_clock_getres=$ac_res
  fi
  rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext
  if ${ac_cv_search_clock_getres+:} false; then :
    break
  fi
done
if ${ac_cv_search_clock_getres+:} false; then :

else
  ac_cv_search_clock_getres=no
fi
rm conftest.$ac_ext
LIBS=$ac_func_search_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_search_clock_getres" >&5
$as_echo "$ac_cv_search_clock_getres" >&6; }

```

```

ac_res=$ac_cv_search_clock_getres
if test "$ac_res" != no; then :
  test "$ac_res" = "none required" || LIBS="$ac_res $LIBS"
  THREAD_LIBS="$THREAD_LIBS -lrt"
fi

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
CLOCK_MONOTONIC" >&5
$as_echo_n "checking for CLOCK_MONOTONIC... " >&6; }
  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */
#include <time.h>
#include <pthread.h>

int
main ()
{

struct timespec monotonic_timer;
pthread_condattr_t attr;
pthread_condattr_init (&attr);
pthread_condattr_setclock (&attr, CLOCK_MONOTONIC);
clock_getres (CLOCK_MONOTONIC,&monotonic_timer);

;
  return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
  have_clock_monotonic=true
else
  have_clock_monotonic=false
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
if test x$have_clock_monotonic = xtrue; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: found" >&5
$as_echo "found" >&6; }

$as_echo "@%:@define HAVE_MONOTONIC_CLOCK 1" >>confdefs.h

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not found" >&5
$as_echo "not found" >&6; }
fi
fi
LIBS="$save_libs"

# SELinux detection
if test x$enable_selinux = xno ; then
  have_selinux=no;

```

```

else
    # See if we have SELinux library
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
is_selinux_enabled in -lselinux" >&5
$as_echo_n "checking for is_selinux_enabled in -lselinux... " >&6; }
if ${ac_cv_lib_selinux_is_selinux_enabled+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lselinux $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char is_selinux_enabled ();
int
main ()
{
return is_selinux_enabled ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_selinux_is_selinux_enabled=yes
else
    ac_cv_lib_selinux_is_selinux_enabled=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_selinux_is_selinux_enabled" >&5
$as_echo "$ac_cv_lib_selinux_is_selinux_enabled" >&6; }
if test "x$ac_cv_lib_selinux_is_selinux_enabled" = xyes; then :
    have_selinux=yes
else
    have_selinux=no
fi

    # see if we have the SELinux header with the new D-Bus stuff in it
    if test x$have_selinux = xyes ; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for DBUS
Flask permissions in selinux/av_permissions.h" >&5

```

```

$as_echo_n "checking for DBUS Flask permissions in
selinux/av_permissions.h... " >&6; }
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <selinux/av_permissions.h>
int
main ()
{
#ifdef DBUS__ACQUIRE_SVC return 0;
    #else
    #error DBUS__ACQUIRE_SVC not defined
    #endif
;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    have_selinux=yes
else
    have_selinux=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $have_selinux"
>&5
$as_echo "$have_selinux" >&6; }
    fi

    if test x$enable_selinux = xauto ; then
        if test x$have_selinux = xno ; then
            { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING:
Sufficiently new SELinux library not found" >&5
$as_echo "$as_me: WARNING: Sufficiently new SELinux library not found"
>&2;}
        fi
    else
        if test x$have_selinux = xno ; then
            as_fn_error $? "SELinux explicitly required, and
SELinux library not found" "$LINENO" 5
        fi
    fi
fi

if test x$have_selinux = xyes; then
    HAVE_SELINUX_TRUE=
    HAVE_SELINUX_FALSE='#'
else
    HAVE_SELINUX_TRUE='#'
    HAVE_SELINUX_FALSE=
fi

if test x$have_selinux = xyes ; then

```



```

    # the selinux code creates threads
    # which requires libpthread even on linux
    ac_fn_c_check_func "$LINENO" "pthread_create"
"ac_cv_func_pthread_create"
if test "x$ac_cv_func_pthread_create" = xyes; then :

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for pthread_create
in -lpthread" >&5
$as_echo_n "checking for pthread_create in -lpthread... " >&6; }
if ${ac_cv_lib_pthread_pthread_create+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lpthread $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char pthread_create ();
int
main ()
{
return pthread_create ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_pthread_pthread_create=yes
else
  ac_cv_lib_pthread_pthread_create=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_pthread_pthread_create" >&5
$as_echo "$ac_cv_lib_pthread_pthread_create" >&6; }
if test "x$ac_cv_lib_pthread_pthread_create" = xyes; then :
  SELINUX_THREAD_LIBS="-lpthread"
fi

fi

```

```

        SELINUX_LIBS="-lselinux $SELINUX_THREAD_LIBS"

$as_echo "@%:@define HAVE_SELINUX 1" >>confdefs.h

else
    SELINUX_LIBS=
fi

# inotify checks
if test x$enable_inotify = xno ; then
    have_inotify=no;
else
    for ac_header in sys/inotify.h
    do :
        ac_fn_c_check_header_mongrel "$LINENO" "sys/inotify.h"
"ac_cv_header_sys_inotify_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_inotify_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_SYS_INOTIFY_H 1
_ACEOF
    have_inotify=yes
else
    have_inotify=no
fi

done

fi

if test x$have_inotify = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_INOTIFY 1" >>confdefs.h

    for ac_func in inotify_init1
    do :
        ac_fn_c_check_func "$LINENO" "inotify_init1"
"ac_cv_func_inotify_init1"
if test "x$ac_cv_func_inotify_init1" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_INOTIFY_INIT1 1
_ACEOF

fi

done

fi

if test x$have_inotify = xyes; then
    DBUS_BUS_ENABLE_INOTIFY_TRUE=
    DBUS_BUS_ENABLE_INOTIFY_FALSE='#'
else
    DBUS_BUS_ENABLE_INOTIFY_TRUE='#'

```

```

    DBUS_BUS_ENABLE_INOTIFY_FALSE=
fi

# dnotify checks
if test x$enable_dnotify = xno ; then
    have_dnotify=no;
else
    if test x$have_inotify = xno -a x$host_os = xlinux-gnu -o
x$host_os = xlinux; then
        have_dnotify=yes;
    else
        have_dnotify=no;
    fi
fi

if test x$have_dnotify = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX 1" >>confdefs.h

fi

    if test x$have_dnotify = xyes; then
        DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE=
        DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE='#'
    else
        DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE='#'
        DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE=
    fi

# For simplicity, we require the userland API for epoll_create1 at
# compile-time (glibc 2.9), but we'll run on kernels that turn out
# not to have it at runtime.
@%:@ Check whether --enable-epoll was given.
if test "${enable_epoll+set}" = set; then :
    enableval=$enable_epoll; enable_epoll=$enableval
else
    enable_epoll=auto
fi

if test x$enable_epoll = xno; then
    have_linux_epoll=no
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for Linux
epoll(4)" >&5
$as_echo_n "checking for Linux epoll(4)... " >&6; }
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

    #ifndef __linux__
    #error This is not Linux

```

```

        #endif
        #include <sys/epoll.h>

int
main ()
{
    epoll_create1 (EPOLL_CLOEXEC);
    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    have_linux_epoll=yes
else
    have_linux_epoll=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    { $as_echo "$as_me:${as_lineno-$LINENO}: result:
$have_linux_epoll" >&5
$as_echo "$have_linux_epoll" >&6; }
fi
if test x$enable_epoll,$have_linux_epoll = xyes,no; then
    as_fn_error $? "epoll support explicitly enabled but not
available" "$LINENO" 5
fi
if test x$have_linux_epoll = xyes; then

$as_echo "@%:@define DBUS_HAVE_LINUX_EPOLL 1" >>confdefs.h

fi
    if test x$have_linux_epoll = xyes; then
        HAVE_LINUX_EPOLL_TRUE=
        HAVE_LINUX_EPOLL_FALSE='#'
    else
        HAVE_LINUX_EPOLL_TRUE='#'
        HAVE_LINUX_EPOLL_FALSE=
    fi

# kqueue checks
if test x$enable_kqueue = xno ; then
    have_kqueue=no
else
    have_kqueue=yes
    ac_fn_c_check_header_mongrel "$LINENO" "sys/event.h"
"ac_cv_header_sys_event_h" "$ac_includes_default"
if test "x$ac_cv_header_sys_event_h" = xyes; then :

else
    have_kqueue=no
fi

```

```

        ac_fn_c_check_func "$LINENO" "kqueue" "ac_cv_func_kqueue"
if test "x$ac_cv_func_kqueue" = xyes; then :

else
    have_kqueue=no
fi

        if test x$enable_kqueue = xyes -a x$have_kqueue = xno; then
            as_fn_error $? "kqueue support explicitly enabled but not
available" "$LINENO" 5
        fi
fi

if test x$have_kqueue = xyes; then

$as_echo "@%:@define DBUS_BUS_ENABLE_KQUEUE 1" >>confdefs.h

fi

    if test x$have_kqueue = xyes; then
        DBUS_BUS_ENABLE_KQUEUE_TRUE=
        DBUS_BUS_ENABLE_KQUEUE_FALSE='#'
    else
        DBUS_BUS_ENABLE_KQUEUE_TRUE='#'
        DBUS_BUS_ENABLE_KQUEUE_FALSE=
    fi
fi

# launchd checks
if test x$enable_launchd = xno ; then
    have_launchd=no
else
    have_launchd=yes
    ac_fn_c_check_header_mongrel "$LINENO" "launch.h"
"ac_cv_header_launch_h" "$ac_includes_default"
if test "x$ac_cv_header_launch_h" = xyes; then :

else
    have_launchd=no
fi

        # Extract the first word of "launchctl", so it can be a program
name with args.
set dummy launchctl; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_LAUNCHCTL+:} false; then :
    $as_echo_n "(cached) " >&6

```

```

else
  case $LAUNCHCTL in
    [\\/* | ?:[\\/*]*)
      ac_cv_path_LAUNCHCTL="$LAUNCHCTL" # Let the user override the test
      with a path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in '' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_path_LAUNCHCTL="$as_dir/$ac_word$ac_exec_ext"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      ;;
    esac
  fi
  LAUNCHCTL=$ac_cv_path_LAUNCHCTL
  if test -n "$LAUNCHCTL"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $LAUNCHCTL" >&5
$as_echo "$LAUNCHCTL" >&6; }
  else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
  fi

  if test "x$LAUNCHCTL" = "x"; then
    have_launchd=no
  fi

  if test x$enable_launchd = xyes && test x$have_launchd = xno ;
then
    as_fn_error $? "launchd support explicitly enabled but not
available" "$LINENO" 5
  fi
fi

if test x$have_launchd = xyes; then

$as_echo "@%:@define DBUS_ENABLE_LAUNCHD 1" >>confdefs.h

fi

```

```

if test x$have_launchd = xyes; then
    DBUS_ENABLE_LAUNCHD_TRUE=
    DBUS_ENABLE_LAUNCHD_FALSE='#'
else
    DBUS_ENABLE_LAUNCHD_TRUE='#'
    DBUS_ENABLE_LAUNCHD_FALSE=
fi

#### Directory to place launchd agent file
if test "x$with_launchd_agent_dir" = "x"; then
    LAUNCHD_AGENT_DIR="/Library/LaunchAgents"
else
    LAUNCHD_AGENT_DIR="$with_launchd_agent_dir"
fi

if test x$enable_console_owner_file = xno ; then
    have_console_owner_file=no;
else
    case $host_os in
        solaris*)
            have_console_owner_file=yes;
    esac

$as_echo "@%:@define HAVE_CONSOLE_OWNER_FILE 1" >>confdefs.h

    ;;
*)
    have_console_owner_file=no;;
esac
fi

if test x$have_console_owner_file = xyes; then
    HAVE_CONSOLE_OWNER_FILE_TRUE=
    HAVE_CONSOLE_OWNER_FILE_FALSE='#'
else
    HAVE_CONSOLE_OWNER_FILE_TRUE='#'
    HAVE_CONSOLE_OWNER_FILE_FALSE=
fi

if test x$enable_systemd = xno ; then
    have_systemd=no;
else

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for SYSTEMD" >&5
$as_echo_n "checking for SYSTEMD... " >&6; }

if test -n "$SYSTEMD_CFLAGS"; then

```

```

    pkg_cv_SYSTEMD_CFLAGS="$SYSTEMD_CFLAGS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"libsistemd-login >= 32, libsistemd-daemon >= 32\""; }
>&5
        ($PKG_CONFIG --exists --print-errors "libsistemd-login >= 32,
libsistemd-daemon >= 32") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = \${ac_status}" >&5
        test $ac_status = 0; }; then
        pkg_cv_SYSTEMD_CFLAGS=`$PKG_CONFIG --cflags "libsistemd-login >= 32,
libsistemd-daemon >= 32" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi
if test -n "$SYSTEMD_LIBS"; then
    pkg_cv_SYSTEMD_LIBS="$SYSTEMD_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \${PKG_CONFIG} --exists -
-print-errors \"libsistemd-login >= 32, libsistemd-daemon >= 32\""; }
>&5
        ($PKG_CONFIG --exists --print-errors "libsistemd-login >= 32,
libsistemd-daemon >= 32") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \${?} = \${ac_status}" >&5
        test $ac_status = 0; }; then
        pkg_cv_SYSTEMD_LIBS=`$PKG_CONFIG --libs "libsistemd-login >= 32,
libsistemd-daemon >= 32" 2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

if test $pkg_failed = yes; then

if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi

    if test $_pkg_short_errors_supported = yes; then
        SYSTEMD_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "libsistemd-login >= 32, libsistemd-daemon >= 32" 2>&1`

```



```

        else
            SYSTEMD_PKG_ERRORS=`$PKG_CONFIG --print-errors
"libsystemd-login >= 32, libsystemd-daemon >= 32" 2>&1`
            fi
            # Put the nasty error message in config.log where it belongs
            echo "$SYSTEMD_PKG_ERRORS" >&5

            { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
                have_systemd=no
            elif test $pkg_failed = untried; then
                have_systemd=no
            else
                SYSTEMD_CFLAGS=$pkg_cv_SYSTEMD_CFLAGS
                SYSTEMD_LIBS=$pkg_cv_SYSTEMD_LIBS
                { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
                    have_systemd=yes
            fi
            fi

            if test x$have_systemd = xyes; then

$as_echo "@%:@define HAVE_SYSTEMD 1" >>confdefs.h

            fi

            if test x$enable_systemd = xyes -a x$have_systemd != xyes ; then
                as_fn_error $? "Explicitly requested systemd support, but systemd
not found" "$LINENO" 5
            fi

            # libaudit detection
            if test x$enable_libaudit = xno ; then
                have_libaudit=no;
            else
                # See if we have audit daemon & capabilities library
                { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
audit_log_user_avc_message in -laudit" >&5
$as_echo_n "checking for audit_log_user_avc_message in -laudit... "
>&6; }
                if ${ac_cv_lib_audit_audit_log_user_avc_message+:} false; then :
                    $as_echo_n "(cached) " >&6
                else
                    ac_check_lib_save_LIBS=$LIBS
                    LIBS="-laudit $LIBS"
                    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
                    /* end confdefs.h. */

                    /* Override any GCC internal prototype to avoid an error.
                    Use char because int might match the return type of a GCC
                    builtin and then its argument prototype would still apply. */

```

```

#ifdef __cplusplus
extern "C"
#endif
char audit_log_user_avc_message ();
int
main ()
{
return audit_log_user_avc_message ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_audit_audit_log_user_avc_message=yes
else
ac_cv_lib_audit_audit_log_user_avc_message=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_audit_audit_log_user_avc_message" >&5
$as_echo "$ac_cv_lib_audit_audit_log_user_avc_message" >&6; }
if test "x$ac_cv_lib_audit_audit_log_user_avc_message" = xyes; then :
have_libaudit=yes
else
have_libaudit=no
fi

if test x$have_libaudit = xyes ; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for
capng_clear in -lcap-ng" >&5
$as_echo_n "checking for capng_clear in -lcap-ng... " >&6; }
if ${ac_cv_lib_capng_capng_clear+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-lcap-ng $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char capng_clear ();
int
main ()
{

```

```

return capng_clear ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_cap_ng_capng_clear=yes
else
    ac_cv_lib_cap_ng_capng_clear=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_cap_ng_capng_clear" >&5
$as_echo "$ac_cv_lib_cap_ng_capng_clear" >&6; }
if test "x$ac_cv_lib_cap_ng_capng_clear" = xyes; then :
    have_libaudit=yes
else
    have_libaudit=no
fi

    fi
fi

if test x$have_libaudit = xyes; then
    HAVE_LIBAUDIT_TRUE=
    HAVE_LIBAUDIT_FALSE='#'
else
    HAVE_LIBAUDIT_TRUE='#'
    HAVE_LIBAUDIT_FALSE=
fi

if test x$have_libaudit = xyes ; then
    SELINUX_LIBS="$SELINUX_LIBS -laudit -lcap-ng"

$as_echo "@%:@define HAVE_LIBAUDIT 1" >>confdefs.h

fi

# Check for ADT API (Solaris Basic Security Mode auditing)
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for ADT API" >&5
$as_echo_n "checking for ADT API... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#include <bsm/adt.h>
adt_user_context = ADT_USER;

```

```

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    check_adt_audit=yes
else
    check_adt_audit=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

if test ${check_adt_audit} = yes
then

$as_echo "@%:@define HAVE_ADT /**/" >>confdefs.h

    ADT_LIBS="-lbsm"
    LIBS="-lbsm $LIBS"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

# Check for SCM_RIGHTS
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for SCM_RIGHTS" >&5
$as_echo_n "checking for SCM_RIGHTS... " >&6; }
cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

#include <sys/types.h>
#include <sys/socket.h>
#include <sys/un.h>
static int x = SCM_RIGHTS;

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: supported" >&5

```

```

$as_echo "supported" >&6; }

$as_echo "@%:@define HAVE_UNIX_FD_PASSING 1" >>confdefs.h

else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: not supported" >&5
$as_echo "not supported" >&6; }
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

NETWORK_libs=
if test x$dbus_win = xyes ; then
  if test x$dbus_wince = xyes ; then
    NETWORK_libs="-lws2"
  else
    NETWORK_libs="-lws2_32"
  fi
fi
fi

@%:@ Check whether --with-valgrind was given.
if test "${with_valgrind+set}" = set; then :
  withval=$with_valgrind;
else
  with_valgrind=no
fi

if test x$with_valgrind != xno; then

pkg_failed=no
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for VALGRIND" >&5
$as_echo_n "checking for VALGRIND... " >&6; }

if test -n "$VALGRIND_CFLAGS"; then
  pkg_cv_VALGRIND_CFLAGS="$VALGRIND_CFLAGS"
elif test -n "$PKG_CONFIG"; then
  if test -n "$PKG_CONFIG" && \
    { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"valgrind >= 3.6\""; } >&5
    ($PKG_CONFIG --exists --print-errors "valgrind >= 3.6") 2>&5
    ac_status=$?
    $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5
    test $ac_status = 0; }; then
    pkg_cv_VALGRIND_CFLAGS=`$PKG_CONFIG --cflags "valgrind >= 3.6"
2>/dev/null`
  else
    pkg_failed=yes
  fi
else

```

```

    pkg_failed=untried
fi
if test -n "$VALGRIND_LIBS"; then
    pkg_cv_VALGRIND_LIBS="$VALGRIND_LIBS"
elif test -n "$PKG_CONFIG"; then
    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \
        \${PKG_CONFIG} --exists -
-print-errors \"valgrind >= 3.6\""; } >&5
        ($PKG_CONFIG --exists --print-errors "valgrind >= 3.6") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \
        \${?} = $ac_status" >&5
        test $ac_status = 0; }; then
        pkg_cv_VALGRIND_LIBS=`$PKG_CONFIG --libs "valgrind >= 3.6"
2>/dev/null`
    else
        pkg_failed=yes
    fi
else
    pkg_failed=untried
fi

```

```

if test $pkg_failed = yes; then

```

```

    if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
        _pkg_short_errors_supported=yes
    else
        _pkg_short_errors_supported=no
    fi
    if test $_pkg_short_errors_supported = yes; then
        VALGRIND_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "valgrind >= 3.6" 2>&1`
    else
        VALGRIND_PKG_ERRORS=`$PKG_CONFIG --print-errors "valgrind
>= 3.6" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$VALGRIND_PKG_ERRORS" >&5

```

```

    as_fn_error $? "Package requirements (valgrind >= 3.6) were not
met:

```

```

$VALGRIND_PKG_ERRORS

```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

Alternatively, you may set the environment variables VALGRIND_CFLAGS and VALGRIND_LIBS to avoid the need to call pkg-config.

See the pkg-config man page for more details.

```

" "$LINENO" 5

```

```

elif test $pkg_failed = untried; then
    { { $as_echo "$as_me:${as_lineno-$LINENO}: error: in `\$ac_pwd':"
    >&5
    $as_echo "$as_me: error: in `\$ac_pwd':" >&2;}
    as_fn_error $? "The pkg-config script could not be found or is too
    old. Make sure it
    is in your PATH or set the PKG_CONFIG environment variable to the full
    path to pkg-config.

```

Alternatively, you may set the environment variables VALGRIND_CFLAGS and VALGRIND_LIBS to avoid the need to call pkg-config. See the pkg-config man page for more details.

To get pkg-config, see <<http://pkg-config.freedesktop.org/>>. See `config.log' for more details" "\$LINENO" 5; }

```

else
    VALGRIND_CFLAGS=$pkg_cv_VALGRIND_CFLAGS
    VALGRIND_LIBS=$pkg_cv_VALGRIND_LIBS
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
    $as_echo "yes" >&6; }
    :
fi

```

```

$as_echo "@%:@define WITH_VALGRIND 1" >>confdefs.h

```

```

fi

```

```

#### Set up final flags
LIBDBUS_LIBS="$THREAD_LIBS $NETWORK_libs"

```

```

### X11 detection
DBUS_X_LIBS=
DBUS_X_CFLAGS=

```

```

@%:@ Check whether --enable-x11-autolaunch was given.
if test "${enable_x11_autolaunch+set}" = set; then :
    enableval=$enable_x11_autolaunch;
else
    enable_x11_autolaunch=auto
fi

```

```

if test "x$dbus_win" = xyes; then
    if test "x$enable_x11_autolaunch" = xyes; then
        as_fn_error $? "X11 auto-launch is not supported on Windows"
"$LINENO" 5
    fi

```

```

        enable_x11_autolaunch=no
        have_x11=no
else

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for X" >&5
$as_echo_n "checking for X... " >&6; }

@%:@ Check whether --with-x was given.
if test "${with_x+set}" = set; then :
  withval=$with_x;
fi

# $have_x is `yes', `no', `disabled', or empty when we do not yet
know.
if test "x$with_x" = xno; then
  # The user explicitly disabled X.
  have_x=disabled
else
  case $x_includes,$x_libraries in #(
    *\'*) as_fn_error $? "cannot use X directory names containing '"
"$LINENO" 5;; #(
    *,NONE | NONE,*) if ${ac_cv_have_x+:} false; then :
  $as_echo_n "(cached) " >&6
else
  # One or both of the vars are not set, and there is no cached value.
ac_x_includes=no ac_x_libraries=no
# Standard set of common directories for X headers.
# Check X11 before X11Rn because it is often a symlink to the current
release.
ac_x_header_dirs=''

if test "$ac_x_includes" = no; then
  # Guess where to find include files, by looking for Xlib.h.
  # First, try using that file with no special directory specified.
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
@%:@include <X11/Xlib.h>
_ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
  # We can compile using X headers with no special include directory.
ac_x_includes=
else
  for ac_dir in $ac_x_header_dirs; do
    if test -r "$ac_dir/X11/Xlib.h"; then
      ac_x_includes=$ac_dir
      break
    fi
  done
fi
rm -f conftest.err conftest.i conftest.$ac_ext
fi # $ac_x_includes = no

if test "$ac_x_libraries" = no; then
  # Check for the libraries.
  # See if we find them without any special options.

```



```

# Don't add to $LIBS permanently.
ac_save_LIBS=$LIBS
LIBS="-lX11 $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */
@%:@include <X11/Xlib.h>
int
main ()
{
XrmInitialize ()
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
LIBS=$ac_save_LIBS
# We can link X programs with no special library path.
ac_x_libraries=
else
LIBS=$ac_save_LIBS
for ac_dir in `$as_echo "$ac_x_includes $ac_x_header_dirs" | sed
s/include/lib/g`
do
# Don't even attempt the hair of trying to link an X program!
for ac_extension in a so sl dylib la dll; do
if test -r "$ac_dir/libX11.$ac_extension"; then
ac_x_libraries=$ac_dir
break 2
fi
done
done
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
fi # $ac_x_libraries = no

case $ac_x_includes,$ac_x_libraries in #(
no,* | *,no | *\')
# Didn't find X, or a directory has "" in its name.
ac_cv_have_x="have_x=no";; #(
*)
# Record where we found X for the cache.
ac_cv_have_x="have_x=yes\
ac_x_includes='$ac_x_includes'\
ac_x_libraries='$ac_x_libraries'"
esac
fi
;; #(
*) have_x=yes;;
esac
eval "$ac_cv_have_x"
fi # $with_x != no

```

```

if test "$have_x" != yes; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $have_x" >&5
$as_echo "$have_x" >&6; }
  no_x=yes
else
  # If each of the values was on the command line, it overrides each
  guess.
  test "x$x_includes" = xNONE && x_includes=$ac_x_includes
  test "x$x_libraries" = xNONE && x_libraries=$ac_x_libraries
  # Update the cache value to reflect the command line values.
  ac_cv_have_x="have_x=yes\
  ac_x_includes='$x_includes'\
  ac_x_libraries='$x_libraries'"
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: libraries
$x_libraries, headers $x_includes" >&5
$as_echo "libraries $x_libraries, headers $x_includes" >&6; }
fi

if test "$no_x" = yes; then
  # Not all programs may use this symbol, but it does not hurt to
  define it.

$as_echo "@%:@define X_DISPLAY_MISSING 1" >>confdefs.h

  X_CFLAGS= X_PRE_LIBS= X_LIBS= X_EXTRA_LIBS=
else
  if test -n "$x_includes"; then
    X_CFLAGS="$X_CFLAGS -I$x_includes"
  fi

  # It would also be nice to do this for all -L options, not just this
  one.
  if test -n "$x_libraries"; then
    X_LIBS="$X_LIBS -L$x_libraries"
    # For Solaris; some versions of Sun CC require a space after -R
    and
    # others require no space. Words are not sufficient . . . .
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether -R must
be followed by a space" >&5
$as_echo_n "checking whether -R must be followed by a space... " >&6;
}
    ac_xsave_LIBS=$LIBS; LIBS="$LIBS -R$x_libraries"
    ac_xsave_c_werror_flag=$ac_c_werror_flag
    ac_c_werror_flag=yes
    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

```

```

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
    X_LIBS="$X_LIBS -R$x_libraries"
else
  LIBS="$ac_xsave_LIBS -R $x_libraries"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: yes" >&5
$as_echo "yes" >&6; }
    X_LIBS="$X_LIBS -R $x_libraries"
else
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: neither works" >&5
$as_echo "neither works" >&6; }
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
    ac_c_werror_flag=$ac_xsave_c_werror_flag
    LIBS=$ac_xsave_LIBS
fi

# Check for system-dependent libraries X programs must link with.
# Do this before checking for the system-independent R6 libraries
# (-lICE), since we may need -lsocket or whatever for X linking.

if test "$ISC" = yes; then
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lnsl_s -linet"
else
  # Martyn Johnson says this is needed for Ultrix, if the X
  # libraries were built with DECnet support.  And Karl Berry says
  # the Alpha needs dnet_stub (dnet does not exist).
  ac_xsave_LIBS="$LIBS"; LIBS="$LIBS $X_LIBS -lX11"
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

```

```

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char XOpenDisplay ();
int
main ()
{
return XOpenDisplay ();
;
return 0;
}
_EOF
if ac_fn_c_try_link "$LINENO"; then :

else
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for dnet_ntoa in -
ldnet" >&5
$as_echo_n "checking for dnet_ntoa in -ldnet... " >&6; }
if ${ac_cv_lib_dnet_dnet_ntoa+:} false; then :
$as_echo_n "(cached) " >&6
else
ac_check_lib_save_LIBS=$LIBS
LIBS="-ldnet $LIBS"
cat confdefs.h - <<_EOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dnet_ntoa ();
int
main ()
{
return dnet_ntoa ();
;
return 0;
}
_EOF
if ac_fn_c_try_link "$LINENO"; then :
ac_cv_lib_dnet_dnet_ntoa=yes
else
ac_cv_lib_dnet_dnet_ntoa=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest.$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dnet_dnet_ntoa" >&5
$as_echo "$ac_cv_lib_dnet_dnet_ntoa" >&6; }
if test "x$ac_cv_lib_dnet_dnet_ntoa" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -ldnet"
fi

  if test $ac_cv_lib_dnet_dnet_ntoa = no; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: checking for dnet_ntoa
in -ldnet_stub" >&5
$as_echo_n "checking for dnet_ntoa in -ldnet_stub... " >&6; }
if ${ac_cv_lib_dnet_stub_dnet_ntoa+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-ldnet_stub $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char dnet_ntoa ();
int
main ()
{
return dnet_ntoa ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_dnet_stub_dnet_ntoa=yes
else
  ac_cv_lib_dnet_stub_dnet_ntoa=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_dnet_stub_dnet_ntoa" >&5
$as_echo "$ac_cv_lib_dnet_stub_dnet_ntoa" >&6; }
if test "x$ac_cv_lib_dnet_stub_dnet_ntoa" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -ldnet_stub"
fi

fi

```

```

fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS="$ac_xsave_LIBS"

# msh@cis.ufl.edu says -lnsl (and -lsocket) are needed for his
386/AT,
# to get the SysV transport functions.
# Chad R. Larson says the Pyramis MIS-ES running DC/OSx (SVR4)
# needs -lnsl.
# The nsl library prevents programs from opening the X display
# on Irix 5.2, according to T.E. Dickey.
# The functions gethostbyname, getservbyname, and inet_addr are
# in -lbsd on LynxOS 3.0.1/i386, according to Lars Hecking.
ac_fn_c_check_func "$LINENO" "gethostbyname"
"ac_cv_func_gethostbyname"
if test "x$ac_cv_func_gethostbyname" = xyes; then :

fi

    if test $ac_cv_func_gethostbyname = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
gethostbyname in -lnsl" >&5
$as_echo_n "checking for gethostbyname in -lnsl... " >&6; }
if ${ac_cv_lib_nsl_gethostbyname+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lnsl $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();
int
main ()
{
return gethostbyname ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_nsl_gethostbyname=yes
else
    ac_cv_lib_nsl_gethostbyname=no
fi

```

```

rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_nsl_gethostbyname" >&5
$as_echo "$ac_cv_lib_nsl_gethostbyname" >&6; }
if test "x$ac_cv_lib_nsl_gethostbyname" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lnsl"
fi

    if test $ac_cv_lib_nsl_gethostbyname = no; then
      { $as_echo "$as_me:${as_lineno-$LINENO}: checking for
gethostbyname in -lbsd" >&5
$as_echo_n "checking for gethostbyname in -lbsd... " >&6; }
if ${ac_cv_lib_bsd_gethostbyname+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lbsd $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply.  */
#ifdef __cplusplus
extern "C"
#endif
char gethostbyname ();
int
main ()
{
return gethostbyname ();
;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_bsd_gethostbyname=yes
else
  ac_cv_lib_bsd_gethostbyname=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_bsd_gethostbyname" >&5
$as_echo "$ac_cv_lib_bsd_gethostbyname" >&6; }
if test "x$ac_cv_lib_bsd_gethostbyname" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lbsd"

```

```

fi

    fi
fi

# lieder@skyler.mavd.honeywell.com says without -lsocket,
# socket/setsockopt and other routines are undefined under SCO ODT
# 2.0. But -lsocket is broken on IRIX 5.2 (and is not necessary
# on later versions), says Simon Leinen: it contains gethostby*
# variants that don't use the name server (or something). -
lsocket
# must be given before -lnsl if both are needed. We assume that
# if connect needs -lnsl, so does gethostbyname.
ac_fn_c_check_func "$LINENO" "connect" "ac_cv_func_connect"
if test "x$ac_cv_func_connect" = xyes; then :

fi

    if test $ac_cv_func_connect = no; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: checking for connect in
-lsocket" >&5
$as_echo_n "checking for connect in -lsocket... " >&6; }
if ${ac_cv_lib_socket_connect+:} false; then :
    $as_echo_n "(cached) " >&6
else
    ac_check_lib_save_LIBS=$LIBS
LIBS="-lsocket $X_EXTRA_LIBS $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char connect ();
int
main ()
{
return connect ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
    ac_cv_lib_socket_connect=yes
else
    ac_cv_lib_socket_connect=no
fi
rm -f core conftest.err conftest.$ac_objext \
    conftest$ac_exeext conftest.$ac_ext

```



```

LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_socket_connect" >&5
$as_echo "$ac_cv_lib_socket_connect" >&6; }
if test "x$ac_cv_lib_socket_connect" = xyes; then :
  X_EXTRA_LIBS="-lsocket $X_EXTRA_LIBS"
fi

fi

# Guillermo Gomez says -lposix is necessary on A/UX.
ac_fn_c_check_func "$LINENO" "remove" "ac_cv_func_remove"
if test "x$ac_cv_func_remove" = xyes; then :

fi

if test $ac_cv_func_remove = no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for remove in
-lposix" >&5
$as_echo_n "checking for remove in -lposix... " >&6; }
if ${ac_cv_lib_posix_remove+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lposix $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
Use char because int might match the return type of a GCC
builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char remove ();
int
main ()
{
return remove ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_posix_remove=yes
else
  ac_cv_lib_posix_remove=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS

```

```

fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_posix_remove" >&5
$as_echo "$ac_cv_lib_posix_remove" >&6; }
if test "x$ac_cv_lib_posix_remove" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lposix"
fi

fi

# BSDI BSD/OS 2.1 needs -lipc for XOpenDisplay.
ac_fn_c_check_func "$LINENO" "shmat" "ac_cv_func_shmat"
if test "x$ac_cv_func_shmat" = xyes; then :

fi

if test $ac_cv_func_shmat = no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for shmat in -
lipc" >&5
$as_echo_n "checking for shmat in -lipc... " >&6; }
if ${ac_cv_lib_ipc_shmat+:} false; then :
  $as_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lipc $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char shmat ();
int
main ()
{
return shmat ();
;
return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_ipc_shmat=yes
else
  ac_cv_lib_ipc_shmat=no
fi
rm -f core conftest.err conftest.$ac_objext \
conftest$ac_exeext conftest.$ac_ext
LIBS=$ac_check_lib_save_LIBS
fi

```

```

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $ac_cv_lib_ipc_shmat"
>&5
$sas_echo "$ac_cv_lib_ipc_shmat" >&6; }
if test "x$ac_cv_lib_ipc_shmat" = xyes; then :
  X_EXTRA_LIBS="$X_EXTRA_LIBS -lipc"
fi

  fi
fi

# Check for libraries that X11R6 Xt/Xaw programs need.
ac_save_LDFLAGS=$LDFLAGS
test -n "$x_libraries" && LDFLAGS="$LDFLAGS -L$x_libraries"
# SM needs ICE to (dynamically) link under SunOS 4.x (so we have to
# check for ICE first), but we must link in the order -lSM -lICE or
# we get undefined symbols. So assume we have SM if we have ICE.
# These have to be linked with before -lX11, unlike the other
# libraries we check for below, so use a different variable.
# John Interrante, Karl Berry
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for
IceConnectionNumber in -lICE" >&5
$sas_echo_n "checking for IceConnectionNumber in -lICE... " >&6; }
if ${ac_cv_lib_ICE_IceConnectionNumber+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  ac_check_lib_save_LIBS=$LIBS
LIBS="-lICE $X_EXTRA_LIBS $LIBS"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

/* Override any GCC internal prototype to avoid an error.
   Use char because int might match the return type of a GCC
   builtin and then its argument prototype would still apply. */
#ifdef __cplusplus
extern "C"
#endif
char IceConnectionNumber ();
int
main ()
{
return IceConnectionNumber ();
  ;
  return 0;
}
_ACEOF
if ac_fn_c_try_link "$LINENO"; then :
  ac_cv_lib_ICE_IceConnectionNumber=yes
else
  ac_cv_lib_ICE_IceConnectionNumber=no
fi
rm -f core conftest.err conftest.$ac_objext \
  conftest$sac_exeext conftest.$ac_ext

```

```

LIBS=$ac_check_lib_save_LIBS
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result:
$ac_cv_lib_ICE_IceConnectionNumber" >&5
$as_echo "$ac_cv_lib_ICE_IceConnectionNumber" >&6; }
if test "x$ac_cv_lib_ICE_IceConnectionNumber" = xyes; then :
  X_PRE_LIBS="$X_PRE_LIBS -lSM -lICE"
fi

LDFLAGS=$ac_save_LDFLAGS

fi

if test "x$no_x" = xyes; then
  have_x11=no
else
  have_x11=yes
  DBUS_X_LIBS="$X_LIBS $X_PRE_LIBS -lX11 $X_EXTRA_LIBS"
  DBUS_X_CFLAGS="$X_CFLAGS"
fi
fi

if test "x$enable_x11_autolaunch,$have_x11" = xyes,no; then
  as_fn_error $? "X11 auto-launch requires X headers/libraries"
"$LINENO" 5
else
  # move from "auto" to "yes" or "no" if necessary
  if test "x$enable_x11_autolaunch" != xno; then
    enable_x11_autolaunch="$have_x11"
  fi
fi

if test "x$have_x11" = xyes ; then

$as_echo "@%:@define DBUS_BUILD_X11 1" >>confdefs.h

fi

if test "x$enable_x11_autolaunch" = xyes ; then

$as_echo "@%:@define DBUS_ENABLE_X11_AUTOLAUNCH 1" >>confdefs.h

fi

#### gcc warning flags

cc_supports_flag() {

```

```

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking whether $CC
supports \"\$*\\"" >&5
$as_echo_n "checking whether $CC supports \"\$*\"... " >&6; }
    save_CFLAGS="$CFLAGS"
    CFLAGS="$*"
    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    rc=yes
else
    rc=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
    CFLAGS="$save_CFLAGS"
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $rc" >&5
$as_echo "$rc" >&6; }
    test "x$rc" = xyes
}

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands " >&5
$as_echo_n "checking to see if compiler understands ... " >&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS "
    CXXFLAGS="$CXXFLAGS "

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes

```

```

else
  flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then

  true
else

  true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

tp_warnings=""
for tp_flag in  all \
  extra \
  char-subscripts \
  missing-declarations \
  missing-prototypes \
  nested-externs \
  pointer-arith \
  cast-align \
  no-address \
  float-equal \
  declaration-after-statement \
; do

  { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -W$tp_flag" >&5
$as_echo_n "checking to see if compiler understands -W$tp_flag... "
>&6; }

  save_CFLAGS="$CFLAGS"
  save_CXXFLAGS="$CXXFLAGS"
  CFLAGS="$CFLAGS -W$tp_flag"
  CXXFLAGS="$CXXFLAGS -W$tp_flag"

  cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

  ;
  return 0;

```

```

}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    tp_warnings="$tp_warnings -W$tp_flag"
    true
else

    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

done

tp_error_flags="-Werror"

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Werror" >&5
$as_echo_n "checking to see if compiler understands -Werror... " >&6;
}

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -Werror"
CXXFLAGS="$CXXFLAGS -Werror"

cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext

```

```

CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    tp_werror=yes
    true
else
    tp_werror=no
    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

for tp_flag in
missing-field-initializers \
unused-parameter \
sign-compare \
pointer-sign \
type-limits \
; do
                                $DISABLE_UNUSED_WARNINGS \

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Wno-$tp_flag" >&5
$as_echo_n "checking to see if compiler understands -Wno-$tp_flag... "
>&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -Wno-$tp_flag"
    CXXFLAGS="$CXXFLAGS -Wno-$tp_flag"

    cat confdefs.h - << _ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

```



```

if test "X$flag_ok" = Xyes ; then
    tp_warnings="$tp_warnings -Wno-$tp_flag"
    true
else

    true
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$sas_echo "$flag_ok" >&6; }

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking to see if compiler
understands -Wno-error=$tp_flag" >&5
$sas_echo_n "checking to see if compiler understands -Wno-
error=$tp_flag... " >&6; }

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -Wno-error=$tp_flag"
CXXFLAGS="$CXXFLAGS -Wno-error=$tp_flag"

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    tp_error_flags="$tp_error_flags -Wno-error=$tp_flag"
    true
else
    tp_werror=no
    true
fi
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$sas_echo "$flag_ok" >&6; }

done

```

```

    @%:@ Check whether --enable-Werror was given.
if test "${enable_Werror+set}" = set; then :
    enableval=$enable_Werror; tp_werror=$enableval
else
    :
fi

    if test "x$tp_werror" = xyes &&          test x$dbus_win != xyes -a
x$dbus_cygwin != xyes -a x$enable_developer = xyes; then
        WARNING_CFLAGS="$tp_error_flags $tp_warnings"
    else
        WARNING_CFLAGS="$tp_warnings"
    fi

if test "x$GCC" = "xyes"; then
    # We're treating -fno-common like a warning: it makes the linker
more
    # strict, because on some systems the linker is *always* this strict

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -fno-common" >&5
$as_echo_n "checking to see if compiler understands -fno-common... "
>&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -fno-common"
    CXXFLAGS="$CXXFLAGS -fno-common"

    cat confdefs.h - <<_ACEOF >>conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"

```

```

CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    WARNING_CFLAGS="$WARNING_CFLAGS -fno-common"
    true
else

    true
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

# http://bugs.freedesktop.org/show_bug.cgi?id=10599

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -fno-strict-aliasing" >&5
$as_echo_n "checking to see if compiler understands -fno-strict-
aliasing... " >&6; }

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS -fno-strict-aliasing"
CXXFLAGS="$CXXFLAGS -fno-strict-aliasing"

cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    WARNING_CFLAGS="$WARNING_CFLAGS -fno-strict-aliasing"
    true
else

```

```

    true
  fi
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5
$as_echo "$flag_ok" >&6; }

  if test "x$enable_ansi" = "xyes"; then

    { $as_echo "$as_me:${as_lineno-$LINENO}: checking to see if compiler
understands -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -pedantic"
>&5
$as_echo_n "checking to see if compiler understands -ansi -
D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -pedantic... " >&6; }

    save_CFLAGS="$CFLAGS"
    save_CXXFLAGS="$CXXFLAGS"
    CFLAGS="$CFLAGS -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -
pedantic"
    CXXFLAGS="$CXXFLAGS -ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -
pedantic"

    cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h.  */

int
main ()
{

    ;
    return 0;
}
_ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
    flag_ok=yes
else
    flag_ok=no
fi
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

    if test "X$flag_ok" = Xyes ; then
        WARNING_CFLAGS="$WARNING_CFLAGS -ansi -D_POSIX_C_SOURCE=199309L -
D_BSD_SOURCE -pedantic"
        true
    else

        true
    fi
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $flag_ok" >&5

```

```

$as_echo "$flag_ok" >&6; }

    fi
fi

CFLAGS="$WARNING_CFLAGS $CFLAGS"

case $host_os in
    solaris*)
        # Solaris' C library apparently needs these runes to be
        threadsafe...
        CFLAGS="$CFLAGS -D_POSIX_PTHREAD_SEMANTICS -D_REENTRANT"
        # ... this opt-in to get sockaddr_in6 and sockaddr_storage...
        CFLAGS="$CFLAGS -D__EXTENSIONS__"
        # ... and this opt-in to get file descriptor passing support
        CFLAGS="$CFLAGS -D_XOPEN_SOURCE=500"
        ;;
esac

### Doxygen Documentation

# Extract the first word of "doxygen", so it can be a program name
with args.
set dummy doxygen; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_DOXYGEN+:} false; then :
  $as_echo_n "(cached) " >&6
else
  case $DOXYGEN in
    [\\/] * | ?:[\\/] *)
      ac_cv_path_DOXYGEN="$DOXYGEN" # Let the user override the test with
a path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_path_DOXYGEN="$as_dir/$ac_word$ac_exec_ext"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

```

```

    test -z "$ac_cv_path_DOXYGEN" && ac_cv_path_DOXYGEN="no"
    ;;
esac
fi
DOXYGEN=$ac_cv_path_DOXYGEN
if test -n "$DOXYGEN"; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: $DOXYGEN" >&5
$as_echo "$DOXYGEN" >&6; }
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
$as_echo "no" >&6; }
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking whether to build
Doxygen documentation" >&5
$as_echo_n "checking whether to build Doxygen documentation... " >&6;
}

if test x$DOXYGEN = xno ; then
    have_doxygen=no
else
    have_doxygen=yes
fi

if test x$enable_doxygen_docs = xauto ; then
    if test x$have_doxygen = xno ; then
        enable_doxygen_docs=no
    else
        enable_doxygen_docs=yes
    fi
fi

if test x$enable_doxygen_docs = xyes; then
    if test x$have_doxygen = xno; then
        as_fn_error $? "Building Doxygen docs explicitly required, but
Doxygen not found" "$LINENO" 5
    fi
fi

if test x$enable_doxygen_docs = xyes; then
    DBUS_DOXYGEN_DOCS_ENABLED_TRUE=
    DBUS_DOXYGEN_DOCS_ENABLED_FALSE='#'
else
    DBUS_DOXYGEN_DOCS_ENABLED_TRUE='#'
    DBUS_DOXYGEN_DOCS_ENABLED_FALSE=
fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_doxygen_docs"
>&5
$as_echo "$enable_doxygen_docs" >&6; }

```

```

for ac_prog in xsltproc
do
  # Extract the first word of "$ac_prog", so it can be a program name
  with args.
  set dummy $ac_prog; ac_word=$2
  { $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
  $as_echo_n "checking for $ac_word... " >&6; }
  if ${ac_cv_prog_XSLTPROC+:} false; then :
    $as_echo_n "(cached) " >&6
  else
    if test -n "$XSLTPROC"; then
      ac_cv_prog_XSLTPROC="$XSLTPROC" # Let the user override the test.
    else
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
      for as_dir in $PATH
      do
        IFS=$as_save_IFS
        test -z "$as_dir" && as_dir=.
        for ac_exec_ext in ' ' $ac_executable_extensions; do
          if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
            ac_cv_prog_XSLTPROC="$ac_prog"
            $as_echo "$as_me:${as_lineno-$LINENO}: found
$as_dir/$ac_word$ac_exec_ext" >&5
            break 2
          fi
        done
      done
      IFS=$as_save_IFS

      fi
      fi
      XSLTPROC=$ac_cv_prog_XSLTPROC
      if test -n "$XSLTPROC"; then
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: $XSLTPROC" >&5
        $as_echo "$XSLTPROC" >&6; }
      else
        { $as_echo "$as_me:${as_lineno-$LINENO}: result: no" >&5
        $as_echo "no" >&6; }
      fi

      test -n "$XSLTPROC" && break
    done

    if test "x$XSLTPROC" != "x"; then
      DBUS_HAVE_XSLTPROC_TRUE=
      DBUS_HAVE_XSLTPROC_FALSE='#'
    else
      DBUS_HAVE_XSLTPROC_TRUE='#'
      DBUS_HAVE_XSLTPROC_FALSE=
    fi
  fi

```

```

### XML Documentation

# Extract the first word of "xmlto", so it can be a program name with
args.
set dummy xmlto; ac_word=$2
{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$sas_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_XMLTO+:} false; then :
  $sas_echo_n "(cached) " >&6
else
  case $XMLTO in
    [\\/] * | ?:[\\/] *)
      ac_cv_path_XMLTO="$XMLTO" # Let the user override the test with a
path.
      ;;
    *)
      as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  for ac_exec_ext in '' $ac_executable_extensions; do
    if as_fn_executable_p "$as_dir/$ac_word$ac_exec_ext"; then
      ac_cv_path_XMLTO="$as_dir/$ac_word$ac_exec_ext"
      $sas_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
      break 2
    fi
  done
done
IFS=$as_save_IFS

  test -z "$ac_cv_path_XMLTO" && ac_cv_path_XMLTO="no"
  ;;
esac
fi
XMLTO=$ac_cv_path_XMLTO
if test -n "$XMLTO"; then
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: $XMLTO" >&5
$sas_echo "$XMLTO" >&6; }
else
  { $sas_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
$sas_echo "no" >&6; }
fi

{ $sas_echo "$sas_me:${as_lineno-$LINENO}: checking whether to build XML
documentation" >&5
$sas_echo_n "checking whether to build XML documentation... " >&6; }

```



```

if test x$XMLTO = xno ; then
    have_xmlto=no
else
    have_xmlto=yes
fi

if test x$enable_xml_docs = xauto ; then
    if test x$have_xmlto = xno ; then
        enable_xml_docs=no
    else
        enable_xml_docs=yes
    fi
fi

if test x$enable_xml_docs = xyes; then
    if test x$have_xmlto = xno; then
        as_fn_error $? "Building XML docs explicitly required, but xmlto
not found" "$LINENO" 5
    fi
fi

    if test x$enable_xml_docs = xyes; then
        DBUS_XML_DOCS_ENABLED_TRUE=
        DBUS_XML_DOCS_ENABLED_FALSE='#'
    else
        DBUS_XML_DOCS_ENABLED_TRUE='#'
        DBUS_XML_DOCS_ENABLED_FALSE=
    fi

{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $enable_xml_docs" >&5
$as_echo "$enable_xml_docs" >&6; }

# Extract the first word of "man2html", so it can be a program name
with args.
set dummy man2html; ac_word=$2
{ $as_echo "$as_me:${as_lineno-$LINENO}: checking for $ac_word" >&5
$as_echo_n "checking for $ac_word... " >&6; }
if ${ac_cv_path_MAN2HTML+:} false; then :
    $as_echo_n "(cached) " >&6
else
    case $MAN2HTML in
    [\\/] * | ?:[\\/] *)
        ac_cv_path_MAN2HTML="$MAN2HTML" # Let the user override the test
with a path.
        ;;
    *)
        as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
        for as_dir in $PATH
        do
            IFS=$as_save_IFS
            test -z "$as_dir" && as_dir=.

```

```

        for ac_exec_ext in ' ' $ac_executable_extensions; do
        if as_fn_executable_p "$sas_dir/$ac_word$ac_exec_ext"; then
            ac_cv_path MAN2HTML="$sas_dir/$ac_word$ac_exec_ext"
            $as_echo "$sas_me:${as_lineno-$LINENO}: found
$sas_dir/$ac_word$ac_exec_ext" >&5
            break 2
        fi
    done
done
IFS=$sas_save_IFS

;;
esac
fi
MAN2HTML=$ac_cv_path_MAN2HTML
if test -n "$MAN2HTML"; then
    { $as_echo "$sas_me:${as_lineno-$LINENO}: result: $MAN2HTML" >&5
    $as_echo "$MAN2HTML" >&6; }
else
    { $as_echo "$sas_me:${as_lineno-$LINENO}: result: no" >&5
    $as_echo "no" >&6; }
fi

if test x$MAN2HTML != x; then
    DBUS_HAVE_MAN2HTML_TRUE=
    DBUS_HAVE_MAN2HTML_FALSE='#'
else
    DBUS_HAVE_MAN2HTML_TRUE='#'
    DBUS_HAVE_MAN2HTML_FALSE=
fi

if test x$enable_doxygen_docs = xyes -a x$enable_xml_docs = xyes -a \
    x$MAN2HTML != x; then
    DBUS_CAN_UPLOAD_DOCS_TRUE=
    DBUS_CAN_UPLOAD_DOCS_FALSE='#'
else
    DBUS_CAN_UPLOAD_DOCS_TRUE='#'
    DBUS_CAN_UPLOAD_DOCS_FALSE=
fi

#### Have to go $localstatedir->$prefix/var->/usr/local/var

#### find the actual value for $prefix that we'll end up with
## (I know this is broken and should be done in the Makefile, but
## that's a major pain and almost nobody actually seems to care)

EXP_VAR=EXPANDED_PREFIX
FROM_VAR="$prefix"

```

```

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
    prefix="$ac_default_prefix"
fi
    if test "x$exec_prefix" = "xNONE"; then
    exec_prefix=$prefix
fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

    full_var=$new_full_var
EXPANDED_PREFIX="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

EXP_VAR=EXPANDED_LOCALSTATEDIR
FROM_VAR="$localstatedir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
    prefix="$ac_default_prefix"
fi
    if test "x$exec_prefix" = "xNONE"; then
    exec_prefix=$prefix
fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

    full_var=$new_full_var
EXPANDED_LOCALSTATEDIR="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

```

```

EXP_VAR=EXPANDED_SYSCONFDIR
FROM_VAR="$sysconfdir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
        prefix="$ac_default_prefix"
    fi
    if test "x$exec_prefix" = "xNONE"; then
        exec_prefix=$prefix
    fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

full_var=$new_full_var
EXPANDED_SYSCONFDIR="$full_var"

    prefix=$prefix_save
exec_prefix=$exec_prefix_save

EXP_VAR=EXPANDED_BINDIR
FROM_VAR="$bindir"

    prefix_save=$prefix
exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
        prefix="$ac_default_prefix"
    fi
    if test "x$exec_prefix" = "xNONE"; then
        exec_prefix=$prefix
    fi

full_var="$FROM_VAR"
while true; do
    new_full_var=`eval echo $full_var`
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
done

full_var=$new_full_var
EXPANDED_BINDIR="$full_var"

```

```
prefix=$prefix_save
exec_prefix=$exec_prefix_save
```

```
EXP_VAR=EXPANDED_LIBDIR
FROM_VAR="$libdir"
```

```
prefix_save=$prefix
exec_prefix_save=$exec_prefix
```

```
if test "x$prefix" = "xNONE"; then
prefix="$ac_default_prefix"
fi
if test "x$exec_prefix" = "xNONE"; then
exec_prefix=$prefix
fi
```

```
full_var="$FROM_VAR"
while true; do
new_full_var="`eval echo $full_var`"
if test "x$new_full_var" = "x$full_var"; then break; fi
full_var=$new_full_var
done
```

```
full_var=$new_full_var
EXPANDED_LIBDIR="$full_var"
```

```
prefix=$prefix_save
exec_prefix=$exec_prefix_save
```

```
EXP_VAR=EXPANDED_LIBEXECDIR
FROM_VAR="$libexecdir"
```

```
prefix_save=$prefix
exec_prefix_save=$exec_prefix
```

```
if test "x$prefix" = "xNONE"; then
prefix="$ac_default_prefix"
fi
if test "x$exec_prefix" = "xNONE"; then
exec_prefix=$prefix
fi
```

```
full_var="$FROM_VAR"
while true; do
new_full_var="`eval echo $full_var`"
if test "x$new_full_var" = "x$full_var"; then break; fi
full_var=$new_full_var
```

```

done

    full_var=$new_full_var
    EXPANDED_LIBEXECDIR="$full_var"

    prefix=$prefix_save
    exec_prefix=$exec_prefix_save

    EXP_VAR=EXPANDED_DATADIR
    FROM_VAR="$datadir"

    prefix_save=$prefix
    exec_prefix_save=$exec_prefix

    if test "x$prefix" = "xNONE"; then
        prefix="$ac_default_prefix"
    fi
    if test "x$exec_prefix" = "xNONE"; then
        exec_prefix=$prefix
    fi

    full_var="$FROM_VAR"
    while true; do
        new_full_var="`eval echo $full_var`"
        if test "x$new_full_var" = "x$full_var"; then break; fi
        full_var=$new_full_var
    done

    full_var=$new_full_var
    EXPANDED_DATADIR="$full_var"

    prefix=$prefix_save
    exec_prefix=$exec_prefix_save

#### Check our operating system
operating_system=unknown
if test -f /etc/redhat-release || test -f $EXPANDED_SYSCONFDIR/redhat-
release ; then
    operating_system=redhat
fi

if test -f /etc/slackware-version || test -f
$EXPANDED_SYSCONFDIR/slackware-version ; then
    operating_system=slackware
fi

if test -f /usr/bin/cygwin1.dll || test -f
$EXPANDED_BINDIR/cygwin1.dll ; then

```

```

    operating_system=cygwin
fi

#### Sort out init scripts

if test x$with_init_scripts = x; then
    case x$operating_system in
        xredhat) with_init_scripts=redhat ;;
        xslackware) with_init_scripts=slackware ;;
        xcygwin) with_init_scripts=cygwin ;;
        *) with_init_scripts=none ;;
    esac
fi

if test x$with_init_scripts = xredhat; then
    DBUS_INIT_SCRIPTS_RED_HAT_TRUE=
    DBUS_INIT_SCRIPTS_RED_HAT_FALSE='#'
else
    DBUS_INIT_SCRIPTS_RED_HAT_TRUE='#'
    DBUS_INIT_SCRIPTS_RED_HAT_FALSE=
fi

if test x$with_init_scripts = xslackware; then
    DBUS_INIT_SCRIPTS_SLACKWARE_TRUE=
    DBUS_INIT_SCRIPTS_SLACKWARE_FALSE='#'
else
    DBUS_INIT_SCRIPTS_SLACKWARE_TRUE='#'
    DBUS_INIT_SCRIPTS_SLACKWARE_FALSE=
fi

if test x$with_init_scripts = xcygwin; then
    DBUS_INIT_SCRIPTS_CYGWIN_TRUE=
    DBUS_INIT_SCRIPTS_CYGWIN_FALSE='#'
else
    DBUS_INIT_SCRIPTS_CYGWIN_TRUE='#'
    DBUS_INIT_SCRIPTS_CYGWIN_FALSE=
fi

#### systemd unit files

@%:@ Check whether --with-systemdsystemunitdir was given.
if test "${with_systemdsystemunitdir+set}" = set; then :
    withval=$with_systemdsystemunitdir;
else

    if test -n "$PKG_CONFIG" && \
        { { $as_echo "$as_me:${as_lineno-$LINENO}: \$PKG_CONFIG --exists -
-print-errors \"systemd\""; } >&5
        ($PKG_CONFIG --exists --print-errors "systemd") 2>&5
        ac_status=$?
        $as_echo "$as_me:${as_lineno-$LINENO}: \$? = $ac_status" >&5

```

```

    test $ac_status = 0; }; then
    with_systemdsystemunitdir=${($PKG_CONFIG --
variable=systemdsystemunitdir systemd)
else
    with_systemdsystemunitdir=no
fi

fi

if test "x$with_systemdsystemunitdir" != xno; then
    systemdsystemunitdir=$with_systemdsystemunitdir

fi
    if test -n "$with_systemdsystemunitdir" -a
"x$with_systemdsystemunitdir" != xno ; then
        HAVE_SYSTEMD_TRUE=
        HAVE_SYSTEMD_FALSE='#'
    else
        HAVE_SYSTEMD_TRUE='#'
        HAVE_SYSTEMD_FALSE=
    fi

##### Set up location for system bus socket
if ! test -z "$with_system_socket"; then
    DBUS_SYSTEM_SOCKET=$with_system_socket
else

DBUS_SYSTEM_SOCKET=${EXPANDED_LOCALSTATEDIR}/run/dbus/system_bus_socke
t
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SYSTEM_SOCKET "$DBUS_SYSTEM_SOCKET"
_ACEOF

## system bus only listens on local domain sockets, and never
## on an abstract socket (so only root can create the socket)
DBUS_SYSTEM_BUS_DEFAULT_ADDRESS="unix:path=$DBUS_SYSTEM_SOCKET"

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SYSTEM_BUS_DEFAULT_ADDRESS
"$DBUS_SYSTEM_BUS_DEFAULT_ADDRESS"
_ACEOF

##### Set up the pid file
if ! test -z "$with_system_pid_file"; then

```



```
    DBUS_SYSTEM_PID_FILE=$with_system_pid_file
elif test x$with_init_scripts = xredhat ; then
    DBUS_SYSTEM_PID_FILE=${EXPANDED_LOCALSTATEDIR}/run/messagebus.pid
else
    DBUS_SYSTEM_PID_FILE=${EXPANDED_LOCALSTATEDIR}/run/dbus/pid
fi
```

```
#### Directory to check for console ownership
if ! test -z "$with_console_auth_dir"; then
    DBUS_CONSOLE_AUTH_DIR=$with_console_auth_dir
else
    DBUS_CONSOLE_AUTH_DIR=/var/run/console/
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_CONSOLE_AUTH_DIR "$DBUS_CONSOLE_AUTH_DIR"
_ACEOF
```

```
#### File to check for console ownership
if test x$have_console_owner_file = xyes; then
    if ! test -z "$with_console_owner_file"; then
        DBUS_CONSOLE_OWNER_FILE=$with_console_owner_file
    else
        DBUS_CONSOLE_OWNER_FILE=/dev/console
    fi
else
    DBUS_CONSOLE_OWNER_FILE=
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_CONSOLE_OWNER_FILE "$DBUS_CONSOLE_OWNER_FILE"
_ACEOF
```

```
#### User to start the system bus as
if test -z "$with_dbus_user" ; then
    DBUS_USER=messagebus
else
    DBUS_USER=$with_dbus_user
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_USER "$DBUS_USER"
_ACEOF
```

```
#### Prefix to install into
DBUS_PREFIX=$EXPANDED_PREFIX
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_PREFIX "$DBUS_PREFIX"
_ACEOF
```

```
#### Directory to install data files into
DBUS_DATADIR=$EXPANDED_DATADIR
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DATADIR "$DBUS_DATADIR"
_ACEOF
```

```
#### Directory to install dbus-daemon
if test -z "$with_dbus_daemon_dir" ; then
    DBUS_DAEMONDIR=$EXPANDED_BINDIR
else
    DBUS_DAEMONDIR=$with_dbus_daemon_dir
fi
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_DAEMONDIR "$DBUS_DAEMONDIR"
_ACEOF
```

```
#### Directory to install the other binaries
DBUS_BINDIR=$EXPANDED_BINDIR
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_BINDIR "$DBUS_BINDIR"
_ACEOF
```

```
#### Directory to install the libexec binaries
DBUS_LIBEXECDIR=$EXPANDED_LIBEXECDIR
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_LIBEXECDIR "$DBUS_LIBEXECDIR"
_ACEOF
```

```
#### Tell tests where to find certain stuff in builddir
```

```
DBUS_PWD=`pwd`
# Useful in a cross-compilation environment, where the tests are run
on the host system.
```

```
@%:@ Check whether --with-dbus-test-dir was given.
if test "${with_dbus_test_dir+set}" = set; then :
  withval=$with_dbus_test_dir; DBUS_PWD=$withval
fi
```

```
DBUS_TEST_EXEC="$DBUS_PWD/test"
DBUS_TEST_DATA="$DBUS_PWD/test/data"
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_EXEC "$DBUS_TEST_EXEC"
_ACEOF
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_EXEEXT "$EXEEXT"
_ACEOF
```

```
cat >>confdefs.h <<_ACEOF
@%:@define TEST_BUS_BINARY "$DBUS_PWD/bus/dbus-daemon$EXEEXT"
_ACEOF
```

```
## Export the non-setuid external helper
TEST_LAUNCH_HELPER_BINARY="$DBUS_PWD/bus/dbus-daemon-launch-helper-
test$EXEEXT"
```

```
cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_LAUNCH_HELPER_BINARY "$TEST_LAUNCH_HELPER_BINARY"
_ACEOF
```

```
DEFAULT_SOCKET_DIR=/tmp
```

```
DEFAULT_SOCKET_DIR=`echo $DEFAULT_SOCKET_DIR | sed 's/+/%2B/g'`
```

```
if ! test -z "$with_test_socket_dir" ; then
  TEST_SOCKET_DIR="$with_test_socket_dir"
else
```

```

    TEST_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_TEST_SOCKET_DIR "$TEST_SOCKET_DIR"
_ACEOF

if test "x$dbus_unix" = xyes; then
    TEST_LISTEN="unix:tmpdir=$TEST_SOCKET_DIR"
else
    TEST_LISTEN="tcp:host=localhost"
fi

cat >>confdefs.h <<_ACEOF
@%:@define TEST_LISTEN "$TEST_LISTEN"
_ACEOF

if ! test -z "$with_session_socket_dir" ; then
    DBUS_SESSION_SOCKET_DIR="$with_session_socket_dir"
else
    DBUS_SESSION_SOCKET_DIR=$DEFAULT_SOCKET_DIR
fi

cat >>confdefs.h <<_ACEOF
@%:@define DBUS_SESSION_SOCKET_DIR "$DBUS_SESSION_SOCKET_DIR"
_ACEOF

if test x$dbus_win = xyes; then

DBUS_SESSION_BUS_DEFAULT_ADDRESS="$with_dbus_session_bus_default_address"
elif test x$have_launchd = xyes; then

DBUS_SESSION_BUS_DEFAULT_ADDRESS="launchd:env=DBUS_LAUNCHD_SESSION_BUS_SOCKET"
else

DBUS_SESSION_BUS_DEFAULT_ADDRESS="unix:tmpdir=$DBUS_SESSION_SOCKET_DIR"
"
fi

# darwin needs this to initialize the environment
for ac_header in crt_externs.h
do :
```

```

    ac_fn_c_check_header_mongrel "$LINENO" "crt_extrns.h"
"ac_cv_header_crt_extrns_h" "$ac_includes_default"
if test "x$ac_cv_header_crt_extrns_h" = xyes; then :
    cat >>confdefs.h <<_ACEOF
@%:@define HAVE_CRT_EXTRNS_H 1
    _ACEOF

fi

done

ac_fn_c_check_func "$LINENO" "_NSGetEnviron"
"ac_cv_func__NSGetEnviron"
if test "x$ac_cv_func__NSGetEnviron" = xyes; then :

$as_echo "@%:@define HAVE_NSGETENVIRON 1" >>confdefs.h

fi

@%:@ Check whether --enable-stats was given.
if test "${enable_stats+set}" = set; then :
    enableval=$enable_stats;
else
    enable_stats=no
fi

if test "x$enable_stats" = xyes; then

$as_echo "@%:@define DBUS_ENABLE_STATS 1" >>confdefs.h

fi

ac_config_files="$ac_config_files Doxyfile dbus/versioninfo.rc
dbus/dbus-arch-deps.h bus/system.conf bus/session.conf bus/messagebus
bus/messagebus-config bus/org.freedesktop.dbus-session.plist
bus/rc.messagebus bus/dbus.service bus/dbus.socket Makefile
dbus/Makefile bus/Makefile tools/Makefile test/Makefile test/name-
test/Makefile doc/Makefile doc/dbus-daemon.1 dbus-1.pc dbus-1-
uninstalled.pc test/data/valid-config-files/debug-allow-all.conf
test/data/valid-config-files/debug-allow-all-sha1.conf
test/data/valid-config-files-system/debug-allow-all-pass.conf
test/data/valid-config-files-system/debug-allow-all-fail.conf
test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service

```

```

test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service test/data/invalid-
service-files-system/org.freedesktop.DBus.TestSuiteNoUser.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service"

```

```

cat >confcache <<\_ACEOF
# This file is a shell script that caches the results of configure
# tests run on this system so they can be shared between configure
# scripts and configure runs, see configure's option --config-cache.
# It is not useful on other systems.  If it contains results you don't
# want to keep, you may remove or edit it.
#
# config.status only pays attention to the cache file if you give it
# the --recheck option to rerun configure.
#
# `ac_cv_env_foo' variables (set or unset) will be overridden when
# loading this file, other *unset* `ac_cv_foo' will be assigned the
# following values.

```

```
_ACEOF
```

```

# The following way of writing the cache mishandles newlines in
values,
# but we know of no workaround that is simple, portable, and
efficient.
# So, we kill variables containing newlines.
# Ultrix sh set writes to stderr and can't be redirected directly,
# and sets the high bit in the cache file unless we assign to the
vars.
(
  for ac_var in `(set) 2>&1 | sed -n 's/^\([a-zA-Z_][a-zA-Z0-
9_]*\)=.*/\1/p'`; do
    eval ac_val=\${$ac_var}
    case $ac_val in #(
      *${as_nl}*)
        case $ac_var in #(
          *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache
variable $ac_var contains a newline" >&5

```

```

$as_echo "$as_me: WARNING: cache variable $ac_var contains a newline"
>&2;} ;;
    esac
    case $ac_var in #(
    _ | IFS | as_nl) ;; #(
    BASH_ARGV | BASH_SOURCE) eval $ac_var= ;; #(
    *) { eval $ac_var=; unset $ac_var;} ;;
    esac ;;
    esac
done

(set) 2>&1 |
case $as_nl`(ac_space=' '; set) 2>&1` in #(
*${as_nl}ac_space=\ *)
# `set' does not quote correctly, so add quotes: double-quote
# substitution turns \\ into \, and sed turns \ into \.
sed -n \
"s/'/'\\\\"'/g;

s/^\([_$_as_cr_alnum]*_cv_[_$_as_cr_alnum]*\)=\(.*\)/\1='\'2'/p"
;; #(
*)
# `set' quotes correctly as required by POSIX, so do not add
quotes.
sed -n "/^[_$_as_cr_alnum]*_cv_[_$_as_cr_alnum]*=/p"
;;
esac |
sort
) |
sed '
/^ac_cv_env_/b end
t clear
:clear
s/^\([^=]*\)=\(.*\)[{}].*\)/test "${\1+set}" = set || &/
t end
s/^\([^=]*\)=\(.*\)/\1=${\1=\2}/
:end' >>confcache
if diff "$cache_file" confcache >/dev/null 2>&1; then ;; else
if test -w "$cache_file"; then
if test "x$cache_file" != "x/dev/null"; then
{ $as_echo "$as_me:${as_lineno-$LINENO}: updating cache
$cache_file" >&5
$as_echo "$as_me: updating cache $cache_file" >&6;}
if test ! -f "$cache_file" || test -h "$cache_file"; then
cat confcache >"$cache_file"
else
case $cache_file in #(
*/* | ?:* )
mv -f confcache "$cache_file"$$ &&
mv -f "$cache_file"$$ "$cache_file" ;; #(
*)
mv -f confcache "$cache_file" ;;

```

```

        esac
        fi
    fi
else
    { $as_echo "$as_me:${as_lineno-$LINENO}: not updating unwritable
cache $cache_file" >&5
$as_echo "$as_me: not updating unwritable cache $cache_file" >&6;}
    fi
fi
rm -f confcache

test "x$prefix" = xNONE && prefix=$ac_default_prefix
# Let make expand exec_prefix.
test "x$exec_prefix" = xNONE && exec_prefix='${prefix}'

DEFS=-DHAVE_CONFIG_H

ac_libobjs=
ac_ltlibobjs=
U=
for ac_i in : $LIB@&t@OBS; do test "x$ac_i" = x: && continue
# 1. Remove the extension, and $U if already installed.
ac_script='s/\$U\.\./;/s/\.o$///;s/\.obj$//'
ac_i=`$as_echo "$ac_i" | sed "$ac_script"`
# 2. Prepend LIBOBJDIR.  When used with automake>=1.10 LIBOBJDIR
#    will be set to the directory where LIBOBS objects are built.
as_fn_append ac_libobjs " \${LIBOBJDIR}$ac_i\$U.$ac_objext"
as_fn_append ac_ltlibobjs " \${LIBOBJDIR}$ac_i'\'$U.lo'
done
LIB@&t@OBS=$ac_libobjs

LTLIBOBS=$ac_ltlibobjs

{ $as_echo "$as_me:${as_lineno-$LINENO}: checking that generated files
are newer than configure" >&5
$as_echo_n "checking that generated files are newer than configure...
" >&6; }
    if test -n "$am_sleep_pid"; then
        # Hide warnings about reused PIDs.
        wait $am_sleep_pid 2>/dev/null
    fi
    { $as_echo "$as_me:${as_lineno-$LINENO}: result: done" >&5
$as_echo "done" >&6; }
    if test -n "$EXEEXT"; then
        am__EXEEXT_TRUE=
        am__EXEEXT_FALSE='#'
    else
        am__EXEEXT_TRUE='#'
        am__EXEEXT_FALSE=
    fi

```



```

if test -z "${MAINTAINER_MODE_TRUE}" && test -z
"${MAINTAINER_MODE_FALSE}"; then
  as_fn_error $? "conditional \"MAINTAINER_MODE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${AMDEP_TRUE}" && test -z "${AMDEP_FALSE}"; then
  as_fn_error $? "conditional \"AMDEP\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCC_TRUE}" && test -z
"${am__fastdepCC_FALSE}"; then
  as_fn_error $? "conditional \"am__fastdepCC\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${am__fastdepCXX_TRUE}" && test -z
"${am__fastdepCXX_FALSE}"; then
  as_fn_error $? "conditional \"am__fastdepCXX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WIN_TRUE}" && test -z "${DBUS_WIN_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_WIN\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WINCE_TRUE}" && test -z "${DBUS_WINCE_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_WINCE\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_UNIX_TRUE}" && test -z "${DBUS_UNIX_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_UNIX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_CYGWIN_TRUE}" && test -z "${DBUS_CYGWIN_FALSE}";
then
  as_fn_error $? "conditional \"DBUS_CYGWIN\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUILD_TESTS_TRUE}" && test -z
"${DBUS_BUILD_TESTS_FALSE}"; then
  as_fn_error $? "conditional \"DBUS_BUILD_TESTS\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_EMBEDDED_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_EMBEDDED_TESTS_FALSE}"; then

```

```

    as_fn_error $? "conditional \"DBUS_ENABLE_EMBEDDED_TESTS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_MODULAR_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_MODULAR_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_MODULAR_TESTS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_WITH_GLIB_TRUE}" && test -z
"${DBUS_WITH_GLIB_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_WITH_GLIB\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_INSTALLED_TESTS_TRUE}" && test -z
"${DBUS_ENABLE_INSTALLED_TESTS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_INSTALLED_TESTS\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

if test -z "${DBUS_USE_EXPAT_TRUE}" && test -z
"${DBUS_USE_EXPAT_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_USE_EXPAT\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_USE_LIBXML_TRUE}" && test -z
"${DBUS_USE_LIBXML_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_USE_LIBXML\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_SELINUX_TRUE}" && test -z "${HAVE_SELINUX_FALSE}";
then
    as_fn_error $? "conditional \"HAVE_SELINUX\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUS_ENABLE_INOTIFY_TRUE}" && test -z
"${DBUS_BUS_ENABLE_INOTIFY_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUS_ENABLE_INOTIFY\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi

```

```

if test -z "${DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE}" && test -z
"${DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_LINUX_EPOLL_TRUE}" && test -z
"${HAVE_LINUX_EPOLL_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_LINUX_EPOLL\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_BUS_ENABLE_KQUEUE_TRUE}" && test -z
"${DBUS_BUS_ENABLE_KQUEUE_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_BUS_ENABLE_KQUEUE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_ENABLE_LAUNCHD_TRUE}" && test -z
"${DBUS_ENABLE_LAUNCHD_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_ENABLE_LAUNCHD\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_CONSOLE_OWNER_FILE_TRUE}" && test -z
"${HAVE_CONSOLE_OWNER_FILE_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_CONSOLE_OWNER_FILE\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_LIBAUDIT_TRUE}" && test -z
"${HAVE_LIBAUDIT_FALSE}"; then
    as_fn_error $? "conditional \"HAVE_LIBAUDIT\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_DOXYGEN_DOCS_ENABLED_TRUE}" && test -z
"${DBUS_DOXYGEN_DOCS_ENABLED_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_DOXYGEN_DOCS_ENABLED\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_HAVE_XSLTPROC_TRUE}" && test -z
"${DBUS_HAVE_XSLTPROC_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_HAVE_XSLTPROC\" was never
defined.

```

```
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_XML_DOCS_ENABLED_TRUE}" && test -z
"${DBUS_XML_DOCS_ENABLED_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_XML_DOCS_ENABLED\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_HAVE_MAN2HTML_TRUE}" && test -z
"${DBUS_HAVE_MAN2HTML_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_HAVE_MAN2HTML\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_CAN_UPLOAD_DOCS_TRUE}" && test -z
"${DBUS_CAN_UPLOAD_DOCS_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_CAN_UPLOAD_DOCS\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_RED_HAT_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_RED_HAT_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_RED_HAT\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_SLACKWARE_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_SLACKWARE_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_SLACKWARE\" was
never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${DBUS_INIT_SCRIPTS_CYGWIN_TRUE}" && test -z
"${DBUS_INIT_SCRIPTS_CYGWIN_FALSE}"; then
    as_fn_error $? "conditional \"DBUS_INIT_SCRIPTS_CYGWIN\" was never
defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
if test -z "${HAVE_SYSTEMD_TRUE}" && test -z "${HAVE_SYSTEMD_FALSE}";
then
    as_fn_error $? "conditional \"HAVE_SYSTEMD\" was never defined.
Usually this means the macro was only invoked conditionally."
"$LINENO" 5
fi
```



```

as_echo=$as_echo$as_echo$as_echo$as_echo$as_echo
as_echo=$as_echo$as_echo$as_echo$as_echo$as_echo$as_echo
# Prefer a ksh shell builtin over an external printf program on
Solaris,
# but without wasting forks for bash or zsh.
if test -z "$BASH_VERSION$ZSH_VERSION" \
    && (test "X`print -r -- $as_echo`" = "X$as_echo") 2>/dev/null;
then
    as_echo='print -r --'
    as_echo_n='print -rn --'
elif (test "X`printf %s $as_echo`" = "X$as_echo") 2>/dev/null; then
    as_echo='printf %s\n'
    as_echo_n='printf %s'
else
    if test "X`(/usr/ucb/echo -n -n $as_echo) 2>/dev/null`" = "X-n
$as_echo"; then
        as_echo_body='eval /usr/ucb/echo -n "$1$as_nl"'
        as_echo_n='/usr/ucb/echo -n'
    else
        as_echo_body='eval expr "X$1" : "X\\(.*\\)"'
        as_echo_n_body='eval
        arg=$1;
        case $arg in @%:@(
        *"$as_nl"*)
            expr "X$arg" : "X\\(.*\\)$as_nl";
            arg=`expr "X$arg" : ".*$as_nl\\(.*\\)"`;
            esac;
            expr "X$arg" : "X\\(.*\\)" | tr -d "$as_nl"
        ,
        export as_echo_n_body
        as_echo_n='sh -c $as_echo_n_body as_echo'
    fi
    export as_echo_body
    as_echo='sh -c $as_echo_body as_echo'
fi

# The user is always right.
if test "${PATH_SEPARATOR+set}" != set; then
    PATH_SEPARATOR=:
    (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
        (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
        PATH_SEPARATOR=';'
    }
fi

# IFS
# We need space, tab and new line, in precisely that order. Quoting
is
# there to prevent editors from complaining about space-tab.
# (If _AS_PATH_WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)

```

```

IFS=" " $as_nl"

# Find who we are. Look in the path if we contain no directory
separator.
as_myself=
case $0 in @%:@(
  *[\ \/]* ) as_myself=$0 ;;
  *) as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as_dir in $PATH
do
  IFS=$as_save_IFS
  test -z "$as_dir" && as_dir=.
  test -r "$as_dir/$0" && as_myself=$as_dir/$0 && break
done
IFS=$as_save_IFS

;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as_myself" = x; then
  as_myself=$0
fi
if test ! -f "$as_myself"; then
  $as_echo "$as_myself: error: cannot find myself; rerun with an
absolute file name" >&2
  exit 1
fi

# Unset variables that we do not need and which cause bugs (e.g. in
# pre-3.0 UWIN ksh). But do not cause bugs in bash 2.01; the "|| exit
1"
# suppresses any "Segmentation fault" message there. '(' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\${$as_var+set} = xset \
  && ( (unset $as_var) || exit 1) >/dev/null 2>&1 && unset $as_var ||
:
done
PS1='$ '
PS2='> '
PS4='+ '

# NLS nuisances.
LC_ALL=C
export LC_ALL
LANGUAGE=C
export LANGUAGE

# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH

```

```

@%:@ as_fn_error STATUS ERROR [LINENO LOG_FD]
@%:@ -----
@%:@ Output "`basename @S|@0`: error: ERROR" to stderr. If LINENO and
LOG_FD are
@%:@ provided, also output the error to LOG_FD, referencing LINENO.
Then exit the
@%:@ script with STATUS, using 1 if that was 0.
as_fn_error ()
{
    as_status=$1; test $as_status -eq 0 && as_status=1
    if test "$4"; then
        as_lineno=${as_lineno-"$3"}
as_lineno_stack=as_lineno_stack=$as_lineno_stack
        $as_echo "$as_me:${as_lineno-$LINENO}: error: $2" >&$4
    fi
    $as_echo "$as_me: error: $2" >&2
    as_fn_exit $as_status
} @%:@ as_fn_error

@%:@ as_fn_set_status STATUS
@%:@ -----
@%:@ Set @S|@? to STATUS, without forking.
as_fn_set_status ()
{
    return $1
} @%:@ as_fn_set_status

@%:@ as_fn_exit STATUS
@%:@ -----
@%:@ Exit the shell with STATUS, even in a "trap 0" or "set -e"
context.
as_fn_exit ()
{
    set +e
    as_fn_set_status $1
    exit $1
} @%:@ as_fn_exit

@%:@ as_fn_unset VAR
@%:@ -----
@%:@ Portably unset VAR.
as_fn_unset ()
{
    { eval $1=; unset $1;}
}
as_unset=as_fn_unset
@%:@ as_fn_append VAR VALUE
@%:@ -----
@%:@ Append the text in VALUE to the end of the definition contained
in VAR. Take

```



```

@%:@ advantage of any shell optimizations that allow amortized linear
growth over
@%:@ repeated appends, instead of the typical quadratic growth present
in naive
@%:@ implementations.
if (eval "as_var=1; as_var+=2; test x\$as_var = x12") 2>/dev/null;
then :
    eval 'as_fn_append ()
    {
        eval $1+=\$2
    }'
else
    as_fn_append ()
    {
        eval $1=\$$1\$2
    }
fi # as_fn_append

@%:@ as_fn_arith ARG...
@%:@ -----
@%:@ Perform arithmetic evaluation on the ARGs, and store the result
in the
@%:@ global @S|@as_val. Take advantage of shells that can avoid forks.
The arguments
@%:@ must be portable across @S|@(( )) and expr.
if (eval "test \$(( 1 + 1 )) = 2") 2>/dev/null; then :
    eval 'as_fn_arith ()
    {
        as_val=$(( $* ))
    }'
else
    as_fn_arith ()
    {
        as_val=`expr "$@" || test $? -eq 1`
    }
fi # as_fn_arith

if expr a : '\(a\)' >/dev/null 2>&1 &&
    test "X`expr 00001 : '.*\(...\)`" = X001; then
    as_expr=expr
else
    as_expr=false
fi

if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" =
"X/"; then
    as_basename=basename
else
    as_basename=false
fi

```

```

if (as_dir=`dirname -- /` && test "X$as_dir" = X/) >/dev/null 2>&1;
then
  as_dirname=dirname
else
  as_dirname=false
fi

as_me=`$as_basename -- "$0" ||
$as_expr X/"$0" : '.*\/\([^\/]\{*\}\)/*$' \| \
  X"$0" : 'X\(/\)\$' \| \
  X"$0" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X/"$0" |
  sed '/^\.*\/\([^\/]\{*\}\)\/*$/{
    s//\1/
    q
  }
/^X\/\(\(\(\)\)\)$/{
  s//\1/
  q
}
/^X\/\(\(\)\)\.*/{
  s//\1/
  q
}
s/.*\/./; q'`

# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxyz'
as_cr_LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as_cr_Letters=$as_cr_letters$as_cr_LETTERS
as_cr_digits='0123456789'
as_cr_alnum=$as_cr_Letters$as_cr_digits

ECHO_C= ECHO_N= ECHO_T=
case `echo -n x` in @%:@((((
-n*))
  case `echo 'xy\c'` in
  *c*) ECHO_T=' ';; # ECHO_T is single tab character.
  xy) ECHO_C='\c';;
  *) echo `echo ksh88 bug on AIX 6.1` > /dev/null
     ECHO_T=' ';;
  esac;;
*)
  ECHO_N='-n';;
esac

rm -f conf$$ conf$$exe conf$$file
if test -d conf$$dir; then
  rm -f conf$$dir/conf$$file
else
  rm -f conf$$dir
  mkdir conf$$dir 2>/dev/null

```



```

    }
    /^X\(\\\/\\\/)\ [^/].*/{
        s//\1/
        q
    }
    /^X\(\\\/\\\/)$/{
        s//\1/
        q
    }
    /^X\(\\\/)\.*/{
        s//\1/
        q
    }
    }
    s/.*/./; q'`
    test -d "$sas_dir" && break
done
test -z "$sas_dirs" || eval "mkdir $sas_dirs"
} || test -d "$sas_dir" || as_fn_error $? "cannot create directory
$sas_dir"

```

```

} @%:@ as_fn_mkdir_p
if mkdir -p . 2>/dev/null; then
    as_mkdir_p='mkdir -p "$sas_dir"'
else
    test -d ./-p && rmdir ./-p
    as_mkdir_p=false
fi

```

```

@%:@ as_fn_executable_p FILE
@%:@ -----
@%:@ Test if FILE is an executable regular file.
as_fn_executable_p ()
{
    test -f "$1" && test -x "$1"
} @%:@ as_fn_executable_p
as_test_x='test -x'
as_executable_p=as_fn_executable_p

```

```

# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed
'y%*$sas_cr_letters%P$sas_cr_LETTERS%;s%[^_$$sas_cr_alnum]%%_g'"

```

```

# Sed expression to map a string onto a valid variable name.
as_tr_sh="eval sed 'y%*+%pp%;s%[^_$$sas_cr_alnum]%%_g'"

```

```

exec 6>&1
## ----- ##
## Main body of $CONFIG_STATUS script. ##
## ----- ##

```

```
_ACEOF
test $as_write_fail = 0 && chmod +x $CONFIG_STATUS || ac_write_fail=1
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# Save the log message, to keep $0 and so on meaningful, and to
# report actual input values of CONFIG_FILES etc. instead of their
# values after options handling.
```

```
ac_log="
```

```
This file was extended by dbus $as_me 1.6.8, which was
generated by GNU Autoconf 2.69.  Invocation command line was
```

```
CONFIG_FILES      = $CONFIG_FILES
CONFIG_HEADERS    = $CONFIG_HEADERS
CONFIG_LINKS      = $CONFIG_LINKS
CONFIG_COMMANDS   = $CONFIG_COMMANDS
$ $0 $@
```

```
on `(hostname || uname -n) 2>/dev/null | sed 1q`
```

```
"
```

```
_ACEOF
```

```
case $ac_config_files in *)
```

```
*) set x $ac_config_files; shift; ac_config_files=$*;;
```

```
esac
```

```
case $ac_config_headers in *)
```

```
*) set x $ac_config_headers; shift; ac_config_headers=$*;;
```

```
esac
```

```
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
```

```
# Files that config.status was made for.
```

```
config_files="$ac_config_files"
```

```
config_headers="$ac_config_headers"
```

```
config_commands="$ac_config_commands"
```

```
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
```

```
ac_cs_usage="\
```

```
\`$as_me' instantiates files and other configuration actions
from templates according to the current configuration.  Unless the
files
```

```
and actions are specified as TAGs, all are instantiated by default.
```

```
Usage: $0 [OPTION]... [TAG]...
```

```
  -h, --help          print this help, then exit
  -V, --version       print version number and configuration settings,
then exit
  --config            print configuration, then exit
```

```
-q, --quiet, --silent
                        do not print progress messages
-d, --debug            don't remove temporary files
--recheck              update $as_me by reconfiguring in the same
conditions
--file=FILE[:TEMPLATE]
                        instantiate the configuration file FILE
--header=FILE[:TEMPLATE]
                        instantiate the configuration header FILE
```

Configuration files:
\$config_files

Configuration headers:
\$config_headers

Configuration commands:
\$config_commands

Report bugs to
<https://bugs.freedesktop.org/enter_bug.cgi?product=dbus>."

```
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_cs_config="\`$as_echo "$ac_configure_args" | sed 's/^ //;
s/[\\\"'`\\$]/\\\\\\&/g'\`"
ac_cs_version="\`
dbus config.status 1.6.8
configured by $0, generated by GNU Autoconf 2.69,
  with options  \\\`$ac_cs_config\\\`"
```

Copyright (C) 2012 Free Software Foundation, Inc.
This config.status script is free software; the Free Software
Foundation
gives unlimited permission to copy, distribute and modify it."

```
ac_pwd='$ac_pwd'
srcdir='$srcdir'
INSTALL='$INSTALL'
MKDIR_P='$MKDIR_P'
AWK='$AWK'
test -n "\`$AWK" || AWK=awk
_ACEOF
```

```
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# The default lists apply if the user does not specify any file.
ac_need_defaults=:
while test $# != 0
do
  case $1 in
    --*=?*)
      ac_option=`expr "X$1" : 'X\([^=]*\)='`
```

```

    ac_optarg=`expr "X$1" : 'X[^=]*=\(.*)'`
    ac_shift=:
    ;;
--*=)
    ac_option=`expr "X$1" : 'X\[([^\=]*)='`
    ac_optarg=
    ac_shift=:
    ;;
*)
    ac_option=$1
    ac_optarg=$2
    ac_shift=shift
    ;;
esac

case $ac_option in
# Handling of the options.
-recheck | --recheck | --rehec | --reche | --rech | --rec | --re |
--r)
    ac_cs_recheck=: ;;
--version | --versio | --versi | --vers | --ver | --ve | --v | -V )
    $as_echo "$ac_cs_version"; exit ;;
--config | --confi | --conf | --con | --co | --c )
    $as_echo "$ac_cs_config"; exit ;;
--debug | --debu | --deb | --de | --d | -d )
    debug=: ;;
--file | --fil | --fi | --f )
    $ac_shift
    case $ac_optarg in
*'') ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
'') as_fn_error $? "missing file argument" ;;
esac
as_fn_append CONFIG_FILES " '$ac_optarg'"
ac_need_defaults=false;;
--header | --heade | --head | --hea )
    $ac_shift
    case $ac_optarg in
*'') ac_optarg=`$as_echo "$ac_optarg" | sed "s/'/'\\\\\\\\\\\\\\\\'/g"`
;;
esac
as_fn_append CONFIG_HEADERS " '$ac_optarg'"
ac_need_defaults=false;;
--he | --h)
    # Conflict between --help and --header
    as_fn_error $? "ambiguous option: \`$1'"
Try \`$0 --help' for more information.";;
--help | --hel | -h )
    $as_echo "$ac_cs_usage"; exit ;;
-q | -quiet | --quiet | --quie | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil | --si | --s)
    ac_cs_silent=: ;;

```

```

# This is an error.
-*) as_fn_error $? "unrecognized option: \`${1}'
Try \`${0} --help' for more information." ;;

*) as_fn_append ac_config_targets " ${1}"
   ac_need_defaults=false ;;

esac
shift
done

ac_configure_extra_args=

if $ac_cs_silent; then
  exec 6>/dev/null
  ac_configure_extra_args="$ac_configure_extra_args --silent"
fi

_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
if \${ac_cs_recheck}; then
  set X $$SHELL `${0}' ${ac_configure_args} \${ac_configure_extra_args} --no-
create --no-recursion
  shift
  \${as_echo} "running CONFIG_SHELL=$SHELL \`${1}'" >&6
  CONFIG_SHELL='$SHELL'
  export CONFIG_SHELL
  exec "\${@}"
fi

_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
exec 5>>config.log
{
  echo
  sed 'h;s/./-/g;s/^.../@@%:@@%:@ /;s/...$/ @%:@@%:@/;p;x;p;x' <<_ASBOX
  @%:@@%:@ Running $as_me. @%:@@%:@
  _ASBOX
  $as_echo "$ac_log"
} >&5

_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
#
# INIT-COMMANDS
#
AMDEP_TRUE="$AMDEP_TRUE" ac_aux_dir="$ac_aux_dir"

# The HP-UX ksh and POSIX shell print the target directory to stdout
# if CDPATH is set.

```



```
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH
```

```
sed_quote_subst='$sed_quote_subst'  
double_quote_subst='$double_quote_subst'  
delay_variable_subst='$delay_variable_subst'  
macro_version='`$ECHO "$macro_version" | $SED  
"$delay_single_quote_subst"``'  
macro_revision='`$ECHO "$macro_revision" | $SED  
"$delay_single_quote_subst"``'  
enable_shared='`$ECHO "$enable_shared" | $SED  
"$delay_single_quote_subst"``'  
enable_static='`$ECHO "$enable_static" | $SED  
"$delay_single_quote_subst"``'  
pic_mode='`$ECHO "$pic_mode" | $SED "$delay_single_quote_subst"``'  
enable_fast_install='`$ECHO "$enable_fast_install" | $SED  
"$delay_single_quote_subst"``'  
SHELL='`$ECHO "$SHELL" | $SED "$delay_single_quote_subst"``'  
ECHO='`$ECHO "$ECHO" | $SED "$delay_single_quote_subst"``'  
PATH_SEPARATOR='`$ECHO "$PATH_SEPARATOR" | $SED  
"$delay_single_quote_subst"``'  
host_alias='`$ECHO "$host_alias" | $SED "$delay_single_quote_subst"``'  
host='`$ECHO "$host" | $SED "$delay_single_quote_subst"``'  
host_os='`$ECHO "$host_os" | $SED "$delay_single_quote_subst"``'  
build_alias='`$ECHO "$build_alias" | $SED  
"$delay_single_quote_subst"``'  
build='`$ECHO "$build" | $SED "$delay_single_quote_subst"``'  
build_os='`$ECHO "$build_os" | $SED "$delay_single_quote_subst"``'  
SED='`$ECHO "$SED" | $SED "$delay_single_quote_subst"``'  
Xsed='`$ECHO "$Xsed" | $SED "$delay_single_quote_subst"``'  
GREP='`$ECHO "$GREP" | $SED "$delay_single_quote_subst"``'  
EGREP='`$ECHO "$EGREP" | $SED "$delay_single_quote_subst"``'  
FGREP='`$ECHO "$FGREP" | $SED "$delay_single_quote_subst"``'  
LD='`$ECHO "$LD" | $SED "$delay_single_quote_subst"``'  
NM='`$ECHO "$NM" | $SED "$delay_single_quote_subst"``'  
LN_S='`$ECHO "$LN_S" | $SED "$delay_single_quote_subst"``'  
max_cmd_len='`$ECHO "$max_cmd_len" | $SED  
"$delay_single_quote_subst"``'  
ac_objext='`$ECHO "$ac_objext" | $SED "$delay_single_quote_subst"``'  
exeext='`$ECHO "$exeext" | $SED "$delay_single_quote_subst"``'  
lt_unset='`$ECHO "$lt_unset" | $SED "$delay_single_quote_subst"``'  
lt_SP2NL='`$ECHO "$lt_SP2NL" | $SED "$delay_single_quote_subst"``'  
lt_NL2SP='`$ECHO "$lt_NL2SP" | $SED "$delay_single_quote_subst"``'  
lt_cv_to_host_file_cmd='`$ECHO "$lt_cv_to_host_file_cmd" | $SED  
"$delay_single_quote_subst"``'  
lt_cv_to_tool_file_cmd='`$ECHO "$lt_cv_to_tool_file_cmd" | $SED  
"$delay_single_quote_subst"``'  
reload_flag='`$ECHO "$reload_flag" | $SED  
"$delay_single_quote_subst"``'  
reload_cmds='`$ECHO "$reload_cmds" | $SED  
"$delay_single_quote_subst"``'  
OBJDUMP='`$ECHO "$OBJDUMP" | $SED "$delay_single_quote_subst"``'
```

```
deplibs_check_method='`$ECHO "$deplibs_check_method" | $SED
"$delay_single_quote_subst"`'
file_magic_cmd='`$ECHO "$file_magic_cmd" | $SED
"$delay_single_quote_subst"`'
file_magic_glob='`$ECHO "$file_magic_glob" | $SED
"$delay_single_quote_subst"`'
want_nocaseglob='`$ECHO "$want_nocaseglob" | $SED
"$delay_single_quote_subst"`'
DLLTOOL='`$ECHO "$DLLTOOL" | $SED "$delay_single_quote_subst"`'
sharedlib_from_linklib_cmd='`$ECHO "$sharedlib_from_linklib_cmd" |
$SED "$delay_single_quote_subst"`'
AR='`$ECHO "$AR" | $SED "$delay_single_quote_subst"`'
AR_FLAGS='`$ECHO "$AR_FLAGS" | $SED "$delay_single_quote_subst"`'
archiver_list_spec='`$ECHO "$archiver_list_spec" | $SED
"$delay_single_quote_subst"`'
STRIP='`$ECHO "$STRIP" | $SED "$delay_single_quote_subst"`'
RANLIB='`$ECHO "$RANLIB" | $SED "$delay_single_quote_subst"`'
old_postinstall_cmds='`$ECHO "$old_postinstall_cmds" | $SED
"$delay_single_quote_subst"`'
old_postuninstall_cmds='`$ECHO "$old_postuninstall_cmds" | $SED
"$delay_single_quote_subst"`'
old_archive_cmds='`$ECHO "$old_archive_cmds" | $SED
"$delay_single_quote_subst"`'
lock_old_archive_extraction='`$ECHO "$lock_old_archive_extraction" |
$SED "$delay_single_quote_subst"`'
CC='`$ECHO "$CC" | $SED "$delay_single_quote_subst"`'
CFLAGS='`$ECHO "$CFLAGS" | $SED "$delay_single_quote_subst"`'
compiler='`$ECHO "$compiler" | $SED "$delay_single_quote_subst"`'
GCC='`$ECHO "$GCC" | $SED "$delay_single_quote_subst"`'
lt_cv_sys_global_symbol_pipe='`$ECHO "$lt_cv_sys_global_symbol_pipe" |
$SED "$delay_single_quote_subst"`'
lt_cv_sys_global_symbol_to_cdecl='`$ECHO
"$lt_cv_sys_global_symbol_to_cdecl" | $SED
"$delay_single_quote_subst"`'
lt_cv_sys_global_symbol_to_c_name_address='`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address" | $SED
"$delay_single_quote_subst"`'
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix='`$ECHO
"$lt_cv_sys_global_symbol_to_c_name_address_lib_prefix" | $SED
"$delay_single_quote_subst"`'
nm_file_list_spec='`$ECHO "$nm_file_list_spec" | $SED
"$delay_single_quote_subst"`'
lt_sysroot='`$ECHO "$lt_sysroot" | $SED "$delay_single_quote_subst"`'
objdir='`$ECHO "$objdir" | $SED "$delay_single_quote_subst"`'
MAGIC_CMD='`$ECHO "$MAGIC_CMD" | $SED "$delay_single_quote_subst"`'
lt_prog_compiler_no_builtin_flag='`$ECHO
"$lt_prog_compiler_no_builtin_flag" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_pic='`$ECHO "$lt_prog_compiler_pic" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_wl='`$ECHO "$lt_prog_compiler_wl" | $SED
"$delay_single_quote_subst"`'
```

```
lt_prog_compiler_static='`$ECHO "$lt_prog_compiler_static" | $SED
"$delay_single_quote_subst"``'
lt_cv_prog_compiler_c_o='`$ECHO "$lt_cv_prog_compiler_c_o" | $SED
"$delay_single_quote_subst"``'
need_locks='`$ECHO "$need_locks" | $SED "$delay_single_quote_subst"``'
MANIFEST_TOOL='`$ECHO "$MANIFEST_TOOL" | $SED
"$delay_single_quote_subst"``'
DSYMUTIL='`$ECHO "$DSYMUTIL" | $SED "$delay_single_quote_subst"``'
NMEDIT='`$ECHO "$NMEDIT" | $SED "$delay_single_quote_subst"``'
LIPO='`$ECHO "$LIPO" | $SED "$delay_single_quote_subst"``'
OTOOL='`$ECHO "$OTOOL" | $SED "$delay_single_quote_subst"``'
OTOOL64='`$ECHO "$OTOOL64" | $SED "$delay_single_quote_subst"``'
libext='`$ECHO "$libext" | $SED "$delay_single_quote_subst"``'
shrext_cmds='`$ECHO "$shrext_cmds" | $SED
"$delay_single_quote_subst"``'
extract_expsyms_cmds='`$ECHO "$extract_expsyms_cmds" | $SED
"$delay_single_quote_subst"``'
archive_cmds_need_lc='`$ECHO "$archive_cmds_need_lc" | $SED
"$delay_single_quote_subst"``'
enable_shared_with_static_runtimes='`$ECHO
"$enable_shared_with_static_runtimes" | $SED
"$delay_single_quote_subst"``'
export_dynamic_flag_spec='`$ECHO "$export_dynamic_flag_spec" | $SED
"$delay_single_quote_subst"``'
whole_archive_flag_spec='`$ECHO "$whole_archive_flag_spec" | $SED
"$delay_single_quote_subst"``'
compiler_needs_object='`$ECHO "$compiler_needs_object" | $SED
"$delay_single_quote_subst"``'
old_archive_from_new_cmds='`$ECHO "$old_archive_from_new_cmds" | $SED
"$delay_single_quote_subst"``'
old_archive_from_expsyms_cmds='`$ECHO "$old_archive_from_expsyms_cmds"
| $SED "$delay_single_quote_subst"``'
archive_cmds='`$ECHO "$archive_cmds" | $SED
"$delay_single_quote_subst"``'
archive_expsym_cmds='`$ECHO "$archive_expsym_cmds" | $SED
"$delay_single_quote_subst"``'
module_cmds='`$ECHO "$module_cmds" | $SED
"$delay_single_quote_subst"``'
module_expsym_cmds='`$ECHO "$module_expsym_cmds" | $SED
"$delay_single_quote_subst"``'
with_gnu_ld='`$ECHO "$with_gnu_ld" | $SED
"$delay_single_quote_subst"``'
allow_undefined_flag='`$ECHO "$allow_undefined_flag" | $SED
"$delay_single_quote_subst"``'
no_undefined_flag='`$ECHO "$no_undefined_flag" | $SED
"$delay_single_quote_subst"``'
hardcode_libdir_flag_spec='`$ECHO "$hardcode_libdir_flag_spec" | $SED
"$delay_single_quote_subst"``'
hardcode_libdir_separator='`$ECHO "$hardcode_libdir_separator" | $SED
"$delay_single_quote_subst"``'
hardcode_direct='`$ECHO "$hardcode_direct" | $SED
"$delay_single_quote_subst"``'
```

```
hardcode_direct_absolute='`$ECHO "$hardcode_direct_absolute" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L='`$ECHO "$hardcode_minus_L" | $SED
"$delay_single_quote_subst"`'
hardcode_shlibpath_var='`$ECHO "$hardcode_shlibpath_var" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic='`$ECHO "$hardcode_automatic" | $SED
"$delay_single_quote_subst"`'
inherit_rpath='`$ECHO "$inherit_rpath" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs='`$ECHO "$link_all_deplibs" | $SED
"$delay_single_quote_subst"`'
always_export_symbols='`$ECHO "$always_export_symbols" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds='`$ECHO "$export_symbols_cmds" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms='`$ECHO "$exclude_expsyms" | $SED
"$delay_single_quote_subst"`'
include_expsyms='`$ECHO "$include_expsyms" | $SED
"$delay_single_quote_subst"`'
prelink_cmds='`$ECHO "$prelink_cmds" | $SED
"$delay_single_quote_subst"`'
postlink_cmds='`$ECHO "$postlink_cmds" | $SED
"$delay_single_quote_subst"`'
file_list_spec='`$ECHO "$file_list_spec" | $SED
"$delay_single_quote_subst"`'
variables_saved_for_relink='`$ECHO "$variables_saved_for_relink" |
$SED "$delay_single_quote_subst"`'
need_lib_prefix='`$ECHO "$need_lib_prefix" | $SED
"$delay_single_quote_subst"`'
need_version='`$ECHO "$need_version" | $SED
"$delay_single_quote_subst"`'
version_type='`$ECHO "$version_type" | $SED
"$delay_single_quote_subst"`'
runpath_var='`$ECHO "$runpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_var='`$ECHO "$shlibpath_var" | $SED
"$delay_single_quote_subst"`'
shlibpath_overrides_runpath='`$ECHO "$shlibpath_overrides_runpath" |
$SED "$delay_single_quote_subst"`'
libname_spec='`$ECHO "$libname_spec" | $SED
"$delay_single_quote_subst"`'
library_names_spec='`$ECHO "$library_names_spec" | $SED
"$delay_single_quote_subst"`'
soname_spec='`$ECHO "$soname_spec" | $SED
"$delay_single_quote_subst"`'
install_override_mode='`$ECHO "$install_override_mode" | $SED
"$delay_single_quote_subst"`'
postinstall_cmds='`$ECHO "$postinstall_cmds" | $SED
"$delay_single_quote_subst"`'
postuninstall_cmds='`$ECHO "$postuninstall_cmds" | $SED
"$delay_single_quote_subst"`'
```

```
finish_cmds='`$ECHO "$finish_cmds" | $SED
"$delay_single_quote_subst"``'
finish_eval='`$ECHO "$finish_eval" | $SED
"$delay_single_quote_subst"``'
hardcode_into_libs='`$ECHO "$hardcode_into_libs" | $SED
"$delay_single_quote_subst"``'
sys_lib_search_path_spec='`$ECHO "$sys_lib_search_path_spec" | $SED
"$delay_single_quote_subst"``'
sys_lib_dlsearch_path_spec='`$ECHO "$sys_lib_dlsearch_path_spec" |
$SED "$delay_single_quote_subst"``'
hardcode_action='`$ECHO "$hardcode_action" | $SED
"$delay_single_quote_subst"``'
enable_dlopen='`$ECHO "$enable_dlopen" | $SED
"$delay_single_quote_subst"``'
enable_dlopen_self='`$ECHO "$enable_dlopen_self" | $SED
"$delay_single_quote_subst"``'
enable_dlopen_self_static='`$ECHO "$enable_dlopen_self_static" | $SED
"$delay_single_quote_subst"``'
old_strip_lib='`$ECHO "$old_strip_lib" | $SED
"$delay_single_quote_subst"``'
strip_lib='`$ECHO "$strip_lib" | $SED "$delay_single_quote_subst"``'
compiler_lib_search_dirs='`$ECHO "$compiler_lib_search_dirs" | $SED
"$delay_single_quote_subst"``'
predep_objects='`$ECHO "$predep_objects" | $SED
"$delay_single_quote_subst"``'
postdep_objects='`$ECHO "$postdep_objects" | $SED
"$delay_single_quote_subst"``'
predeps='`$ECHO "$predeps" | $SED "$delay_single_quote_subst"``'
postdeps='`$ECHO "$postdeps" | $SED "$delay_single_quote_subst"``'
compiler_lib_search_path='`$ECHO "$compiler_lib_search_path" | $SED
"$delay_single_quote_subst"``'
LD_CXX='`$ECHO "$LD_CXX" | $SED "$delay_single_quote_subst"``'
LD_RC='`$ECHO "$LD_RC" | $SED "$delay_single_quote_subst"``'
reload_flag_CXX='`$ECHO "$reload_flag_CXX" | $SED
"$delay_single_quote_subst"``'
reload_flag_RC='`$ECHO "$reload_flag_RC" | $SED
"$delay_single_quote_subst"``'
reload_cmds_CXX='`$ECHO "$reload_cmds_CXX" | $SED
"$delay_single_quote_subst"``'
reload_cmds_RC='`$ECHO "$reload_cmds_RC" | $SED
"$delay_single_quote_subst"``'
old_archive_cmds_CXX='`$ECHO "$old_archive_cmds_CXX" | $SED
"$delay_single_quote_subst"``'
old_archive_cmds_RC='`$ECHO "$old_archive_cmds_RC" | $SED
"$delay_single_quote_subst"``'
compiler_CXX='`$ECHO "$compiler_CXX" | $SED
"$delay_single_quote_subst"``'
compiler_RC='`$ECHO "$compiler_RC" | $SED
"$delay_single_quote_subst"``'
GCC_CXX='`$ECHO "$GCC_CXX" | $SED "$delay_single_quote_subst"``'
GCC_RC='`$ECHO "$GCC_RC" | $SED "$delay_single_quote_subst"``'
```

```
lt_prog_compiler_no_builtin_flag_CXX='`$ECHO
"$lt_prog_compiler_no_builtin_flag_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_no_builtin_flag_RC='`$ECHO
"$lt_prog_compiler_no_builtin_flag_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_pic_CXX='`$ECHO "$lt_prog_compiler_pic_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_pic_RC='`$ECHO "$lt_prog_compiler_pic_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_wl_CXX='`$ECHO "$lt_prog_compiler_wl_CXX" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_wl_RC='`$ECHO "$lt_prog_compiler_wl_RC" | $SED
"$delay_single_quote_subst"`'
lt_prog_compiler_static_CXX='`$ECHO "$lt_prog_compiler_static_CXX" |
$SED "$delay_single_quote_subst"`'
lt_prog_compiler_static_RC='`$ECHO "$lt_prog_compiler_static_RC" |
$SED "$delay_single_quote_subst"`'
lt_cv_prog_compiler_c_o_CXX='`$ECHO "$lt_cv_prog_compiler_c_o_CXX" |
$SED "$delay_single_quote_subst"`'
lt_cv_prog_compiler_c_o_RC='`$ECHO "$lt_cv_prog_compiler_c_o_RC" |
$SED "$delay_single_quote_subst"`'
archive_cmds_need_lc_CXX='`$ECHO "$archive_cmds_need_lc_CXX" | $SED
"$delay_single_quote_subst"`'
archive_cmds_need_lc_RC='`$ECHO "$archive_cmds_need_lc_RC" | $SED
"$delay_single_quote_subst"`'
enable_shared_with_static_runtimes_CXX='`$ECHO
"$enable_shared_with_static_runtimes_CXX" | $SED
"$delay_single_quote_subst"`'
enable_shared_with_static_runtimes_RC='`$ECHO
"$enable_shared_with_static_runtimes_RC" | $SED
"$delay_single_quote_subst"`'
export_dynamic_flag_spec_CXX='`$ECHO "$export_dynamic_flag_spec_CXX" |
$SED "$delay_single_quote_subst"`'
export_dynamic_flag_spec_RC='`$ECHO "$export_dynamic_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
whole_archive_flag_spec_CXX='`$ECHO "$whole_archive_flag_spec_CXX" |
$SED "$delay_single_quote_subst"`'
whole_archive_flag_spec_RC='`$ECHO "$whole_archive_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
compiler_needs_object_CXX='`$ECHO "$compiler_needs_object_CXX" | $SED
"$delay_single_quote_subst"`'
compiler_needs_object_RC='`$ECHO "$compiler_needs_object_RC" | $SED
"$delay_single_quote_subst"`'
old_archive_from_new_cmds_CXX='`$ECHO "$old_archive_from_new_cmds_CXX"
| $SED "$delay_single_quote_subst"`'
old_archive_from_new_cmds_RC='`$ECHO "$old_archive_from_new_cmds_RC" |
$SED "$delay_single_quote_subst"`'
old_archive_from_expsyms_cmds_CXX='`$ECHO
"$old_archive_from_expsyms_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
```

```
old_archive_from_expsyms_cmds_RC='`$ECHO
"$old_archive_from_expsyms_cmds_RC" | $SED
"$delay_single_quote_subst"`'
archive_cmds_CXX='`$ECHO "$archive_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
archive_cmds_RC='`$ECHO "$archive_cmds_RC" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds_CXX='`$ECHO "$archive_expsym_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
archive_expsym_cmds_RC='`$ECHO "$archive_expsym_cmds_RC" | $SED
"$delay_single_quote_subst"`'
module_cmds_CXX='`$ECHO "$module_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
module_cmds_RC='`$ECHO "$module_cmds_RC" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds_CXX='`$ECHO "$module_expsym_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
module_expsym_cmds_RC='`$ECHO "$module_expsym_cmds_RC" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld_CXX='`$ECHO "$with_gnu_ld_CXX" | $SED
"$delay_single_quote_subst"`'
with_gnu_ld_RC='`$ECHO "$with_gnu_ld_RC" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag_CXX='`$ECHO "$allow_undefined_flag_CXX" | $SED
"$delay_single_quote_subst"`'
allow_undefined_flag_RC='`$ECHO "$allow_undefined_flag_RC" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag_CXX='`$ECHO "$no_undefined_flag_CXX" | $SED
"$delay_single_quote_subst"`'
no_undefined_flag_RC='`$ECHO "$no_undefined_flag_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_libdir_flag_spec_CXX='`$ECHO "$hardcode_libdir_flag_spec_CXX"
| $SED "$delay_single_quote_subst"`'
hardcode_libdir_flag_spec_RC='`$ECHO "$hardcode_libdir_flag_spec_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_libdir_separator_CXX='`$ECHO "$hardcode_libdir_separator_CXX"
| $SED "$delay_single_quote_subst"`'
hardcode_libdir_separator_RC='`$ECHO "$hardcode_libdir_separator_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_direct_CXX='`$ECHO "$hardcode_direct_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_RC='`$ECHO "$hardcode_direct_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_direct_absolute_CXX='`$ECHO "$hardcode_direct_absolute_CXX" |
$SED "$delay_single_quote_subst"`'
hardcode_direct_absolute_RC='`$ECHO "$hardcode_direct_absolute_RC" |
$SED "$delay_single_quote_subst"`'
hardcode_minus_L_CXX='`$ECHO "$hardcode_minus_L_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_minus_L_RC='`$ECHO "$hardcode_minus_L_RC" | $SED
"$delay_single_quote_subst"`'
```

```
hardcode_shlibpath_var_CXX='`$ECHO "$hardcode_shlibpath_var_CXX" |
$SED "$delay_single_quote_subst"`'
hardcode_shlibpath_var_RC='`$ECHO "$hardcode_shlibpath_var_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic_CXX='`$ECHO "$hardcode_automatic_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_automatic_RC='`$ECHO "$hardcode_automatic_RC" | $SED
"$delay_single_quote_subst"`'
inherit_rpath_CXX='`$ECHO "$inherit_rpath_CXX" | $SED
"$delay_single_quote_subst"`'
inherit_rpath_RC='`$ECHO "$inherit_rpath_RC" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs_CXX='`$ECHO "$link_all_deplibs_CXX" | $SED
"$delay_single_quote_subst"`'
link_all_deplibs_RC='`$ECHO "$link_all_deplibs_RC" | $SED
"$delay_single_quote_subst"`'
always_export_symbols_CXX='`$ECHO "$always_export_symbols_CXX" | $SED
"$delay_single_quote_subst"`'
always_export_symbols_RC='`$ECHO "$always_export_symbols_RC" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds_CXX='`$ECHO "$export_symbols_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
export_symbols_cmds_RC='`$ECHO "$export_symbols_cmds_RC" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms_CXX='`$ECHO "$exclude_expsyms_CXX" | $SED
"$delay_single_quote_subst"`'
exclude_expsyms_RC='`$ECHO "$exclude_expsyms_RC" | $SED
"$delay_single_quote_subst"`'
include_expsyms_CXX='`$ECHO "$include_expsyms_CXX" | $SED
"$delay_single_quote_subst"`'
include_expsyms_RC='`$ECHO "$include_expsyms_RC" | $SED
"$delay_single_quote_subst"`'
prelink_cmds_CXX='`$ECHO "$prelink_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
prelink_cmds_RC='`$ECHO "$prelink_cmds_RC" | $SED
"$delay_single_quote_subst"`'
postlink_cmds_CXX='`$ECHO "$postlink_cmds_CXX" | $SED
"$delay_single_quote_subst"`'
postlink_cmds_RC='`$ECHO "$postlink_cmds_RC" | $SED
"$delay_single_quote_subst"`'
file_list_spec_CXX='`$ECHO "$file_list_spec_CXX" | $SED
"$delay_single_quote_subst"`'
file_list_spec_RC='`$ECHO "$file_list_spec_RC" | $SED
"$delay_single_quote_subst"`'
hardcode_action_CXX='`$ECHO "$hardcode_action_CXX" | $SED
"$delay_single_quote_subst"`'
hardcode_action_RC='`$ECHO "$hardcode_action_RC" | $SED
"$delay_single_quote_subst"`'
compiler_lib_search_dirs_CXX='`$ECHO "$compiler_lib_search_dirs_CXX" |
$SED "$delay_single_quote_subst"`'
compiler_lib_search_dirs_RC='`$ECHO "$compiler_lib_search_dirs_RC" |
$SED "$delay_single_quote_subst"`'
```



```

predep_objects_CXX='`$ECHO "$predep_objects_CXX" | $SED
"$delay_single_quote_subst"`'
predep_objects_RC='`$ECHO "$predep_objects_RC" | $SED
"$delay_single_quote_subst"`'
postdep_objects_CXX='`$ECHO "$postdep_objects_CXX" | $SED
"$delay_single_quote_subst"`'
postdep_objects_RC='`$ECHO "$postdep_objects_RC" | $SED
"$delay_single_quote_subst"`'
predeps_CXX='`$ECHO "$predeps_CXX" | $SED
"$delay_single_quote_subst"`'
predeps_RC='`$ECHO "$predeps_RC" | $SED "$delay_single_quote_subst"`'
postdeps_CXX='`$ECHO "$postdeps_CXX" | $SED
"$delay_single_quote_subst"`'
postdeps_RC='`$ECHO "$postdeps_RC" | $SED
"$delay_single_quote_subst"`'
compiler_lib_search_path_CXX='`$ECHO "$compiler_lib_search_path_CXX" |
$SED "$delay_single_quote_subst"`'
compiler_lib_search_path_RC='`$ECHO "$compiler_lib_search_path_RC" |
$SED "$delay_single_quote_subst"`'

```

```

LTCC='$LTCC'
LTCFLAGS='$LTCFLAGS'
compiler='$compiler_DEFAULT'

```

A function that is used when there is no print builtin or printf.

```

func_fallback_echo ()
{
    eval 'cat << _LTECHO_EOF
\${1}
_LTECHO_EOF'
}

```

```

# Quote eveled strings.
for var in SHELL \
ECHO \
PATH_SEPARATOR \
SED \
GREP \
EGREP \
FGREP \
LD \
NM \
LN_S \
lt_SP2NL \
lt_NL2SP \
reload_flag \
OBJDUMP \
deplibs_check_method \
file_magic_cmd \
file_magic_glob \
want_nocaseglob \
DLLTOOL \

```

sharedlib_from_linklib_cmd \
AR \
AR_FLAGS \
archiver_list_spec \
STRIP \
RANLIB \
CC \
CFLAGS \
compiler \
lt_cv_sys_global_symbol_pipe \
lt_cv_sys_global_symbol_to_cdecl \
lt_cv_sys_global_symbol_to_c_name_address \
lt_cv_sys_global_symbol_to_c_name_address_lib_prefix \
nm_file_list_spec \
lt_prog_compiler_no_builtin_flag \
lt_prog_compiler_pic \
lt_prog_compiler_wl \
lt_prog_compiler_static \
lt_cv_prog_compiler_c_o \
need_locks \
MANIFEST_TOOL \
DSYMUTIL \
NMEDIT \
LIPO \
OTOOL \
OTOOL64 \
shrext_cmds \
export_dynamic_flag_spec \
whole_archive_flag_spec \
compiler_needs_object \
with_gnu_ld \
allow_undefined_flag \
no_undefined_flag \
hardcode_libdir_flag_spec \
hardcode_libdir_separator \
exclude_expsyms \
include_expsyms \
file_list_spec \
variables_saved_for_relink \
libname_spec \
library_names_spec \
soname_spec \
install_override_mode \
finish_eval \
old_striplib \
striplib \
compiler_lib_search_dirs \
predep_objects \
postdep_objects \
predeps \
postdeps \
compiler_lib_search_path \

```

LD_CXX \
LD_RC \
reload_flag_CXX \
reload_flag_RC \
compiler_CXX \
compiler_RC \
lt_prog_compiler_no_builtin_flag_CXX \
lt_prog_compiler_no_builtin_flag_RC \
lt_prog_compiler_pic_CXX \
lt_prog_compiler_pic_RC \
lt_prog_compiler_wl_CXX \
lt_prog_compiler_wl_RC \
lt_prog_compiler_static_CXX \
lt_prog_compiler_static_RC \
lt_cv_prog_compiler_c_o_CXX \
lt_cv_prog_compiler_c_o_RC \
export_dynamic_flag_spec_CXX \
export_dynamic_flag_spec_RC \
whole_archive_flag_spec_CXX \
whole_archive_flag_spec_RC \
compiler_needs_object_CXX \
compiler_needs_object_RC \
with_gnu_ld_CXX \
with_gnu_ld_RC \
allow_undefined_flag_CXX \
allow_undefined_flag_RC \
no_undefined_flag_CXX \
no_undefined_flag_RC \
hardcode_libdir_flag_spec_CXX \
hardcode_libdir_flag_spec_RC \
hardcode_libdir_separator_CXX \
hardcode_libdir_separator_RC \
exclude_expsyms_CXX \
exclude_expsyms_RC \
include_expsyms_CXX \
include_expsyms_RC \
file_list_spec_CXX \
file_list_spec_RC \
compiler_lib_search_dirs_CXX \
compiler_lib_search_dirs_RC \
predep_objects_CXX \
predep_objects_RC \
postdep_objects_CXX \
postdep_objects_RC \
predeps_CXX \
predeps_RC \
postdeps_CXX \
postdeps_RC \
compiler_lib_search_path_CXX \
compiler_lib_search_path_RC; do
    case `eval \\\\\\\$ECHO \\\\\\\"\\\\\\\\\\$\\$var"\\\\\\\\\\"` in
        *[\\\\\\\\\\\`\\\\\\"\\\\\\\\\\$]*)

```

```

eval "lt \${var}=\\" || \"\${var}\" | \"\${var}\"
\" \\$sed_quote_subst\" \\$SED
;;
*)
eval "lt \${var}=\\" || \"\${var}\"
;;
esac
done

```

```

# Double-quote double-eval'd strings.

```

```

for var in reload_cmds \
old_postinstall_cmds \
old_postuninstall_cmds \
old_archive_cmds \
extract_expsyms_cmds \
old_archive_from_new_cmds \
old_archive_from_expsyms_cmds \
archive_cmds \
archive_expsym_cmds \
module_cmds \
module_expsym_cmds \
export_symbols_cmds \
prelink_cmds \
postlink_cmds \
postinstall_cmds \
postuninstall_cmds \
finish_cmds \
sys_lib_search_path_spec \
sys_lib_dlsearch_path_spec \
reload_cmds_CXX \
reload_cmds_RC \
old_archive_cmds_CXX \
old_archive_cmds_RC \
old_archive_from_new_cmds_CXX \
old_archive_from_new_cmds_RC \
old_archive_from_expsyms_cmds_CXX \
old_archive_from_expsyms_cmds_RC \
archive_cmds_CXX \
archive_cmds_RC \
archive_expsym_cmds_CXX \
archive_expsym_cmds_RC \
module_cmds_CXX \
module_cmds_RC \
module_expsym_cmds_CXX \
module_expsym_cmds_RC \
export_symbols_cmds_CXX \
export_symbols_cmds_RC \
prelink_cmds_CXX \
prelink_cmds_RC \
postlink_cmds_CXX \
postlink_cmds_RC; do
case `eval \"\${var}\" \\$ECHO \"\${var}\"` in

```

```

    *[\$\`\'\"\\$]*)
        eval "lt_\$var=\\\$var\\ | \\\$SED -e
\\\$double_quote_subst\\" -e \\\$sed_quote_subst\\" -e
\\\$delay_variable_subst\\\$var\\\$var\\"
        ;;
    *)
        eval "lt_\$var=\\\$var\\\$var\\"
        ;;
    esac
done

ac_aux_dir='\$ac_aux_dir'
xsi_shell='\$xsi_shell'
lt_shell_append='\$lt_shell_append'

# See if we are running on zsh, and set the options which allow our
# commands through without removal of \ escapes INIT.
if test -n "\${ZSH_VERSION+set}" ; then
    setopt NO_GLOB_SUBST
fi

PACKAGE='\$PACKAGE'
VERSION='\$VERSION'
TIMESTAMP='\$TIMESTAMP'
RM='\$RM'
ofile='\$ofile'

_ACEOF

cat >>\$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1

# Handling of arguments.
for ac_config_target in \$ac_config_targets
do
    case \$ac_config_target in
        "config.h") CONFIG_HEADERS="\$CONFIG_HEADERS config.h" ;;
        "depfiles") CONFIG_COMMANDS="\$CONFIG_COMMANDS depfiles" ;;
        "libtool") CONFIG_COMMANDS="\$CONFIG_COMMANDS libtool" ;;
        "Doxyfile") CONFIG_FILES="\$CONFIG_FILES Doxyfile" ;;
        "dbus/versioninfo.rc") CONFIG_FILES="\$CONFIG_FILES
dbus/versioninfo.rc" ;;
        "dbus/dbus-arch-deps.h") CONFIG_FILES="\$CONFIG_FILES dbus/dbus-
arch-deps.h" ;;
        "bus/system.conf") CONFIG_FILES="\$CONFIG_FILES bus/system.conf" ;;
    esac
done

```

```

    "bus/session.conf") CONFIG_FILES="$CONFIG_FILES bus/session.conf"
;;
    "bus/messagebus") CONFIG_FILES="$CONFIG_FILES bus/messagebus" ;;
    "bus/messagebus-config") CONFIG_FILES="$CONFIG_FILES
bus/messagebus-config" ;;
    "bus/org.freedesktop.dbus-session.plist")
CONFIG_FILES="$CONFIG_FILES bus/org.freedesktop.dbus-session.plist" ;;
    "bus/rc.messagebus") CONFIG_FILES="$CONFIG_FILES
bus/rc.messagebus" ;;
    "bus/dbus.service") CONFIG_FILES="$CONFIG_FILES bus/dbus.service"
;;
    "bus/dbus.socket") CONFIG_FILES="$CONFIG_FILES bus/dbus.socket" ;;
    "Makefile") CONFIG_FILES="$CONFIG_FILES Makefile" ;;
    "dbus/Makefile") CONFIG_FILES="$CONFIG_FILES dbus/Makefile" ;;
    "bus/Makefile") CONFIG_FILES="$CONFIG_FILES bus/Makefile" ;;
    "tools/Makefile") CONFIG_FILES="$CONFIG_FILES tools/Makefile" ;;
    "test/Makefile") CONFIG_FILES="$CONFIG_FILES test/Makefile" ;;
    "test/name-test/Makefile") CONFIG_FILES="$CONFIG_FILES test/name-
test/Makefile" ;;
    "doc/Makefile") CONFIG_FILES="$CONFIG_FILES doc/Makefile" ;;
    "doc/dbus-daemon.1") CONFIG_FILES="$CONFIG_FILES doc/dbus-
daemon.1" ;;
    "dbus-1.pc") CONFIG_FILES="$CONFIG_FILES dbus-1.pc" ;;
    "dbus-1-uninstalled.pc") CONFIG_FILES="$CONFIG_FILES dbus-1-
uninstalled.pc" ;;
    "test/data/valid-config-files/debug-allow-all.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files/debug-allow-
all.conf" ;;
    "test/data/valid-config-files/debug-allow-all-sha1.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files/debug-allow-
all-sha1.conf" ;;
    "test/data/valid-config-files-system/debug-allow-all-pass.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files-system/debug-
allow-all-pass.conf" ;;
    "test/data/valid-config-files-system/debug-allow-all-fail.conf")
CONFIG_FILES="$CONFIG_FILES test/data/valid-config-files-system/debug-
allow-all-fail.conf" ;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service" ;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service" ;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service" ;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service")

```

```

CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service" ;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service"
;;
    "test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service" ;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service"
;;
    "test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service")
CONFIG_FILES="$CONFIG_FILES test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service" ;;
    "test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service")
CONFIG_FILES="$CONFIG_FILES test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service" ;;

    *) as_fn_error $? "invalid argument: \`${ac_config_target}'" "$LINENO"
5;;
    esac
done

```

```

# If the user did not use the arguments to specify the items to
# instantiate,
# then the envvar interface is used. Set only those that are not.
# We use the long form for the default assignment because of an
# extremely

```

```

# bizarre bug on SunOS 4.1.3.
if $ac_need_defaults; then
  test "${CONFIG_FILES+set}" = set || CONFIG_FILES=$config_files
  test "${CONFIG_HEADERS+set}" = set || CONFIG_HEADERS=$config_headers
  test "${CONFIG_COMMANDS+set}" = set ||
CONFIG_COMMANDS=$config_commands
fi

# Have a temporary directory for convenience.  Make it in the build
tree
# simply because there is no reason against having it here, and in
addition,
# creating and moving files from /tmp can sometimes cause problems.
# Hook for its removal unless debugging.
# Note that there is a small window in which the directory will not be
cleaned:
# after its creation but before its name has been assigned to `$tmp'.
$debug ||
{
  tmp= ac_tmp=
  trap 'exit_status=$?'
  : "${ac_tmp:=$tmp}"
  { test ! -d "$ac_tmp" || rm -fr "$ac_tmp"; } && exit $exit_status
' 0
  trap 'as_fn_exit 1' 1 2 13 15
}
# Create a (secure) tmp directory for tmp files.

{
  tmp=`(umask 077 && mktemp -d "./confXXXXXX") 2>/dev/null` &&
  test -d "$tmp"
} ||
{
  tmp=./conf$$-$RANDOM
  (umask 077 && mkdir "$tmp")
} || as_fn_error $? "cannot create a temporary directory in ."
"$LINENO" 5
ac_tmp=$tmp

# Set up the scripts for CONFIG_FILES section.
# No need to generate them if there are no CONFIG_FILES.
# This happens for instance with `./config.status config.h'.
if test -n "$CONFIG_FILES"; then

ac_cr=`echo X | tr X '\015'`
# On cygwin, bash can eat \r inside `` if the user requested igncr.
# But we know of no other shell where ac_cr would be empty at this
# point, so we can use a bashism as a fallback.
if test "x$ac_cr" = x; then
  eval ac_cr=\$\`\\r\`
fi

```



```

ac_cs_awk_cr=`$AWK 'BEGIN { print "a\r\n" }' </dev/null 2>/dev/null`
if test "$ac_cs_awk_cr" = "a${ac_cr}b"; then
    ac_cs_awk_cr='\r\n'
else
    ac_cs_awk_cr=$ac_cr
fi

echo 'BEGIN {' >"$ac_tmp/subs1.awk" &&
_ACEOF

{
    echo "cat >conf$$$subs.awk <<_ACEOF" &&
    echo "$ac_subst_vars" | sed 's/./&!\$&$ac_delim/' &&
    echo "_ACEOF"
} >conf$$$subs.sh ||
    as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
ac_delim_num=`echo "$ac_subst_vars" | grep -c '^`
ac_delim='%!_!# '
for ac_last_try in false false false false false ;; do
    . ./conf$$$subs.sh ||
        as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5

    ac_delim_n=`sed -n "s/.*$ac_delim\$/X/p" conf$$$subs.awk | grep -c X`
    if test $ac_delim_n = $ac_delim_num; then
        break
    elif $ac_last_try; then
        as_fn_error $? "could not make $CONFIG_STATUS" "$LINENO" 5
    else
        ac_delim="$ac_delim!$ac_delim_$ac_delim!! "
    fi
done
rm -f conf$$$subs.sh

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
cat >>"$ac_tmp/subs1.awk" <<\_ACAWK &&
_ACEOF
sed -n '
h
s/^\(S["/; s/!.*"/]=/
p
g
s/^[^!]*!//
:repl
t repl
s/'"$ac_delim"'$//
t delim
:nl
h
s/\(.\{148\}\)\..*/\1/
t more1
s/["\]\|\&/g; s/^\(\/; s/\$\\n"\\

```

```

p
n
b repl
:more1
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/.\{148\}//
t nl
:delim
h
s/\(.\{148\}\)\..*/\1/
t more2
s/["\\]/\\&/g; s/^"/; s/$"/
p
b
:more2
s/["\\]/\\&/g; s/^"/; s/$/"\\//
p
g
s/.\{148\}//
t delim
' <conf$$subs.awk | sed '
/^[^"]*/{
    N
    s/\n//
}
' >>$CONFIG_STATUS || ac_write_fail=1
rm -f conf$$subs.awk
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
_ACAWK
cat >>"$ac_tmp/subs1.awk" <<_ACAWK &&
    for (key in S) S_is_set[key] = 1
    FS = " "
}
{
    line = $ 0
    nfields = split(line, field, "@")
    substed = 0
    len = length(field[1])
    for (i = 2; i < nfields; i++) {
        key = field[i]
        keylen = length(key)
        if (S_is_set[key]) {
            value = S[key]
            line = substr(line, 1, len) "" value "" substr(line, len +
keylen + 3)
            len += length(value) + length(field[++i])
            substed = 1
        } else
            len += 1 + keylen
    }
}

```

```

    }

    print line
}

_ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
if sed "s/$ac_cr//" < /dev/null > /dev/null 2>&1; then
    sed "s/$ac_cr\\$//; s/$ac_cr/$ac_cs_awk_cr/g"
else
    cat
fi < "$ac_tmp/subs1.awk" > "$ac_tmp/subs.awk" \
|| as_fn_error $? "could not setup config files machinery" "$LINENO"
5
_ACEOF

# VPATH may cause trouble with some makes, so we remove sole
$(srcdir),
# ${srcdir} and @srcdir@ entries from VPATH if srcdir is ".", strip
leading and
# trailing colons and then remove the whole line if VPATH becomes
empty
# (actually we leave an empty line to preserve line numbers).
if test "x$srcdir" = x.; then
    ac_vpsub='/^[ ]*VPATH[ ]*=[ ]*{
h
s///
s/~/:/
s/[ ]*$:/
s/:\$(srcdir)::/g
s/:\${srcdir}::/g
s/:\@srcdir@:~/g
s/^\:*//
s/:\:*$//
x
s/\(=[ ]*\).*\/\1/
G
s/\\n//
s/^[^=]*=[ ]*$//
}'
fi

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
fi # test -n "$CONFIG_FILES"

# Set up the scripts for CONFIG_HEADERS section.
# No need to generate them if there are no CONFIG_HEADERS.
# This happens for instance with `./config.status Makefile'.
if test -n "$CONFIG_HEADERS"; then
cat >"$ac_tmp/defines.awk" <<\_ACAWK ||
BEGIN {

```

```

_ACEOF

# Transform confdefs.h into an awk script `defines.awk', embedded as
# here-document in config.status, that substitutes the proper values
into
# config.h.in to produce config.h.

# Create a delimiter string that does not exist in confdefs.h, to ease
# handling of long lines.
ac_delim='%!_!# '
for ac_last_try in false false ;; do
  ac_tt=`sed -n "/$ac_delim/p" confdefs.h`
  if test -z "$ac_tt"; then
    break
  elif $ac_last_try; then
    as_fn_error $? "could not make $CONFIG_HEADERS" "$LINENO" 5
  else
    ac_delim="$ac_delim!$ac_delim _$ac_delim!! "
  fi
done

# For the awk script, D is an array of macro values keyed by name,
# likewise P contains macro parameters if any. Preserve backslash
# newline sequences.

ac_word_re=[_$as_cr_Letters][_$as_cr_alnum]*
sed -n \
s/.\{148\}/&'"$ac_delim"/g \
t rset \
:rset \
s/^[ ]*#[ ]*define[ ]*[ ]*/ / \
t def \
d \
:def \
s/\\$// \
t bsnl \
s/["\\]/\\&/g \
s/^\ ("$ac_word_re"\)\ ([[^\]]*)\ [ ]*\ (.*)/P["\1"]="\2"\ \
D["\1"]=" \3"/p \
s/^\ ("$ac_word_re"\)[ ]*\ (.*)/D["\1"]=" \2"/p \
d \
:bsnl \
s/["\\]/\\&/g \
s/^\ ("$ac_word_re"\)\ ([[^\]]*)\ [ ]*\ (.*)/P["\1"]="\2"\ \
D["\1"]=" \3\\n"/p \
t cont \
s/^\ ("$ac_word_re"\)[ ]*\ (.*)/D["\1"]=" \2\\n"/p \
t cont \
d \
:cont \
n \
s/.\{148\}/&'"$ac_delim"/g

```

```

t clear
:clear
s/\\$//
t bsnlc
s/["\\]/\\&/g; s/^"/; s/$"/p
d
:bsnlc
s/["\\]/\\&/g; s/^"/; s/$/\\\\\\n"\\//p
b cont
' <confdefs.h | sed '
s/"$ac_delim"/"\\
"/g' >>$CONFIG_STATUS || ac_write_fail=1

cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
  for (key in D) D_is_set[key] = 1
  FS = " "
}
/^[\t ]*#[\t ]*(define|undef)[\t ]+$ac_word_re([\t ]|\$)/ {
  line = \$0
  split(line, arg, " ")
  if (arg[1] == "#") {
    defundef = arg[2]
    mac1 = arg[3]
  } else {
    defundef = substr(arg[1], 2)
    mac1 = arg[2]
  }
  split(mac1, mac2, "(") #)
  macro = mac2[1]
  prefix = substr(line, 1, index(line, defundef) - 1)
  if (D_is_set[macro]) {
    # Preserve the white space surrounding the "#".
    print prefix "define", macro P[macro] D[macro]
    next
  } else {
    # Replace #undef with comments. This is necessary, for example,
    # in the case of _POSIX_SOURCE, which is predefined and required
    # on some systems where configure will not decide to define it.
    if (defundef == "undef") {
      print "/*", prefix defundef, macro, "*/"
      next
    }
  }
}
}
{ print }
_ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
  as_fn_error $? "could not setup config headers machinery" "$LINENO"
5
fi # test -n "$CONFIG_HEADERS"

```

```

eval set X " :F $CONFIG_FILES :H $CONFIG_HEADERS :C
$CONFIG_COMMANDS"
shift
for ac_tag
do
  case $ac_tag in
  :[FHLC]) ac_mode=$ac_tag; continue;;
  esac
  case $ac_mode$ac_tag in
  :[FHL]*:*);;
  :L* | :C*:*) as_fn_error $? "invalid tag \`${ac_tag}`" "$LINENO" 5;;
  :[FH]-) ac_tag=-:-;;
  :[FH]*) ac_tag=$ac_tag:$ac_tag.in;;
  esac
  ac_save_IFS=$IFS
  IFS=:
  set x $ac_tag
  IFS=$ac_save_IFS
  shift
  ac_file=$1
  shift

  case $ac_mode in
  :L) ac_source=$1;;
  :[FH])
    ac_file_inputs=
    for ac_f
    do
      case $ac_f in
      -) ac_f="$ac_tmp/stdin";;
      *) # Look for the file first in the build tree, then in the
source tree
# (if the path is not absolute). The absolute path cannot be
DOS-style,
# because $ac_f cannot contain `:`.
test -f "$ac_f" ||
case $ac_f in
[\\/$]*) false;;
*) test -f "$srcdir/$ac_f" && ac_f="$srcdir/$ac_f";;
esac ||
as_fn_error 1 "cannot find input file: \`${ac_f}`" "$LINENO" 5;;
esac
case $ac_f in *\'*) ac_f=`$as_echo "$ac_f" | sed
"s/'/'\\`\\`\\`\\`\\`/g"``; esac
as_fn_append ac_file_inputs " '$ac_f'"
done

# Let's still pretend it is `configure' which instantiates (i.e.,
don't
# use $as_me), people would be surprised to read:
# /* config.h. Generated by config.status. */

```

```

configure_input='Generated from '`
  $as_echo "$*" | sed 's|^[^:]*/||;s|:[^:]*/|, |g'
  ` by configure.'
if test x"$ac_file" != x-; then
  configure_input="$ac_file. $configure_input"
  { $as_echo "$as_me:${as_lineno-$LINENO}: creating $ac_file" >&5
$as_echo "$as_me: creating $ac_file" >&6;}
  fi
  # Neutralize special characters interpreted by sed in replacement
strings.
  case $configure_input in
    *\&* | *\\|* | *\\* )
      ac_sed_conf_input=`$as_echo "$configure_input" |
sed 's/[\\&|]/\\&/g'`;; # (
*) ac_sed_conf_input=$configure_input;;
  esac

  case $ac_tag in
    *:-* | *:-) cat >"$ac_tmp/stdin" \
  || as_fn_error $? "could not create $ac_file" "$LINENO" 5 ;;
  esac
  ;;
esac

  ac_dir=`$as_dirname -- "$ac_file" ||
$as_expr X"$ac_file" : 'X\([^/]\)\/*[^/][^/]*/*$' \| \
X"$ac_file" : 'X\(/\)\[^/]' \| \
X"$ac_file" : 'X\(/\)\$' \| \
X"$ac_file" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$ac_file" |
sed '/^X\([^/]\)\/*[^/][^/]*\/*$/{
s//\1/
q
}
/^X\(\//\)\[^/].*/{
s//\1/
q
}
/^X\(\//\)\$/{
s//\1/
q
}
/^X\(\//\).*/{
s//\1/
q
}
s/././; q'`
  as_dir="$ac_dir"; as_fn_mkdir_p
  ac_builddir=.

case "$ac_dir" in
.) ac_dir_suffix= ac_top_builddir_sub=. ac_top_build_prefix= ;;

```

```

*)
  ac_dir_suffix=/`$as_echo "$ac_dir" | sed 's|^\.([\//]|||)`
  # A ".." for each directory in $ac_dir_suffix.
  ac_top_buildddir_sub=`$as_echo "$ac_dir_suffix" | sed
's|/[^\\/]*/|/..|g;s|/|||`
  case $ac_top_buildddir_sub in
    "") ac_top_buildddir_sub=. ac_top_build_prefix= ;;
    *) ac_top_build_prefix=$ac_top_buildddir_sub/ ;;
  esac ;;
esac
ac_abs_top_buildddir=$ac_pwd
ac_abs_buildddir=$ac_pwd$ac_dir_suffix
# for backward compatibility:
ac_top_buildddir=$ac_top_build_prefix

case $srcdir in
  .) # We are building in place.
    ac_srcdir=.
    ac_top_srcdir=$ac_top_buildddir_sub
    ac_abs_top_srcdir=$ac_pwd ;;
  [\\/] * | ?:[\\/] * ) # Absolute name.
    ac_srcdir=$srcdir$ac_dir_suffix;
    ac_top_srcdir=$srcdir
    ac_abs_top_srcdir=$srcdir ;;
  *) # Relative name.
    ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
    ac_top_srcdir=$ac_top_build_prefix$srcdir
    ac_abs_top_srcdir=$ac_pwd/$srcdir ;;
esac
ac_abs_srcdir=$ac_abs_top_srcdir$ac_dir_suffix

case $ac_mode in
:F)
#
# CONFIG_FILE
#

case $INSTALL in
[\\/$] * | ?:[\\/] * ) ac_INSTALL=$INSTALL ;;
*) ac_INSTALL=$ac_top_build_prefix$INSTALL ;;
esac
ac_MKDIR_P=$MKDIR_P
case $MKDIR_P in
[\\/$] * | ?:[\\/] * ) ;;
*/*) ac_MKDIR_P=$ac_top_build_prefix$MKDIR_P ;;
esac
_ACEOF

cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
# If the template does not know about datarootdir, expand it.
# FIXME: This hack should be removed a few years after 2.60.

```



```

ac_datarootdir_hack=; ac_datarootdir_seen=
ac_sed_dataroot='
/datarootdir/ {
    p
    q
}
/@datadir@/p
/@docdir@/p
/@infodir@/p
/@localedir@/p
/@mandir@/p'
case `eval "sed -n \"\$ac_sed_dataroot\" \$ac_file_inputs"` in
*datarootdir*) ac_datarootdir_seen=yes;;
*@datadir@*|*@docdir@*|*@infodir@*|*@localedir@*|*@mandir@*)
    { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file_inputs
seems to ignore the --datarootdir setting" >&5
$as_echo "$as_me: WARNING: $ac_file_inputs seems to ignore the --
datarootdir setting" >&2;}
_ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
    ac_datarootdir_hack='
    s&@datadir@&${datadir}&g
    s&@docdir@&${docdir}&g
    s&@infodir@&${infodir}&g
    s&@localedir@&${localedir}&g
    s&@mandir@&${mandir}&g
    s&\\\$${datarootdir}&${datarootdir}&g' ;;
esac
_ACEOF

# Neutralize VPATH when `srcdir' = `.'.
# Shell code in configure.ac might set extrasub.
# FIXME: do we really want to maintain this feature?
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1
ac_sed_extra="$ac_vpsub
$extrasub
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1
:t
/@[a-zA-Z_][a-zA-Z_0-9]*@/!b
s|@configure_input@|${ac_sed_conf_input}|;t t
s&@top_builddir@&${ac_top_builddir_sub}&;t t
s&@top_build_prefix@&${ac_top_build_prefix}&;t t
s&@srcdir@&${ac_srcdir}&;t t
s&@abs_srcdir@&${ac_abs_srcdir}&;t t
s&@top_srcdir@&${ac_top_srcdir}&;t t
s&@abs_top_srcdir@&${ac_abs_top_srcdir}&;t t
s&@builddir@&${ac_builddir}&;t t
s&@abs_builddir@&${ac_abs_builddir}&;t t
s&@abs_top_builddir@&${ac_abs_top_builddir}&;t t
s&@INSTALL@&${ac_INSTALL}&;t t
s&@MKDIR_P@&${ac_MKDIR_P}&;t t

```

```

$ac_datarootdir_hack
"
eval sed "\"$ac_sed_extra\" \"$ac_file_inputs" | $AWK -f
"$ac_tmp/subs.awk" \
  >$ac_tmp/out || as_fn_error $? "could not create $ac_file" "$LINENO"
5

test -z "$ac_datarootdir_hack$ac_datarootdir_seen" &&
  { ac_out=`sed -n '/\${datarootdir}/p' "$ac_tmp/out"`; test -n
"$ac_out"; } &&
  { ac_out=`sed -n '/^[ ]*datarootdir[ ]*:*=/p' \
    "$ac_tmp/out"`; test -z "$ac_out"; } &&
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $ac_file contains
a reference to the variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&5
$as_echo "$as_me: WARNING: $ac_file contains a reference to the
variable `datarootdir'
which seems to be undefined. Please make sure it is defined" >&2;}

rm -f "$ac_tmp/stdin"
case $ac_file in
-) cat "$ac_tmp/out" && rm -f "$ac_tmp/out";;
*) rm -f "$ac_file" && mv "$ac_tmp/out" "$ac_file";;
esac \
|| as_fn_error $? "could not create $ac_file" "$LINENO" 5
;;
:H)
#
# CONFIG_HEADER
#
if test x"$ac_file" != x-; then
  {
    $as_echo "/* $configure_input */" \
    && eval '$AWK -f "$ac_tmp/defines.awk"' "$ac_file_inputs"
  } >"$ac_tmp/config.h" \
  || as_fn_error $? "could not create $ac_file" "$LINENO" 5
  if diff "$ac_file" "$ac_tmp/config.h" >/dev/null 2>&1; then
    { $as_echo "$as_me:${as_lineno-$LINENO}: $ac_file is unchanged"
>&5
$as_echo "$as_me: $ac_file is unchanged" >&6;}
  else
    rm -f "$ac_file"
    mv "$ac_tmp/config.h" "$ac_file" \
    || as_fn_error $? "could not create $ac_file" "$LINENO" 5
  fi
else
  $as_echo "/* $configure_input */" \
  && eval '$AWK -f "$ac_tmp/defines.awk"' "$ac_file_inputs" \
  || as_fn_error $? "could not create -" "$LINENO" 5
fi
# Compute "$ac_file"'s index in $config_headers.
_am_arg="$ac_file"

```

```

_am_stamp_count=1
for _am_header in $config_headers ;; do
  case $_am_header in
    $_am_arg | $_am_arg:* )
      break ;;
    * )
      _am_stamp_count=`expr $_am_stamp_count + 1` ;;
  esac
done
echo "timestamp for $_am_arg" >`$as_dirname -- "$_am_arg" ||
$as_expr X"$_am_arg" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$_am_arg" : 'X\(//\)[^/]' \| \
  X"$_am_arg" : 'X\(//\)$' \| \
  X"$_am_arg" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$_am_arg" |
  sed '/^X\(.*[^/]\)\/*[^/][^/]*/*$/{
    s//\1/
    q
  }
/^X\(\\\/\)\[^/].*{/
  s//\1/
  q
}
/^X\(\\\/\)$/{
  s//\1/
  q
}
/^X\(\\\/\).*{/
  s//\1/
  q
}
s/.*/./; q'`/stamp-h$_am_stamp_count
;;

:C) { $as_echo "$as_me:${as_lineno-$LINENO}: executing $ac_file
commands" >&5
$as_echo "$as_me: executing $ac_file commands" >&6;}
;;
esac

case $ac_file$ac_mode in
  "depfiles":C) test x"$AMDEP_TRUE" != x"" || {
  # Autoconf 2.62 quotes --file arguments for eval, but not when files
  # are listed without --file. Let's play safe and only enable the
eval
  # if we detect the quoting.
  case $CONFIG_FILES in
    *\'*) eval set x "$CONFIG_FILES" ;;
    *) set x $CONFIG_FILES ;;
  esac
  shift

```

```

for mf
do
  # Strip MF so we end up with the name of the file.
  mf=`echo "$mf" | sed -e 's/:.*$//'\`
  # Check whether this is an Automake generated Makefile or not.
  # We used to match only the files named 'Makefile.in', but
  # some people rename them; so instead we look at the file content.
  # Grep'ing the first line is not enough: some people post-process
  # each Makefile.in and add a new line on top of each file to say
so.
  # Grep'ing the whole file is not good either: AIX grep has a line
  # limit of 2048, but all sed's we know have understand at least
4000.
  if sed -n 's,^#.*generated by automake.*,X,p' "$mf" | grep X
>/dev/null 2>&1; then
    dirpart=`$as_dirname -- "$mf" ||
$as_expr X"$mf" : 'X\(.*[^/]\)\/*[^/][^/]*/*$' \| \
  X"$mf" : 'X\(//\)[^/]' \| \
  X"$mf" : 'X\(//\)$' \| \
  X"$mf" : 'X\(/\)' \| . 2>/dev/null ||
$as_echo X"$mf" |
  sed '/^X\(.*[^/]\)\/*[^/][^/]*/*$/{
    s//\1/
    q
  }
/^X\(\\/\)\)[^/].*/{
  s//\1/
  q
}
/^X\(\\/\)\)$/{
  s//\1/
  q
}
/^X\(\\/\).*/{
  s//\1/
  q
}
s/.*/./; q'\`
  else
    continue
  fi
  # Extract the definition of DEPDIR, am__include, and am__quote
  # from the Makefile without running 'make'.
  DEPDIR=`sed -n 's/^DEPDIR = //p' < "$mf"`
  test -z "$DEPDIR" && continue
  am__include=`sed -n 's/^am__include = //p' < "$mf"`
  test -z "am__include" && continue
  am__quote=`sed -n 's/^am__quote = //p' < "$mf"`
  # Find all dependency output files, they are included files with
  # $(DEPDIR) in their names. We invoke sed twice because it is the
  # simplest approach to changing $(DEPDIR) to its actual value in
the

```

```

# expansion.
for file in `sed -n "
    s/^\$am__include \$am__quote\(.*(DEPDIR).*\)$am__quote"'\$/\1/p'
<"$mf" | \
    sed -e 's/\$(DEPDIR)/'"$DEPDIR"'/g`; do
# Make sure the directory exists.
test -f "$dirpart/$file" && continue
fdir=`$as_dirname -- "$file" ||
$as_expr X"$file" : 'X\([^/]\)\/*\([^/]\)\/*\*$' \|| \
X"$file" : 'X\(/\)\[\^/]' \|| \
X"$file" : 'X\(/\)\$' \|| \
X"$file" : 'X\(/)\' \|| . 2>/dev/null ||
$as_echo X"$file" |
sed '/^\X\(\.[^/]\)\*\/*\[\^/]\[\^/]\*\/*\$/{\
    s//\1/
    q
}
/^X\(\.\.\.\)\[\^/].*\$/{\
    s//\1/
    q
}
/^X\(\.\.\.\)\$/{\
    s//\1/
    q
}
/^X\(\.\.\)\.*\$/{\
    s//\1/
    q
}
s/.*\/./; q'`
as_dir=$dirpart/$fdir; as_fn_mkdir_p
# echo "creating $dirpart/$file"
echo '# dummy' > "$dirpart/$file"
done
done
}
;;
"libtool":C)

# See if we are running on zsh, and set the options which allow
our
# commands through without removal of \ escapes.
if test -n "${ZSH_VERSION+set}" ; then
    setopt NO_GLOB_SUBST
fi

cfgfile="${ofile}T"
trap "$RM \"\$cfgfile\"; exit 1" 1 2 15
$RM "$cfgfile"

cat <<_LT_EOF >> "$cfgfile"
#! $SHELL

```

```

# `SECHO "$ofile" | sed 's%^.*/%%'` - Provide generalized library-
building support services.
# Generated automatically by $as_me ($PACKAGE$TIMESTAMP) $VERSION
# Libtool was configured on host `(hostname || uname -n) 2>/dev/null |
sed 1q`:
# NOTE: Changes made to this file will be lost: look at ltmain.sh.
#
# Copyright (C) 1996, 1997, 1998, 1999, 2000, 2001, 2003, 2004,
2005,
#           2006, 2007, 2008, 2009, 2010, 2011 Free Software
#           Foundation, Inc.
# Written by Gordon Matzigkeit, 1996
#
# This file is part of GNU Libtool.
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# can be downloaded from http://www.gnu.org/licenses/gpl.html, or
# obtained by writing to the Free Software Foundation, Inc.,
# 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA.

# The names of the tagged configurations supported by this script.
available_tags="CXX RC "

# ### BEGIN LIBTOOL CONFIG

# Which release of libtool.m4 was used?
macro_version=$macro_version
macro_revision=$macro_revision

# Whether or not to build shared libraries.
build_libtool_libs=$enable_shared

# Whether or not to build static libraries.
build_old_libs=$enable_static

```

```
# What type of objects to build.
pic_mode=$pic_mode

# Whether or not to optimize for fast installation.
fast_install=$enable_fast_install

# Shell to use when invoking shell scripts.
SHELL=$lt_SHELL

# An echo program that protects backslashes.
ECHO=$lt_ECHO

# The PATH separator for the build system.
PATH_SEPARATOR=$lt_PATH_SEPARATOR

# The host system.
host_alias=$host_alias
host=$host
host_os=$host_os

# The build system.
build_alias=$build_alias
build=$build
build_os=$build_os

# A sed program that does not truncate output.
SED=$lt_SED

# Sed that helps us avoid accidentally triggering echo(1) options like
-n.
Xsed="\$SED -e 1s/^X//"

# A grep program that handles long lines.
GREP=$lt_GREP

# An ERE matcher.
EGREP=$lt_EGREP

# A literal string matcher.
FGREP=$lt_FGREP

# A BSD- or MS-compatible name lister.
NM=$lt_NM

# Whether we need soft or hard links.
LN_S=$lt_LN_S

# What is the maximum length of a command?
max_cmd_len=$max_cmd_len

# Object file suffix (normally "o").
```

```
objext=$ac_objext

# Executable file suffix (normally "").
exeext=$exeext

# whether the shell understands "unset".
lt_unset=$lt_unset

# turn spaces into newlines.
SP2NL=$lt_lt_SP2NL

# turn newlines into spaces.
NL2SP=$lt_lt_NL2SP

# convert \${build} file names to \${host} format.
to_host_file_cmd=$lt_cv_to_host_file_cmd

# convert \${build} files to toolchain format.
to_tool_file_cmd=$lt_cv_to_tool_file_cmd

# An object symbol dumper.
OBJDUMP=$lt_OBJDUMP

# Method to check whether dependent libraries are shared objects.
deplibs_check_method=$lt_deplibs_check_method

# Command to use when deplibs_check_method = "file_magic".
file_magic_cmd=$lt_file_magic_cmd

# How to find potential files when deplibs_check_method =
"file_magic".
file_magic_glob=$lt_file_magic_glob

# Find potential files using nocaseglob when deplibs_check_method =
"file_magic".
want_nocaseglob=$lt_want_nocaseglob

# DLL creation program.
DLLTOOL=$lt_DLLTOOL

# Command to associate shared and link libraries.
sharedlib_from_linklib_cmd=$lt_sharedlib_from_linklib_cmd

# The archiver.
AR=$lt_AR

# Flags to create an archive.
AR_FLAGS=$lt_AR_FLAGS

# How to feed a file listing to the archiver.
archiver_list_spec=$lt_archiver_list_spec
```



```
# A symbol stripping program.
STRIP=$lt_STRIP

# Commands used to install an old-style archive.
RANLIB=$lt_RANLIB
old_postinstall_cmds=$lt_old_postinstall_cmds
old_postuninstall_cmds=$lt_old_postuninstall_cmds

# Whether to use a lock for old archive extraction.
lock_old_archive_extraction=$lock_old_archive_extraction

# A C compiler.
LTCC=$lt_CC

# LTCC compiler flags.
LTCFLAGS=$lt_CFLAGS

# Take the output of nm and produce a listing of raw symbols and C
names.
global_symbol_pipe=$lt_lt_cv_sys_global_symbol_pipe

# Transform the output of nm in a proper C declaration.
global_symbol_to_cdecl=$lt_lt_cv_sys_global_symbol_to_cdecl

# Transform the output of nm in a C name address pair.
global_symbol_to_c_name_address=$lt_lt_cv_sys_global_symbol_to_c_name_
address

# Transform the output of nm in a C name address pair when lib prefix
is needed.
global_symbol_to_c_name_address_lib_prefix=$lt_lt_cv_sys_global_symbol
_to_c_name_address_lib_prefix

# Specify filename containing input files for \${NM}.
nm_file_list_spec=$lt_nm_file_list_spec

# The root where to search for dependent libraries, and in which our
libraries should be installed.
lt_sysroot=$lt_sysroot

# The name of the directory that contains temporary libtool files.
objdir=${objdir}

# Used to examine libraries when file_magic_cmd begins with "file".
MAGIC_CMD=${MAGIC_CMD}

# Must we lock files when doing compilation?
need_locks=$lt_need_locks

# Manifest tool.
MANIFEST_TOOL=$lt_MANIFEST_TOOL
```

```
# Tool to manipulate archived DWARF debug symbol files on Mac OS X.
DSYMUTIL=${lt_DSYMUTIL}

# Tool to change global to local symbols on Mac OS X.
NMEDIT=${lt_NMEDIT}

# Tool to manipulate fat objects and archives on Mac OS X.
LIPO=${lt_LIPO}

# ldd/readelf like tool for Mach-O binaries on Mac OS X.
OTOOL=${lt_OTOOL}

# ldd/readelf like tool for 64 bit Mach-O binaries on Mac OS X 10.4.
OTOOL64=${lt_OTOOL64}

# Old archive suffix (normally "a").
libext=${libext}

# Shared library suffix (normally ".so").
shrext_cmds=${lt_shrext_cmds}

# The commands to extract the exported symbol list from a shared
archive.
extract_expsyms_cmds=${lt_extract_expsyms_cmds}

# Variables whose values should be saved in libtool wrapper scripts
and
# restored at link time.
variables_saved_for_relink=${lt_variables_saved_for_relink}

# Do we need the "lib" prefix for modules?
need_lib_prefix=${need_lib_prefix}

# Do we need a version for libraries?
need_version=${need_version}

# Library versioning type.
version_type=${version_type}

# Shared library runtime path variable.
runpath_var=${runpath_var}

# Shared library path variable.
shlibpath_var=${shlibpath_var}

# Is shlibpath searched before the hard-coded library search path?
shlibpath_overrides_runpath=${shlibpath_overrides_runpath}

# Format of library name prefix.
libname_spec=${lt_libname_spec}
```

```
# List of archive names.  First name is the real one, the rest are
links.
# The last name is the one that the linker finds with -lNAME
library_names_spec=$lt_library_names_spec

# The coded name of the library, if different from the real name.
soname_spec=$lt_soname_spec

# Permission mode override for installation of shared libraries.
install_override_mode=$lt_install_override_mode

# Command to use after installation of a shared archive.
postinstall_cmds=$lt_postinstall_cmds

# Command to use after uninstallation of a shared archive.
postuninstall_cmds=$lt_postuninstall_cmds

# Commands used to finish a libtool library installation in a
directory.
finish_cmds=$lt_finish_cmds

# As "finish_cmds", except a single script fragment to be evaled but
# not shown.
finish_eval=$lt_finish_eval

# Whether we should hardcode library paths into libraries.
hardcode_into_libs=$hardcode_into_libs

# Compile-time system search path for libraries.
sys_lib_search_path_spec=$lt_sys_lib_search_path_spec

# Run-time system search path for libraries.
sys_lib_dlsearch_path_spec=$lt_sys_lib_dlsearch_path_spec

# Whether dlopen is supported.
dlopen_support=$enable_dlopen

# Whether dlopen of programs is supported.
dlopen_self=$enable_dlopen_self

# Whether dlopen of statically linked programs is supported.
dlopen_self_static=$enable_dlopen_self_static

# Commands to strip libraries.
old_striplib=$lt_old_striplib
striplib=$lt_striplib

# The linker used to build libraries.
LD=$lt_LD

# How to create reloadable object files.
```

```
reload_flag=$lt_reload_flag
reload_cmds=$lt_reload_cmds

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds

# A language specific compiler.
CC=$lt_compiler

# Is the compiler the GNU compiler?
with_gcc=$GCC

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag

# Additional compiler flags for building library objects.
pic_flag=$lt_lt_prog_compiler_pic

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_runtimes

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds
```

```
archive_expsym_cmds=$lt_archive_expsym_cmds

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds
module_expsym_cmds=$lt_module_expsym_cmds

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=$lt_hardcode_libdir_separator

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=$hardcode_direct

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=$hardcode_direct_absolute

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=$hardcode_minus_L

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=$hardcode_shlibpath_var

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=$hardcode_automatic
```

```
# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=$inherit_rpath

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=$link_all_deplibs

# Set to "yes" if exported symbols are required.
always_export_symbols=$always_export_symbols

# The commands to list exported symbols.
export_symbols_cmds=$lt_export_symbols_cmds

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=$lt_exclude_expsyms

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects
postdep_objects=$lt_postdep_objects
predeps=$lt_predeps
postdeps=$lt_postdeps

# The library search path used internally by the compiler when linking
# a shared library.
compiler_lib_search_path=$lt_compiler_lib_search_path

# ### END LIBTOOL CONFIG

_LT_EOF
```

```

case $host_os in
aix3*)
    cat <<\_LT_EOF >> "$cfgfile"
# AIX sometimes has problems with the GCC collect2 program.  For some
# reason, if we set the COLLECT_NAMES environment variable, the
problems
# vanish in a puff of smoke.
if test "X${COLLECT_NAMES+set}" != Xset; then
    COLLECT_NAMES=
    export COLLECT_NAMES
fi
_LT_EOF
;;
esac

ltmain="$ac_aux_dir/ltmain.sh"

# We use sed instead of cat because bash on DJGPP gets confused if
# if finds mixed CR/LF and LF-only lines.  Since sed operates in
# text mode, it properly converts lines to CR/LF.  This bash problem
# is reportedly fixed, but why not run on old versions too?
sed 'sq' "$ltmain" >> "$cfgfile" \
    || (rm -f "$cfgfile"; exit 1)

if test x"$xsi_shell" = xyes; then
    sed -e '/^func_dirname ()$/,/^{ } # func_dirname /c\
func_dirname ()\
{\
\   case ${1} in\
\       */*) func_dirname_result="${1%/*}${2}" ;;\
\       * ) func_dirname_result="${3}" ;;\
\   esac\
} # Extended-shell func_dirname implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_basename ()$/,/^{ } # func_basename /c\
func_basename ()\
{\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_basename implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

```

```

    sed -e '/^func_dirname_and_basename ()$/,/^{ } #
func_dirname_and_basename /c\
func_dirname_and_basename ()\
{\
\   case ${1} in\
\     */*) func_dirname_result="${1%/*}${2}" ;;\
\     * ) func_dirname_result="${3}" ;;\
\   esac\
\   func_basename_result="${1##*/}"\
} # Extended-shell func_dirname_and_basename implementation'
"$cfgfile" > $cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_stripname ()$/,/^{ } # func_stripname /c\
func_stripname ()\
{\
\   # pdksh 5.2.14 does not do ${X%$Y} correctly if both X and Y are\
\   # positional parameters, so assign one to ordinary parameter
first.\
\   func_stripname_result=${3}\
\   func_stripname_result=${func_stripname_result#"${1}"}\
\   func_stripname_result=${func_stripname_result%"${2}"}\
} # Extended-shell func_stripname implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_split_long_opt ()$/,/^{ } # func_split_long_opt /c\
func_split_long_opt ()\
{\
\   func_split_long_opt_name=${1%*=*}\
\   func_split_long_opt_arg=${1#*=}\
} # Extended-shell func_split_long_opt implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_split_short_opt ()$/,/^{ } # func_split_short_opt /c\
func_split_short_opt ()\
{\

```



```

\   func_split_short_opt_arg=${1#??}\
\   func_split_short_opt_name=${1%"$func_split_short_opt_arg"}\
} # Extended-shell func_split_short_opt implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_lo2o ()$/,/^\} # func_lo2o /c\
func_lo2o ()\
{\
\   case ${1} in\
\     *.lo) func_lo2o_result=${1%.lo}.${objext} ;;\
\     *)   func_lo2o_result=${1} ;;\
\   esac\
} # Extended-shell func_lo2o implementation' "$cfgfile" > $cfgfile.tmp
\
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_xform ()$/,/^\} # func_xform /c\
func_xform ()\
{\
  func_xform_result=${1%.*}.lo\
} # Extended-shell func_xform implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_arith ()$/,/^\} # func_arith /c\
func_arith ()\
{\
  func_arith_result=$(( $* ))\
} # Extended-shell func_arith implementation' "$cfgfile" >
$cfgfile.tmp \
  && mv -f "$cfgfile.tmp" "$cfgfile" \
  || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

  sed -e '/^func_len ()$/,/^\} # func_len /c\
func_len ()\
{\

```

```

    func_len_result=${#1}\
} # Extended-shell func_len implementation' "$cfgfile" > $cfgfile.tmp
\
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

fi

if test x"$lt_shell_append" = xyes; then
    sed -e '/^func_append ()$/,/^{ # func_append /c\
func_append ()\
{\
    eval "${1}+=\\${2}"\
} # Extended-shell func_append implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    sed -e '/^func_append_quoted ()$/,/^{ # func_append_quoted /c\
func_append_quoted ()\
{\
\    func_quote_for_eval "${2}"\
\    eval "${1}+=\\\ \\\ $func_quote_for_eval_result"\
} # Extended-shell func_append_quoted implementation' "$cfgfile" >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
test 0 -eq $? || _lt_function_replace_fail=:

    # Save a `func_append' function call where possible by direct use of
    '+='
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1+= "%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:
else
    # Save a `func_append' function call even when '+' is not available
    sed -e 's%func_append \([a-zA-Z_]\{1,\}\) "%\1=" $\1%g' $cfgfile >
$cfgfile.tmp \
    && mv -f "$cfgfile.tmp" "$cfgfile" \
    || (rm -f "$cfgfile" && cp "$cfgfile.tmp" "$cfgfile" && rm -f
"$cfgfile.tmp")
    test 0 -eq $? || _lt_function_replace_fail=:

```

```

fi

if test x"$_lt_function_replace_fail" = x:"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: Unable to
substitute extended shell functions in $ofile" >&5
$as_echo "$as_me: WARNING: Unable to substitute extended shell
functions in $ofile" >&2;}
fi

  mv -f "$cfgfile" "$ofile" ||
  (rm -f "$ofile" && cp "$cfgfile" "$ofile" && rm -f "$cfgfile")
  chmod +x "$ofile"

  cat <<_LT_EOF >> "$ofile"

# ### BEGIN LIBTOOL TAG CONFIG: CXX

# The linker used to build libraries.
LD=$lt_LD_CXX

# How to create reloadable object files.
reload_flag=$lt_reload_flag_CXX
reload_cmds=$lt_reload_cmds_CXX

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds_CXX

# A language specific compiler.
CC=$lt_compiler_CXX

# Is the compiler the GNU compiler?
with_gcc=$GCC_CXX

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag_CXX

# Additional compiler flags for building library objects.
pic_flag=$lt_lt_prog_compiler_pic_CXX

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl_CXX

# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static_CXX

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o_CXX

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc_CXX

```

```
# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_run
times_CXX

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec_CXX

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec_CXX

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object_CXX

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds_CXX

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds_CXX

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds_CXX
archive_expsym_cmds=$lt_archive_expsym_cmds_CXX

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds_CXX
module_expsym_cmds=$lt_module_expsym_cmds_CXX

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld_CXX

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag_CXX

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag_CXX

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec_CXX

# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=$lt_hardcode_libdir_separator_CXX

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=$hardcode_direct_CXX
```

```
# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute",i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=$hardcode_direct_absolute_CXX

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=$hardcode_minus_L_CXX

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=$hardcode_shlibpath_var_CXX

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=$hardcode_automatic_CXX

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=$inherit_rpath_CXX

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=$link_all_deplibs_CXX

# Set to "yes" if exported symbols are required.
always_export_symbols=$always_export_symbols_CXX

# The commands to list exported symbols.
export_symbols_cmds=$lt_export_symbols_cmds_CXX

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=$lt_exclude_expsyms_CXX

# Symbols that must always be exported.
include_expsyms=$lt_include_expsyms_CXX

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds_CXX

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds_CXX

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec_CXX
```

```

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action_CXX

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs_CXX

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects_CXX
postdep_objects=$lt_postdep_objects_CXX
predeps=$lt_predeps_CXX
postdeps=$lt_postdeps_CXX

# The library search path used internally by the compiler when linking
# a shared library.
compiler_lib_search_path=$lt_compiler_lib_search_path_CXX

# ### END LIBTOOL TAG CONFIG: CXX
_LT_EOF

    cat <<_LT_EOF >> "$ofile"

# ### BEGIN LIBTOOL TAG CONFIG: RC

# The linker used to build libraries.
LD=$lt_LD_RC

# How to create reloadable object files.
reload_flag=$lt_reload_flag_RC
reload_cmds=$lt_reload_cmds_RC

# Commands used to build an old-style archive.
old_archive_cmds=$lt_old_archive_cmds_RC

# A language specific compiler.
CC=$lt_compiler_RC

# Is the compiler the GNU compiler?
with_gcc=$GCC_RC

# Compiler flag to turn off builtin functions.
no_builtin_flag=$lt_lt_prog_compiler_no_builtin_flag_RC

# Additional compiler flags for building library objects.
pic_flag=$lt_lt_prog_compiler_pic_RC

# How to pass a linker flag through the compiler.
wl=$lt_lt_prog_compiler_wl_RC

```

```
# Compiler flag to prevent dynamic linking.
link_static_flag=$lt_lt_prog_compiler_static_RC

# Does compiler simultaneously support -c and -o options?
compiler_c_o=$lt_lt_cv_prog_compiler_c_o_RC

# Whether or not to add -lc for building shared libraries.
build_libtool_need_lc=$archive_cmds_need_lc_RC

# Whether or not to disallow shared libs when runtime libs are static.
allow_libtool_libs_with_static_runtimes=$enable_shared_with_static_run
times_RC

# Compiler flag to allow reflexive dlopens.
export_dynamic_flag_spec=$lt_export_dynamic_flag_spec_RC

# Compiler flag to generate shared objects directly from archives.
whole_archive_flag_spec=$lt_whole_archive_flag_spec_RC

# Whether the compiler copes with passing no objects directly.
compiler_needs_object=$lt_compiler_needs_object_RC

# Create an old-style archive from a shared archive.
old_archive_from_new_cmds=$lt_old_archive_from_new_cmds_RC

# Create a temporary old-style archive to link instead of a shared
archive.
old_archive_from_expsyms_cmds=$lt_old_archive_from_expsyms_cmds_RC

# Commands used to build a shared archive.
archive_cmds=$lt_archive_cmds_RC
archive_expsym_cmds=$lt_archive_expsym_cmds_RC

# Commands used to build a loadable module if different from building
# a shared archive.
module_cmds=$lt_module_cmds_RC
module_expsym_cmds=$lt_module_expsym_cmds_RC

# Whether we are building with GNU ld or not.
with_gnu_ld=$lt_with_gnu_ld_RC

# Flag that allows shared libraries with undefined symbols to be
built.
allow_undefined_flag=$lt_allow_undefined_flag_RC

# Flag that enforces no undefined symbols.
no_undefined_flag=$lt_no_undefined_flag_RC

# Flag to hardcode \${libdir} into a binary during linking.
# This must work even if \${libdir} does not exist
hardcode_libdir_flag_spec=$lt_hardcode_libdir_flag_spec_RC
```

```
# Whether we need a single "-rpath" flag with a separated argument.
hardcode_libdir_separator=${lt_hardcode_libdir_separator_RC}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary.
hardcode_direct=${hardcode_direct_RC}

# Set to "yes" if using DIR/libNAME\${shared_ext} during linking
hardcodes
# DIR into the resulting binary and the resulting library dependency
is
# "absolute", i.e impossible to change by setting \${shlibpath_var} if
the
# library is relocated.
hardcode_direct_absolute=${hardcode_direct_absolute_RC}

# Set to "yes" if using the -LDIR flag during linking hardcodes DIR
# into the resulting binary.
hardcode_minus_L=${hardcode_minus_L_RC}

# Set to "yes" if using SHLIBPATH_VAR=DIR during linking hardcodes DIR
# into the resulting binary.
hardcode_shlibpath_var=${hardcode_shlibpath_var_RC}

# Set to "yes" if building a shared library automatically hardcodes
DIR
# into the library and all subsequent libraries and executables linked
# against it.
hardcode_automatic=${hardcode_automatic_RC}

# Set to yes if linker adds runtime paths of dependent libraries
# to runtime path list.
inherit_rpath=${inherit_rpath_RC}

# Whether libtool must link a program against all its dependency
libraries.
link_all_deplibs=${link_all_deplibs_RC}

# Set to "yes" if exported symbols are required.
always_export_symbols=${always_export_symbols_RC}

# The commands to list exported symbols.
export_symbols_cmds=${lt_export_symbols_cmds_RC}

# Symbols that should not be listed in the preloaded symbols.
exclude_expsyms=${lt_exclude_expsyms_RC}

# Symbols that must always be exported.
include_expsyms=${lt_include_expsyms_RC}
```



```

# Commands necessary for linking programs (against libraries) with
templates.
prelink_cmds=$lt_prelink_cmds_RC

# Commands necessary for finishing linking programs.
postlink_cmds=$lt_postlink_cmds_RC

# Specify filename containing input files.
file_list_spec=$lt_file_list_spec_RC

# How to hardcode a shared library path into an executable.
hardcode_action=$hardcode_action_RC

# The directories searched by this compiler when creating a shared
library.
compiler_lib_search_dirs=$lt_compiler_lib_search_dirs_RC

# Dependencies to place before and after the objects being linked to
# create a shared library.
predep_objects=$lt_predep_objects_RC
postdep_objects=$lt_postdep_objects_RC
predeps=$lt_predeps_RC
postdeps=$lt_postdeps_RC

# The library search path used internally by the compiler when linking
# a shared library.
compiler_lib_search_path=$lt_compiler_lib_search_path_RC

# ### END LIBTOOL TAG CONFIG: RC
_LT_EOF

;;

esac
done # for ac_tag

as_fn_exit 0
_ACEOF
ac_clean_files=$ac_clean_files_save

test $ac_write_fail = 0 ||
  as_fn_error $? "write failure creating $CONFIG_STATUS" "$LINENO" 5

# configure is writing to config.log, and then calls config.status.
# config.status does its own redirection, appending to config.log.
# Unfortunately, on DOS this fails, as config.log is still kept open
# by configure, so config.status won't be able to write to it; its
# output is simply discarded. So we exec the FD to /dev/null,
# effectively closing config.log, so it can be properly (re)opened and
# appended to by config.status. When coming back to configure, we

```

```

# need to make the FD available again.
if test "$no_create" != yes; then
  ac_cs_success=:
  ac_config_status_args=
  test "$silent" = yes &&
    ac_config_status_args="$ac_config_status_args --quiet"
  exec 5>/dev/null
  $SHELL $CONFIG_STATUS $ac_config_status_args || ac_cs_success=false
  exec 5>>config.log
  # Use ||, not &&, to avoid exiting from the if with $? = 1, which
  # would make configure fail if this is the last instruction.
  $ac_cs_success || as_fn_exit 1
fi
if test -n "$ac_unrecognized_opts" && test "$enable_option_checking"
!= no; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: unrecognized
options: $ac_unrecognized_opts" >&5
$as_echo "$as_me: WARNING: unrecognized options:
$ac_unrecognized_opts" >&2;}
fi

```

```
echo "
```

```

          D-Bus $VERSION
          =====

```

```

prefix:                ${EXPANDED_PREFIX}
exec_prefix:           ${exec_prefix}
  libdir:               ${EXPANDED_LIBDIR}
  libexecdir:          ${EXPANDED_LIBEXECDIR}
  bindir:              ${EXPANDED_BINDIR}
  sysconfdir:          ${EXPANDED_SYSCONFDIR}
  localstatedir:       ${EXPANDED_LOCALSTATEDIR}
datadir:               ${EXPANDED_DATADIR}
source code location:  ${srcdir}
compiler:              ${CC}
cflags:                ${CFLAGS}
cppflags:              ${CPPFLAGS}
cxxflags:              ${CXXFLAGS}
64-bit int:            ${DBUS_INT64_TYPE}
32-bit int:            ${DBUS_INT32_TYPE}
16-bit int:            ${DBUS_INT16_TYPE}
  Doxygen:              ${DOXYGEN:-not found}
  xmlto:                ${XMLTO:-not found}
  man2html:            ${MAN2HTML:-not found}

```

```
echo "
```

```

  Rebuilding generated files: ${USE_MAINTAINER_MODE}
  gcc coverage profiling:     ${enable_compiler_coverage}
  Building embedded tests:    ${enable_embedded_tests}
  Building modular tests:     ${enable_modular_tests}
    - with GLib:              ${with_glib}

```

```

Building verbose mode:      ${enable_verbose_mode}
Building assertions:       ${enable_asserts}
Building checks:          ${enable_checks}
Building bus stats API:    ${enable_stats}
Building SELinux support:  ${have_selinux}
Building inotify support:  ${have_inotify}
Building dnotify support:  ${have_dnotify}
Building kqueue support:   ${have_kqueue}
Building systemd support:  ${have_systemd}
Building X11 code:         ${enable_x11}
Building Doxygen docs:     ${enable_doxygen_docs}
Building XML docs:         ${enable_xml_docs}
Building cache support:    ${enable_userdb_cache}
Building launchd support:  ${have_launchd}
Using XML parser:         ${with_xml}
Init scripts style:       ${with_init_scripts}
Abstract socket names:    ${ac_cv_have_abstract_sockets}
System bus socket:        ${DBUS_SYSTEM_SOCKET}
System bus address:       ${DBUS_SYSTEM_BUS_DEFAULT_ADDRESS}
System bus PID file:      ${DBUS_SYSTEM_PID_FILE}
Session bus address:      ${DBUS_SESSION_BUS_DEFAULT_ADDRESS}
Console auth dir:         ${DBUS_CONSOLE_AUTH_DIR}
Console owner file:       ${have_console_owner_file}
Console owner file path:  ${DBUS_CONSOLE_OWNER_FILE}
System bus user:          ${DBUS_USER}
Session bus services dir: ${EXPANDED_DATADIR}/dbus-1/services
'make check' socket dir:  ${TEST_SOCKET_DIR}
"
if test x$have_launchd = xyes; then
    echo "          launchd agent dir:          ${LAUNCHD_AGENT_DIR}"
fi
echo

if test x$enable_embedded_tests = xyes; then
    echo "NOTE: building with unit tests increases the size of the
installed library and renders it insecure."
fi
if test x$enable_embedded_tests = xyes -a x$enable_asserts = xno; then
    echo "NOTE: building with embedded tests but without
assertions means tests may not properly report failures (this
configuration is only useful when doing something like profiling the
tests)"
fi
if test x$enable_compiler_coverage = xyes; then
    echo "NOTE: building with coverage profiling is definitely for
developers only."
fi
if test x$enable_verbose_mode = xyes; then
    echo "NOTE: building with verbose mode increases library size,
may slightly increase security risk, and decreases performance."
fi
if test x$enable_asserts = xyes; then

```

```

        echo "NOTE: building with assertions increases library size
and decreases performance."
fi
if test x$enable_checks = xno; then
    echo "NOTE: building without checks for arguments passed to
public API makes it harder to debug apps using D-Bus, but will
slightly decrease D-Bus library size and _very_ slightly improve
performance."
fi
if test x$dbus_use_libxml = xtrue; then
    echo
    echo "WARNING: You have chosen to use libxml as your xml parser
however this code path is not maintained by the D-Bus developers and
if it breaks you get to keep the pieces.  If you have selected this
option in err please reconfigure with expat (e.g. --with-xml=expat)."

```

This removes parts of the standard D-Bus API and ABI (the 't' and 'x' typecodes, the dbus_int64_t and dbus_uint64_t types, etc.) and should only be used if your compiler lacks support for 64-bit integers. Please report a bug with details of your platform and compiler.

This option is likely to be removed in future, unless the D-Bus developers receive reports that it is still needed.

```

" >&5
$as_echo "$as_me: WARNING: You have disabled 64-bit integers via --
without-64-bit.

```

This removes parts of the standard D-Bus API and ABI (the 't' and 'x' typecodes, the dbus_int64_t and dbus_uint64_t types, etc.) and should only be used if your compiler lacks support for 64-bit integers. Please report a bug with details of your platform and compiler.

This option is likely to be removed in future, unless the D-Bus developers receive reports that it is still needed.

```

" >&2;}
fi

```

```
File = overlong-name.message
```

```
## a message with too-long name field
```

```
## VALID_HEADER includes a LENGTH Header and LENGTH Body
```

```
VALID_HEADER method_call
```

```
HEADER_FIELD INTERFACE
```

```
TYPE STRING
```

```
STRING 'org.foo.bar.this.is.really.long 1 2 3 4 5 6 7 8 9 10 11 12 13  
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36  
37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59  
60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82  
83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104  
105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121  
122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138  
139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155  
156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172  
173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189  
190 191 192 193 194 195 196 197 198 199 200'
```

```
HEADER_FIELD MEMBER
```

```
TYPE STRING
```

```
STRING 'Bar'
```

```
HEADER_FIELD PATH
```

```
TYPE OBJECT_PATH
```

```
OBJECT_PATH '/foo'
```

```
ALIGN 8
```

```
END_LENGTH Header
```

```
START_LENGTH Body
```

```
END_LENGTH Body
```

```
File = peer-client.c
```

```
#include <config.h>
```

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
#include <string.h>
```

```
#include <unistd.h>
```

```
#include <dbus/dbus.h>
```

```
#include <dbus/dbus-glib.h>
```

```
static GMainLoop *loop;
```

```
static guint exit_timeout = 0;
```

```
static int n_times_frobinate_received = 0;
```

```
static gboolean terminating = FALSE, terminated = FALSE;
```

```
static void
```

```

lose (const char *str, ...)
{
    va_list args;
    va_start (args, str);

    vfprintf (stderr, str, args);
    fputc ('\n', stderr);

    va_end (args);
    exit (1);
}

static void
lose_gerror (const char *prefix, GError *error)
{
    if (error->domain == DBUS_GERROR && error->code ==
        DBUS_GERROR_REMOTE_EXCEPTION)
        lose ("%s (%s): %s", prefix, dbus_g_error_get_name (error),
            error->message);
    else
        lose ("%s: %s", prefix, error->message);
}

static gboolean
timed_exit (gpointer loop)
{
    g_print ("timed exit!\n");
    g_main_loop_quit (loop);
    return TRUE;
}

static void
frob_nicate_signal_handler (DBusGProxy *proxy, int val, void
*user_data)
{
    n_times_frob_nicate_received += 1;

    g_assert (val == 42);

    g_main_loop_quit (loop);
    g_source_remove (exit_timeout);
}

static void
destroy_cb (DBusGProxy *proxy, gpointer user_data)
{
    if (!terminating) {
        lose ("Proxy destroyed when it shouldn't have been");
    } else {
        terminated = TRUE;
        g_main_loop_quit (loop);
        g_source_remove (exit_timeout);
    }
}

```

```

    }
}

int
main (int argc, char **argv)
{
    GError *error = NULL;
    DBusGConnection *conn;
    DBusGProxy *proxy;
    guint32 v_UINT32_2;
    char *addrbuf;
    gsize lineoffset;
    GIOChannel *io;

    g_thread_init (NULL); dbus_g_thread_init ();
    g_type_init ();

    io = g_io_channel_unix_new (0);
    if (!g_io_channel_read_line (io, &addrbuf, NULL, &lineoffset,
&error))
        lose_gerror ("failed to read address from stdin", error);
    /* trim newline */
    addrbuf[lineoffset] = '\0';

    loop = g_main_loop_new (NULL, TRUE);

    conn = dbus_g_connection_open (addrbuf, &error);
    if (!conn)
        g_error ("Cannot open connection: %s", error->message);

    proxy = dbus_g_proxy_new_for_peer (conn, "/",
"org.freedesktop.DBus.GLib.Tests.MyObject");
    g_assert (proxy);

    if (!dbus_g_proxy_call (proxy, "DoNothing", &error, G_TYPE_INVALID,
G_TYPE_INVALID))
        lose_gerror ("Failed to complete DoNothing call", error);

    if (!dbus_g_proxy_call (proxy, "Increment", &error,
        G_TYPE_UINT, 42,
        G_TYPE_INVALID,
        G_TYPE_UINT, &v_UINT32_2,
        G_TYPE_INVALID))
        lose_gerror ("Failed to complete Increment call", error);
    if (v_UINT32_2 != 43)
        lose ("Increment call returned %d, should be 43", v_UINT32_2);

    n_times_froblicate_received = 0;

```

```

    dbus_g_proxy_add_signal (proxy, "Frobnicate", G_TYPE_INT,
G_TYPE_INVALID);
    dbus_g_proxy_connect_signal (proxy, "Frobnicate",
                                G_CALLBACK (frobnicate_signal_handler),
                                NULL, NULL);
    g_signal_connect (G_OBJECT (proxy), "destroy",
                      G_CALLBACK (destroy_cb),
                      NULL);

    if (!dbus_g_proxy_call (proxy, "EmitFrobnicate", &error,
G_TYPE_INVALID, G_TYPE_INVALID))
        lose_gerror ("Failed to complete EmitFrobnicate call", error);
    exit_timeout = g_timeout_add (5000, timed_exit, loop);
    g_main_loop_run (loop);
    if (n_times_frobnicate_received != 1)
        lose ("Frobnicate signal received %d times, should have been 1",
n_times_frobnicate_received);

    terminating = TRUE;
    if (!dbus_g_proxy_call (proxy, "Terminate", &error, G_TYPE_INVALID,
G_TYPE_INVALID))
        lose_gerror ("Failed to complete Terminate call", error);
    exit_timeout = g_timeout_add (5000, timed_exit, loop);
    g_main_loop_run (loop);
    if (!terminated)
        lose ("Proxy didn't destroy when peer terminated");

    g_main_loop_unref (loop);

    return 0;
}

```

File = peer-on-bus.c

```

/* Regression test for object registration and unregistration
 *
 * Copyright © 2009 Collabora Ltd. <http://www.collabora.co.uk/>
 * Copyright © 2009-2011 Nokia Corporation
 *
 * In preparation for dbus-glib relicensing (if it ever happens), this
file is
 * licensed under (at your option) either the AFL v2.1, the GPL v2 or
later,
 * or an MIT/X11-style license:
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify

```



```
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* (at your option) any later version.
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* Permission is hereby granted, free of charge, to any person
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* restriction, including without limitation the rights to use, copy,
* modify, merge, publish, distribute, sublicense, and/or sell copies
* of the Software, and to permit persons to whom the Software is
* furnished to do so, subject to the following conditions:
*
* The above copyright notice and this permission notice shall be
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*
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* WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM,
* OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER
* DEALINGS IN THE SOFTWARE.
*/
```

```
#include <config.h>
```

```
#include <dbus/dbus-glib.h>
```

```
#include <dbus/dbus-glib-lowlevel.h>
```

```
#include "test/lib/util.h"
```

```
GMainLoop *loop = NULL;
```

```
typedef struct {
    DBusGConnection *bus;
    DBusGConnection *bus2;
} Fixture;
```

```
static void
setup (Fixture *f,
      gconstpointer path_to_use)
{
    f->bus = dbus_g_bus_get_private (DBUS_BUS_SESSION, NULL, NULL);
    g_assert (f->bus != NULL);

    f->bus2 = dbus_g_bus_get_private (DBUS_BUS_SESSION, NULL, NULL);
    g_assert (f->bus2 != NULL);
}
```

```
static void
```

```

teardown (Fixture *f,
         gconstpointer test_data G_GNUC_UNUSED)
{
    if (f->bus != NULL)
    {
        test_run_until_disconnected (f->bus, NULL);
        dbus_g_connection_unref (f->bus);
    }

    if (f->bus2 != NULL)
    {
        test_run_until_disconnected (f->bus2, NULL);
        dbus_g_connection_unref (f->bus2);
    }

    dbus_shutdown ();
}

static void
destroy_cb (DBusGProxy *proxy G_GNUC_UNUSED,
           gpointer user_data)
{
    gboolean *destroyed = user_data;

    *destroyed = TRUE;
}

static void
test_name_owner_changed (Fixture *f,
                        gconstpointer test_data G_GNUC_UNUSED)
{
    DBusGProxy *peer;
    DBusGProxy *named;
    gboolean destroyed = FALSE;

    g_test_bug ("41126");

    /* bus has a proxy for bus2... */
    named = dbus_g_proxy_new_for_name (f->bus,
                                       dbus_bus_get_unique_name (dbus_g_connection_get_connection (f->bus2)),
                                       "/", "org.freedesktop.DBus.Peer");
    /* ... and also a proxy for the peer (i.e. the dbus-daemon) */
    peer = dbus_g_proxy_new_for_peer (f->bus, "/",
                                      "org.freedesktop.DBus.Peer");

    g_signal_connect (G_OBJECT (named), "destroy", G_CALLBACK
                     (destroy_cb),
                     &destroyed);

    /* Disconnect bus2, to provoke a NameOwnerChanged signal on bus */
    test_run_until_disconnected (f->bus2, NULL);
}

```

```

dbus_g_connection_unref (f->bus2);
f->bus2 = NULL;

/* Wait for that NameOwnerChanged to be processed */
while (!destroyed)
    g_main_context_iteration (NULL, TRUE);

g_signal_handlers_disconnect_by_func (named, destroy_cb,
&destroyed);

/* The first part of the bug was that we'd never get here, because
checking
* whether 'peer' was affected by the NameOwnerChanged caused a NULL
* dereference and segfault. If we get here, all is OK.
*
* The second part of the bug was that if the last proxy in
existence was
* for a peer, when it was unregistered there would be no
owner_match_rules,
* causing a crash. Unref named before peer, to exercise that. */

g_object_unref (named);
g_object_unref (peer);
}

int
main (int argc, char **argv)
{
    g_setenv ("DBUS_FATAL_WARNINGS", "1", TRUE);
    g_type_init ();
    g_log_set_always_fatal (G_LOG_LEVEL_WARNING | G_LOG_LEVEL_CRITICAL);
    dbus_g_type_specialized_init ();
    g_test_bug_base ("https://bugs.freedesktop.org/show_bug.cgi?id=");
    g_test_init (&argc, &argv, NULL);

    g_test_add ("/peer-on-bus/name-owner-changed", Fixture, NULL,
        setup, test_name_owner_changed, teardown);

    return g_test_run ();
}

```

File = peer-server.c

```

#include <config.h>

#include <stdio.h>
#include <stdlib.h>

#include <dbus/dbus.h>
#include <dbus/dbus-glib.h>

```

```

#include <dbus/dbus-glib-lowlevel.h>

#include "my-object.h"

GMainLoop *loop;

static void
new_connection_func (DBusServer *server, DBusConnection *conn,
gpointer user_data)
{
    GObject *obj;

    obj = g_object_new (MY_TYPE_OBJECT, NULL);

    dbus_connection_ref (conn);
    dbus_connection_setup_with_g_main (conn, NULL);

    dbus_g_connection_register_g_object
        (dbus_connection_get_g_connection (conn), "/", obj);
}

int
main (int argc, char **argv)
{
    DBusError error;
    DBusServer *server;
    char *addr;

    dbus_error_init (&error);

    g_thread_init (NULL); dbus_g_thread_init ();
    g_type_init ();

    loop = g_main_loop_new (NULL, TRUE);

    server = dbus_server_listen ("unix:tmpdir=/tmp", &error);
    if (!server)
    {
        g_warning ("Cannot create server: %s", error.message);
        return 1;
    }
    addr = dbus_server_get_address (server);
    fprintf (stdout, "%s\n", addr);
    fflush (stdout);
    free (addr);
    dbus_server_setup_with_g_main (server, NULL);
    dbus_server_set_new_connection_function (server,
new_connection_func, NULL, NULL);

    g_main_loop_run (loop);

    g_main_loop_unref (loop);
}

```

```
    return 0;
}
```

```
File = pkg.m4
```

```
# pkg.m4 - Macros to locate and utilise pkg-config.          -*-
Autoconf -*-
# serial 1 (pkg-config-0.24)
#
# Copyright © 2004 Scott James Remnant <scott@netsplit.com>.
#
# This program is free software; you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation; either version 2 of the License, or
# (at your option) any later version.
#
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#
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# Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-
# 1307, USA.
#
# As a special exception to the GNU General Public License, if you
# distribute this file as part of a program that contains a
# configuration script generated by Autoconf, you may include it under
# the same distribution terms that you use for the rest of that
# program.

# PKG_PROG_PKG_CONFIG([MIN-VERSION])
# -----
AC_DEFUN([PKG_PROG_PKG_CONFIG],
[m4_pattern_forbid([^\?PKG_[A-Z_]+$])
m4_pattern_allow([^\?PKG_CONFIG(_PATH)?$])
AC_ARG_VAR([PKG_CONFIG], [path to pkg-config utility])
AC_ARG_VAR([PKG_CONFIG_PATH], [directories to add to pkg-config's
search path])
AC_ARG_VAR([PKG_CONFIG_LIBDIR], [path overriding pkg-config's built-in
search path])

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
    AC_PATH_TOOL([PKG_CONFIG], [pkg-config])
fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=m4_default([$1], [0.9.0])
    AC_MSG_CHECKING([pkg-config is at least version
$_pkg_min_version])
```

```

        if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
    AC_MSG_RESULT([yes])
else
    AC_MSG_RESULT([no])
    PKG_CONFIG=""
fi
fi[]dnl
])# PKG_PROG_PKG_CONFIG

# PKG_CHECK_EXISTS(MODULES, [ACTION-IF-FOUND], [ACTION-IF-NOT-FOUND])
#
# Check to see whether a particular set of modules exists.  Similar
# to PKG_CHECK_MODULES(), but does not set variables or print errors.
#
# Please remember that m4 expands AC_REQUIRE([PKG_PROG_PKG_CONFIG])
# only at the first occurrence in configure.ac, so if the first place
# it's called might be skipped (such as if it is within an "if", you
# have to call PKG_CHECK_EXISTS manually
# -----
AC_DEFUN([PKG_CHECK_EXISTS],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
if test -n "$PKG_CONFIG" && \
    AC_RUN_LOG([$PKG_CONFIG --exists --print-errors "$1"]); then
    m4_default([$2], [:])
m4_ifvaln([$3], [else
    $3])dnl
fi])

# _PKG_CONFIG([VARIABLE], [COMMAND], [MODULES])
# -----
m4_define([_PKG_CONFIG],
[if test -n "$$1"; then
    pkg_cv_[]$1="$$1"
elif test -n "$PKG_CONFIG"; then
    PKG_CHECK_EXISTS([$3],
                    [pkg_cv_[]$1=`$PKG_CONFIG --[]$2 "$3"
2>/dev/null`],
                    [pkg_failed=yes])
else
    pkg_failed=untried
fi[]dnl
])# _PKG_CONFIG

# _PKG_SHORT_ERRORS_SUPPORTED
# -----
AC_DEFUN([_PKG_SHORT_ERRORS_SUPPORTED],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])
if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no

```

```

fi[]dnl
])# _PKG_SHORT_ERRORS_SUPPORTED

# PKG_CHECK_MODULES(VARIABLE-PREFIX, MODULES, [ACTION-IF-FOUND],
# [ACTION-IF-NOT-FOUND])
#
#
# Note that if there is a possibility the first call to
# PKG_CHECK_MODULES might not happen, you should be sure to include an
# explicit call to PKG_PROG_PKG_CONFIG in your configure.ac
#
#
# -----
AC_DEFUN([PKG_CHECK_MODULES],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
AC_ARG_VAR([$_CFLAGS], [C compiler flags for $1, overriding pkg-
config])dnl
AC_ARG_VAR([$_LIBS], [linker flags for $1, overriding pkg-
config])dnl

pkg_failed=no
AC_MSG_CHECKING([for $1])

_PKG_CONFIG([$_CFLAGS], [cflags], [$2])
_PKG_CONFIG([$_LIBS], [libs], [$2])

m4_define([_PKG_TEXT], [Alternatively, you may set the environment
variables $_CFLAGS
and $_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details.])

if test $pkg_failed = yes; then
    AC_MSG_RESULT([no])
    _PKG_SHORT_ERRORS_SUPPORTED
    if test $_pkg_short_errors_supported = yes; then
        $_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "$2" 2>&1`
    else
        $_PKG_ERRORS=`$PKG_CONFIG --print-errors "$2" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$$_PKG_ERRORS" >&AS_MESSAGE_LOG_FD

    m4_default([$4], [AC_MSG_ERROR(
[Package requirements ($2) were not met:

$$_PKG_ERRORS

Consider adjusting the PKG_CONFIG_PATH environment variable if you
installed software in a non-standard prefix.

```

```

_PKG_TEXT])dnl
    ])
elif test $pkg_failed = untried; then
    AC_MSG_RESULT([no])
    m4_default([$4], [AC_MSG_FAILURE(
[The pkg-config script could not be found or is too old.  Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

_PKG_TEXT

To get pkg-config, see <http://pkg-config.freedesktop.org/>.)])dnl
    ])
else
    $1[_CFLAGS=$pkg_cv_[]$1[_CFLAGS
    $1[_LIBS=$pkg_cv_[]$1[_LIBS
    AC_MSG_RESULT([yes])
    $3
fi[]dnl
])# PKG_CHECK_MODULES

```

File = pkg.m4.~1~

```

# pkg.m4 - Macros to locate and utilise pkg-config.          -*-
Autoconf -*-
# serial 1 (pkg-config-0.24)
#
# Copyright © 2004 Scott James Remnant <scott@netsplit.com>.
#
# This program is free software; you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
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# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful, but
# WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the GNU
# General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program; if not, write to the Free Software
# Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-
# 1307, USA.
#
# As a special exception to the GNU General Public License, if you
# distribute this file as part of a program that contains a
# configuration script generated by Autoconf, you may include it under
# the same distribution terms that you use for the rest of that
# program.

```



```

# PKG_PROG_PKG_CONFIG([MIN-VERSION])
# -----
AC_DEFUN([PKG_PROG_PKG_CONFIG],
[m4_pattern_forbid([^_?PKG_[A-Z_]+$])
m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
AC_ARG_VAR([PKG_CONFIG], [path to pkg-config utility])
AC_ARG_VAR([PKG_CONFIG_PATH], [directories to add to pkg-config's
search path])
AC_ARG_VAR([PKG_CONFIG_LIBDIR], [path overriding pkg-config's built-in
search path])

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
    AC_PATH_TOOL([PKG_CONFIG], [pkg-config])
fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=m4_default([$1], [0.9.0])
    AC_MSG_CHECKING([pkg-config is at least version
$_pkg_min_version])
    if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        AC_MSG_RESULT([yes])
    else
        AC_MSG_RESULT([no])
        PKG_CONFIG=""
    fi
fi[]dnl
])# PKG_PROG_PKG_CONFIG

# PKG_CHECK_EXISTS(MODULES, [ACTION-IF-FOUND], [ACTION-IF-NOT-FOUND])
#
# Check to see whether a particular set of modules exists.  Similar
# to PKG_CHECK_MODULES(), but does not set variables or print errors.
#
# Please remember that m4 expands AC_REQUIRE([PKG_PROG_PKG_CONFIG])
# only at the first occurrence in configure.ac, so if the first place
# it's called might be skipped (such as if it is within an "if", you
# have to call PKG_CHECK_EXISTS manually
# -----
AC_DEFUN([PKG_CHECK_EXISTS],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
if test -n "$PKG_CONFIG" && \
    AC_RUN_LOG([$PKG_CONFIG --exists --print-errors "$1"]); then
    m4_default([$2], [:])
m4_ifvaln([$3], [else
    $3])dnl
fi])

# _PKG_CONFIG([VARIABLE], [COMMAND], [MODULES])
# -----
m4_define([_PKG_CONFIG],
[if test -n "$$1"; then
    pkg_cv_[]$1="$$1"

```

```

elif test -n "$PKG_CONFIG"; then
    PKG_CHECK_EXISTS([$3],
                    [pkg_cv_[]$1=`$PKG_CONFIG --[]$2 "$3"
2>/dev/null`],
                    [pkg_failed=yes])
else
    pkg_failed=untried
fi[]dnl
])# _PKG_CONFIG

# _PKG_SHORT_ERRORS_SUPPORTED
# -----
AC_DEFUN([_PKG_SHORT_ERRORS_SUPPORTED],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])
if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi[]dnl
])# _PKG_SHORT_ERRORS_SUPPORTED

# PKG_CHECK_MODULES(VARIABLE-PREFIX, MODULES, [ACTION-IF-FOUND],
# [ACTION-IF-NOT-FOUND])
#
#
# Note that if there is a possibility the first call to
# PKG_CHECK_MODULES might not happen, you should be sure to include an
# explicit call to PKG_PROG_PKG_CONFIG in your configure.ac
#
#
# -----
AC_DEFUN([PKG_CHECK_MODULES],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
AC_ARG_VAR([$1][_CFLAGS], [C compiler flags for $1, overriding pkg-
config])dnl
AC_ARG_VAR([$1][_LIBS], [linker flags for $1, overriding pkg-
config])dnl

pkg_failed=no
AC_MSG_CHECKING([for $1])

_PKG_CONFIG([$1][_CFLAGS], [cflags], [$2])
_PKG_CONFIG([$1][_LIBS], [libs], [$2])

m4_define([_PKG_TEXT], [Alternatively, you may set the environment
variables $1[]_CFLAGS
and $1[]_LIBS to avoid the need to call pkg-config.
See the pkg-config man page for more details.])

if test $pkg_failed = yes; then
    AC_MSG_RESULT([no])

```

```

        _PKG_SHORT_ERRORS_SUPPORTED
        if test $_pkg_short_errors_supported = yes; then
            $1[_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "$2" 2>&1`
        else
            $1[_PKG_ERRORS=`$PKG_CONFIG --print-errors "$2" 2>&1`
        fi
        # Put the nasty error message in config.log where it belongs
        echo "$$1[_PKG_ERRORS" >&AS_MESSAGE_LOG_FD

```

```

        m4_default([$4], [AC_MSG_ERROR(
[Package requirements ($2) were not met:

```

```

$$1_PKG_ERRORS

```

Consider adjusting the PKG_CONFIG_PATH environment variable if you installed software in a non-standard prefix.

```

    _PKG_TEXT))dnl
    ])
elif test $pkg_failed = untried; then
    AC_MSG_RESULT([no])
    m4_default([$4], [AC_MSG_FAILURE(
[The pkg-config script could not be found or is too old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

```

```

    _PKG_TEXT

```

```

To get pkg-config, see <http://pkg-config.freedesktop.org/>.)dnl
    ])

```

```

else
    $1[_CFLAGS=$pkg_cv_[]$1[_CFLAGS
    $1[_LIBS=$pkg_cv_[]$1[_LIBS
    AC_MSG_RESULT([yes])
    $3

```

```

fi[]dnl
])# PKG_CHECK_MODULES

```

File = pkg.m4.~2~

```

# pkg.m4 - Macros to locate and utilise pkg-config.          -*-
Autoconf -*-
#
# Copyright © 2004 Scott James Remnant <scott@netsplit.com>.
#
# This program is free software; you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation; either version 2 of the License, or
# (at your option) any later version.

```

```

#
# This program is distributed in the hope that it will be useful, but
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# Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-
1307, USA.
#
# As a special exception to the GNU General Public License, if you
# distribute this file as part of a program that contains a
# configuration script generated by Autoconf, you may include it under
# the same distribution terms that you use for the rest of that
program.

# PKG_PROG_PKG_CONFIG([MIN-VERSION])
# -----
AC_DEFUN([PKG_PROG_PKG_CONFIG],
[m4_pattern_forbid([^?PKG_[A-Z_]+$])
m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
AC_ARG_VAR([PKG_CONFIG], [path to pkg-config utility])dnl
if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
    AC_PATH_TOOL([PKG_CONFIG], [pkg-config])
fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=m4_default([$1], [0.9.0])
    AC_MSG_CHECKING([pkg-config is at least version
$_pkg_min_version])
    if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        AC_MSG_RESULT([yes])
    else
        AC_MSG_RESULT([no])
        PKG_CONFIG=""
    fi
fi[]dnl
])# PKG_PROG_PKG_CONFIG

# PKG_CHECK_EXISTS(MODULES, [ACTION-IF-FOUND], [ACTION-IF-NOT-FOUND])
#
# Check to see whether a particular set of modules exists. Similar
# to PKG_CHECK_MODULES(), but does not set variables or print errors.
#
#
# Similar to PKG_CHECK_MODULES, make sure that the first instance of
# this or PKG_CHECK_MODULES is called, or make sure to call
# PKG_CHECK_EXISTS manually
# -----
AC_DEFUN([PKG_CHECK_EXISTS],

```

```

[AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
if test -n "$PKG_CONFIG" && \
    AC_RUN_LOG([$PKG_CONFIG --exists --print-errors "$1"]); then
    m4_ifval([$2], [$2], [:])
m4_ifvaln([$3], [else
    $3])dnl
fi])

# _PKG_CONFIG([VARIABLE], [COMMAND], [MODULES])
# -----
m4_define([_PKG_CONFIG],
[if test -n "$$1"; then
    pkg_cv_[]$1="$$1"
    elif test -n "$PKG_CONFIG"; then
        PKG_CHECK_EXISTS([$3],
            [pkg_cv_[]$1=`$PKG_CONFIG --[]$2 "$3"
2>/dev/null`],
                [pkg_failed=yes])
    else
        pkg_failed=untried
fi[]dnl
])# _PKG_CONFIG

# _PKG_SHORT_ERRORS_SUPPORTED
# -----
AC_DEFUN([_PKG_SHORT_ERRORS_SUPPORTED],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])
if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi[]dnl
])# _PKG_SHORT_ERRORS_SUPPORTED

# PKG_CHECK_MODULES (VARIABLE-PREFIX, MODULES, [ACTION-IF-FOUND],
# [ACTION-IF-NOT-FOUND])
#
#
# Note that if there is a possibility the first call to
# PKG_CHECK_MODULES might not happen, you should be sure to include an
# explicit call to PKG_PROG_PKG_CONFIG in your configure.ac
#
#
# -----
AC_DEFUN([PKG_CHECK_MODULES],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
AC_ARG_VAR([$1][_CFLAGS], [C compiler flags for $1, overriding pkg-
config])dnl
AC_ARG_VAR([$1][_LIBS], [linker flags for $1, overriding pkg-
config])dnl

```

```

pkg_failed=no
AC_MSG_CHECKING([for $1])

_PKG_CONFIG([$1][_CFLAGS], [cflags], [$2])
_PKG_CONFIG([$1][_LIBS], [libs], [$2])

m4_define([_PKG_TEXT], [Alternatively, you may set the environment
variables $1[_CFLAGS]
and $1[_LIBS] to avoid the need to call pkg-config.
See the pkg-config man page for more details.])

if test $pkg_failed = yes; then
    _PKG_SHORT_ERRORS_SUPPORTED
    if test $_pkg_short_errors_supported = yes; then
        $1[_PKG_ERRORS]=`$PKG_CONFIG --short-errors --print-
errors "$2" 2>&1`
    else
        $1[_PKG_ERRORS]=`$PKG_CONFIG --print-errors "$2" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$$1[_PKG_ERRORS]" >&AS_MESSAGE_LOG_FD

    ifelse([$4], , [AC_MSG_ERROR(dnl
[Package requirements ($2) were not met:

$$1_PKG_ERRORS

Consider adjusting the PKG_CONFIG_PATH environment variable if you
installed software in a non-standard prefix.

_PKG_TEXT
])],
        [AC_MSG_RESULT([no]
$4)])
elif test $pkg_failed = untried; then
    ifelse([$4], , [AC_MSG_FAILURE(dnl
[The pkg-config script could not be found or is too old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

_PKG_TEXT

To get pkg-config, see <http://pkg-config.freedesktop.org/>.])],
        [$4])
else
    $1[_CFLAGS]=$pkg_cv_[$1][_CFLAGS]
    $1[_LIBS]=$pkg_cv_[$1][_LIBS]
    AC_MSG_RESULT([yes])
    ifelse([$3], , :, [$3])
fi[dnl
])# PKG_CHECK_MODULES

```

File = policy.c

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* policy.c  Bus security policy
 *
 * Copyright (C) 2003, 2004  Red Hat, Inc.
 *
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301  USA
 */
```

```
#include <config.h>
#include "policy.h"
#include "services.h"
#include "test.h"
#include "utils.h"
#include <dbus/dbus-list.h>
#include <dbus/dbus-hash.h>
#include <dbus/dbus-internals.h>
```

```
BusPolicyRule*
bus_policy_rule_new (BusPolicyRuleType type,
                    dbus_bool_t      allow)
{
    BusPolicyRule *rule;

    rule = dbus_new0 (BusPolicyRule, 1);
    if (rule == NULL)
        return NULL;

    rule->type = type;
    rule->refcount = 1;
```

```

rule->allow = allow;

switch (rule->type)
{
case BUS_POLICY_RULE_USER:
    rule->d.user.uid = DBUS_UID_UNSET;
    break;
case BUS_POLICY_RULE_GROUP:
    rule->d.group.gid = DBUS_GID_UNSET;
    break;
case BUS_POLICY_RULE_SEND:
    rule->d.send.message_type = DBUS_MESSAGE_TYPE_INVALID;

    /* allow rules default to TRUE (only requested replies allowed)
     * deny rules default to FALSE (only unrequested replies denied)
     */
    rule->d.send.requested_reply = rule->allow;
    break;
case BUS_POLICY_RULE_RECEIVE:
    rule->d.receive.message_type = DBUS_MESSAGE_TYPE_INVALID;
    /* allow rules default to TRUE (only requested replies allowed)
     * deny rules default to FALSE (only unrequested replies denied)
     */
    rule->d.receive.requested_reply = rule->allow;
    break;
case BUS_POLICY_RULE_OWN:
    break;
}

return rule;
}

BusPolicyRule *
bus_policy_rule_ref (BusPolicyRule *rule)
{
    _dbus_assert (rule->refcount > 0);

    rule->refcount += 1;

    return rule;
}

void
bus_policy_rule_unref (BusPolicyRule *rule)
{
    _dbus_assert (rule->refcount > 0);

    rule->refcount -= 1;

    if (rule->refcount == 0)
    {
        switch (rule->type)

```



```

    {
    case BUS_POLICY_RULE_SEND:
        dbus_free (rule->d.send.path);
        dbus_free (rule->d.send.interface);
        dbus_free (rule->d.send.member);
        dbus_free (rule->d.send.error);
        dbus_free (rule->d.send.destination);
        break;
    case BUS_POLICY_RULE_RECEIVE:
        dbus_free (rule->d.receive.path);
        dbus_free (rule->d.receive.interface);
        dbus_free (rule->d.receive.member);
        dbus_free (rule->d.receive.error);
        dbus_free (rule->d.receive.origin);
        break;
    case BUS_POLICY_RULE_OWN:
        dbus_free (rule->d.own.service_name);
        break;
    case BUS_POLICY_RULE_USER:
        break;
    case BUS_POLICY_RULE_GROUP:
        break;
    }

    dbus_free (rule);
}

}

struct BusPolicy
{
    int refcount;

    DBusList *default_rules;          /**< Default policy rules */
    DBusList *mandatory_rules;       /**< Mandatory policy rules */
    DBusHashTable *rules_by_uid;     /**< per-UID policy rules */
    DBusHashTable *rules_by_gid;     /**< per-GID policy rules */
    DBusList *at_console_true_rules; /**< console user policy rules
where at_console="true"*/
    DBusList *at_console_false_rules; /**< console user policy rules
where at_console="false"*/
};

static void
free_rule_func (void *data,
                void *user_data)
{
    BusPolicyRule *rule = data;

    bus_policy_rule_unref (rule);
}

static void

```

```

free_rule_list_func (void *data)
{
    DBusList **list = data;

    if (list == NULL) /* DBusHashTable is on crack */
        return;

    _dbus_list_foreach (list, free_rule_func, NULL);

    _dbus_list_clear (list);

    dbus_free (list);
}

BusPolicy*
bus_policy_new (void)
{
    BusPolicy *policy;

    policy = dbus_new0 (BusPolicy, 1);
    if (policy == NULL)
        return NULL;

    policy->refcount = 1;

    policy->rules_by_uid = _dbus_hash_table_new (DBUS_HASH_UINTPTR,
                                                NULL,
                                                free_rule_list_func);

    if (policy->rules_by_uid == NULL)
        goto failed;

    policy->rules_by_gid = _dbus_hash_table_new (DBUS_HASH_UINTPTR,
                                                NULL,
                                                free_rule_list_func);

    if (policy->rules_by_gid == NULL)
        goto failed;

    return policy;

failed:
    bus_policy_unref (policy);
    return NULL;
}

BusPolicy *
bus_policy_ref (BusPolicy *policy)
{
    _dbus_assert (policy->refcount > 0);

    policy->refcount += 1;

    return policy;
}

```

```

}

void
bus_policy_unref (BusPolicy *policy)
{
    _dbus_assert (policy->refcount > 0);

    policy->refcount -= 1;

    if (policy->refcount == 0)
    {
        _dbus_list_foreach (&policy->default_rules, free_rule_func,
NULL);
        _dbus_list_clear (&policy->default_rules);

        _dbus_list_foreach (&policy->mandatory_rules, free_rule_func,
NULL);
        _dbus_list_clear (&policy->mandatory_rules);

        _dbus_list_foreach (&policy->at_console_true_rules,
free_rule_func, NULL);
        _dbus_list_clear (&policy->at_console_true_rules);

        _dbus_list_foreach (&policy->at_console_false_rules,
free_rule_func, NULL);
        _dbus_list_clear (&policy->at_console_false_rules);

        if (policy->rules_by_uid)
        {
            _dbus_hash_table_unref (policy->rules_by_uid);
            policy->rules_by_uid = NULL;
        }

        if (policy->rules_by_gid)
        {
            _dbus_hash_table_unref (policy->rules_by_gid);
            policy->rules_by_gid = NULL;
        }

        dbus_free (policy);
    }
}

static dbus_bool_t
add_list_to_client (DBusList **list,
                   BusClientPolicy *client)
{
    DBusList *link;

    link = _dbus_list_get_first_link (list);
    while (link != NULL)
    {

```

```

BusPolicyRule *rule = link->data;
link = _dbus_list_get_next_link (list, link);

switch (rule->type)
{
  case BUS_POLICY_RULE_USER:
  case BUS_POLICY_RULE_GROUP:
    /* These aren't per-connection policies */
    break;

  case BUS_POLICY_RULE_OWN:
  case BUS_POLICY_RULE_SEND:
  case BUS_POLICY_RULE_RECEIVE:
    /* These are per-connection */
    if (!bus_client_policy_append_rule (client, rule))
      return FALSE;
    break;
}
}

return TRUE;
}

BusClientPolicy*
bus_policy_create_client_policy (BusPolicy      *policy,
                                DBusConnection *connection,
                                DBusError      *error)
{
  BusClientPolicy *client;
  dbus_uid_t uid;
  dbus_bool_t at_console;

  _dbus_assert (dbus_connection_get_is_authenticated (connection));
  _DBUS_ASSERT_ERROR_IS_CLEAR (error);

  client = bus_client_policy_new ();
  if (client == NULL)
    goto nomem;

  if (!add_list_to_client (&policy->default_rules,
                          client))
    goto nomem;

  /* we avoid the overhead of looking up user's groups
   * if we don't have any group rules anyway
   */
  if (_dbus_hash_table_get_n_entries (policy->rules_by_gid) > 0)
  {
    unsigned long *groups;
    int n_groups;
    int i;

```

```

        if (!bus_connection_get_unix_groups (connection, &groups,
&n_groups, error))
            goto failed;

        i = 0;
        while (i < n_groups)
        {
            DBusList **list;

            list = _dbus_hash_table_lookup_uintptr (policy-
>rules_by_gid,
                                                    groups[i]);

            if (list != NULL)
            {
                if (!add_list_to_client (list, client))
                {
                    dbus_free (groups);
                    goto nomem;
                }
            }

            ++i;
        }

        dbus_free (groups);
    }

    if (dbus_connection_get_unix_user (connection, &uid))
    {
        if (_dbus_hash_table_get_n_entries (policy->rules_by_uid) > 0)
        {
            DBusList **list;

            list = _dbus_hash_table_lookup_uintptr (policy-
>rules_by_uid,
                                                    uid);

            if (list != NULL)
            {
                if (!add_list_to_client (list, client))
                    goto nomem;
            }
        }

        /* Add console rules */
        at_console = _dbus_unix_user_is_at_console (uid, error);

        if (at_console)
        {
            if (!add_list_to_client (&policy->at_console_true_rules,
client))

```

```

        goto nomem;
    }
    else if (dbus_error_is_set (error) == TRUE)
    {
        goto failed;
    }
    else if (!add_list_to_client (&policy->at_console_false_rules,
client))
    {
        goto nomem;
    }
}

if (!add_list_to_client (&policy->mandatory_rules,
client))

    goto nomem;

bus_client_policy_optimize (client);

return client;

nomem:
    BUS_SET_OOM (error);
failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    if (client)
        bus_client_policy_unref (client);
    return NULL;
}

static dbus_bool_t
list_allows_user (dbus_bool_t          def,
                  DBusList             **list,
                  unsigned long         uid,
                  const unsigned long *group_ids,
                  int                   n_group_ids)
{
    DBusList *link;
    dbus_bool_t allowed;

    allowed = def;

    link = _dbus_list_get_first_link (list);
    while (link != NULL)
    {
        BusPolicyRule *rule = link->data;
        link = _dbus_list_get_next_link (list, link);

        if (rule->type == BUS_POLICY_RULE_USER)
        {
            _dbus_verbose ("List %p user rule uid="DBUS_UID_FORMAT"\n",
list, rule->d.user.uid);

```

```

        if (rule->d.user.uid == DBUS_UID_UNSET)
            ; /* '*' wildcard */
        else if (rule->d.user.uid != uid)
            continue;
    }
    else if (rule->type == BUS_POLICY_RULE_GROUP)
    {
        _dbus_verbose ("List %p group rule gid="DBUS_GID_FORMAT"\n",
            list, rule->d.group.gid);

        if (rule->d.group.gid == DBUS_GID_UNSET)
            ; /* '*' wildcard */
        else
        {
            int i;

            i = 0;
            while (i < n_group_ids)
            {
                if (rule->d.group.gid == group_ids[i])
                    break;
                ++i;
            }

            if (i == n_group_ids)
                continue;
        }
    }
    else
        continue;

    allowed = rule->allow;
}

return allowed;
}

dbus_bool_t
bus_policy_allow_unix_user (BusPolicy      *policy,
                           unsigned long   uid)
{
    dbus_bool_t allowed;
    unsigned long *group_ids;
    int n_group_ids;

    /* On OOM or error we always reject the user */
    if (!_dbus_unix_groups_from_uid (uid, &group_ids, &n_group_ids))
    {
        _dbus_verbose ("Did not get any groups for UID %lu\n",
            uid);
        return FALSE;
    }
}

```

```

    }

    /* Default to "user owning bus" can connect */
    allowed = _dbus_unix_user_is_process_owner (uid);

    allowed = list_allows_user (allowed,
                               &policy->default_rules,
                               uid,
                               group_ids, n_group_ids);

    allowed = list_allows_user (allowed,
                               &policy->mandatory_rules,
                               uid,
                               group_ids, n_group_ids);

    dbus_free (group_ids);

    _dbus_verbose ("UID %lu allowed = %d\n", uid, allowed);

    return allowed;
}

/* For now this is never actually called because the default
 * DBusConnection behavior of 'same user that owns the bus can
 * connect' is all it would do. Set the windows user function in
 * connection.c if the config file ever supports doing something
 * interesting here.
 */
dbus_bool_t
bus_policy_allow_windows_user (BusPolicy      *policy,
                              const char     *windows_sid)
{
    /* Windows has no policies here since only the session bus
     * is really used for now, so just checking that the
     * connecting person is the same as the bus owner is fine.
     */
    return _dbus_windows_user_is_process_owner (windows_sid);
}

dbus_bool_t
bus_policy_append_default_rule (BusPolicy      *policy,
                               BusPolicyRule  *rule)
{
    if (!_dbus_list_append (&policy->default_rules, rule))
        return FALSE;

    bus_policy_rule_ref (rule);

    return TRUE;
}

dbus_bool_t

```



```

bus_policy_append_mandatory_rule (BusPolicy      *policy,
                                  BusPolicyRule  *rule)
{
    if (!_dbus_list_append (&policy->mandatory_rules, rule))
        return FALSE;

    bus_policy_rule_ref (rule);

    return TRUE;
}

static DBusList**
get_list (DBusHashTable *hash,
          unsigned long  key)
{
    DBusList **list;

    list = _dbus_hash_table_lookup_uintptr (hash, key);

    if (list == NULL)
        {
            list = dbus_new0 (DBusList*, 1);
            if (list == NULL)
                return NULL;

            if (!_dbus_hash_table_insert_uintptr (hash, key, list))
                {
                    dbus_free (list);
                    return NULL;
                }
        }

    return list;
}

dbus_bool_t
bus_policy_append_user_rule (BusPolicy      *policy,
                             dbus_uid_t    uid,
                             BusPolicyRule  *rule)
{
    DBusList **list;

    list = get_list (policy->rules_by_uid, uid);

    if (list == NULL)
        return FALSE;

    if (!_dbus_list_append (list, rule))
        return FALSE;
}

```

```

    bus_policy_rule_ref (rule);

    return TRUE;
}

dbus_bool_t
bus_policy_append_group_rule (BusPolicy      *policy,
                              dbus_gid_t     gid,
                              BusPolicyRule  *rule)
{
    DBusList **list;

    list = get_list (policy->rules_by_gid, gid);

    if (list == NULL)
        return FALSE;

    if (!_dbus_list_append (list, rule))
        return FALSE;

    bus_policy_rule_ref (rule);

    return TRUE;
}

dbus_bool_t
bus_policy_append_console_rule (BusPolicy      *policy,
                                dbus_bool_t    at_console,
                                BusPolicyRule  *rule)
{
    if (at_console)
    {
        if (!_dbus_list_append (&policy->at_console_true_rules, rule))
            return FALSE;
    }
    else
    {
        if (!_dbus_list_append (&policy->at_console_false_rules, rule))
            return FALSE;
    }

    bus_policy_rule_ref (rule);

    return TRUE;
}

static dbus_bool_t
append_copy_of_policy_list (DBusList **list,
                            DBusList **to_append)
{
    DBusList *link;

```

```

DBusList *tmp_list;

tmp_list = NULL;

/* Preallocate all our links */
link = _dbus_list_get_first_link (to_append);
while (link != NULL)
{
    if (!_dbus_list_append (&tmp_list, link->data))
    {
        _dbus_list_clear (&tmp_list);
        return FALSE;
    }

    link = _dbus_list_get_next_link (to_append, link);
}

/* Now append them */
while ((link = _dbus_list_pop_first_link (&tmp_list))
{
    bus_policy_rule_ref (link->data);
    _dbus_list_append_link (list, link);
}

return TRUE;
}

static dbus_bool_t
merge_id_hash (DBusHashTable *dest,
              DBusHashTable *to_absorb)
{
    DBusHashIter iter;

    _dbus_hash_iter_init (to_absorb, &iter);
    while (_dbus_hash_iter_next (&iter))
    {
        unsigned long id = _dbus_hash_iter_get_uintptr_key (&iter);
        DBusList **list = _dbus_hash_iter_get_value (&iter);
        DBusList **target = get_list (dest, id);

        if (target == NULL)
            return FALSE;

        if (!append_copy_of_policy_list (target, list))
            return FALSE;
    }

    return TRUE;
}

dbus_bool_t
bus_policy_merge (BusPolicy *policy,

```

```

        BusPolicy *to_absorb)
{
    /* FIXME Not properly atomic, but as used for configuration files we
     * don't rely on it quite so much.
     */

    if (!append_copy_of_policy_list (&policy->default_rules,
                                     &to_absorb->default_rules))
        return FALSE;

    if (!append_copy_of_policy_list (&policy->mandatory_rules,
                                     &to_absorb->mandatory_rules))
        return FALSE;

    if (!append_copy_of_policy_list (&policy->at_console_true_rules,
                                     &to_absorb->at_console_true_rules))
        return FALSE;

    if (!append_copy_of_policy_list (&policy->at_console_false_rules,
                                     &to_absorb->
>at_console_false_rules))
        return FALSE;

    if (!merge_id_hash (policy->rules_by_uid,
                       to_absorb->rules_by_uid))
        return FALSE;

    if (!merge_id_hash (policy->rules_by_gid,
                       to_absorb->rules_by_gid))
        return FALSE;

    return TRUE;
}

struct BusClientPolicy
{
    int refcount;

    DBusList *rules;
};

BusClientPolicy*
bus_client_policy_new (void)
{
    BusClientPolicy *policy;

    policy = dbus_new0 (BusClientPolicy, 1);
    if (policy == NULL)
        return NULL;

    policy->refcount = 1;

```

```

    return policy;
}

BusClientPolicy *
bus_client_policy_ref (BusClientPolicy *policy)
{
    _dbus_assert (policy->refcount > 0);

    policy->refcount += 1;

    return policy;
}

static void
rule_unref_foreach (void *data,
                   void *user_data)
{
    BusPolicyRule *rule = data;

    bus_policy_rule_unref (rule);
}

void
bus_client_policy_unref (BusClientPolicy *policy)
{
    _dbus_assert (policy->refcount > 0);

    policy->refcount -= 1;

    if (policy->refcount == 0)
        {
            _dbus_list_foreach (&policy->rules,
                               rule_unref_foreach,
                               NULL);

            _dbus_list_clear (&policy->rules);

            dbus_free (policy);
        }
}

static void
remove_rules_by_type_up_to (BusClientPolicy *policy,
                           BusPolicyRuleType type,
                           DBusList *up_to)
{
    DBusList *link;

    link = _dbus_list_get_first_link (&policy->rules);
    while (link != up_to)
        {
            BusPolicyRule *rule = link->data;

```

```

        DBusList *next = _dbus_list_get_next_link (&policy->rules,
link);

        if (rule->type == type)
        {
            _dbus_list_remove_link (&policy->rules, link);
            bus_policy_rule_unref (rule);
        }

        link = next;
    }
}

void
bus_client_policy_optimize (BusClientPolicy *policy)
{
    DBusList *link;

    /* The idea here is that if we have:
    *
    * <allow send_interface="foo.bar"/>
    * <deny send_interface="*/>
    *
    * (for example) the deny will always override the allow. So we
    * delete the allow. Ditto for deny followed by allow, etc. This is
    * a dumb thing to put in a config file, but the <include> feature
    * of files allows for an "inheritance and override" pattern where
    * it could make sense. If an included file wants to "start over"
    * with a blanket deny, no point keeping the rules from the parent
    * file.
    */

    _dbus_verbose ("Optimizing policy with %d rules\n",
        _dbus_list_get_length (&policy->rules));

    link = _dbus_list_get_first_link (&policy->rules);
    while (link != NULL)
    {
        BusPolicyRule *rule;
        DBusList *next;
        dbus_bool_t remove_preceding;

        next = _dbus_list_get_next_link (&policy->rules, link);
        rule = link->data;

        remove_preceding = FALSE;

        _dbus_assert (rule != NULL);

        switch (rule->type)
        {
            {
                case BUS_POLICY_RULE_SEND:

```

```

        remove_preceding =
            rule->d.send.message_type == DBUS_MESSAGE_TYPE_INVALID &&
            rule->d.send.path == NULL &&
            rule->d.send.interface == NULL &&
            rule->d.send.member == NULL &&
            rule->d.send.error == NULL &&
            rule->d.send.destination == NULL;
        break;
    case BUS_POLICY_RULE_RECEIVE:
        remove_preceding =
            rule->d.receive.message_type == DBUS_MESSAGE_TYPE_INVALID
&&

            rule->d.receive.path == NULL &&
            rule->d.receive.interface == NULL &&
            rule->d.receive.member == NULL &&
            rule->d.receive.error == NULL &&
            rule->d.receive.origin == NULL;
        break;
    case BUS_POLICY_RULE_OWN:
        remove_preceding =
            rule->d.own.service_name == NULL;
        break;
    case BUS_POLICY_RULE_USER:
    case BUS_POLICY_RULE_GROUP:
        _dbus_assert_not_reached ("invalid rule");
        break;
    }

    if (remove_preceding)
        remove_rules_by_type_up_to (policy, rule->type,
                                    link);

    link = next;
}

_dbus_verbose ("After optimization, policy has %d rules\n",
               _dbus_list_get_length (&policy->rules));
}

dbus_bool_t
bus_client_policy_append_rule (BusClientPolicy *policy,
                               BusPolicyRule *rule)
{
    _dbus_verbose ("Appending rule %p with type %d to policy %p\n",
                  rule, rule->type, policy);

    if (!_dbus_list_append (&policy->rules, rule))
        return FALSE;

    bus_policy_rule_ref (rule);

    return TRUE;
}

```

```

}

dbus_bool_t
bus_client_policy_check_can_send (BusClientPolicy *policy,
                                  BusRegistry      *registry,
                                  dbus_bool_t      requested_reply,
                                  DBusConnection   *receiver,
                                  DBusMessage      *message,
                                  dbus_int32_t     *toggles,
                                  dbus_bool_t      *log)
{
    DBusList *link;
    dbus_bool_t allowed;

    /* policy->rules is in the order the rules appeared
     * in the config file, i.e. last rule that applies wins
     */

    _dbus_verbose (" (policy) checking send rules\n");
    *toggles = 0;

    allowed = FALSE;
    link = _dbus_list_get_first_link (&policy->rules);
    while (link != NULL)
    {
        BusPolicyRule *rule = link->data;

        link = _dbus_list_get_next_link (&policy->rules, link);

        /* Rule is skipped if it specifies a different
         * message name from the message, or a different
         * destination from the message
         */

        if (rule->type != BUS_POLICY_RULE_SEND)
        {
            _dbus_verbose (" (policy) skipping non-send rule\n");
            continue;
        }

        if (rule->d.send.message_type != DBUS_MESSAGE_TYPE_INVALID)
        {
            if (dbus_message_get_type (message) != rule->
                d.send.message_type)
            {
                _dbus_verbose (" (policy) skipping rule for different
message type\n");
                continue;
            }
        }

        /* If it's a reply, the requested_reply flag kicks in */

```



```

    if (dbus_message_get_reply_serial (message) != 0)
    {
        /* for allow, requested_reply=true means the rule applies
        * only when reply was requested. requested_reply=false
means
        * always allow.
        */
        if (!requested_reply && rule->allow && rule-
>d.send.requested_reply && !rule->d.send.eavesdrop)
        {
            _dbus_verbose (" (policy) skipping allow rule since it
only applies to requested replies and does not allow
eavesdropping\n");
            continue;
        }

        /* for deny, requested_reply=false means the rule applies
only
        * when the reply was not requested. requested_reply=true
means the
        * rule always applies.
        */
        if (requested_reply && !rule->allow && !rule-
>d.send.requested_reply)
        {
            _dbus_verbose (" (policy) skipping deny rule since it
only applies to unrequested replies\n");
            continue;
        }
    }

    if (rule->d.send.path != NULL)
    {
        if (dbus_message_get_path (message) != NULL &&
            strcmp (dbus_message_get_path (message),
                    rule->d.send.path) != 0)
        {
            _dbus_verbose (" (policy) skipping rule for different
path\n");
            continue;
        }
    }

    if (rule->d.send.interface != NULL)
    {
        /* The interface is optional in messages. For allow rules,
if the message
        * has no interface we want to skip the rule (and thus not
allow);
        * for deny rules, if the message has no interface we want
to use the
        * rule (and thus deny).

```

```

    */
    dbus_bool_t no_interface;

    no_interface = dbus_message_get_interface (message) == NULL;

    if ((no_interface && rule->allow) ||
        (!no_interface &&
         strcmp (dbus_message_get_interface (message),
                 rule->d.send.interface) != 0))
    {
        interface\n");
        _dbus_verbose (" (policy) skipping rule for different
        continue;
    }
}

if (rule->d.send.member != NULL)
{
    if (dbus_message_get_member (message) != NULL &&
        strcmp (dbus_message_get_member (message),
                rule->d.send.member) != 0)
    {
        member\n");
        _dbus_verbose (" (policy) skipping rule for different
        continue;
    }
}

if (rule->d.send.error != NULL)
{
    if (dbus_message_get_error_name (message) != NULL &&
        strcmp (dbus_message_get_error_name (message),
                rule->d.send.error) != 0)
    {
        error name\n");
        _dbus_verbose (" (policy) skipping rule for different
        continue;
    }
}

if (rule->d.send.destination != NULL)
{
    /* receiver can be NULL for messages that are sent to the
     * message bus itself, we check the strings in that case as
     * built-in services don't have a DbusConnection but
messages
     * to them have a destination service name.
    */
    if (receiver == NULL)
    {
        if (!dbus_message_has_destination (message,

```

```

                                                                    rule-
>d.send.destination))
    {
        _dbus_verbose (" (policy) skipping rule because
message dest is not %s\n",
                                                                    rule->d.send.destination);
        continue;
    }
else
    {
        DBusString str;
        BusService *service;

        _dbus_string_init_const (&str, rule-
>d.send.destination);

        service = bus_registry_lookup (registry, &str);
        if (service == NULL)
            {
                _dbus_verbose (" (policy) skipping rule because
dest %s doesn't exist\n",
                                                                    rule->d.send.destination);
                continue;
            }

            if (!bus_service_has_owner (service, receiver))
                {
                    _dbus_verbose (" (policy) skipping rule because
dest %s isn't owned by receiver\n",
                                                                    rule->d.send.destination);
                    continue;
                }
        }
    }

    /* Use this rule */
    allowed = rule->allow;
    *log = rule->d.send.log;
    (*toggles)++;

    _dbus_verbose (" (policy) used rule, allow now = %d\n",
allowed);
}

return allowed;
}

/* See docs on what the args mean on
bus_context_check_security_policy()
* comment
*/

```

```

dbus_bool_t
bus_client_policy_check_can_receive (BusClientPolicy *policy,
                                     BusRegistry      *registry,
                                     dbus_bool_t      requested_reply,
                                     DBusConnection  *sender,
                                     DBusConnection
*addressed_recipient,
                                     DBusConnection
*proposed_recipient,
                                     DBusMessage     *message,
                                     dbus_int32_t    *toggles)
{
    DBusList *link;
    dbus_bool_t allowed;
    dbus_bool_t eavesdropping;

    eavesdropping =
        addressed_recipient != proposed_recipient &&
        dbus_message_get_destination (message) != NULL;

    /* policy->rules is in the order the rules appeared
     * in the config file, i.e. last rule that applies wins
     */

    _dbus_verbose (" (policy) checking receive rules, eavesdropping =
%d\n", eavesdropping);
    *toggles = 0;

    allowed = FALSE;
    link = _dbus_list_get_first_link (&policy->rules);
    while (link != NULL)
    {
        BusPolicyRule *rule = link->data;

        link = _dbus_list_get_next_link (&policy->rules, link);

        if (rule->type != BUS_POLICY_RULE_RECEIVE)
        {
            _dbus_verbose (" (policy) skipping non-receive rule\n");
            continue;
        }

        if (rule->d.receive.message_type != DBUS_MESSAGE_TYPE_INVALID)
        {
            if (dbus_message_get_type (message) != rule-
>d.receive.message_type)
            {
                _dbus_verbose (" (policy) skipping rule for different
message type\n");
                continue;
            }
        }
    }
}

```

```

/* for allow, eavesdrop=false means the rule doesn't apply when
 * eavesdropping. eavesdrop=true means always allow.
 */
if (eavesdropping && rule->allow && !rule->d.receive.eavesdrop)
{
    _dbus_verbose (" (policy) skipping allow rule since it
doesn't apply to eavesdropping\n");
    continue;
}

/* for deny, eavesdrop=true means the rule applies only when
 * eavesdropping; eavesdrop=false means always deny.
 */
if (!eavesdropping && !rule->allow && rule->d.receive.eavesdrop)
{
    _dbus_verbose (" (policy) skipping deny rule since it only
applies to eavesdropping\n");
    continue;
}

/* If it's a reply, the requested_reply flag kicks in */
if (dbus_message_get_reply_serial (message) != 0)
{
    /* for allow, requested_reply=true means the rule applies
 * only when reply was requested. requested_reply=false
means
 * always allow.
 */
    if (!requested_reply && rule->allow && rule-
>d.receive.requested_reply && !rule->d.receive.eavesdrop)
    {
        _dbus_verbose (" (policy) skipping allow rule since it
only applies to requested replies and does not allow
eavesdropping\n");
        continue;
    }

    /* for deny, requested_reply=false means the rule applies
only
 * when the reply was not requested. requested_reply=true
means the
 * rule always applies.
 */
    if (requested_reply && !rule->allow && !rule-
>d.receive.requested_reply)
    {
        _dbus_verbose (" (policy) skipping deny rule since it
only applies to unrequested replies\n");
        continue;
    }
}
}

```

```

if (rule->d.receive.path != NULL)
{
    if (dbus_message_get_path (message) != NULL &&
        strcmp (dbus_message_get_path (message),
                rule->d.receive.path) != 0)
    {
        _dbus_verbose (" (policy) skipping rule for different
path\n");
        continue;
    }
}

if (rule->d.receive.interface != NULL)
{
    /* The interface is optional in messages. For allow rules,
if the message
    * has no interface we want to skip the rule (and thus not
allow);
    * for deny rules, if the message has no interface we want
to use the
    * rule (and thus deny).
    */
    dbus_bool_t no_interface;

    no_interface = dbus_message_get_interface (message) == NULL;

    if ((no_interface && rule->allow) ||
        (!no_interface &&
         strcmp (dbus_message_get_interface (message),
                 rule->d.receive.interface) != 0))
    {
        _dbus_verbose (" (policy) skipping rule for different
interface\n");
        continue;
    }
}

if (rule->d.receive.member != NULL)
{
    if (dbus_message_get_member (message) != NULL &&
        strcmp (dbus_message_get_member (message),
                rule->d.receive.member) != 0)
    {
        _dbus_verbose (" (policy) skipping rule for different
member\n");
        continue;
    }
}

if (rule->d.receive.error != NULL)
{

```

```

        if (dbus_message_get_error_name (message) != NULL &&
            strcmp (dbus_message_get_error_name (message),
                    rule->d.receive.error) != 0)
        {
            _dbus_verbose (" (policy) skipping rule for different
error name\n");
            continue;
        }
    }

    if (rule->d.receive.origin != NULL)
    {
        /* sender can be NULL for messages that originate from the
        * message bus itself, we check the strings in that case as
        * built-in services don't have a DBusConnection but will
        * still set the sender on their messages.
        */
        if (sender == NULL)
        {
            if (!dbus_message_has_sender (message,
                                          rule->d.receive.origin))
            {
                _dbus_verbose (" (policy) skipping rule because
message sender is not %s\n",
                              rule->d.receive.origin);
                continue;
            }
        }
        else
        {
            BusService *service;
            DBusString str;

            _dbus_string_init_const (&str, rule->d.receive.origin);

            service = bus_registry_lookup (registry, &str);

            if (service == NULL)
            {
                _dbus_verbose (" (policy) skipping rule because
origin %s doesn't exist\n",
                              rule->d.receive.origin);
                continue;
            }

            if (!bus_service_has_owner (service, sender))
            {
                _dbus_verbose (" (policy) skipping rule because
origin %s isn't owned by sender\n",
                              rule->d.receive.origin);
                continue;
            }
        }
    }

```

```

        }
    }

    /* Use this rule */
    allowed = rule->allow;
    (*toggles)++;

    _dbus_verbose (" (policy) used rule, allow now = %d\n",
                  allowed);
}

return allowed;
}

static dbus_bool_t
bus_rules_check_can_own (DBusList *rules,
                        const DBusString *service_name)
{
    DBusList *link;
    dbus_bool_t allowed;

    /* rules is in the order the rules appeared
     * in the config file, i.e. last rule that applies wins
     */

    allowed = FALSE;
    link = _dbus_list_get_first_link (&rules);
    while (link != NULL)
    {
        BusPolicyRule *rule = link->data;

        link = _dbus_list_get_next_link (&rules, link);

        /* Rule is skipped if it specifies a different service name from
         * the desired one.
         */

        if (rule->type != BUS_POLICY_RULE_OWN)
            continue;

        if (!rule->d.own.prefix && rule->d.own.service_name != NULL)
        {
            if (!_dbus_string_equal_c_str (service_name,
                                          rule->d.own.service_name))
                continue;
        }
        else if (rule->d.own.prefix)
        {
            const char *data;
            char next_char;

```



```

        if (!_dbus_string_starts_with_c_str (service_name,
                                             rule-
>d.own.service_name))
            continue;

        data = _dbus_string_get_const_data (service_name);
        next_char = data[strlen (rule->d.own.service_name)];
        if (next_char != '\0' && next_char != '.')
            continue;
    }

    /* Use this rule */
    allowed = rule->allow;
}

return allowed;
}

dbus_bool_t
bus_client_policy_check_can_own (BusClientPolicy *policy,
                                 const DBusString *service_name)
{
    return bus_rules_check_can_own (policy->rules, service_name);
}

#ifdef DBUS_BUILD_TESTS
dbus_bool_t
bus_policy_check_can_own (BusPolicy *policy,
                          const DBusString *service_name)
{
    return bus_rules_check_can_own (policy->default_rules,
service_name);
}
#endif /* DBUS_BUILD_TESTS */

```

File = policy.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* policy.h  Bus security policy
 *
 * Copyright (C) 2003  Red Hat, Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify
 * it under the terms of the GNU General Public License as published
by
 * the Free Software Foundation; either version 2 of the License, or

```

```

* (at your option) any later version.
*
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* GNU General Public License for more details.
*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

```

```

#ifndef BUS_POLICY_H
#define BUS_POLICY_H

```

```

#include <dbus/dbus.h>
#include <dbus/dbus-string.h>
#include <dbus/dbus-list.h>
#include <dbus/dbus-sysdeps.h>
#include "bus.h"

```

```

typedef enum

```

```

{
    BUS_POLICY_RULE_SEND,
    BUS_POLICY_RULE_RECEIVE,
    BUS_POLICY_RULE_OWN,
    BUS_POLICY_RULE_USER,
    BUS_POLICY_RULE_GROUP
} BusPolicyRuleType;

```

```

/** determines whether the rule affects a connection, or some global
item */

```

```

#define BUS_POLICY_RULE_IS_PER_CLIENT(rule) (!((rule)->type ==
BUS_POLICY_RULE_USER || \
                                             (rule)->type ==
BUS_POLICY_RULE_GROUP))

```

```

struct BusPolicyRule

```

```

{
    int refcount;

    BusPolicyRuleType type;

```

```

    unsigned int allow : 1; /**< #TRUE if this allows, #FALSE if it
denies */

```

```

    union
    {
        struct
        {

```

```

    /* message type can be DBUS_MESSAGE_TYPE_INVALID meaning "any"
*/
    int    message_type;
    /* any of these can be NULL meaning "any" */
    char *path;
    char *interface;
    char *member;
    char *error;
    char *destination;
    unsigned int eavesdrop : 1;
    unsigned int requested_reply : 1;
    unsigned int log : 1;
} send;

struct
{
    /* message type can be DBUS_MESSAGE_TYPE_INVALID meaning "any"
*/
    int    message_type;
    /* any of these can be NULL meaning "any" */
    char *path;
    char *interface;
    char *member;
    char *error;
    char *origin;
    unsigned int eavesdrop : 1;
    unsigned int requested_reply : 1;
} receive;

struct
{
    /* can be NULL meaning "any" */
    char *service_name;
    /* if prefix is set, any name starting with service_name can be
owned */
    unsigned int prefix : 1;
} own;

struct
{
    /* can be DBUS_UID_UNSET meaning "any" */
    dbus_uid_t uid;
} user;

struct
{
    /* can be DBUS_GID_UNSET meaning "any" */
    dbus_gid_t gid;
} group;

} d;
};

```

```

BusPolicyRule* bus_policy_rule_new (BusPolicyRuleType type,
                                     dbus_bool_t allow);
BusPolicyRule* bus_policy_rule_ref (BusPolicyRule *rule);
void bus_policy_rule_unref (BusPolicyRule *rule);

BusPolicy* bus_policy_new (void);
BusPolicy* bus_policy_ref (BusPolicy
*policy);
void bus_policy_unref (BusPolicy
*policy);
BusClientPolicy* bus_policy_create_client_policy (BusPolicy
*policy,
DBusConnection
*connection,
DBusError
*error);
dbus_bool_t bus_policy_allow_unix_user (BusPolicy
*policy,
unsigned long
uid);
dbus_bool_t bus_policy_allow_windows_user (BusPolicy
*policy,
const char
*windows_sid);
dbus_bool_t bus_policy_append_default_rule (BusPolicy
*policy,
BusPolicyRule
*rule);
dbus_bool_t bus_policy_append_mandatory_rule (BusPolicy
*policy,
BusPolicyRule
*rule);
dbus_bool_t bus_policy_append_user_rule (BusPolicy
*policy,
dbus_uid_t
uid,
BusPolicyRule
*rule);
dbus_bool_t bus_policy_append_group_rule (BusPolicy
*policy,
dbus_gid_t
gid,
BusPolicyRule
*rule);
dbus_bool_t bus_policy_append_console_rule (BusPolicy
*policy,
dbus_bool_t
at_console,
BusPolicyRule
*rule);

```

```

dbus_bool_t      bus_policy_merge          (BusPolicy
*policy,
                                                    BusPolicy
*to_absorb);

BusClientPolicy* bus_client_policy_new      (void);
BusClientPolicy* bus_client_policy_ref      (BusClientPolicy
*policy);
void             bus_client_policy_unref     (BusClientPolicy
*policy);
dbus_bool_t      bus_client_policy_check_can_send (BusClientPolicy
*policy,
                                                    BusRegistry
*registry,
dbus_bool_t
requested_reply,
DBusConnection
*receiver,
DBusMessage
*message,
dbus_int32_t
*toggles,
dbus_bool_t
*log);
dbus_bool_t      bus_client_policy_check_can_receive (BusClientPolicy
*policy,
                                                    BusRegistry
*registry,
dbus_bool_t
requested_reply,
DBusConnection
*sender,
DBusConnection
*addressed_recipient,
DBusConnection
*proposed_recipient,
DBusMessage
*message,
dbus_int32_t
*toggles);
dbus_bool_t      bus_client_policy_check_can_own (BusClientPolicy
*policy,
                                                    const DBusString
*service_name);
dbus_bool_t      bus_client_policy_append_rule (BusClientPolicy
*policy,
                                                    BusPolicyRule
*rule);
void             bus_client_policy_optimize (BusClientPolicy
*policy);

#ifdef DBUS_BUILD_TESTS

```

```

dbus_bool_t      bus_policy_check_can_own      (BusPolicy *policy,
                                                const DBusString
*service_name);
#endif

#endif /* BUS_POLICY_H */

```

File = ProjectSourceGroup.cmake

```

# folders in the msvc projects
# mode==flat : headers and sources in no folders
# mode==split : standard behavior of cmake, split headers and sources
# mode== <other values" : code is in this folder
macro(project_source_group mode sources headers)
    #message(STATUS ${mode})
    #message(STATUS ${sources} ${headers})
    if(${mode} MATCHES "flat")
        source_group("Source Files" Files)
        source_group("Header Files" Files)
        source_group("cmake" FILES CMakeLists.txt)
    else(${mode} MATCHES "flat")
        if(NOT ${mode} MATCHES "split")
            source_group("${mode}" FILES ${${sources}})
        ${${headers}})
        endif(NOT ${mode} MATCHES "split")
    endif(${mode} MATCHES "flat")
endmacro(project_source_group mode sources headers)

```

File = rc.messagebus

```

#!/bin/sh
#
# messagebus:   The D-BUS systemwide message bus
#
# chkconfig: 345 97 03
# description: This is a daemon which broadcasts notifications of
system events \
#               and other messages. See
http://www.freedesktop.org/software/dbus/
#
# processname: dbus-daemon
# pidfile: /var/run/dbus/pid
#
# Sanity checks.
#[ -x /usr/bin/dbus-daemon ] || exit 0

```

```

# Source function library.
#. /etc/rc.d/init.d/functions

# so we can rearrange this easily
#processname=dbus-daemon
#servicename=messagebus

#RETVAL=0

start() {
    echo "Starting system message bus"
    if [ -x /usr/bin/dbus-uuidgen ] ; then
        /usr/bin/dbus-uuidgen --ensure
    fi

    if [ -x /usr/bin/dbus-daemon ];then
        /usr/bin/dbus-daemon --system
    fi
    #daemon --check $servicename $processname --system
    #RETVAL=$?
    #echo
    #[ $RETVAL -eq 0 ] && touch /var/lock/subsys/$servicename
}

stop() {
    echo "Stopping system message bus"

    ## we don't want to kill all the per-user $processname, we want
    ## to use the pid file *only*; because we use the fake nonexistent
    ## program name "$servicename" that should be safe-ish
    killall dbus-daemon
    #RETVAL=$?
    #echo
    #if [ $RETVAL -eq 0 ]; then
    #    rm -f /var/lock/subsys/$servicename
    #    rm -f /var/run/dbus/pid
    #fi
}

# See how we were called.
case "$1" in
    start)
        start
        ;;
    stop)
        stop
        ;;
    status)
        status $servicename
        RETVAL=$?
        ;;
    restart)

```

```

        stop
        start
        ;;
    reload)
        echo "Message bus can't reload its configuration, you have to
restart it"
        RETVAL=$?
        ;;
    *)
        echo $"Usage: $0 {start|stop|status|restart|reload}"
        ;;
esac
exit $RETVAL

```

File = rc.messagebus.in

```

#!/bin/sh
#
# messagebus:   The D-BUS systemwide message bus
#
# chkconfig: 345 97 03
# description: This is a daemon which broadcasts notifications of
system events \
#               and other messages. See
http://www.freedesktop.org/software/dbus/
#
# processname: dbus-daemon
# pidfile: @DBUS_SYSTEM_PID_FILE@
#
# Sanity checks.
#[ -x @EXPANDED_BINDIR@/dbus-daemon ] || exit 0

# Source function library.
#. @EXPANDED_SYSCONFDIR@/rc.d/init.d/functions

# so we can rearrange this easily
#processname=dbus-daemon
#servicename=messagebus

#RETVAL=0

start() {
    echo "Starting system message bus"
    if [ -x @EXPANDED_BINDIR@/dbus-uuidgen ] ; then
        @EXPANDED_BINDIR@/dbus-uuidgen --ensure
    fi

    if [ -x @EXPANDED_BINDIR@/dbus-daemon ];then
        @EXPANDED_BINDIR@/dbus-daemon --system
    fi
}

```



```

    fi
    #daemon --check $servicename $processname --system
    #RETVAL=$?
    #echo
    #[ $RETVAL -eq 0 ] && touch
@EXPANDED_LOCALSTATEDIR@/lock/subsys/$servicename
}

stop() {
    echo "Stopping system message bus"

    ## we don't want to kill all the per-user $processname, we want
    ## to use the pid file *only*; because we use the fake nonexistent
    ## program name "$servicename" that should be safe-ish
    killall dbus-daemon
    #RETVAL=$?
    #echo
    #if [ $RETVAL -eq 0 ]; then
    #    rm -f @EXPANDED_LOCALSTATEDIR@/lock/subsys/$servicename
    #    rm -f @DBUS_SYSTEM_PID_FILE@
    #fi
}

# See how we were called.
case "$1" in
    start)
        start
        ;;
    stop)
        stop
        ;;
    status)
        status $servicename
        RETVAL=$?
        ;;
    restart)
        stop
        start
        ;;
    reload)
        echo "Message bus can't reload its configuration, you have to
restart it"
        RETVAL=$?
        ;;
    *)
        echo $"Usage: $0 {start|stop|status|restart|reload}"
        ;;
esac
exit $RETVAL

```

File = README

D-BUS is a simple IPC library based on messages.

See <http://www.freedesktop.org/software/dbus/> for lots of documentation, mailing lists, etc.

Note
===

A core concept of the D-BUS implementation is that "libdbus" is intended to be a low-level API, similar to Xlib. Most programmers are intended to use the bindings to GLib, Qt, Python, Mono, Java, or whatever. These bindings have varying levels of completeness.

Configuration flags
===

These are the dbus-specific configuration flags that can be given to the ./configure program.

--enable-tests	enable unit test code
--enable-ansi	enable -ansi -pedantic gcc flags
--enable-verbose-mode	support verbose debug mode
--enable-asserts	include assertion checks
--enable-checks	include sanity checks on public API
--enable-xml-docs	build XML documentation (requires xmlto)
--enable-gcov	compile with coverage profiling
instrumentation (gcc only)	
--with-xml=libxml/expat	XML library to use
--with-gnu-ld	assume the C compiler uses GNU ld
[default=no]	
--with-tags[=TAGS]	include additional configurations
[automatic]	

File = README.cygwin

The cygwin dbus port is included in master branch of dbus git repository since 1.3.1.

The cygwin port of dbus is maintained by:

<http://sourceware.org/cygwinports/>

File = README.launchd

Launchd[1,2] replaces init, inetd and cron on Mac OS X since 10.4 "Tiger".

dbus uses this service to provide a common session bus address for each user

and so deprecates the X11 enabled dbus-launcher.

[1] <http://developer.apple.com/MacOSX/launchd.html>

[2] <http://launchd.macosforge.org/>

Setup

===

Configure with --enable-launchd and --without-x (X11 should not harm but it's

simply not necessary any more)

After installation, to prevent a reboot, load the dbus session starter into

launchd by executing:

```
$ launchctl load /Library/LaunchAgents/org.freedesktop.dbus-session.plist
```

You can change the launch agent dir via configure, but it's not recommended.

Make sure to execute the above line as the actual user for which you want to

use a session bus since launchd manages its agents on a per user basis.

How it works

===

Launchd allocates a socket and provides the unix path to it via the variable

DBUS_LAUNCHD_SESSION_BUS_SOCKET in launchd's environment. Every process

spawned by launchd (or dbus-daemon, if started by launchd) can access it through

its own environment. Other processes can query launchd for it by executing:

```
$ launchctl getenv DBUS_LAUNCHD_SESSION_BUS_SOCKET
```

However, this is normally done by the dbus client lib for you.

If launchd start dbus-daemon with a config file containing a "launchd:env=FOO"

address, as the default session config does with

env=DBUS_LAUNCHD_SESSION_BUS_SOCKET,

the daemon will get the file descriptor from launchd and start listening on it.

The environment variable is used to get the actual socket path which is passed

to every service spawned by dbus-daemon as a result from autolaunch messages.

Please note that it's not possible to start dbus-daemon manually when using a

"launchd:" address. Only child processes of launchd can access the above

mentioned file descriptor!

To create custom buses just set up an other launch agent. As a quick start copy

/Library/LaunchAgents/org.freedesktop.dbus-session.plist, change the label

to i.e. "org.freedesktop.dbus-foo" and change the SecureSocketWithKey value,

i.e. to "DBUS_LAUNCHD_FOO_BUS_SOCKET". This environment variable has to be set

in the config file for your new bus in the <listen> element (see session.config).

Then edit your /Library/LaunchAgents/org.freedesktop.dbus-foo.plist to start

dbus-daemon with "--config-file=/opt/local/etc/dbus-1/foo.conf" instead of

"--session". Now load the new plist onto launchd as described in the setup

section of this document.

Executing "launchctl export" should now give you two sockets, one in DBUS_LAUNCHD_SESSION_BUS_SOCKET and the new

DBUS_LAUNCHD_FOO_BUS_SOCKET.

To connect to this new bus use

"launchd:env=DBUS_LAUNCHD_FOO_BUS_SOCKET".

Since Mac OS X 10.5 "Leopard" you can also configure launchd to start dbus-daemon on demand as soon as some process connects to the socket.

Since

it's broken on 10.4 this feature is disabled per default. Look at

/Library/LaunchAgents/org.freedesktop.dbus-session.plist to change it.

On the client side, the envvar DBUS_SESSION_BUS_ADDRESS can be normally used

but if it's not set, launchd is queried for the session bus socket.

File = Readme.txt

Test suite from <http://csrc.nist.gov/cryptval/shs.html>

Sample Vectors for SHA-1 Testing

This file describes tests and vectors that can be used in verifying the correctness of

an SHA-1 implementation. However, use of these vectors does not take the place of validation obtained through the Cryptographic Module Validation Program.

There are three areas of the Secure Hash Standard for which test vectors are supplied: short messages of varying length, selected long messages, and pseudorandomly generated messages. Since it is possible for an implementation to correctly handle the hashing of byte-oriented messages (and not messages of a non-byte length), the SHS tests each come in two flavors. For both byte oriented and bit oriented messages, the message lengths are given in bits.

Type I Test: Messages of Varying Length

An implementation of the SHS must be able to correctly generate message digests for messages of arbitrary length. This functionality can be tested by supplying the implementation with 1025 pseudorandomly generated messages with lengths from 0 to 1024 bits (for an implementation that only hashes byte-oriented data correctly, 129 messages of length 0, 8, 16, 24, ..., 1024 bits will be supplied).

Type II Test: Selected Long Messages

Additional testing of an implementation can be performed by testing that the implementation can correctly generate digests for longer messages. A list of 100 messages, each of length > 1024 , is supplied. These can be used to verify the hashing of longer message lengths. For bit oriented testing the messages are from 1025 to 103425 bits long (length= $1025+i*1024$, where $0 \leq i < 100$). For byte oriented testing the messages are from 1032 to 103432 (length= $1032+i*1024$, where $0 \leq i < 100$).

Type III Test: Pseudorandomly Generated Messages

This test determines whether the implementation can compute message digests for messages that are generated using a given seed. A sequence of 100 message digests is generated using this seed. The digests are generated according to the following pseudocode:

```
procedure MonteCarlo(string SEED)
{
    integer i, j, a;
```

```

string      M;

M := SEED;
for j = 0 to 99 do {
    for i = 1 to 50000 do {
        for a = 1 to (j/4*8 + 24) do M := M || '0'; /*'0' is
the binary zero bit. */
        M := M || i;      /* Here, the value for 'i' is
expressed as a 32-bit word
and concatenated with 'M'. The first bit
concatenated with 'M' is the most
significant bit of
this 32-bit word. */
        M := SHA(M);
    }
    print(M);
}
}

```

NOTE: In the above procedure, || denotes concatenation. Also, M || i denotes appending the 32-bit word representing the value 'i', as defined in section 2 of the SHS. Within the procedure, M is a string of variable length. The initial length of 416 bits ensures that the length of M never exceeds 512 bits during execution of the above procedure, and it ensures that messages will be of a byte length. Each element printed should be 160 bits in length.

File formats:

There are two files included for each test type (bit-oriented and byte-oriented). One file contains the messages and the other file contains the hashes.

The message files provided use "compact strings" to store the message values. Compact strings are used to represent the messages in a compact form. A compact string has the form

$$z \ || \ b \ || \ n(1) \ || \ n(2) \ || \ \dots \ || \ n(z)$$

where $z \geq 0$ that represents the number of n , b is either 0 or 1, and each $n(i)$ is a decimal integer representing a positive number. The length of the compact string is given by the summation of the $n(i)$.

The compact string is interpreted as the representation of the bit string consisting of b repeated $n(1)$ times, followed by $1-b$ repeated $n(2)$ times, followed by b repeated $n(3)$ times, and so on.

Example:

M = 5 1 7 13 5 1 2
where z = 5 and b = 1. Then the compact string M represents the
bit string
11111110000000000000011111011
where 1 is repeated 7 times, 0 is repeated 13 times, 1 is
repeated 5 times,
0 is repeated 1 time, and 1 is repeated 2 times.

File = README.win

Windows port of the freedesktop.org D-Bus

Features and completeness

The windows port of dbus provides the dbus-1 library and mostly applications which are already available on unix. These applications are: dbus-daemon, dbus-launch, dbus-monitor and dbus-send. D-Bus comes with a test suite which is used on unix to guarantee production quality and this test suite runs mostly. There are some test not running yet and there is help needed to get them running.

Supported compilers

On windows Microsoft Visual Studio 2010 (Express and professional variants) and mingw-w64|32 are known to work.

Building

D-Bus can be built on windows using automake or cmake. See the file README for more information. Special cmake build instructions can be found in cmake/readme-cmake.txt

windbus and dbus4win Ports

The Windows ports from the windbus and dbus4win projects has been merged into the freedesktop git master branch, as applicable. The spec has been updated with windows specific stuff.

Tests

- dbus library check

```
bin\dbus-test.exe <build-root>\test\data
```

- bus daemon check

```
bin\bus-test.exe <build-root>\test\data
```

- check available names

```
bin\test_names.exe
```

- check if dbus-daemon is accessible

```
bin\dbus-send.exe --session --type=method_call --print-reply --
dest=org.freedesktop.DBus / org.freedesktop.DBus.ListNames method
return sender=org.freedesktop.DBus -> dest=:1.4 array [ string
"org.freedesktop.DBus"string ":1.4"]
```

- start session dbus-daemon

either by running

```
bin\dbus-launch
```

or

```
start bin\dbus-daemon --session
```

Before running these commands you may execute

```
set DBUS_VERBOSE=1
```

for getting debug infos

- call function registered in dbus

```
bin\dbus-send.exe --dest=org.freedesktop.DBus --print-reply --
type=method_call / org.freedesktop.DBus.StartServiceByName
string:org.freedesktop.DBus.TestSuiteEchoService uint32:455 method
return sender=org.freedesktop.DBus -> dest=:1.8 uint32 2
```

note: When building with the Visual C++ IDE the *.exe files are in
the bin/Debug and bin/Release folder, not in the bin folder.

FAQ

- How far is WinDBus from being usable for production ?

dbus comes with a test suite which is used on unix to guarantate
production quality and this test suite runs mostly. There are some
test not running and we need help to get them running.

In the pratice I and some other people are using dbus for at least
more

than four years in conjunction with kde on windows without any
problems.

- On UNIX D-Bus uses UNIX sockets to communicate (correct me if I'm
wrong).

What is used on Windows ?

tcp sockets, there are some efforts to get named pipe running, but some design problems of the win32 api, we are not able to solve without bigger changes to the dbus code base let us stop this effort.

- Do you have any clue if dbus-win32 can run in a Windows CE environment?

dbus has been ported to wince, see README.wince for more information

- Do you know if the C++ binding made by OpenWengo will be easily portable to Windows?

The OpenWengo dbus-c++ binding has been ported to windows see in WinDBus svn

(<http://sf.net/projects/windbus>)

The related test applicationa are running well.

TODO

Oktober 2010:

- the code wrapped with DBUS_WIN_FIXME should be inspected if it required for windows

- create a dbus setup installer

- implement system bus and system bus service starter
see <http://windbus.svn.sourceforge.net/viewvc/windbus/trunk/bus/bus-service-win.c>
for a starting point

- implement a real login session bus
The scope parameter of the autolaunch meta protocol could be extended to support user specific session busses (like already done with the amarok bundled dbus which use a shared memory area named "DBusDaemonAddressInfo:<username>".
Also the dbus installer should start a session bus on user login.

File = README.wince

DBus Daemon for Windows CE/Windows Mobile 6.5

=====

Bugs in upstream for any window version:

* MoveFileExA < 0 result check bug

* double dbus_free somewhere I forgot where (check in -ugly)

- * alignment issue
- * CreateProcess process information handle leak
- * _dbus_getsid NULL vs INVALID_HANDLE_VALUE
- * win_account_to_sid

Customisation

=====

1) At installation, the following registry value should be set to the installation directory of the dbus installation (the directory containing the bin, etc, share folders):

HKLM\Software\freedesktop\DBus\Install Directory

2) Instead of environment variable DBUS_VERBOSE, use
HKLM\Software\freedesktop\DBus\Verbose

2) The keyring directory is MYDOCUMENTS\dbus-keyrings, not
HOMEPATH\.dbus-keyrings.

Compilation

=====

```
./configure --host=arm-mingw32ce CPPFLAGS=-I/path/to/expat/include
LDFLAGS=-L/path/to/expat/lib
```

A recent version of libtool is required, with this change:

2010-02-28 Pierre Ossman <ossman@ossman.lkpg.cendio.se> (tiny change)

Ralf Wildenhues <Ralf.Wildenhues@gmx.de>

```
Fix deplibs check fallback for 64-bit Windows and Windows CE.
* libltdl/m4/libtool.m4 (_LT_CHECK_MAGIC_METHOD): Accept file
formats
'pe-arm-wince' and 'pe-x86-64'. Add note about consistency
with ...
* libltdl/config/ltmain.m4sh (func_win32_libid): ... the
respective
pattern here; sync pattern from the former.
* tests/deplibs-mingw.at (deplibs without file command): New
file, new test.
* Makefile.am (TESTSUITE_AT): Update.
* NEWS: Update.
```

MB vs WCHAR

=====

Windows CE only supports the Unicode interface, while Dbus Daemon uses the Multi-Byte interface on Windows by default. The glue code does

not support multibyte in all cases. In particular, the `_mbsrchr` function is not correctly implemented. It could be correctly implemented, or dbus daemon could use the `wchar` interface more consistently on all Windows targets. For now, the Windows CE port will only work for filesystems without some weird characters in file names. Is this a serious limitation?

Known Issues =====

Autolaunch is broken so far.

Environment variables are faked. Some are punted to the registry, but in any case they can not be used reliably for IPC.

The test suite is not ported yet.

dbus-pipe.c:

- * Uses libc file descriptors. Needed for `--print-address` and `--print-pid` which probably don't work yet.

dbus-sysdeps-win.c:

- * Backtraces have been disabled.
- * `_dbus_fd_set_close_on_exec` Not supported, maybe we should disable the warning.
- * `SearchPathA`: Uses `HKLM\\Software\\freedesktop\\DBus\\Install Directory` to locate binaries.

File = README.~1~

This directory is where `.m4` files providing third-party autoconf macros can be placed to be automatically found by the `aclocal(1)` program.

The `.m4` files placed here could be shared among different versions of `aclocal`, so be careful.

Even if no actual `.m4` files are present, this directory is required in order for `aclocal` to work properly. Please do not remove it.

File = README.~2~

Sections in this file describe:

- introduction and overview
- low-level vs. high-level API
- version numbers

- options to the configure script
- ABI stability policy

Introduction

===

D-Bus is a simple system for interprocess communication and coordination.

The "and coordination" part is important; D-Bus provides a bus daemon that does things like:

- notify applications when other apps exit
- start services on demand
- support single-instance applications

See <http://www.freedesktop.org/software/dbus/> for lots of documentation, mailing lists, etc.

See also the file HACKING for notes of interest to developers working on D-Bus.

If you're considering D-Bus for use in a project, you should be aware that D-Bus was designed for a couple of specific use cases, a "system bus" and a "desktop session bus." These are documented in more detail in the D-Bus specification and FAQ available on the web site.

If your use-case isn't one of these, D-Bus may still be useful, but only by accident; so you should evaluate carefully whether D-Bus makes sense for your project.

Note: low-level API vs. high-level binding APIs

===

A core concept of the D-Bus implementation is that "libdbus" is intended to be a low-level API. Most programmers are intended to use the bindings to GLib, Qt, Python, Mono, Java, or whatever. These bindings have varying levels of completeness and are maintained as separate projects from the main D-Bus package. The main D-Bus package contains the low-level libdbus, the bus daemon, and a few command-line tools such as dbus-launch.

If you use the low-level API directly, you're signing up for some pain. Think of the low-level API as analogous to Xlib or GDI, and the high-level API as analogous to Qt/GTK+/HTML.

Version numbers

===

D-Bus uses the common "Linux kernel" versioning system, where even-numbered minor versions are stable and odd-numbered minor versions are development snapshots.

So for example, development snapshots: 1.1.1, 1.1.2, 1.1.3, 1.3.4
Stable versions: 1.0, 1.0.1, 1.0.2, 1.2.1, 1.2.3

All pre-1.0 versions were development snapshots.

Development snapshots make no ABI stability guarantees for new ABI introduced since the last stable release. Development snapshots are likely to have more bugs than stable releases, obviously.

Configuration

===

dbus could be build by using autotools or cmake.

When using autotools the configure step is initiated by running
./configure
with or without additional configuration flags.

When using cmake the configure step is initiated by running the cmake program with or without additional configuration flags.

Configuration flags

===

When using autotools, run "./configure --help" to see the possible configuration options and environment variables.

When using cmake, inspect README.cmake to see the possible configuration options and environment variables.

API/ABI Policy

===

Now that D-Bus has reached version 1.0, the objective is that all applications dynamically linked to libdbus will continue working indefinitely with the most recent system and session bus daemons.

- The protocol will never be broken again; any message bus should work with any client forever. However, extensions are possible where the protocol is extensible.
- If the library API is modified incompatibly, we will rename it as in <http://ometer.com/parallel.html> - in other words, it will always be possible to compile against and use the older API, and apps will always get the API they expect.

Interfaces can and probably will be `_added_`. This means both new functions and types in libdbus, and new methods exported to applications by the bus daemon.

The above policy is intended to make D-Bus as API-stable as other

widely-used libraries (such as GTK+, Qt, Xlib, or your favorite example). If you have questions or concerns they are very welcome on the D-Bus mailing list.

NOTE ABOUT DEVELOPMENT SNAPSHOTS AND VERSIONING

Odd-numbered minor releases (1.1.x, 1.3.x, 2.1.x, etc. - major.minor.micro) are devel snapshots for testing, and any new ABI they introduce relative to the last stable version is subject to change during the development cycle.

Any ABI found in a stable release, however, is frozen.

ABI will not be added in a stable series if we can help it. i.e. the ABI of 1.2.0 and 1.2.5 you can expect to be the same, while the ABI of 1.4.x may add more stuff not found in 1.2.x.

NOTE ABOUT STATIC LINKING

We are not yet firmly freezing all runtime dependencies of the libdbus library. For example, the library may read certain files as part of its implementation, and these files may move around between versions.

As a result, we don't yet recommend statically linking to libdbus. Also, reimplementations of the protocol from scratch might have to work to stay in sync with how libdbus behaves.

To lock things down and declare static linking and reimplementation to be safe, we'd like to see all the internal dependencies of libdbus (for example, files read) well-documented in the specification, and we'd like to have a high degree of confidence that these dependencies are supportable over the long term and extensible where required.

NOTE ABOUT HIGH-LEVEL BINDINGS

Note that the high-level bindings are separate projects from the main D-Bus package, and have their own release cycles, levels of maturity, and ABI stability policies. Please consult the documentation for your binding.

Bootstrapping D-Bus on new platforms

===

A full build of D-Bus, with all regression tests enabled and run, has some dependencies which themselves depend on D-Bus, either for compilation or for some of *their* regression tests: GLib, dbus-glib and dbus-python are currently affected.

To avoid circular dependencies, when bootstrapping D-Bus for the first time on a new OS or CPU architecture, you can either cross-compile some of those components, or choose the build order and options carefully:

- * build and install D-Bus without tests
 - do not use the --enable-modular-tests=yes configure option
 - do not use the --enable-tests=yes configure option
- * build and install GLib, again without tests
- * use those versions of libdbus and GLib to build and install dbus-glib
- * ... and use those to install dbus-python
- * rebuild libdbus; this time you can run all of the tests
- * rebuild GLib; this time you can run all of the tests

File = README.~3~

This directory is where .m4 files providing third-party autoconf macros can be placed to be automatically found by the aclocal(1) program.

The .m4 files placed here could be shared among different versions of aclocal, so be careful.

Even if no actual .m4 files are present, this directory is required in order for aclocal to work properly. Please do not remove it.

File = recursive-types.message

Message with recursive types

VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call

REQUIRED_FIELDS

ALIGN 8
END_LENGTH Header
START_LENGTH Body

Everything is inside a dict
TYPE DICT
LENGTH Dict1
START_LENGTH Dict1

first dict entry is an array of array of uint32
STRING 'mega-uint-array'
TYPE ARRAY

```
TYPE ARRAY
TYPE ARRAY
TYPE UINT32
LENGTH Array1
START_LENGTH Array1

LENGTH Array1_1
START_LENGTH Array1_1
UINT32_ARRAY { 1, 2, 3, 4, 5}
UINT32_ARRAY { 2, 3, 4, 5, 1}
UINT32_ARRAY { 3, 4, 5, 1, 2}
END_LENGTH Array1_1

LENGTH Array1_2
START_LENGTH Array1_2
UINT32_ARRAY { 4, 5, 6, 7, 8}
UINT32_ARRAY { 5, 6, 7, 8, 4}
END_LENGTH Array1_2

END_LENGTH Array1

# second dict entry is an array of strings
STRING 'string-array'
TYPE ARRAY
TYPE STRING
STRING_ARRAY { 'a', 'string', 'array'}

# third dict entry is another dict
STRING 'nested-dict'
TYPE DICT
LENGTH Dict2
START_LENGTH Dict2

STRING 'string'
TYPE STRING
STRING 'a deeply nested string'

STRING 'super-nested-dict'
TYPE DICT
LENGTH Dict3
START_LENGTH Dict3

STRING 'double-array'
TYPE ARRAY
TYPE DOUBLE
DOUBLE_ARRAY {1.0, 2.0, 3.0}

STRING 'dict-array'
TYPE ARRAY
TYPE DICT
LENGTH Array2
START_LENGTH Array2
```



```
LENGTH Dict4
START_LENGTH Dict4
STRING 'key4'
TYPE BYTE
BYTE '4'
END_LENGTH Dict4
```

```
LENGTH Dict5
START_LENGTH Dict5
STRING 'key5'
TYPE BYTE
BYTE '5'
END_LENGTH Dict5
```

```
END_LENGTH Array2
```

```
STRING 'boolean'
TYPE BOOLEAN
BOOLEAN false
```

```
END_LENGTH Dict3
```

```
END_LENGTH Dict2
```

```
END_LENGTH Dict1
```

```
END_LENGTH Body
```

```
File = registrations.c
```

```
/* Regression test for object registration and unregistration
 *
 * Copyright © 2009 Collabora Ltd. <http://www.collabora.co.uk/>
 * Copyright © 2009-2011 Nokia Corporation
 *
 * In preparation for dbus-glib relicensing (if it ever happens), this
file is
 * licensed under (at your option) either the AFL v2.1, the GPL v2 or
later,
 * or an MIT/X11-style license:
 *
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 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
```

```

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* DEALINGS IN THE SOFTWARE.
*/

```

```
#include <config.h>
```

```
#include <dbus/dbus-glib.h>
```

```
#include <dbus/dbus-glib-lowlevel.h>
```

```
#include "my-object.h"
```

```
GMainLoop *loop = NULL;
```

```
typedef struct {
    DBusError dbus_error;
    DBusGConnection *bus;
    DBusGConnection *bus2;
    GObject *object;
    DBusMessage *frobnicatel1_message;
    DBusMessage *frobnicate2_message;
    gboolean received_objectified;
} Fixture;
```

```
#define assert_no_error(e) _assert_no_error (e, __FILE__, __LINE__)
static void
_assert_no_error (const DBusError *e,
                  const char *file,
                  int line)
{
    if (G_UNLIKELY (dbus_error_is_set (e)))
        g_error ("%s:%d: expected success but got error: %s: %s",
                  file, line, e->name, e->message);
}

```

```

static void
setup (Fixture *f,
      gconstpointer path_to_use)
{
    dbus_error_init (&f->dbus_error);

    f->bus = dbus_g_bus_get_private (DBUS_BUS_SESSION, NULL, NULL);
    g_assert (f->bus != NULL);

    f->bus2 = dbus_g_bus_get_private (DBUS_BUS_SESSION, NULL, NULL);
    g_assert (f->bus2 != NULL);

    f->object = g_object_new (MY_TYPE_OBJECT, NULL);
    g_assert (MY_IS_OBJECT (f->object));
}

static void
teardown (Fixture *f,
          gconstpointer test_data G_GNUC_UNUSED)
{
    /* we close the connection before releasing the object, to test fd.o
#5688
    * in test_lookup() */
    if (f->bus != NULL)
        {
            dbus_connection_close (dbus_g_connection_get_connection (f-
>bus));
            dbus_g_connection_unref (f->bus);
        }

    if (f->bus2 != NULL)
        {
            dbus_connection_close (dbus_g_connection_get_connection (f-
>bus2));
            dbus_g_connection_unref (f->bus2);
        }

    if (f->object != NULL)
        {
            g_object_unref (f->object);
        }

    /* This is safe to call on an initialized-but-unset DBusError, a bit
like
    * g_clear_error */
    dbus_error_free (&f->dbus_error);
}

static void
test_lookup (Fixture *f,
             gconstpointer test_data G_GNUC_UNUSED)
{

```

```

    /* teardown() closes the connection before f->object is destroyed,
    which
    * used to be broken */
    g_test_bug ("5688");

    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              f->object);
    /* this was briefly broken while fixing fd.o#5688 */
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/bar") ==
              NULL);
}

static void
test_unregister (Fixture *f,
                 gconstpointer test_data G_GNUC_UNUSED)
{
    /* feature test: objects can be unregistered */
    g_test_bug ("21219");

    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              f->object);
    dbus_g_connection_unregister_g_object (f->bus, f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              NULL);
}

static void
test_unregister_on_last_unref (Fixture *f,
                               gconstpointer test_data G_GNUC_UNUSED)
{
    gpointer weak_pointer;

    weak_pointer = f->object;
    g_object_add_weak_pointer (weak_pointer, &weak_pointer);

    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              f->object);
    /* implicit unregistration by the last-unref of the object */
    g_object_unref (f->object);
    f->object = NULL;

    g_assert (weak_pointer == NULL);

    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              NULL);
}

static void
test_unregister_on_forced_dispose (Fixture *f,

```

```

    gconstpointer test_data G_GNUC_UNUSED)
{
    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              f->object);
    /* implicit unregistration by dispose() of the object (don't try
     * this at home) */
    g_object_run_dispose (f->object);

    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              NULL);
}

static void
test_reregister (Fixture *f,
                 gconstpointer test_data G_GNUC_UNUSED)
{
    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              f->object);

    /* Before 0.82, re-registering the same object path was leaky but
     * successful.
     * 0.82 disallowed this behaviour. Since 0.84 it was meant to be
     * allowed
     * again, and a no-op, but it actually had the effect of removing
     * all
     * record of the registrations (while leaving the object registered
     * with
     * libdbus). */
    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              f->object);

    /* This would critical in 0.84. */
    dbus_g_connection_unregister_g_object (f->bus, f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
              NULL);
}

static DBusHandlerResult
frob_nicate_cb (DBusConnection *conn,
               DBusMessage *message,
               void *user_data)
{
    Fixture *f = user_data;

    if (dbus_message_is_signal (message,
                               "org.freedesktop.DBus.GLib.Tests.MyObject",
                               "Frob_nicate"))
    {
        const char *sender = dbus_message_get_sender (message);
        const char *path = dbus_message_get_path (message);
    }
}

```

```

g_assert (sender != NULL);
g_assert (path != NULL);

if (g_strcmp0 (path, "/foo") == 0)
{
    g_assert_cmpstr (sender, ==, dbus_bus_get_unique_name (
        dbus_g_connection_get_connection (f->bus)));

    g_assert (f->froblicate1_message == NULL);
    f->froblicate1_message = dbus_message_ref (message);
}
else
{
    g_assert_cmpstr (path, ==, "/bar");
    g_assert_cmpstr (sender, ==, dbus_bus_get_unique_name (
        dbus_g_connection_get_connection (f->bus2)));

    g_assert (f->froblicate2_message == NULL);
    f->froblicate2_message = dbus_message_ref (message);
}
}

return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static void
test_twice (Fixture *f,
            gconstpointer test_data G_GNUC_UNUSED)
{
    dbus_bool_t mem;

    g_test_bug ("32087");

    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    dbus_g_connection_register_g_object (f->bus2, "/bar", f->object);

    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
        f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus2, "/bar") ==
        f->object);

    dbus_bus_add_match (dbus_g_connection_get_connection (f->bus),
        "type='signal'", &f->dbus_error);
    assert_no_error (&f->dbus_error);
    mem = dbus_connection_add_filter (dbus_g_connection_get_connection
(f->bus),
        frobnicate_cb, f, NULL);
    g_assert (mem);

    my_object_emit_froblicate ((MyObject *) f->object, NULL);
}

```

```

/* The object should emit the signal once onto each connection,
 * from the appropriate location */
while (f->frobnicat1_message == NULL || f->frobnicate2_message ==
NULL)
    g_main_context_iteration (NULL, TRUE);

dbus_message_unref (f->frobnicat1_message);
f->frobnicat1_message = NULL;
dbus_message_unref (f->frobnicate2_message);
f->frobnicate2_message = NULL;

/* try again, to catch any extra emissions, but first unregister one
of the
 * object's locations */
dbus_g_connection_unregister_g_object (f->bus, f->object);
my_object_emit_frobnicate ((MyObject *) f->object, NULL);

while (f->frobnicate2_message == NULL)
    g_main_context_iteration (NULL, TRUE);

g_assert (f->frobnicat1_message == NULL);
dbus_message_unref (f->frobnicate2_message);
f->frobnicate2_message = NULL;
}

static void
test_clean_slate (Fixture *f,
                  gconstpointer test_data G_GNUC_UNUSED)
{
    DBusError e;
    dbus_bool_t mem;

    dbus_bus_add_match (dbus_g_connection_get_connection (f->bus),
                        "type='signal'", &f->dbus_error);
    assert_no_error (&f->dbus_error);
    mem = dbus_connection_add_filter (dbus_g_connection_get_connection
(f->bus),
        frobnicate_cb, f, NULL);
    g_assert (mem);

    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
        f->object);

    my_object_emit_frobnicate ((MyObject *) f->object, NULL);

    while (f->frobnicat1_message == NULL)
        g_main_context_iteration (NULL, TRUE);

    dbus_message_unref (f->frobnicat1_message);
    f->frobnicat1_message = NULL;
}

```

```

/* unregister the object from its last object path, then put it back
 * in the same location */
dbus_g_connection_unregister_g_object (f->bus, f->object);
dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
          f->object);

/* bug: in 0.92, this would be emitted twice because the hook was
added
 * twice */
my_object_emit_froblicate ((MyObject *) f->object, NULL);

while (f->froblicate1_message == NULL)
    g_main_context_iteration (NULL, TRUE);

dbus_message_unref (f->froblicate1_message);
f->froblicate1_message = NULL;

/* unregister the object from its last object path, then put it back
 * at a different location */
dbus_g_connection_unregister_g_object (f->bus, f->object);
dbus_g_connection_register_g_object (f->bus2, "/bar", f->object);
g_assert (dbus_g_connection_lookup_g_object (f->bus2, "/bar") ==
          f->object);

my_object_emit_froblicate ((MyObject *) f->object, NULL);

while (f->froblicate2_message == NULL)
    g_main_context_iteration (NULL, TRUE);

/* check that this wasn't received anyway, which would indicate that
 * either unregistration from /foo was unsuccessful, or the double
 * emission mentioned above was seen */
g_assert (f->froblicate1_message == NULL);

dbus_message_unref (f->froblicate2_message);
f->froblicate2_message = NULL;
}

static DBusHandlerResult
objectified_cb (DBusConnection *conn,
               DBusMessage *message,
               void *user_data)
{
    Fixture *f = user_data;

    if (dbus_message_is_signal (message,
                               "org.freedesktop.DBus.GLib.Tests.MyObject", "Objectified"))
    {
        const char *sender = dbus_message_get_sender (message);
        const char *path = dbus_message_get_path (message);
    }
}

```



```

dbus_bool_t ok;
DBusError e;

dbus_error_init (&e);

g_assert (sender != NULL);
g_assert (path != NULL);

g_assert_cmpstr (path, ==, "/foo");
g_assert_cmpstr (sender, ==, dbus_bus_get_unique_name (
    dbus_g_connection_get_connection (f->bus)));

path = NULL;
ok = dbus_message_get_args (message, &e,
    DBUS_TYPE_OBJECT_PATH, &path,
    DBUS_TYPE_INVALID);

if (dbus_error_is_set (&e))
    g_error ("%s: %s", e.name, e.message);

g_assert (ok);
g_assert_cmpstr (path, ==, "/foo");

f->received_objectified = TRUE;
}

return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static void
test_marshall_object (Fixture *f,
    gconstpointer test_data G_GNUC_UNUSED)
{
    dbus_bool_t mem;

    g_test_bug ("37852");

    dbus_g_connection_register_g_object (f->bus, "/foo", f->object);
    g_assert (dbus_g_connection_lookup_g_object (f->bus, "/foo") ==
        f->object);

    dbus_bus_add_match (dbus_g_connection_get_connection (f->bus),
        "type='signal'", &f->dbus_error);
    assert_no_error (&f->dbus_error);
    mem = dbus_connection_add_filter (dbus_g_connection_get_connection
(f->bus),
        objectified_cb, f, NULL);
    g_assert (mem);

    my_object_emit_objectified ((MyObject *) f->object, f->object);

    while (!f->received_objectified)

```

```

    g_main_context_iteration (NULL, TRUE);
}

int
main (int argc, char **argv)
{
    loop = g_main_loop_new (NULL, FALSE);

    g_type_init ();
    g_log_set_always_fatal (G_LOG_LEVEL_WARNING | G_LOG_LEVEL_CRITICAL);
    dbus_g_type_specialized_init ();
    g_test_bug_base ("https://bugs.freedesktop.org/show_bug.cgi?id=");
    g_test_init (&argc, &argv, NULL);

    g_test_add ("/registrations/lookup", Fixture, NULL,
                setup, test_lookup, teardown);
    g_test_add ("/registrations/unregister", Fixture, NULL,
                setup, test_unregister, teardown);
    g_test_add ("/registrations/unregister-on-last-unref", Fixture,
NULL,
                setup, test_unregister_on_last_unref, teardown);
    g_test_add ("/registrations/unregister-on-forced-dispose", Fixture,
NULL,
                setup, test_unregister_on_forced_dispose, teardown);
    g_test_add ("/registrations/reregister", Fixture, NULL,
                setup, test_reregister, teardown);
    g_test_add ("/registrations/twice", Fixture, NULL,
                setup, test_twice, teardown);
    g_test_add ("/registrations/clean-slate", Fixture, NULL,
                setup, test_clean_slate, teardown);
    g_test_add ("/registrations/marshal-object", Fixture, NULL,
                setup, test_marshal_object, teardown);

    return g_test_run ();
}

```

File = requests

```

# This file was generated.
# It contains the lists of macros which have been traced.
# It can be safely removed.

```

```

@request = (
    bless( [
        '0',
        1,
        [

```

```

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/autoconf'

```

```
],  
[
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-  
linux/usr/share/autoconf/autoconf/autoconf.m4f',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-  
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/argz.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-  
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-  
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/pkg.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/amversion.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/auxdir.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/cond.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/depend.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/depout.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/init.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/install-sh.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/lead-dot.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/maintainer.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/make.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/missing.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/options.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/runlog.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/sanity.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/silent.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/strip.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/substnot.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/tar.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/gtk-doc.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltsugar.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltversion.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4',
    'configure.ac'
],
{
    'AM_ENABLE_STATIC' => 1,
    'AC_LIBTOOL_LANG_RC_CONFIG' => 1,
    '_LT_AC_SHELL_INIT' => 1,
    'AC_DEFUN' => 1,
```

'_LT_AC_LANG_CXX_CONFIG' => 1,
'AC_PROG_LIBTOOL' => 1,
'AM_AUTOMAKE_VERSION' => 1,
'AM_SUBST_NOTMAKE' => 1,
'AM_MISSING_PROG' => 1,
'AC_LIBTOOL_PROG_LD_HARDCODE_LIBPATH' => 1,
'_LT_AC_LANG_C_CONFIG' => 1,
'AM_PROG_INSTALL_STRIP' => 1,
'_m4_warn' => 1,
'AC_LIBTOOL_OBJDIR' => 1,
'gl_FUNC_ARGZ' => 1,
'AM_SANITY_CHECK' => 1,
'LTOBSOLETE_VERSION' => 1,
'AC_LIBTOOL_LANG_GCJ_CONFIG' => 1,
'AC_LIBTOOL_PROG_COMPILER_PIC' => 1,
'LT_LIB_M' => 1,
'_LT_AC_CHECK_DLFCN' => 1,
'AC_LIBTOOL_SYS_GLOBAL_SYMBOL_PIPE' => 1,
'LTSUGAR_VERSION' => 1,
'_LT_PROG_LTMMAIN' => 1,
'LT_SYS_SYMBOL_USCORE' => 1,
'_AM_PROG_TAR' => 1,
'AC_LIBTOOL_GCJ' => 1,
'_LT_WITH_SYSROOT' => 1,
'LT_SYS_DLOPEN_DEPLIBS' => 1,
'LT_FUNC_DLSYM_USCORE' => 1,
'_LT_AC_LANG_F77' => 1,
'AC_LIBTOOL_CONFIG' => 1,
'AC_LTDL_DLLIB' => 1,
'_AM_SUBST_NOTMAKE' => 1,
'_AM_AUTOCONF_VERSION' => 1,
'AM_DISABLE_SHARED' => 1,
'_LT_PROG_ECHO_BACKSLASH' => 1,
'_LTDL_SETUP' => 1,
'_LT_AC_LANG_CXX' => 1,
'AM_PROG_LIBTOOL' => 1,
'AM_PROG_LD' => 1,
'_LT_AC_FILE_LTDLL_C' => 1,
'AC_LIB_LTDL' => 1,
'AU_DEFUN' => 1,
'AC_PROG_NM' => 1,
'AC_LIBTOOL_DLOPEN' => 1,
'AC_PROG_LD' => 1,
'AC_PROG_LD_GNU' => 1,
'AC_ENABLE_FAST_INSTALL' => 1,
'AC_LIBTOOL_FC' => 1,
'LTDL_CONVENIENCE' => 1,
'TEST_PATH' => 1,
'_AM_SET_OPTION' => 1,
'AC_LTDL_PREOPEN' => 1,
'_LT_LINKER_BOILERPLATE' => 1,
'_LT_PREPARE_SED_QUOTE_VARS' => 1,

'AC_LIBTOOL_LANG_CXX_CONFIG' => 1,
'AC_LIBTOOL_PROG_CC_C_O' => 1,
'gl_PREREQ_ARGZ' => 1,
'LT_SUPPORTED_TAG' => 1,
'AM_OUTPUT_DEPENDENCY_COMMANDS' => 1,
'LT_PROG_RC' => 1,
'LT_SYS_MODULE_EXT' => 1,
'AC_DEFUN_ONCE' => 1,
'_LT_AC_LANG_GCJ' => 1,
'AC_LTDL_OBJDIR' => 1,
'_LT_PATH_TOOL_PREFIX' => 1,
'AC_LIBTOOL_RC' => 1,
'_LT_AC_PROG_ECHO_BACKSLASH' => 1,
'AC_DISABLE_FAST_INSTALL' => 1,
'AM_SILENT_RULES' => 1,
'include' => 1,
'_LT_AC_TRY_DLOPEN_SELF' => 1,
'_LT_AC_SYS_LIBPATH_AIX' => 1,
'LT_AC_PROG_SED' => 1,
'AM_ENABLE_SHARED' => 1,
'LTDL_INSTALLABLE' => 1,
'_LT_AC_LANG_GCJ_CONFIG' => 1,
'AC_ENABLE_SHARED' => 1,
'_LT_REQUIRED_DARWIN_CHECKS' => 1,
'AC_LIBTOOL_SYS_HARD_LINK_LOCKS' => 1,
'AC_ENABLE_STATIC' => 1,
'_LT_AC_TAGVAR' => 1,
'AC_LIBTOOL_LANG_F77_CONFIG' => 1,
'AM_CONDITIONAL' => 1,
'LT_LIB_DLLOAD' => 1,
'LTVERSION_VERSION' => 1,
'_LT_PROG_CXX' => 1,
'_LT_PROG_F77' => 1,
'LTDL_INIT' => 1,
'm4_include' => 1,
'AM_PROG_INSTALL_SH' => 1,
'AC_PROG_EGREP' => 1,
'AC_PATH_MAGIC' => 1,
'_AC_AM_CONFIG_HEADER_HOOK' => 1,
'AC_LTDL_SYSSEARCHPATH' => 1,
'AM_MAKE_INCLUDE' => 1,
'LT_CMD_MAX_LEN' => 1,
'_LT_AC_TAGCONFIG' => 1,
'm4_pattern_forbid' => 1,
'_LT_LINKER_OPTION' => 1,
'AC_LIBTOOL_COMPILER_OPTION' => 1,
'AC_DISABLE_SHARED' => 1,
'_LT_COMPILER_BOILERPLATE' => 1,
'AC_LIBTOOL_WIN32_DLL' => 1,
'AC_LIBTOOL_SETUP' => 1,
'AC_PROG_LD_RELOAD_FLAG' => 1,
'AC_LTDL_DLSYM_USCORE' => 1,

```
'AM_MISSING_HAS_RUN' => 1,
'LT_LANG' => 1,
'LT_SYS_DLSEARCH_PATH' => 1,
'LT_CONFIG_LTDL_DIR' => 1,
'AC_LIBTOOL_DLOPEN_SELF' => 1,
'LT_OUTPUT' => 1,
'AC_LIBTOOL_PROG_LD_SHLIBS' => 1,
'_PKG_SHORT_ERRORS_SUPPORTED' => 1,
'AC_WITH_LTDL' => 1,
'AC_LIBTOOL_LINKER_OPTION' => 1,
'PKG_CHECK_EXISTS' => 1,
'LT_AC_PROG_RC' => 1,
'AC_LIBTOOL_CXX' => 1,
'LT_INIT' => 1,
'LT_AC_PROG_GCJ' => 1,
'LT_SYS_DLOPEN_SELF' => 1,
'_LT_AC_PROG_CXXCPP' => 1,
'AM_DEP_TRACK' => 1,
'AM_DISABLE_STATIC' => 1,
'_AC_PROG_LIBTOOL' => 1,
'_AM_IF_OPTION' => 1,
'AC_PATH_TOOL_PREFIX' => 1,
'm4_pattern_allow' => 1,
'AC_LIBTOOL_F77' => 1,
'AM_SET_LEADING_DOT' => 1,
'_LT_PROG_FC' => 1,
'LT_AC_PROG_EGREP' => 1,
'_AM_DEPENDENCIES' => 1,
'AC_LIBTOOL_LANG_C_CONFIG' => 1,
'LTOPTIONS_VERSION' => 1,
'_LT_AC_SYS_COMPILER' => 1,
'AM_PROG_NM' => 1,
'PKG_CHECK_MODULES' => 1,
'AC_LIBLTDL_CONVENIENCE' => 1,
'AC_DEPLIBS_CHECK_METHOD' => 1,
'AC_LIBLTDL_INSTALLABLE' => 1,
'jm_MAINTAINER_MODE' => 1,
'AM_SET_CURRENT_AUTOMAKE_VERSION' => 1,
'AC_LTDL_ENABLE_INSTALL' => 1,
'LT_PROG_GCJ' => 1,
'AC_LIBTOOL_SYS_DYNAMIC_LINKER' => 1,
'AM_INIT_AUTOMAKE' => 1,
'AC_DISABLE_STATIC' => 1,
'LT_PATH_NM' => 1,
'AM_MAINTAINER_MODE' => 1,
'AC_LTDL_SHLIBEXT' => 1,
'AC_CC_TRY_FLAG' => 1,
'_LT_AC_LOCK' => 1,
'_LT_AC_LANG_RC_CONFIG' => 1,
'LT_PROG_GO' => 1,
'LT_SYS_MODULE_PATH' => 1,
'LT_WITH_LTDL' => 1,
```

```

'AC_LIBTOOL_POSTDEP_PREDEP' => 1,
'AC_LTDL_SHLIBPATH' => 1,
'GTK_DOC_CHECK' => 1,
'AM_AUX_DIR_EXPAND' => 1,
'AC_LIBTOOL_PROG_COMPILER_NO_RTTI' => 1,
'_LT_AC_LANG_F77_CONFIG' => 1,
'_LT_COMPILER_OPTION' => 1,
'_AM_SET_OPTIONS' => 1,
'_AM_RUN_LOG' => 1,
'_AM_OUTPUT_DEPENDENCY_COMMANDS' => 1,
'AC_LIBTOOL_PICMODE' => 1,
'AC_LTDL_SYS_DLOPEN_DEPLIBS' => 1,
'AC_LIBTOOL_SYS_OLD_ARCHIVE' => 1,
'AC_CHECK_LIBM' => 1,
'LT_PATH_LD' => 1,
'AC_LIBTOOL_SYS_LIB_STRIP' => 1,
'_AM_MANGLE_OPTION' => 1,
'AC_LIBTOOL_SYS_MAX_CMD_LEN' => 1,
'AC_LTDL_SYMBOL_USCORE' => 1,
'_AM_SET_DEPDIR' => 1,
'PKG_PROG_PKG_CONFIG' => 1,
'_LT_CC_BASENAME' => 1,
'_LT_LIBOBJ' => 1
}
], 'Autom4te::Request' ),
bless( [
  '1',
  1,
  [
    '/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-linaro-
    toolchain/sysroots/i686-linux/usr/share/autoconf',

    '/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-linaro-
    toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
    glib/0.100.2-r0/dbus-glib-0.100.2/m4/'
  ],
  [
    '/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-linaro-
    toolchain/sysroots/i686-
    linux/usr/share/autoconf/autoconf/autoconf.m4f',
    'aclocal.m4',
    'configure.ac'
  ],
  {
    'AM_PROG_F77_C_O' => 1,
    '_LT_AC_TAGCONFIG' => 1,
    'AC_INIT' => 1,
    'm4_pattern_forbid' => 1,
    'AC_CANONICAL_TARGET' => 1,
    '_AM_COND_IF' => 1,

```



```
'AC_CONFIG_LIBOBJ_DIR' => 1,
'AC_SUBST' => 1,
'AC_CANONICAL_HOST' => 1,
'AC_FC_SRCEXT' => 1,
'AC_PROG_LIBTOOL' => 1,
'AM_INIT_AUTOMAKE' => 1,
'AC_CONFIG_SUBDIRS' => 1,
'AM_PATH_GUILE' => 1,
'AM_AUTOMAKE_VERSION' => 1,
'LT_CONFIG_LTDL_DIR' => 1,
'AC_CONFIG_LINKS' => 1,
'AC_REQUIRE_AUX_FILE' => 1,
'LT_SUPPORTED_TAG' => 1,
'm4_sinclude' => 1,
'AM_MAINTAINER_MODE' => 1,
'AM_NLS' => 1,
'AC_FC_PP_DEFINE' => 1,
'AM_GNU_GETTEXT_INTL_SUBDIR' => 1,
'_m4_warn' => 1,
'AM_MAKEFILE_INCLUDE' => 1,
'AM_PROG_CXX_C_O' => 1,
'_AM_MAKEFILE_INCLUDE' => 1,
'_AM_COND_ENDIF' => 1,
'AM_ENABLE_MULTILIB' => 1,
'AM_SILENT_RULES' => 1,
'AM_PROG_MOC' => 1,
'AC_CONFIG_FILES' => 1,
'include' => 1,
'LT_INIT' => 1,
'AM_GNU_GETTEXT' => 1,
'AM_PROG_AR' => 1,
'AC_LIBSOURCE' => 1,
'AC_CANONICAL_BUILD' => 1,
'AM_PROG_FC_C_O' => 1,
'AC_FC_FREEFORM' => 1,
'AC_FC_PP_SRCEXT' => 1,
'AH_OUTPUT' => 1,
'AC_CONFIG_AUX_DIR' => 1,
'_AM_SUBST_NOTMAKE' => 1,
'm4_pattern_allow' => 1,
'AM_PROG_CC_C_O' => 1,
'sinclude' => 1,
'AM_CONDITIONAL' => 1,
'AC_CANONICAL_SYSTEM' => 1,
'AM_XGETTEXT_OPTION' => 1,
'AC_CONFIG_HEADERS' => 1,
'AC_DEFINE_TRACE_LITERAL' => 1,
'AM_POT_TOOLS' => 1,
'm4_include' => 1,
'_AM_COND_ELSE' => 1,
'AC_SUBST_TRACE' => 1
}
```

```

    ], 'Autom4te::Request' ),
    bless( [
        '2',
        1,
        [
            '/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
            toolchain/sysroots/i686-linux/usr/share/autoconf'
        ],
        [
            '/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
            toolchain/sysroots/i686-
            linux/usr/share/autoconf/autoconf/autoconf.m4f',
            'aclocal.m4',
            'configure.ac'
        ],
        {
            '_LT_AC_TAGCONFIG' => 1,
            'AM_PROG_F77_C_O' => 1,
            'AC_INIT' => 1,
            'm4_pattern_forbid' => 1,
            'AC_CANONICAL_TARGET' => 1,
            '_AM_COND_IF' => 1,
            'AC_CONFIG_LIBOBJ_DIR' => 1,
            'AC_SUBST' => 1,
            'AC_CANONICAL_HOST' => 1,
            'AC_FC_SRCEXT' => 1,
            'AC_PROG_LIBTOOL' => 1,
            'AM_PROG_MKDIR_P' => 1,
            'AM_INIT_AUTOMAKE' => 1,
            'AC_CONFIG_SUBDIRS' => 1,
            'AM_PATH_GUILE' => 1,
            'AM_AUTOMAKE_VERSION' => 1,
            'LT_CONFIG_LTDL_DIR' => 1,
            'AC_REQUIRE_AUX_FILE' => 1,
            'AC_CONFIG_LINKS' => 1,
            'LT_SUPPORTED_TAG' => 1,
            'm4_sinclude' => 1,
            'AM_MAINTAINER_MODE' => 1,
            'AM-NLS' => 1,
            'AC_FC_PP_DEFINE' => 1,
            'AM_GNU_GETTEXT_INTL_SUBDIR' => 1,
            '_m4_warn' => 1,
            'AM_MAKEFILE_INCLUDE' => 1,
            'AM_PROG_CXX_C_O' => 1,
            '_AM_COND_ENDIF' => 1,
            '_AM_MAKEFILE_INCLUDE' => 1,
            'AM_ENABLE_MULTILIB' => 1,
            'AM_SILENT_RULES' => 1,
            'AM_PROG_MOC' => 1,
            'AC_CONFIG_FILES' => 1,
        }
    ]

```

```

        'include' => 1,
        'LT_INIT' => 1,
        'AM_PROG_AR' => 1,
        'AM_GNU_GETTEXT' => 1,
        'AC_LIBSOURCE' => 1,
        'AC_CANONICAL_BUILD' => 1,
        'AM_PROG_FC_C_O' => 1,
        'AC_FC_FREEFORM' => 1,
        'AC_FC_PP_SRCEXT' => 1,
        'AH_OUTPUT' => 1,
        '_AM_SUBST_NOTMAKE' => 1,
        'AC_CONFIG_AUX_DIR' => 1,
        'AM_PROG_CC_C_O' => 1,
        'sinclude' => 1,
        'm4_pattern_allow' => 1,
        'AM_CONDITIONAL' => 1,
        'AC_CANONICAL_SYSTEM' => 1,
        'AM_XGETTEXT_OPTION' => 1,
        'AC_CONFIG_HEADERS' => 1,
        'AC_DEFINE_TRACE_LITERAL' => 1,
        'AM_POT_TOOLS' => 1,
        'm4_include' => 1,
        '_AM_COND_ELSE' => 1,
        'AC_SUBST_TRACE' => 1
    }
], 'Autom4te::Request' )
);

```

File = requests.~1~

```

# This file was generated.
# It contains the lists of macros which have been traced.
# It can be safely removed.

```

```

@request = (
    bless( [
        '0',
        1,
        [
            '/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
            toolchain/sysroots/i686-linux/usr/share/autoconf'
        ],
        [
            '/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
            toolchain/sysroots/i686-
            linux/usr/share/autoconf/autoconf/autoconf.m4f',

```

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/argz.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/amversion.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/auxdir.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/cond.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/depend.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/depout.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/init.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/install-sh.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/lead-dot.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/maintainer.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/make.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/minuso.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/missing.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/options.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/python.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/runlog.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/sanity.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/silent.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/strip.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/substnot.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/tar.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/as-ac-expand.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/compiler.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltsugar.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltversion.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/pkg.m4',

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-

```
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4',
```

```
'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/tp-compiler-warnings.m4',
```

```
    'configure.ac'  
  ],  
{  
  'AM_ENABLE_STATIC' => 1,  
  'AC_LIBTOOL_LANG_RC_CONFIG' => 1,  
  '_LT_AC_SHELL_INIT' => 1,  
  'AC_DEFUN' => 1,  
  '_LT_AC_LANG_CXX_CONFIG' => 1,  
  'AC_PROG_LIBTOOL' => 1,  
  'AM_PYTHON_CHECK_VERSION' => 1,  
  'AM_AUTOMAKE_VERSION' => 1,  
  'AM_SUBST_NOTMAKE' => 1,  
  'AM_MISSING_PROG' => 1,  
  'AC_LIBTOOL_PROG_LD_HARDCODE_LIBPATH' => 1,  
  '_LT_AC_LANG_C_CONFIG' => 1,  
  'AM_PROG_INSTALL_STRIP' => 1,  
  '_m4_warn' => 1,  
  'AC_LIBTOOL_OBJSUBDIR' => 1,  
  'gl_FUNC_ARGZ' => 1,  
  'LTOBSOLETE_VERSION' => 1,  
  'AM_SANITY_CHECK' => 1,  
  'AC_LIBTOOL_LANG_GCJ_CONFIG' => 1,  
  'AC_LIBTOOL_PROG_COMPILER_PIC' => 1,  
  'LT_LIB_M' => 1,  
  '_LT_AC_CHECK_DLFCN' => 1,  
  'AC_LIBTOOL_SYS_GLOBAL_SYMBOL_PIPE' => 1,  
  'LTSUGAR_VERSION' => 1,  
  '_LT_PROG_LTMAIN' => 1,  
  'LT_SYS_SYMBOL_USCORE' => 1,  
  '_AM_PROG_TAR' => 1,  
  'AC_LIBTOOL_GCJ' => 1,  
  'LT_WITH_SYSROOT' => 1,  
  'LT_FUNC_DLSYM_USCORE' => 1,  
  'LT_SYS_DLOPEN_DEPLIBS' => 1,  
  '_LT_AC_LANG_F77' => 1,  
  'AC_LIBTOOL_CONFIG' => 1,  
  'AC_LTDL_DLLIB' => 1,  
  '_AM_SUBST_NOTMAKE' => 1,  
  '_AM_AUTOCONF_VERSION' => 1,  
  'AM_DISABLE_SHARED' => 1,  
  '_LT_PROG_ECHO_BACKSLASH' => 1,  
  'TP_COMPILER_WARNINGS' => 1,  
  'LTDL_SETUP' => 1,  
  '_LT_AC_LANG_CXX' => 1,  
  'AM_PROG_LIBTOOL' => 1,  
  'AM_PROG_LD' => 1,
```

'_LT_AC_FILE_LTDLL_C' => 1,
'AC_LIB_LTDL' => 1,
'AU_DEFUN' => 1,
'COMPILER_WARNINGS' => 1,
'AC_PROG_NM' => 1,
'AC_LIBTOOL_DLOPEN' => 1,
'AC_PROG_LD' => 1,
'AC_PROG_LD_GNU' => 1,
'AC_ENABLE_FAST_INSTALL' => 1,
'AC_LIBTOOL_FC' => 1,
'COMPILER_COVERAGE' => 1,
'LTDL_CONVENIENCE' => 1,
'_AM_SET_OPTION' => 1,
'AC_LTDL_PREOPEN' => 1,
'_LT_LINKER_BOILERPLATE' => 1,
'_LT_PREPARE_SED_QUOTE_VARS' => 1,
'AC_LIBTOOL_LANG_CXX_CONFIG' => 1,
'AC_LIBTOOL_PROG_CC_C_O' => 1,
'gl_PREREQ_ARGZ' => 1,
'LT_SUPPORTED_TAG' => 1,
'AM_OUTPUT_DEPENDENCY_COMMANDS' => 1,
'LT_PROG_RC' => 1,
'LT_SYS_MODULE_EXT' => 1,
'AC_DEFUN_ONCE' => 1,
'_LT_AC_LANG_GCJ' => 1,
'AC_LTDL_OBJDIR' => 1,
'_LT_PATH_TOOL_PREFIX' => 1,
'AC_LIBTOOL_RC' => 1,
'_LT_AC_PROG_ECHO_BACKSLASH' => 1,
'AC_DISABLE_FAST_INSTALL' => 1,
'AM_SILENT_RULES' => 1,
'include' => 1,
'_LT_AC_TRY_DLOPEN_SELF' => 1,
'_LT_AC_SYS_LIBPATH_AIX' => 1,
'LT_AC_PROG_SED' => 1,
'AM_ENABLE_SHARED' => 1,
'LTDL_INSTALLABLE' => 1,
'_LT_AC_LANG_GCJ_CONFIG' => 1,
'AC_ENABLE_SHARED' => 1,
'TP_ADD_COMPILER_FLAG' => 1,
'_LT_REQUIRED_DARWIN_CHECKS' => 1,
'AC_LIBTOOL_SYS_HARD_LINK_LOCKS' => 1,
'AC_ENABLE_STATIC' => 1,
'_LT_AC_TAGVAR' => 1,
'AM_PROG_CC_C_O' => 1,
'AC_LIBTOOL_LANG_F77_CONFIG' => 1,
'AM_CONDITIONAL' => 1,
'LT_LIB_DLLOAD' => 1,
'LTVERSION_VERSION' => 1,
'_LT_PROG_CXX' => 1,
'_LT_PROG_F77' => 1,
'LTDL_INIT' => 1,

```
'm4_include' => 1,  
'AM_PROG_INSTALL_SH' => 1,  
'AC_PROG_EGREP' => 1,  
'AM_PATH_PYTHON' => 1,  
'AC_PATH_MAGIC' => 1,  
'_AC_AM_CONFIG_HEADER_HOOK' => 1,  
'AC_LTDL_SYSSEARCHPATH' => 1,  
'TP_COMPILER_FLAG' => 1,  
'AS_AC_EXPAND' => 1,  
'AM_MAKE_INCLUDE' => 1,  
'LT_CMD_MAX_LEN' => 1,  
'_LT_AC_TAGCONFIG' => 1,  
'm4_pattern_forbid' => 1,  
'_LT_LINKER_OPTION' => 1,  
'AC_LIBTOOL_COMPILER_OPTION' => 1,  
'AC_DISABLE_SHARED' => 1,  
'_LT_COMPILER_BOILERPLATE' => 1,  
'AC_LIBTOOL_WIN32_DLL' => 1,  
'AC_LIBTOOL_SETUP' => 1,  
'AC_PROG_LD_RELOAD_FLAG' => 1,  
'AC_LTDL_DLSYM_USCORE' => 1,  
'AM_MISSING_HAS_RUN' => 1,  
'LT_LANG' => 1,  
'LT_SYS_DLSEARCH_PATH' => 1,  
'LT_CONFIG_LTDL_DIR' => 1,  
'AC_LIBTOOL_DLOPEN_SELF' => 1,  
'LT_OUTPUT' => 1,  
'AC_LIBTOOL_PROG_LD_SHLIBS' => 1,  
'_PKG_SHORT_ERRORS_SUPPORTED' => 1,  
'AC_WITH_LTDL' => 1,  
'AC_LIBTOOL_LINKER_OPTION' => 1,  
'PKG_CHECK_EXISTS' => 1,  
'LT_AC_PROG_RC' => 1,  
'AC_LIBTOOL_CXX' => 1,  
'LT_INIT' => 1,  
'LT_AC_PROG_GCJ' => 1,  
'LT_SYS_DLOPEN_SELF' => 1,  
'_LT_AC_PROG_CXXCPP' => 1,  
'AM_DEP_TRACK' => 1,  
'AM_DISABLE_STATIC' => 1,  
'_AC_PROG_LIBTOOL' => 1,  
'_AM_IF_OPTION' => 1,  
'AC_PATH_TOOL_PREFIX' => 1,  
'm4_pattern_allow' => 1,  
'AC_LIBTOOL_F77' => 1,  
'AM_SET_LEADING_DOT' => 1,  
'_LT_PROG_FC' => 1,  
'LT_AC_PROG_EGREP' => 1,  
'_AM_DEPENDENCIES' => 1,  
'AC_LIBTOOL_LANG_C_CONFIG' => 1,  
'LTOPTIONS_VERSION' => 1,  
'_LT_AC_SYS_COMPILER' => 1,
```



```

'AM_PROG_NM' => 1,
'PKG_CHECK_MODULES' => 1,
'AC_LIBLTDL_CONVENIENCE' => 1,
'AC_DEPLIBS_CHECK_METHOD' => 1,
'AC_LIBLTDL_INSTALLABLE' => 1,
'jm_MAINTAINER_MODE' => 1,
'AM_SET_CURRENT_AUTOMAKE_VERSION' => 1,
'AC_LTDL_ENABLE_INSTALL' => 1,
'LT_PROG_GCJ' => 1,
'AC_LIBTOOL_SYS_DYNAMIC_LINKER' => 1,
'AM_INIT_AUTOMAKE' => 1,
'AC_DISABLE_STATIC' => 1,
'LT_PATH_NM' => 1,
'AM_MAINTAINER_MODE' => 1,
'AC_LTDL_SHLIBEXT' => 1,
'_LT_AC_LOCK' => 1,
'_LT_AC_LANG_RC_CONFIG' => 1,
'LT_PROG_GO' => 1,
'LT_SYS_MODULE_PATH' => 1,
'LT_WITH_LTDL' => 1,
'AC_LIBTOOL_POSTDEP_PREDEP' => 1,
'AC_LTDL_SHLIBPATH' => 1,
'AM_AUX_DIR_EXPAND' => 1,
'AC_LIBTOOL_PROG_COMPILER_NO_RTTI' => 1,
'_LT_AC_LANG_F77_CONFIG' => 1,
'_LT_COMPILER_OPTION' => 1,
'_AM_SET_OPTIONS' => 1,
'AM_RUN_LOG' => 1,
'_AM_OUTPUT_DEPENDENCY_COMMANDS' => 1,
'AC_LIBTOOL_PICMODE' => 1,
'AC_LTDL_SYS_DLOPEN_DEPLIBS' => 1,
'AC_LIBTOOL_SYS_OLD_ARCHIVE' => 1,
'AC_CHECK_LIBM' => 1,
'LT_PATH_LD' => 1,
'AC_LIBTOOL_SYS_LIB_STRIP' => 1,
'_AM_MANGLE_OPTION' => 1,
'COMPILER_OPTIMISATIONS' => 1,
'AC_LIBTOOL_SYS_MAX_CMD_LEN' => 1,
'AC_LTDL_SYMBOL_USCORE' => 1,
'AM_SET_DEPDIR' => 1,
'PKG_PROG_PKG_CONFIG' => 1,
'_LT_CC_BASENAME' => 1,
'_LT_LIBOBJ' => 1
}
], 'Autom4te::Request' ),
bless( [
  '1',
  1,
  [

```

```

'/home/gangadhar/newyoctobuild/tisd/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/autoconf',

```

```
 '/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-  
r6.0-arago1/dbus-1.6.8/m4/'
```

```
 ],  
 [
```

```
 '/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-linaro-  
toolchain/sysroots/i686-  
linux/usr/share/autoconf/autoconf/autoconf.m4f',
```

```
 'aclocal.m4',  
 'configure.ac'
```

```
 ],  
 {
```

```
 'AM_PROG_F77_C_O' => 1,  
 '_LT_AC_TAGCONFIG' => 1,  
 'AC_INIT' => 1,  
 'm4_pattern_forbid' => 1,  
 'AC_CANONICAL_TARGET' => 1,  
 '_AM_COND_IF' => 1,  
 'AC_CONFIG_LIBOBJ_DIR' => 1,  
 'AC_SUBST' => 1,  
 'AC_CANONICAL_HOST' => 1,  
 'AC_FC_SRCEXT' => 1,  
 'AC_PROG_LIBTOOL' => 1,  
 'AM_INIT_AUTOMAKE' => 1,  
 'AC_CONFIG_SUBDIRS' => 1,  
 'AM_PATH_GUILE' => 1,  
 'AM_AUTOMAKE_VERSION' => 1,  
 'LT_CONFIG_LTDL_DIR' => 1,  
 'AC_CONFIG_LINKS' => 1,  
 'AC_REQUIRE_AUX_FILE' => 1,  
 'LT_SUPPORTED_TAG' => 1,  
 'm4_sinclude' => 1,  
 'AM_MAINTAINER_MODE' => 1,  
 'AM_NLS' => 1,  
 'AC_FC_PP_DEFINE' => 1,  
 'AM_GNU_GETTEXT_INTL_SUBDIR' => 1,  
 '_m4_warn' => 1,  
 'AM_MAKEFILE_INCLUDE' => 1,  
 'AM_PROG_CXX_C_O' => 1,  
 '_AM_MAKEFILE_INCLUDE' => 1,  
 '_AM_COND_ENDIF' => 1,  
 'AM_ENABLE_MULTILIB' => 1,  
 'AM_SILENT_RULES' => 1,  
 'AM_PROG_MOC' => 1,  
 'AC_CONFIG_FILES' => 1,  
 'include' => 1,  
 'LT_INIT' => 1,  
 'AM_GNU_GETTEXT' => 1,  
 'AM_PROG_AR' => 1,  
 'AC_LIBSOURCE' => 1,
```

```

        'AC_CANONICAL_BUILD' => 1,
        'AM_PROG_FC_C_O' => 1,
        'AC_FC_FREEFORM' => 1,
        'AC_FC_PP_SRCEXT' => 1,
        'AH_OUTPUT' => 1,
        'AC_CONFIG_AUX_DIR' => 1,
        '_AM_SUBST_NOTMAKE' => 1,
        'm4_pattern_allow' => 1,
        'AM_PROG_CC_C_O' => 1,
        'sininclude' => 1,
        'AM_CONDITIONAL' => 1,
        'AC_CANONICAL_SYSTEM' => 1,
        'AM_XGETTEXT_OPTION' => 1,
        'AC_CONFIG_HEADERS' => 1,
        'AC_DEFINE_TRACE_LITERAL' => 1,
        'AM_POT_TOOLS' => 1,
        'm4_include' => 1,
        '_AM_COND_ELSE' => 1,
        'AC_SUBST_TRACE' => 1
    }
], 'Autom4te::Request' ),
bless( [
    '2',
    1,
    [

```

```

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-linux/usr/share/autoconf'
    ],
    [

```

```

'/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/sysroots/i686-
linux/usr/share/autoconf/autoconf/autoconf.m4f',
        'aclocal.m4',
        'configure.ac'
    ],
    {
        '_LT_AC_TAGCONFIG' => 1,
        'AM_PROG_F77_C_O' => 1,
        'AC_INIT' => 1,
        'm4_pattern_forbid' => 1,
        'AC_CANONICAL_TARGET' => 1,
        '_AM_COND_IF' => 1,
        'AC_CONFIG_LIBOBJ_DIR' => 1,
        'AC_SUBST' => 1,
        'AC_CANONICAL_HOST' => 1,
        'AC_FC_SRCEXT' => 1,
        'AC_PROG_LIBTOOL' => 1,
        'AM_PROG_MKDIR_P' => 1,
        'AM_INIT_AUTOMAKE' => 1,
        'AC_CONFIG_SUBDIRS' => 1,

```

```

'AM_PATH_GUILE' => 1,
'AM_AUTOMAKE_VERSION' => 1,
'LT_CONFIG_LTDL_DIR' => 1,
'AC_REQUIRE_AUX_FILE' => 1,
'AC_CONFIG_LINKS' => 1,
'LT_SUPPORTED_TAG' => 1,
'm4_sinclude' => 1,
'AM_MAINTAINER_MODE' => 1,
'AM_NLS' => 1,
'AC_FC_PP_DEFINE' => 1,
'AM_GNU_GETTEXT_INTL_SUBDIR' => 1,
'_m4_warn' => 1,
'AM_MAKEFILE_INCLUDE' => 1,
'AM_PROG_CXX_C_O' => 1,
'_AM_COND_ENDIF' => 1,
'_AM_MAKEFILE_INCLUDE' => 1,
'AM_ENABLE_MULTILIB' => 1,
'AM_SILENT_RULES' => 1,
'AM_PROG_MOC' => 1,
'AC_CONFIG_FILES' => 1,
'include' => 1,
'LT_INIT' => 1,
'AM_PROG_AR' => 1,
'AM_GNU_GETTEXT' => 1,
'AC_LIBSOURCE' => 1,
'AC_CANONICAL_BUILD' => 1,
'AM_PROG_FC_C_O' => 1,
'AC_FC_FREEFORM' => 1,
'AC_FC_PP_SRCEXT' => 1,
'AH_OUTPUT' => 1,
'_AM_SUBST_NOTMAKE' => 1,
'AC_CONFIG_AUX_DIR' => 1,
'AM_PROG_CC_C_O' => 1,
'sinclude' => 1,
'm4_pattern_allow' => 1,
'AM_CONDITIONAL' => 1,
'AC_CANONICAL_SYSTEM' => 1,
'AM_XGETTEXT_OPTION' => 1,
'AC_CONFIG_HEADERS' => 1,
'AC_DEFINE_TRACE_LITERAL' => 1,
'AM_POT_TOOLS' => 1,
'm4_include' => 1,
'_AM_COND_ELSE' => 1,
'AC_SUBST_TRACE' => 1
}
], 'Autom4te::Request' )
);

```

File = right.png

%PNG

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```

```
File = run-peer-test.sh
```

```
#!/bin/sh
```

```
set -e
```

```
# The peer server writes its address over stdout, which the client  
reads
```

```
${DBUS_TOP_BUILDDIR}/libtool --mode=execute ./peer-server |  
${DBUS_TOP_BUILDDIR}/libtool --mode=execute ./peer-client
```

```
File = run-test-systemserver.sh
```

```
#!/bin/sh
```

```
die()
```

```
{
```

```
    if ! test -z "$DBUS_SESSION_BUS_PID" ; then  
        echo "killing message bus "$DBUS_SESSION_BUS_PID >&2  
        kill -9 $DBUS_SESSION_BUS_PID
```

```
    fi
```

```
    echo $SCRIPTNAME: $* >&2
```

```
    exit 1
```

```
}
```

```
SCRIPTNAME=$0
```

```
MODE=$1
```

```
## so the tests can complain if you fail to use the script to launch  
them
```

```
DBUS_TEST_NAME_RUN_TEST_SCRIPT=1
```

```
export DBUS_TEST_NAME_RUN_TEST_SCRIPT
```

```
SOURCE_CONFIG_FILE=$DBUS_TOP_SRCDIR/test/name-test/tmp-session-like-  
system.conf
```

```
export SOURCE_CONFIG_FILE
```

```
# Rerun ourselves with tmp session bus if we're not already
```

```
if test -z "$DBUS_TEST_NAME_IN_SYS_RUN_TEST"; then
```

```
    DBUS_TEST_NAME_IN_SYS_RUN_TEST=1
```

```
    export DBUS_TEST_NAME_IN_SYS_RUN_TEST
```

```
    exec $DBUS_TOP_SRCDIR/tools/run-with-tmp-session-bus.sh $SCRIPTNAME
```

```
$MODE
```

```
fi
```

```
if test -n "$DBUS_TEST_MONITOR"; then
```

```
    dbus-monitor --session &
```

```

fi

echo "running test-expected-echo-fail"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/tools/dbus-send --print-reply --
dest=org.freedesktop.DBus.TestSuiteEchoService
/org/freedesktop/TestSuite org.freedesktop.TestSuite.Echo string:hi
>echo-error-output.tmp 2>&1
if ! grep -q 'DBus.Error' echo-error-output.tmp; then
  echo "Didn't get expected failure; output was:"
  echo "====="
  cat echo-error-output.tmp
  echo "====="
  exit 1
fi

echo "running test echo signal"
if test "x$PYTHON" = "x:"; then
  echo "Skipped test-echo-signal: Python interpreter not found"
elif ! $PYTHON $DBUS_TOP_SRCDIR/test/name-test/test-wait-for-echo.py;
then
  echo "Failed test-wait-for-echo"
  exit 1
fi

exit 0

```

File = run-test.sh

```

#!/bin/sh

SCRIPTNAME=$0
MODE=$1

## so the tests can complain if you fail to use the script to launch
them
DBUS_TEST_GLIB_RUN_TEST_SCRIPT=1
export DBUS_TEST_GLIB_RUN_TEST_SCRIPT
srcdir=`dirname "$0"`
DBUS_TOP_SRCDIR="$srcdir/../../.."
export DBUS_TOP_SRCDIR
# Rerun ourselves with tmp session bus if we're not already
if test -z "$DBUS_TEST_GLIB_IN_RUN_TEST"; then
  DBUS_TEST_GLIB_IN_RUN_TEST=1
  export DBUS_TEST_GLIB_IN_RUN_TEST
  exec $DBUS_TOP_SRCDIR/tools/run-with-tmp-session-bus.sh $SCRIPTNAME
$MODE
fi

for x in annotated-node nested-annotation; do

```

```

if ! test -f $srcdir/invalid-$x.xml; then
    echo "invalid-$x.xml missing">&2
    exit 1
fi

if $DBUS_BINDING_TOOL --prefix=test_invalid --mode=glib-server \
    --output=invalid-glue.h $srcdir/invalid-$x.xml ||
    $DBUS_BINDING_TOOL --prefix=test_invalid --mode=glib-client \
    --output=invalid-bindings.h $srcdir/invalid-$x.xml; then
    echo "invalid-$x.xml should not have been processed
successfully!">&2
    exit 1
else
    echo "invalid-$x.xml failed, as expected">&2
fi
done

echo "running test-client"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/interfaces/test-client || die "test-client
failed"

```

File = run-test.sh.~1~

```
#!/bin/sh
```

```

die()
{
    if ! test -z "$DBUS_SESSION_BUS_PID" ; then
        echo "killing message bus "$DBUS_SESSION_BUS_PID >&2
        kill -9 $DBUS_SESSION_BUS_PID
    fi
    echo $SCRIPTNAME: $* >&2

    exit 1
}

```

```
SCRIPTNAME=$0
```

```
MODE=$1
```

```
## so the tests can complain if you fail to use the script to launch
them
```

```
DBUS_TEST_NAME_RUN_TEST_SCRIPT=1
```

```
export DBUS_TEST_NAME_RUN_TEST_SCRIPT
```

```
# Rerun ourselves with tmp session bus if we're not already
```

```
if test -z "$DBUS_TEST_NAME_IN_RUN_TEST"; then
```

```
    DBUS_TEST_NAME_IN_RUN_TEST=1
```

```
    export DBUS_TEST_NAME_IN_RUN_TEST
```

```

    exec ${DBUS_TOP_SRCDIR}/tools/run-with-tmp-session-bus.sh $SCRIPTNAME
$MODE
fi

if test -n "$DBUS_TEST_MONITOR"; then
    dbus-monitor --session &
fi

echo "running test-ids"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
${DBUS_TOP_BUILDDIR}/test/name-test/test-ids || die "test-ids failed"

echo "running test-pending-call-dispatch"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
${DBUS_TOP_BUILDDIR}/test/name-test/test-pending-call-dispatch || die
"test-pending-call-dispatch failed"

echo "running test-pending-call-timeout"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
${DBUS_TOP_BUILDDIR}/test/name-test/test-pending-call-timeout || die
"test-pending-call-timeout failed"

echo "running test-threads-init"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
${DBUS_TOP_BUILDDIR}/test/name-test/test-threads-init || die "test-
threads-init failed"

echo "running test-privserver-client"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
${DBUS_TOP_BUILDDIR}/test/name-test/test-privserver-client || die "test-
privserver-client failed"

echo "running test-shutdown"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
${DBUS_TOP_BUILDDIR}/test/name-test/test-shutdown || die "test-shutdown
failed"

echo "running test activation forking"
if test "x$PYTHON" = "x:"; then
    echo "Skipped test-activation-forking: Python interpreter not found"
elif ! $PYTHON ${DBUS_TOP_SRCDIR}/test/name-test/test-activation-
forking.py; then
    echo "Failed test-activation-forking"
    exit 1
fi

echo "running test-autolaunch"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
${DBUS_TOP_BUILDDIR}/test/name-test/test-autolaunch || die "test-
autolaunch failed"

```

File = run-test.sh.~2~

```
#!/bin/sh
```

```
SCRIPTNAME=$0
```

```
MODE=$1
```

```
die()
```

```
{  
    echo $@ 1>&2  
    exit 1  
}
```

```
## so the tests can complain if you fail to use the script to launch  
them
```

```
DBUS_TEST_GLIB_RUN_TEST_SCRIPT=1
```

```
export DBUS_TEST_GLIB_RUN_TEST_SCRIPT
```

```
DBUS_TOP_SRCDIR=`dirname "$0"../../..`
```

```
export DBUS_TOP_SRCDIR
```

```
# Rerun ourselves with tmp session bus if we're not already
```

```
if test -z "$DBUS_TEST_GLIB_IN_RUN_TEST"; then
```

```
    DBUS_TEST_GLIB_IN_RUN_TEST=1
```

```
    export DBUS_TEST_GLIB_IN_RUN_TEST
```

```
    exec $DBUS_TOP_SRCDIR/tools/run-with-tmp-session-bus.sh $SCRIPTNAME  
$MODE
```

```
fi
```

```
if test x$MODE = xprofile ; then
```

```
    echo "profiling type $PROFILE_TYPE"
```

```
    sleep 2 ## this lets the bus get started so its startup time doesn't  
affect the profile too much
```

```
    if test x$PROFILE_TYPE = x ; then
```

```
        PROFILE_TYPE=all
```

```
    fi
```

```
    ${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
```

```
$DBUS_TOP_BUILDDIR/test/core/test-profile $PROFILE_TYPE || die "test-  
profile failed"
```

```
elif test x$MODE = xvviewer ; then
```

```
    echo "Launching dbus-viewer"
```

```
    ARGS=
```

```
    if test x$DEBUG = x ; then
```

```
        ARGS="--services org.freedesktop.DBus  
org.freedesktop.DBus.GLib.TestService"
```

```
    fi
```

```
    ${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
```

```
$DBUS_TOP_BUILDDIR/tools/dbus-viewer $ARGS || die "could not run dbus-  
viewer"
```

```
elif test x$MODE = xwait ; then
```

```
    echo "Waiting DBUS_SESSION_BUS_ADDRESS=$DBUS_SESSION_BUS_ADDRESS"
```

```
    sleep 86400
```

```
else
```

```

echo "running test-dbus-glib"
if test x$DBUS_TEST_MONITOR != x; then
    dbus-monitor --session &
fi
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/core/test-types || die "test-types failed"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/core/test-registrations || die "test-
registrations failed"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/core/test-dbus-glib || die "test-dbus-glib
failed"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/core/test-variant-recursion || die "test-
variant-recursion failed"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/core/test-gvariant || die "test-gvariant
failed"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/core/test-30574 || die "test-30574 failed"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/core/test-error-mapping || die "test-error-
mapping failed"
${DBUS_TOP_BUILDDIR}/libtool --mode=execute $DEBUG
$DBUS_TOP_BUILDDIR/test/core/test-peer-on-bus || die "test-peer-on-bus
failed"
fi

```

File = run-with-tmp-session-bus.sh

```
#!/bin/sh
```

```
SCRIPTNAME=$0
```

```
WRAPPED_SCRIPT=$1
```

```
shift
```

```
die()
```

```
{
    if ! test -z "$DBUS_SESSION_BUS_PID" ; then
        echo "killing message bus "$DBUS_SESSION_BUS_PID >&2
        kill -9 $DBUS_SESSION_BUS_PID
    fi
    echo $SCRIPTNAME: $* >&2
    exit 1
}
```

```
if test -z "$DBUS_TOP_BUILDDIR" ; then
    die "Must set DBUS_TOP_BUILDDIR"
fi
```

```
if test -z "$DBUS_TOP_SRCDIR" ; then
```

```

    die "Must set DBUS_TOP_SRCDIR"
fi

## convenient to be able to ctrl+C without leaking the message bus
process
trap 'die "Received SIGINT"' SIGINT

CONFIG_FILE=./run-with-tmp-session-bus.conf
SERVICE_DIR="$DBUS_TOP_BUILDDIR/test/data/valid-service-files"
ESCAPED_SERVICE_DIR=`echo $SERVICE_DIR | sed -e 's/\\/\\/\\\\\\\\\\\\/g'`
echo "escaped service dir is: $ESCAPED_SERVICE_DIR" >&2

## create a configuration file based on the standard session.conf
cat $DBUS_TOP_SRCDIR/tools/session.conf | \
    sed -e
's/<servicedir>.*$/<servicedir>'$ESCAPED_SERVICE_DIR'<\/servicedir>/g'
| \
    sed -e 's/<include.*$/g'
> $CONFIG_FILE

echo "Created configuration file $CONFIG_FILE" >&2

PATH=$DBUS_TOP_BUILDDIR/bus:$PATH
export PATH
## the libtool script found by the path search should already do this,
but
LD_LIBRARY_PATH=$DBUS_TOP_BUILDDIR/dbus/.libs:$LD_LIBRARY_PATH
export PATH
unset DBUS_SESSION_BUS_ADDRESS
unset DBUS_SESSION_BUS_PID

echo "Running dbus-launch --sh-syntax --config-file=$CONFIG_FILE" >&2
eval `dbus-launch --sh-syntax --config-file=$CONFIG_FILE`

if test -z "$DBUS_SESSION_BUS_PID" ; then
    die "Failed to launch message bus for introspection generation to
run"
fi

echo "Started bus pid $DBUS_SESSION_BUS_PID at
$DBUS_SESSION_BUS_ADDRESS" >&2

# Execute wrapped script
echo "Running $WRAPPED_SCRIPT $@" >&2
$WRAPPED_SCRIPT "$@" || die "script \"$WRAPPED_SCRIPT\" failed"

kill -TERM $DBUS_SESSION_BUS_PID || die "Message bus vanished! should
not have happened" && echo "Killed daemon $DBUS_SESSION_BUS_PID" >&2

sleep 2

```



```

## be sure it really died
kill -9 $DBUS_SESSION_BUS_PID > /dev/null 2>&1 || true

exit 0

File = run-with-tmp-session-bus.sh.~1~

#! /bin/sh

SCRIPTNAME=$0
WRAPPED_SCRIPT=$1
shift

die()
{
    if ! test -z "$DBUS_SESSION_BUS_PID" ; then
        echo "killing message bus "$DBUS_SESSION_BUS_PID >&2
        kill -9 $DBUS_SESSION_BUS_PID
    fi
    echo $SCRIPTNAME: $* >&2
    exit 1
}

if test -z "$DBUS_TOP_BUILDDIR" ; then
    die "Must set DBUS_TOP_BUILDDIR"
fi

## convenient to be able to ctrl+C without leaking the message bus
process
trap 'die "Received SIGINT"' INT

CONFIG_FILE=./run-with-tmp-session-bus.conf
SERVICE_DIR="$DBUS_TOP_BUILDDIR/test/data/valid-service-files"
ESCAPED_SERVICE_DIR=`echo $SERVICE_DIR | sed -e 's/\\/\\/\\\\\\\\\\\\/g'`
echo "escaped service dir is: $ESCAPED_SERVICE_DIR" >&2

if test -z "$SOURCE_CONFIG_FILE"; then
    SOURCE_CONFIG_FILE="$DBUS_TOP_BUILDDIR/bus/session.conf";
fi
## create a configuration file based on the standard session.conf
cat $SOURCE_CONFIG_FILE | \
    sed -e
's/<standard_session_servicedirs.*$/<servicedir>'$ESCAPED_SERVICE_DIR'
<\/servicedir>/g' | \
    sed -e 's/<include.*$/g' \
> $CONFIG_FILE

echo "Created configuration file $CONFIG_FILE" >&2

if ! test -e "$DBUS_TOP_BUILDDIR"/bus/dbus-daemon ; then

```

```

    die "$DBUS_TOP_BUILDDIR/bus/dbus-daemon does not exist"
fi

PATH="$DBUS_TOP_BUILDDIR"/bus:$PATH
export PATH

## the libtool script found by the path search should already do this,
but
LD_LIBRARY_PATH=$DBUS_TOP_BUILDDIR/dbus/.libs:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
unset DBUS_SESSION_BUS_ADDRESS
unset DBUS_SESSION_BUS_PID

echo "Running $DBUS_TOP_BUILDDIR/tools/dbus-launch --sh-syntax --
config-file=$CONFIG_FILE" >&2

DBUS_USE_TEST_BINARY=1
export DBUS_USE_TEST_BINARY
eval `"$DBUS_TOP_BUILDDIR/tools/dbus-launch --sh-syntax --config-
file=$CONFIG_FILE`

if test -z "$DBUS_SESSION_BUS_PID" ; then
    die "Failed to launch message bus for test script to run"
fi

echo "Started bus pid $DBUS_SESSION_BUS_PID at
$DBUS_SESSION_BUS_ADDRESS" >&2

# Execute wrapped script
echo "Running $WRAPPED_SCRIPT $@" >&2
$WRAPPED_SCRIPT "$@" || die "script \"$WRAPPED_SCRIPT\" failed"

kill -TERM $DBUS_SESSION_BUS_PID || die "Message bus vanished! should
not have happened" && echo "Killed daemon $DBUS_SESSION_BUS_PID" >&2

sleep 2

## be sure it really died
kill -9 $DBUS_SESSION_BUS_PID > /dev/null 2>&1 || true

exit 0

```

File = selinux.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*-
 * selinux.c SELinux security checks for D-Bus
 *
 * Author: Matthew Rickard <mjricka@epoch.ncsc.mil>
 *
 * Licensed under the Academic Free License version 2.1

```

```
*
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* it under the terms of the GNU General Public License as published
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* the Free Software Foundation; either version 2 of the License, or
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/
```

```
#include <config.h>
#include <dbus/dbus-internals.h>
#include <dbus/dbus-string.h>
#ifdef DBUS_WIN
#include <dbus/dbus-userdb.h>
#endif
#include "selinux.h"
#include "services.h"
#include "policy.h"
#include "utils.h"
#include "config-parser.h"

#ifdef HAVE_ERRNO_H
#include <errno.h>
#endif
#ifdef HAVE_SELINUX
#include <sys/types.h>
#include <unistd.h>
#include <limits.h>
#include <pthread.h>
#include <syslog.h>
#include <selinux/selinux.h>
#include <selinux/avc.h>
#include <selinux/av_permissions.h>
#include <selinux/flask.h>
#include <signal.h>
#include <stdarg.h>
#include <stdio.h>
#include <grp.h>
#endif /* HAVE_SELINUX */
#ifdef HAVE_LIBAUDIT
#include <cap-ng.h>
```

```

#include <libaudit.h>
#endif /* HAVE_LIBAUDIT */

#define BUS_SID_FROM_SELINUX(sid) ((BusSELinuxID*) (sid))
#define SELINUX_SID_FROM_BUS(sid) ((security_id_t) (sid))

#ifdef HAVE_SELINUX
/* Store the value telling us if SELinux is enabled in the kernel. */
static dbus_bool_t selinux_enabled = FALSE;

/* Store an avc_entry_ref to speed AVC decisions. */
static struct avc_entry_ref aeref;

/* Store the SID of the bus itself to use as the default. */
static security_id_t bus_sid = SECSID_WILD;

/* Thread to listen for SELinux status changes via netlink. */
static pthread_t avc_notify_thread;

/* Prototypes for AVC callback functions. */
static void log_callback (const char *fmt, ...);
static void log_audit_callback (void *data, security_class_t class,
char *buf, size_t buflen);
static void *avc_create_thread (void (*run) (void));
static void avc_stop_thread (void *thread);
static void *avc_alloc_lock (void);
static void avc_get_lock (void *lock);
static void avc_release_lock (void *lock);
static void avc_free_lock (void *lock);

/* AVC callback structures for use in avc_init. */
static const struct avc_memory_callback mem_cb =
{
    .func_malloc = dbus_malloc,
    .func_free = dbus_free
};
static const struct avc_log_callback log_cb =
{
    .func_log = log_callback,
    .func_audit = log_audit_callback
};
static const struct avc_thread_callback thread_cb =
{
    .func_create_thread = avc_create_thread,
    .func_stop_thread = avc_stop_thread
};
static const struct avc_lock_callback lock_cb =
{
    .func_alloc_lock = avc_alloc_lock,
    .func_get_lock = avc_get_lock,
    .func_release_lock = avc_release_lock,
    .func_free_lock = avc_free_lock
}

```

```

};
#endif /* HAVE_SELINUX */

/**
 * Log callback to log denial messages from the AVC.
 * This is used in avc_init. Logs to both standard
 * error and syslogd.
 *
 * @param fmt the format string
 * @param variable argument list
 */
#ifdef HAVE_SELINUX

#ifdef HAVE_LIBAUDIT
static int audit_fd = -1;
#endif

void
bus_selinux_audit_init(void)
{
#ifdef HAVE_LIBAUDIT
    audit_fd = audit_open ();

    if (audit_fd < 0)
    {
        /* If kernel doesn't support audit, bail out */
        if (errno == EINVAL || errno == EPROTONOSUPPORT || errno ==
EAFNOSUPPORT)
            return;
        /* If user bus, bail out */
        if (errno == EPERM && getuid() != 0)
            return;
        _dbus_warn ("Failed opening connection to the audit subsystem");
    }
#endif /* HAVE_LIBAUDIT */
}

static void
log_callback (const char *fmt, ...)
{
    va_list ap;

    va_start(ap, fmt);

#ifdef HAVE_LIBAUDIT
    if (audit_fd >= 0)
    {
        capng_get_caps_process();
        if (capng_have_capability(CAPNG_EFFECTIVE, CAP_AUDIT_WRITE))
        {
            char buf[PATH_MAX*2];

```

```

        /* FIXME: need to change this to show real user */
        vsnprintf(buf, sizeof(buf), fmt, ap);
        audit_log_user_avc_message(audit_fd, AUDIT_USER_AVC, buf, NULL,
NULL,
                                NULL, getuid());
        return;
    }
}
#endif /* HAVE_LIBAUDIT */

    vsyslog (LOG_USER | LOG_INFO, fmt, ap);
    va_end(ap);
}

/**
 * On a policy reload we need to reparse the SELinux configuration
file, since
 * this could have changed.  Send a SIGHUP to reload all configs.
 */
static int
policy_reload_callback (u_int32_t event, security_id_t ssid,
                        security_id_t tsid, security_class_t tclass,
                        access_vector_t perms, access_vector_t
*out_retained)
{
    if (event == AVC_CALLBACK_RESET)
        return raise (SIGHUP);

    return 0;
}

/**
 * Log any auxiliary data
 */
static void
log_audit_callback (void *data, security_class_t class, char *buf,
size_t buflength)
{
    DBusString *audmsg = data;

    if (buflength > (size_t) _dbus_string_get_length(audmsg))
    {
        _dbus_string_copy_to_buffer_with_nul (audmsg, buf, buflength);
    }
    else
    {
        DBusString s;

        _dbus_string_init_const(&s, "Buffer too small for audit
message");

        if (buflength > (size_t) _dbus_string_get_length(&s))

```

```

        _dbus_string_copy_to_buffer_with_nul (&s, buf, buflength);
    }
}

/**
 * Create thread to notify the AVC of enforcing and policy reload
 * changes via netlink.
 *
 * @param run the thread run function
 * @return pointer to the thread
 */
static void *
avc_create_thread (void (*run) (void))
{
    int rc;

    rc = pthread_create (&avc_notify_thread, NULL, (void *(*)(void *))
run, NULL);
    if (rc != 0)
    {
        _dbus_warn ("Failed to start AVC thread: %s\n", _dbus_strerror
(rc));
        exit (1);
    }
    return &avc_notify_thread;
}

/* Stop AVC netlink thread. */
static void
avc_stop_thread (void *thread)
{
    pthread_cancel (*(pthread_t *) thread);
}

/* Allocate a new AVC lock. */
static void *
avc_alloc_lock (void)
{
    pthread_mutex_t *avc_mutex;

    avc_mutex = dbus_new (pthread_mutex_t, 1);
    if (avc_mutex == NULL)
    {
        _dbus_warn ("Could not create mutex: %s\n", _dbus_strerror
(errno));
        exit (1);
    }
    pthread_mutex_init (avc_mutex, NULL);

    return avc_mutex;
}

```

```

/* Acquire an AVC lock. */
static void
avc_get_lock (void *lock)
{
    pthread_mutex_lock (lock);
}

/* Release an AVC lock. */
static void
avc_release_lock (void *lock)
{
    pthread_mutex_unlock (lock);
}

/* Free an AVC lock. */
static void
avc_free_lock (void *lock)
{
    pthread_mutex_destroy (lock);
    dbus_free (lock);
}
#endif /* HAVE_SELINUX */

/**
 * Return whether or not SELinux is enabled; must be
 * called after bus_selinux_init.
 */
dbus_bool_t
bus_selinux_enabled (void)
{
#ifdef HAVE_SELINUX
    return selinux_enabled;
#else
    return FALSE;
#endif /* HAVE_SELINUX */
}

/**
 * Do early initialization; determine whether SELinux is enabled.
 */
dbus_bool_t
bus_selinux_pre_init (void)
{
#ifdef HAVE_SELINUX
    int r;
    _dbus_assert (bus_sid == SECSID_WILD);

    /* Determine if we are running an SELinux kernel. */
    r = is_selinux_enabled ();
    if (r < 0)
    {
        _dbus_warn ("Could not tell if SELinux is enabled: %s\n",

```



```

        _dbus_strerror (errno));
    return FALSE;
}

    selinux_enabled = r != 0;
    return TRUE;
#else
    return TRUE;
#endif
}

/**
 * Initialize the user space access vector cache (AVC) for D-Bus and
 * set up
 * logging callbacks.
 */
dbus_bool_t
bus_selinux_full_init (void)
{
#ifdef HAVE_SELINUX
    char *bus_context;

    _dbus_assert (bus_sid == SECSID_WILD);

    if (!selinux_enabled)
    {
        _dbus_verbose ("SELinux not enabled in this kernel.\n");
        return TRUE;
    }

    _dbus_verbose ("SELinux is enabled in this kernel.\n");

    avc_entry_ref_init (&aeref);
    if (avc_init ("avc", &mem_cb, &log_cb, &thread_cb, &lock_cb) < 0)
    {
        _dbus_warn ("Failed to start Access Vector Cache (AVC).\n");
        return FALSE;
    }
    else
    {
        _dbus_verbose ("Access Vector Cache (AVC) started.\n");
    }

    if (avc_add_callback (policy_reload_callback, AVC_CALLBACK_RESET,
        NULL, NULL, 0, 0) < 0)
    {
        _dbus_warn ("Failed to add policy reload callback: %s\n",
            _dbus_strerror (errno));
        avc_destroy ();
        return FALSE;
    }
}

```

```

bus_context = NULL;
bus_sid = SECSID_WILD;

if (getcon (&bus_context) < 0)
{
    _dbus_verbose ("Error getting context of bus: %s\n",
                  _dbus_strerror (errno));
    return FALSE;
}

if (avc_context_to_sid (bus_context, &bus_sid) < 0)
{
    _dbus_verbose ("Error getting SID from bus context: %s\n",
                  _dbus_strerror (errno));
    freecon (bus_context);
    return FALSE;
}

freecon (bus_context);

#endif /* HAVE_SELINUX */
return TRUE;
}

/**
 * Decrement SID reference count.
 *
 * @param sid the SID to decrement
 */
void
bus_selinux_id_unref (BusSELinuxID *sid)
{
#ifdef HAVE_SELINUX
    if (!selinux_enabled)
        return;

    _dbus_assert (sid != NULL);

    sidput (SELINUX_SID_FROM_BUS (sid));
#endif /* HAVE_SELINUX */
}

void
bus_selinux_id_ref (BusSELinuxID *sid)
{
#ifdef HAVE_SELINUX
    if (!selinux_enabled)
        return;

    _dbus_assert (sid != NULL);

    sidget (SELINUX_SID_FROM_BUS (sid));

```

```

#endif /* HAVE_SELINUX */
}

/**
 * Determine if the SELinux security policy allows the given sender
 * security context to go to the given recipient security context.
 * This function determines if the requested permissions are to be
 * granted from the connection to the message bus or to another
 * optionally supplied security identifier (e.g. for a service
 * context). Currently these permissions are either send_msg or
 * acquire_svc in the dbus class.
 *
 * @param sender_sid source security context
 * @param override_sid is the target security context. If SECSID_WILD
this will
 * use the context of the bus itself (e.g. the default).
 * @param target_class is the target security class.
 * @param requested is the requested permissions.
 * @returns #TRUE if security policy allows the send.
 */
#ifdef HAVE_SELINUX
static dbus_bool_t
bus_selinux_check (BusSELinuxID      *sender_sid,
                  BusSELinuxID      *override_sid,
                  security_class_t   target_class,
                  access_vector_t    requested,
                  DBusString         *auxdata)
{
    if (!selinux_enabled)
        return TRUE;

    /* Make the security check. AVC checks enforcing mode here as well.
 */
    if (avc_has_perm (SELINUX_SID_FROM_BUS (sender_sid),
                    override_sid ?
                    SELINUX_SID_FROM_BUS (override_sid) :
                    SELINUX_SID_FROM_BUS (bus_sid),
                    target_class, requested, &aeref, auxdata) < 0)
    {
        switch (errno)
        {
            case EACCES:
                _dbus_verbose ("SELinux denying due to security policy.\n");
                return FALSE;
            case EINVAL:
                _dbus_verbose ("SELinux denying due to invalid security
context.\n");
                return FALSE;
            default:
                _dbus_verbose ("SELinux denying due to: %s\n", _dbus_strerror
(errno));
                return FALSE;
        }
    }
}

```

```

        }
    }
    else
        return TRUE;
}
#endif /* HAVE_SELINUX */

/**
 * Returns true if the given connection can acquire a service,
 * assuming the given security ID is needed for that service.
 *
 * @param connection connection that wants to own the service
 * @param service_sid the SID of the service from the table
 * @returns #TRUE if acquire is permitted.
 */
dbus_bool_t
bus_selinux_allows_acquire_service (DBusConnection      *connection,
                                     BusSELinuxID       *service_sid,
                                     const char          *service_name,
                                     DBusError           *error)
{
#ifdef HAVE_SELINUX
    BusSELinuxID *connection_sid;
    unsigned long spid;
    DBusString auxdata;
    dbus_bool_t ret;

    if (!selinux_enabled)
        return TRUE;

    connection_sid = bus_connection_get_selinux_id (connection);
    if (!dbus_connection_get_unix_process_id (connection, &spid))
        spid = 0;

    if (!_dbus_string_init (&auxdata))
        goto oom;

    if (!_dbus_string_append (&auxdata, "service="))
        goto oom;

    if (!_dbus_string_append (&auxdata, service_name))
        goto oom;

    if (spid)
    {
        if (!_dbus_string_append (&auxdata, " spid="))
            goto oom;

        if (!_dbus_string_append_uint (&auxdata, spid))
            goto oom;
    }
}

```

```

ret = bus_selinux_check (connection_sid,
                        service_sid,
                        SECCLASS_DBUS,
                        DBUS__ACQUIRE_SVC,
                        &auxdata);

_dbus_string_free (&auxdata);
return ret;

oom:
_dbus_string_free (&auxdata);
BUS_SET_OOM (error);
return FALSE;

#else
return TRUE;
#endif /* HAVE_SELINUX */
}

/**
 * Check if SELinux security controls allow the message to be sent to
 * a
 * particular connection based on the security context of the sender
 * and
 * that of the receiver. The destination connection need not be the
 * addressed recipient, it could be an "eavesdropper"
 *
 * @param sender the sender of the message.
 * @param proposed_recipient the connection the message is to be sent
 * to.
 * @returns whether to allow the send
 */
dbus_bool_t
bus_selinux_allows_send (DBusConnection *sender,
                        DBusConnection *proposed_recipient,
                        const char *msgtype,
                        const char *interface,
                        const char *member,
                        const char *error_name,
                        const char *destination,
                        DBusError *error)
{
#ifdef HAVE_SELINUX
BusSELinuxID *recipient_sid;
BusSELinuxID *sender_sid;
unsigned long spid, tpid;
DBusString auxdata;
dbus_bool_t ret;
dbus_bool_t string_allocated;

if (!selinux_enabled)
return TRUE;

```

```

if (!sender || !dbus_connection_get_unix_process_id (sender, &spid))
    spid = 0;
if (!proposed_recipient || !dbus_connection_get_unix_process_id
(proposed_recipient, &tpid))
    tpid = 0;

string_allocated = FALSE;
if (!_dbus_string_init (&auxdata))
    goto oom;
string_allocated = TRUE;

if (!_dbus_string_append (&auxdata, "msgtype="))
    goto oom;

if (!_dbus_string_append (&auxdata, msgtype))
    goto oom;

if (interface)
{
    if (!_dbus_string_append (&auxdata, " interface="))
        goto oom;
    if (!_dbus_string_append (&auxdata, interface))
        goto oom;
}

if (member)
{
    if (!_dbus_string_append (&auxdata, " member="))
        goto oom;
    if (!_dbus_string_append (&auxdata, member))
        goto oom;
}

if (error_name)
{
    if (!_dbus_string_append (&auxdata, " error_name="))
        goto oom;
    if (!_dbus_string_append (&auxdata, error_name))
        goto oom;
}

if (destination)
{
    if (!_dbus_string_append (&auxdata, " dest="))
        goto oom;
    if (!_dbus_string_append (&auxdata, destination))
        goto oom;
}

if (spid)
{

```

```

        if (!_dbus_string_append (&auxdata, " spid="))
            goto oom;

        if (!_dbus_string_append_uint (&auxdata, spid))
            goto oom;
    }

    if (tpid)
    {
        if (!_dbus_string_append (&auxdata, " tpid="))
            goto oom;

        if (!_dbus_string_append_uint (&auxdata, tpid))
            goto oom;
    }

    sender_sid = bus_connection_get_selinux_id (sender);
    /* A NULL proposed_recipient means the bus itself. */
    if (proposed_recipient)
        recipient_sid = bus_connection_get_selinux_id
        (proposed_recipient);
    else
        recipient_sid = BUS_SID_FROM_SELINUX (bus_sid);

    ret = bus_selinux_check (sender_sid,
                            recipient_sid,
                            SECCLASS_DBUS,
                            DBUS__SEND_MSG,
                            &auxdata);

    _dbus_string_free (&auxdata);

    return ret;

oom:
    if (string_allocated)
        _dbus_string_free (&auxdata);
    BUS_SET_OOM (error);
    return FALSE;

#else
    return TRUE;
#endif /* HAVE_SELINUX */
}

dbus_bool_t
bus_selinux_append_context (DBusMessage *message,
                           BusSELinuxID *sid,
                           DBusError *error)
{
#ifdef HAVE_SELINUX
    char *context;

```

```

if (avc_sid_to_context (SELINUX_SID_FROM_BUS (sid), &context) < 0)
{
    if (errno == ENOMEM)
        BUS_SET_OOM (error);
    else
        dbus_set_error (error, DBUS_ERROR_FAILED,
                        "Error getting context from SID: %s\n",
                        _dbus_strerror (errno));
    return FALSE;
}
if (!dbus_message_append_args (message,
                               DBUS_TYPE_ARRAY,
                               DBUS_TYPE_BYTE,
                               &context,
                               strlen (context),
                               DBUS_TYPE_INVALID))
{
    _DBUS_SET_OOM (error);
    return FALSE;
}
freecon (context);
return TRUE;
#else
return TRUE;
#endif
}

/**
 * Gets the security context of a connection to the bus. It is up to
 * the caller to freecon() when they are done.
 *
 * @param connection the connection to get the context of.
 * @param con the location to store the security context.
 * @returns #TRUE if context is successfully obtained.
 */
#ifdef HAVE_SELINUX
static dbus_bool_t
bus_connection_read_selinux_context (DBusConnection *connection,
                                     char **con)
{
    int fd;

    if (!selinux_enabled)
        return FALSE;

    _dbus_assert (connection != NULL);

    if (!dbus_connection_get_unix_fd (connection, &fd))
    {
        _dbus_verbose ("Failed to get file descriptor of socket.\n");
        return FALSE;
    }
}

```



```

    }

    if (getpeercon (fd, con) < 0)
    {
        _dbus_verbose ("Error getting context of socket peer: %s\n",
                      _dbus_strerror (errno));
        return FALSE;
    }

    _dbus_verbose ("Successfully read connection context.\n");
    return TRUE;
}
#endif /* HAVE_SELINUX */

/**
 * Read the SELinux ID from the connection.
 *
 * @param connection the connection to read from
 * @returns the SID if successfully determined, #NULL otherwise.
 */
BusSELinuxID*
bus_selinux_init_connection_id (DBusConnection *connection,
                               DBusError      *error)
{
#ifdef HAVE_SELINUX
    char *con;
    security_id_t sid;

    if (!selinux_enabled)
        return NULL;

    if (!bus_connection_read_selinux_context (connection, &con))
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
                      "Failed to read an SELinux context from
connection");
        _dbus_verbose ("Error getting peer context.\n");
        return NULL;
    }

    _dbus_verbose ("Converting context to SID to store on
connection\n");

    if (avc_context_to_sid (con, &sid) < 0)
    {
        if (errno == ENOMEM)
            BUS_SET_OOM (error);
        else
            dbus_set_error (error, DBUS_ERROR_FAILED,
                          "Error getting SID from context \"%s\": %s\n",
                          con, _dbus_strerror (errno));
    }
#endif
}

```

```

        _dbus_warn ("Error getting SID from context \"%s\": %s\n",
                    con, _dbus_strerror (errno));

        freecon (con);
        return NULL;
    }

    freecon (con);
    return BUS_SID_FROM_SELINUX (sid);
#else
    return NULL;
#endif /* HAVE_SELINUX */
}

/**
 * Function for freeing hash table data.  These SIDs
 * should no longer be referenced.
 */
static void
bus_selinux_id_table_free_value (BusSELinuxID *sid)
{
#ifdef HAVE_SELINUX
    /* NULL sometimes due to how DBusHashTable works */
    if (sid)
        bus_selinux_id_unref (sid);
#endif /* HAVE_SELINUX */
}

/**
 * Creates a new table mapping service names to security ID.
 * A security ID is a "compiled" security context, a security
 * context is just a string.
 *
 * @returns the new table or #NULL if no memory
 */
DBusHashTable*
bus_selinux_id_table_new (void)
{
    return _dbus_hash_table_new (DBUS_HASH_STRING,
                                (DBusFreeFunction) dbus_free,
                                (DBusFreeFunction)
bus_selinux_id_table_free_value);
}

/**
 * Hashes a service name and service context into the service SID
 * table as a string and a SID.
 *
 * @param service_name is the name of the service.
 * @param service_context is the context of the service.
 * @param service_table is the table to hash them into.

```

```

 * @return #FALSE if not enough memory
 */
dbus_bool_t
bus_selinux_id_table_insert (DBusHashTable *service_table,
                             const char    *service_name,
                             const char    *service_context)
{
#ifdef HAVE_SELINUX
    dbus_bool_t retval;
    security_id_t sid;
    char *key;

    if (!selinux_enabled)
        return TRUE;

    sid = SECSID_WILD;
    retval = FALSE;

    key = _dbus_strdup (service_name);
    if (key == NULL)
        return retval;

    if (avc_context_to_sid ((char *) service_context, &sid) < 0)
    {
        if (errno == ENOMEM)
        {
            _dbus_free (key);
            return FALSE;
        }

        _dbus_warn ("Error getting SID from context \"%s\": %s\n",
                    (char *) service_context,
                    _dbus_strerror (errno));
        goto out;
    }

    if (!_dbus_hash_table_insert_string (service_table,
                                        key,
                                        BUS_SID_FROM_SELINUX (sid)))
        goto out;

    _dbus_verbose ("Parsed \t service: %s \n\t\t context: %s\n",
                  key,
                  sid->ctx);

    /* These are owned by the hash, so clear them to avoid unref */
    key = NULL;
    sid = SECSID_WILD;

    retval = TRUE;

out:

```

```

    if (sid != SECSID_WILD)
        sidput (sid);

    if (key)
        dbus_free (key);

    return retval;
#else
    return TRUE;
#endif /* HAVE_SELINUX */
}

/**
 * Find the security identifier associated with a particular service
 * name. Return a pointer to this SID, or #NULL/SECSID_WILD if the
 * service is not found in the hash table. This should be nearly a
 * constant time operation. If SELinux support is not available,
 * always return NULL.
 *
 * @param service_table the hash table to check for service name.
 * @param service_name the name of the service to look for.
 * @returns the SELinux ID associated with the service
 */
BusSELinuxID*
bus_selinux_id_table_lookup (DBusHashTable *service_table,
                             const DBusString *service_name)
{
#ifdef HAVE_SELINUX
    security_id_t sid;

    sid = SECSID_WILD;    /* default context */

    if (!selinux_enabled)
        return NULL;

    _dbus_verbose ("Looking up service SID for %s\n",
                   _dbus_string_get_const_data (service_name));

    sid = _dbus_hash_table_lookup_string (service_table,
                                         _dbus_string_get_const_data
(service_name));

    if (sid == SECSID_WILD)
        _dbus_verbose ("Service %s not found\n",
                       _dbus_string_get_const_data (service_name));
    else
        _dbus_verbose ("Service %s found\n",
                       _dbus_string_get_const_data (service_name));

    return BUS_SID_FROM_SELINUX (sid);
#endif /* HAVE_SELINUX */
}

```

```

    return NULL;
}

/**
 * Get the SELinux policy root. This is used to find the D-Bus
 * specific config file within the policy.
 */
const char *
bus_selinux_get_policy_root (void)
{
#ifdef HAVE_SELINUX
    return selinux_policy_root ();
#else
    return NULL;
#endif /* HAVE_SELINUX */
}

/**
 * For debugging: Print out the current hash table of service SIDs.
 */
void
bus_selinux_id_table_print (DBusHashTable *service_table)
{
#ifdef DBUS_ENABLE_VERBOSE_MODE
#ifdef HAVE_SELINUX
    DBusHashIter iter;

    if (!selinux_enabled)
        return;

    _dbus_verbose ("Service SID Table:\n");
    _dbus_hash_iter_init (service_table, &iter);
    while (_dbus_hash_iter_next (&iter))
    {
        const char *key = _dbus_hash_iter_get_string_key (&iter);
        security_id_t sid = _dbus_hash_iter_get_value (&iter);
        _dbus_verbose ("The key is %s\n", key);
        _dbus_verbose ("The context is %s\n", sid->ctx);
        _dbus_verbose ("The refcount is %d\n", sid->refcnt);
    }
#endif /* HAVE_SELINUX */
#endif /* DBUS_ENABLE_VERBOSE_MODE */
}

#ifdef DBUS_ENABLE_VERBOSE_MODE
#ifdef HAVE_SELINUX
/**
 * Print out some AVC statistics.
 */
static void
bus_avc_print_stats (void)

```

```

{
    struct avc_cache_stats cstats;

    if (!selinux_enabled)
        return;

    _dbus_verbose ("AVC Statistics:\n");
    avc_cache_stats (&cstats);
    avc_av_stats ();
    _dbus_verbose ("AVC Cache Statistics:\n");
    _dbus_verbose ("Entry lookups: %d\n", cstats.entry_lookups);
    _dbus_verbose ("Entry hits: %d\n", cstats.entry_hits);
    _dbus_verbose ("Entry misses %d\n", cstats.entry_misses);
    _dbus_verbose ("Entry discards: %d\n", cstats.entry_discards);
    _dbus_verbose ("CAV lookups: %d\n", cstats.cav_lookups);
    _dbus_verbose ("CAV hits: %d\n", cstats.cav_hits);
    _dbus_verbose ("CAV probes: %d\n", cstats.cav_probes);
    _dbus_verbose ("CAV misses: %d\n", cstats.cav_misses);
}
#endif /* HAVE_SELINUX */
#endif /* DBUS_ENABLE_VERBOSE_MODE */

/**
 * Destroy the AVC before we terminate.
 */
void
bus_selinux_shutdown (void)
{
#ifdef HAVE_SELINUX
    if (!selinux_enabled)
        return;

    _dbus_verbose ("AVC shutdown\n");

    if (bus_sid != SECSID_WILD)
    {
        sidput (bus_sid);
        bus_sid = SECSID_WILD;
    }

#ifdef DBUS_ENABLE_VERBOSE_MODE

        if (_dbus_is_verbose())
            bus_avc_print_stats ();

#endif

#endif /* DBUS_ENABLE_VERBOSE_MODE */

    avc_destroy ();
#ifdef HAVE_LIBAUDIT
    audit_close (audit_fd);
#endif /* HAVE_LIBAUDIT */
}

```

```

#endif /* HAVE_SELINUX */
}

/* The !HAVE_LIBAUDIT case lives in dbus-sysdeps-util-unix.c */
#ifdef HAVE_LIBAUDIT
/**
 * Changes the user and group the bus is running as.
 *
 * @param user the user to become
 * @param error return location for errors
 * @returns #FALSE on failure
 */
dbus_bool_t
_dbus_change_to_daemon_user (const char *user,
                             DBusError *error)
{
    dbus_uid_t uid;
    dbus_gid_t gid;
    DBusString u;

    _dbus_string_init_const (&u, user);

    if (!_dbus_get_user_id_and_primary_group (&u, &uid, &gid))
    {
        dbus_set_error (error, DBUS_ERROR_FAILED,
                       "User '%s' does not appear to exist?",
                       user);

        return FALSE;
    }

    /* If we were root */
    if (_dbus_geteuid () == 0)
    {
        int rc;

        capng_clear (CAPNG_SELECT_BOTH);
        capng_update (CAPNG_ADD, CAPNG_EFFECTIVE | CAPNG_PERMITTED,
                     CAP_AUDIT_WRITE);
        rc = capng_change_id (uid, gid, CAPNG_DROP_SUPP_GRP);
        if (rc)
        {
            switch (rc) {
            default:
                dbus_set_error (error, DBUS_ERROR_FAILED,
                               "Failed to drop capabilities: %s\n",
                               _dbus_strerror (errno));

                break;
            case -4:
                dbus_set_error (error, _dbus_error_from_errno (errno),
                               "Failed to set GID to %lu: %s", gid,
                               _dbus_strerror (errno));

                break;
            }
        }
    }
}

```

```

        case -5:
            _dbus_warn ("Failed to drop supplementary groups: %s\n",
                _dbus_strerror (errno));
            break;
        case -6:
            dbus_set_error (error, _dbus_error_from_errno (errno),
                "Failed to set UID to %lu: %s", uid,
                _dbus_strerror (errno));
            break;
        case -7:
            dbus_set_error (error, _dbus_error_from_errno (errno),
                "Failed to unset keep-capabilities:
%s\n",
                _dbus_strerror (errno));
            break;
    }
    return FALSE;
}
}

return TRUE;
}
#endif

```

File = selinux.h

```

/* selinux.h SELinux security check headers for D-BUS
 *
 * Author: Matthew Rickard <mjricka@epoch.ncsc.mil>
 *
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 *
 */

```



```

                                const char    *error_name,
                                const char    *destination,
                                DBusError     *error);

BusSELinuxID* bus_selinux_init_connection_id (DBusConnection
*connection,
                                                DBusError     *error);

void bus_selinux_audit_init(void);

#endif /* BUS_SELINUX_H */

File = service.cmake

[D-BUS Service]
Name=org.freedesktop.DBus.ServiceName
Exec=notepad

File = services.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* services.c  Service management
 *
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301  USA
 */

```

```

#include <config.h>
#include <dbus/dbus-hash.h>
#include <dbus/dbus-list.h>
#include <dbus/dbus-mempool.h>
#include <dbus/dbus-marshall-validate.h>

#include "driver.h"
#include "services.h"
#include "connection.h"
#include "utils.h"
#include "activation.h"
#include "policy.h"
#include "bus.h"
#include "selinux.h"

struct BusService
{
    int refcount;

    BusRegistry *registry;
    char *name;
    DBusList *owners;
};

struct BusOwner
{
    int refcount;

    BusService *service;
    DBusConnection *conn;

    unsigned int allow_replacement : 1;
    unsigned int do_not_queue : 1;
};

struct BusRegistry
{
    int refcount;

    BusContext *context;

    DBusHashTable *service_hash;
    DBusMemPool *service_pool;
    DBusMemPool *owner_pool;

    DBusHashTable *service_sid_table;
};

BusRegistry*
bus_registry_new (BusContext *context)
{
    BusRegistry *registry;

```

```

registry = dbus_new0 (BusRegistry, 1);
if (registry == NULL)
    return NULL;

registry->refcount = 1;
registry->context = context;

registry->service_hash = _dbus_hash_table_new (DBUS_HASH_STRING,
                                              NULL, NULL);
if (registry->service_hash == NULL)
    goto failed;

registry->service_pool = _dbus_mem_pool_new (sizeof (BusService),
                                           TRUE);

if (registry->service_pool == NULL)
    goto failed;

registry->owner_pool = _dbus_mem_pool_new (sizeof (BusOwner),
                                           TRUE);

if (registry->owner_pool == NULL)
    goto failed;

registry->service_sid_table = NULL;

return registry;

failed:
bus_registry_unref (registry);
return NULL;
}

BusRegistry *
bus_registry_ref (BusRegistry *registry)
{
    _dbus_assert (registry->refcount > 0);
    registry->refcount += 1;

    return registry;
}

void
bus_registry_unref (BusRegistry *registry)
{
    _dbus_assert (registry->refcount > 0);
    registry->refcount -= 1;

    if (registry->refcount == 0)
        {
            if (registry->service_hash)

```

```

        _dbus_hash_table_unref (registry->service_hash);
    if (registry->service_pool)
        _dbus_mem_pool_free (registry->service_pool);
    if (registry->owner_pool)
        _dbus_mem_pool_free (registry->owner_pool);
    if (registry->service_sid_table)
        _dbus_hash_table_unref (registry->service_sid_table);

    dbus_free (registry);
}

}

BusService*
bus_registry_lookup (BusRegistry      *registry,
                    const DBusString *service_name)
{
    BusService *service;

    service = _dbus_hash_table_lookup_string (registry->service_hash,
        _dbus_string_get_const_data (service_name));

    return service;
}

static DBusList *
_bus_service_find_owner_link (BusService *service,
                              DBusConnection *connection)
{
    DBusList *link;

    link = _dbus_list_get_first_link (&service->owners);

    while (link != NULL)
    {
        BusOwner *bus_owner;

        bus_owner = (BusOwner *) link->data;
        if (bus_owner->conn == connection)
            break;

        link = _dbus_list_get_next_link (&service->owners, link);
    }

    return link;
}

static void
bus_owner_set_flags (BusOwner *owner,
                    dbus_uint32_t flags)
{
    owner->allow_replacement =

```

```

        (flags & DBUS_NAME_FLAG_ALLOW_REPLACEMENT) != FALSE;

    owner->do_not_queue =
        (flags & DBUS_NAME_FLAG_DO_NOT_QUEUE) != FALSE;
}

static BusOwner *
bus_owner_new (BusService *service,
              DBusConnection *conn,
              dbus_uint32_t flags)
{
    BusOwner *result;

    result = _dbus_mem_pool_alloc (service->registry->owner_pool);
    if (result != NULL)
    {
        result->refcount = 1;
        /* don't ref the connection because we don't want
           to block the connection from going away.
           transactions take care of reffing the connection
           but we need to use refcounting on the owner
           so that the owner does not get freed before
           we can deref the connection in the transaction
           */
        result->conn = conn;
        result->service = service;

        if (!bus_connection_add_owned_service (conn, service))
        {
            _dbus_mem_pool_dealloc (service->registry->owner_pool,
result);
            return NULL;
        }

        bus_owner_set_flags (result, flags);
    }
    return result;
}

static BusOwner *
bus_owner_ref (BusOwner *owner)
{
    _dbus_assert (owner->refcount > 0);
    owner->refcount += 1;

    return owner;
}

static void
bus_owner_unref (BusOwner *owner)
{
    _dbus_assert (owner->refcount > 0);

```

```

owner->refcount -= 1;

if (owner->refcount == 0)
{
    bus_connection_remove_owned_service (owner->conn, owner-
>service);
    _dbus_mem_pool_dealloc (owner->service->registry->owner_pool,
owner);
}
}

BusService*
bus_registry_ensure (BusRegistry                *registry,
                    const DBusString           *service_name,
                    DBusConnection
*owner_connection_if_created,
                    dbus_uint32_t             flags,
                    BusTransaction            *transaction,
                    DBusError                 *error)
{
    BusService *service;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    _dbus_assert (owner_connection_if_created != NULL);
    _dbus_assert (transaction != NULL);

    service = _dbus_hash_table_lookup_string (registry->service_hash,
_dbus_string_get_const_data (service_name));
    if (service != NULL)
        return service;

    service = _dbus_mem_pool_alloc (registry->service_pool);
    if (service == NULL)
    {
        BUS_SET_OOM (error);
        return NULL;
    }

    service->registry = registry;
    service->refcount = 1;

    _dbus_verbose ("copying string %p '%s' to service->name\n",
                    service_name, _dbus_string_get_const_data
(service_name));
    if (!_dbus_string_copy_data (service_name, &service->name))
    {
        _dbus_mem_pool_dealloc (registry->service_pool, service);
        BUS_SET_OOM (error);
        return NULL;
    }
}

```

```

    _dbus_verbose ("copied string %p '%s' to '%s'\n",
                  service_name, _dbus_string_get_const_data
(service_name),
                  service->name);

    if (!bus_driver_send_service_owner_changed (service->name,
                                                NULL,
                                                bus_connection_get_name
(owner_connection_if_created),
                                                transaction, error))
    {
        bus_service_unref (service);
        return NULL;
    }

    if (!bus_activation_service_created (bus_context_get_activation
(registry->context),
                                        service->name, transaction, error))
    {
        bus_service_unref (service);
        return NULL;
    }

    if (!bus_service_add_owner (service, owner_connection_if_created,
flags,
                                transaction, error))
    {
        bus_service_unref (service);
        return NULL;
    }

    if (!_dbus_hash_table_insert_string (registry->service_hash,
                                        service->name,
                                        service))
    {
        /* The add_owner gets reverted on transaction cancel */
        BUS_SET_OOM (error);
        return NULL;
    }

    return service;
}

void
bus_registry_foreach (BusRegistry          *registry,
                    BusServiceForeachFunction function,
                    void                  *data)
{
    DBusHashIter iter;

    _dbus_hash_iter_init (registry->service_hash, &iter);
    while (_dbus_hash_iter_next (&iter))

```



```

    {
        BusService *service = _dbus_hash_iter_get_value (&iter);

        (* function) (service, data);
    }
}

dbus_bool_t
bus_registry_list_services (BusRegistry *registry,
                           char        ***listp,
                           int         *array_len)
{
    int i, j, len;
    char **retval;
    DBusHashIter iter;

    len = _dbus_hash_table_get_n_entries (registry->service_hash);
    retval = dbus_new (char *, len + 1);

    if (retval == NULL)
        return FALSE;

    _dbus_hash_iter_init (registry->service_hash, &iter);
    i = 0;
    while (_dbus_hash_iter_next (&iter))
    {
        BusService *service = _dbus_hash_iter_get_value (&iter);

        retval[i] = _dbus_strdup (service->name);
        if (retval[i] == NULL)
            goto error;

        i++;
    }

    retval[i] = NULL;

    if (array_len)
        *array_len = len;

    *listp = retval;
    return TRUE;

error:
    for (j = 0; j < i; j++)
        dbus_free (retval[j]);
    dbus_free (retval);

    return FALSE;
}

dbus_bool_t

```

```

bus_registry_acquire_service (BusRegistry      *registry,
                             DBusConnection  *connection,
                             const DBusString *service_name,
                             dbus_uint32_t   flags,
                             dbus_uint32_t   *result,
                             BusTransaction  *transaction,
                             DBusError       *error)
{
    dbus_bool_t retval;
    DBusConnection *old_owner_conn;
    BusClientPolicy *policy;
    BusService *service;
    BusActivation *activation;
    BusSELinuxID *sid;
    BusOwner *primary_owner;

    retval = FALSE;

    if (!_dbus_validate_bus_name (service_name, 0,
                                _dbus_string_get_length
(service_name)))
    {
        dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                       "Requested bus name \"%s\" is not valid",
                       _dbus_string_get_const_data (service_name));

        _dbus_verbose ("Attempt to acquire invalid service name\n");

        goto out;
    }

    if (_dbus_string_get_byte (service_name, 0) == ':')
    {
        /* Not allowed; only base services can start with ':' */
        dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                       "Cannot acquire a service starting with ':' such
as \"%s\"",
                       _dbus_string_get_const_data (service_name));

        _dbus_verbose ("Attempt to acquire invalid base service name
\"%s\"",
                       _dbus_string_get_const_data (service_name));

        goto out;
    }

    if (_dbus_string_equal_c_str (service_name, DBUS_SERVICE_DBUS))
    {
        dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                       "Connection \"%s\" is not allowed to own the
service \"%s\" because "
                       "it is reserved for D-Bus' use only",

```

```

        bus_connection_is_active (connection) ?
        bus_connection_get_name (connection) :
        "(inactive)",
        DBUS_SERVICE_DBUS);
    goto out;
}

policy = bus_connection_get_policy (connection);
_dbus_assert (policy != NULL);

/* Note that if sid is #NULL then the bus's own context gets used
 * in bus_connection_selinux_allows_acquire_service()
 */
sid = bus_selinux_id_table_lookup (registry->service_sid_table,
                                   service_name);

if (!bus_selinux_allows_acquire_service (connection, sid,
                                         _dbus_string_get_const_data
(service_name), error))
{
    if (dbus_error_is_set (error) &&
        dbus_error_has_name (error, DBUS_ERROR_NO_MEMORY))
    {
        goto out;
    }

    dbus_set_error (error, DBUS_ERROR_ACCESS_DENIED,
        "Connection \"%s\" is not allowed to own the
service \"%s\" due "
        "to SELinux policy",
        bus_connection_is_active (connection) ?
        bus_connection_get_name (connection) :
        "(inactive)",
        _dbus_string_get_const_data (service_name));
    goto out;
}

if (!bus_client_policy_check_can_own (policy, service_name))
{
    dbus_set_error (error, DBUS_ERROR_ACCESS_DENIED,
        "Connection \"%s\" is not allowed to own the
service \"%s\" due "
        "to security policies in the configuration
file",
        bus_connection_is_active (connection) ?
        bus_connection_get_name (connection) :
        "(inactive)",
        _dbus_string_get_const_data (service_name));
    goto out;
}
}

```

```

if (bus_connection_get_n_services_owned (connection) >=
    bus_context_get_max_services_per_connection (registry->context))
{
    dbus_set_error (error, DBUS_ERROR_LIMITS_EXCEEDED,
        "Connection \"%s\" is not allowed to own more
services "
        "(increase limits in configuration file if
required)",
        bus_connection_is_active (connection) ?
        bus_connection_get_name (connection) :
        "(inactive)");
    goto out;
}

service = bus_registry_lookup (registry, service_name);

if (service != NULL)
{
    primary_owner = bus_service_get_primary_owner (service);
    if (primary_owner != NULL)
        old_owner_conn = primary_owner->conn;
    else
        old_owner_conn = NULL;
}
else
    old_owner_conn = NULL;

if (service == NULL)
{
    service = bus_registry_ensure (registry,
        service_name, connection, flags,
        transaction, error);

    if (service == NULL)
        goto out;
}

primary_owner = bus_service_get_primary_owner (service);
if (primary_owner == NULL)
    goto out;

if (old_owner_conn == NULL)
{
    _dbus_assert (primary_owner->conn == connection);

    *result = DBUS_REQUEST_NAME_REPLY_PRIMARY_OWNER;
}
else if (old_owner_conn == connection)
{
    bus_owner_set_flags (primary_owner, flags);
    *result = DBUS_REQUEST_NAME_REPLY_ALREADY_OWNER;
}
else if (((flags & DBUS_NAME_FLAG_DO_NOT_QUEUE) &&

```

```

        !(bus_service_get_allow_replacement (service)) ||
        ((flags & DBUS_NAME_FLAG_DO_NOT_QUEUE) &&
         !(flags & DBUS_NAME_FLAG_REPLACE_EXISTING)))
    {
        DBusList *link;
        BusOwner *temp_owner;
        /* Since we can't be queued if we are already in the queue
           remove us */

        link = _bus_service_find_owner_link (service, connection);
        if (link != NULL)
            {
                _dbus_list_unlink (&service->owners, link);
                temp_owner = (BusOwner *)link->data;
                bus_owner_unref (temp_owner);
                _dbus_list_free_link (link);
            }

        *result = DBUS_REQUEST_NAME_REPLY_EXISTS;
    }
else if (!(flags & DBUS_NAME_FLAG_DO_NOT_QUEUE) &&
         !(flags & DBUS_NAME_FLAG_REPLACE_EXISTING) ||
         !(bus_service_get_allow_replacement (service)))
    {
        /* Queue the connection */
        if (!bus_service_add_owner (service, connection,
                                   flags,
                                   transaction, error))

            goto out;

        *result = DBUS_REQUEST_NAME_REPLY_IN_QUEUE;
    }
else
    {
        /* Replace the current owner */

        /* We enqueue the new owner and remove the first one because
           * that will cause NameAcquired and NameLost messages to
           * be sent.
           */

        if (!bus_service_add_owner (service, connection,
                                   flags,
                                   transaction, error))

            goto out;

        if (primary_owner->do_not_queue)
            {
                if (!bus_service_remove_owner (service, old_owner_conn,
                                                transaction, error))

                    goto out;
            }
    }

```

```

else
{
    if (!bus_service_swap_owner (service, old_owner_conn,
                                transaction, error))
        goto out;
}

    _dbus_assert (connection == bus_service_get_primary_owner
(service)->conn);
    *result = DBUS_REQUEST_NAME_REPLY_PRIMARY_OWNER;
}

    activation = bus_context_get_activation (registry->context);
    retval = bus_activation_send_pending_auto_activation_messages
(activation,
                                service,
                                transaction,
                                error);

out:
    return retval;
}

dbus_bool_t
bus_registry_release_service (BusRegistry      *registry,
                             DBusConnection  *connection,
                             const DBusString *service_name,
                             dbus_uint32_t    *result,
                             BusTransaction   *transaction,
                             DBusError        *error)
{
    dbus_bool_t retval;
    BusService *service;

    retval = FALSE;

    if (!_dbus_validate_bus_name (service_name, 0,
                                _dbus_string_get_length
(service_name)))
    {
        dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
                      "Given bus name \"%s\" is not valid",
                      _dbus_string_get_const_data (service_name));

        _dbus_verbose ("Attempt to release invalid service name\n");

        goto out;
    }

    if (_dbus_string_get_byte (service_name, 0) == ':')
    {

```

```

        /* Not allowed; the base service name cannot be created or
released */
        dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
            "Cannot release a service starting with ':' such
as \"%s\"",
            _dbus_string_get_const_data (service_name));

        _dbus_verbose ("Attempt to release invalid base service name
\"%s\"",
            _dbus_string_get_const_data (service_name));

        goto out;
    }

    if (_dbus_string_equal_c_str (service_name, DBUS_SERVICE_DBUS))
    {
        /* Not allowed; the base service name cannot be created or
released */
        dbus_set_error (error, DBUS_ERROR_INVALID_ARGS,
            "Cannot release the %s service because it is
owned by the bus",
            DBUS_SERVICE_DBUS);

        _dbus_verbose ("Attempt to release service name \"%s\"",
            DBUS_SERVICE_DBUS);

        goto out;
    }

    service = bus_registry_lookup (registry, service_name);

    if (service == NULL)
    {
        *result = DBUS_RELEASE_NAME_REPLY_NON_EXISTENT;
    }
    else if (!bus_service_has_owner (service, connection))
    {
        *result = DBUS_RELEASE_NAME_REPLY_NOT_OWNER;
    }
    else
    {
        if (!bus_service_remove_owner (service, connection,
            transaction, error))
            goto out;

        _dbus_assert (!bus_service_has_owner (service, connection));
        *result = DBUS_RELEASE_NAME_REPLY_RELEASED;
    }

    retval = TRUE;

out:

```



```

    bus_service_unref (service);
}

static void
bus_service_relink (BusService      *service,
                   DBusPreallocatedHash *preallocated)
{
    _dbus_assert (service->owners == NULL);
    _dbus_assert (preallocated != NULL);

    _dbus_hash_table_insert_string_preallocated (service->registry-
>service_hash,
                                               preallocated,
                                               service->name,
                                               service);

    bus_service_ref (service);
}

/**
 * Data used to represent an ownership cancellation in
 * a bus transaction.
 */
typedef struct
{
    BusOwner *owner;           /**< the owner */
    BusService *service;      /**< service to cancel ownership of */
} OwnershipCancelData;

static void
cancel_ownership (void *data)
{
    OwnershipCancelData *d = data;

    /* We don't need to send messages notifying of these
     * changes, since we're reverting something that was
     * cancelled (effectively never really happened)
     */
    bus_service_unlink_owner (d->service, d->owner);

    if (d->service->owners == NULL)
        bus_service_unlink (d->service);
}

static void
free_ownership_cancel_data (void *data)
{
    OwnershipCancelData *d = data;

    dbus_connection_unref (d->owner->conn);
    bus_owner_unref (d->owner);
    bus_service_unref (d->service);
}

```

```

    dbus_free (d);
}

static dbus_bool_t
add_cancel_ownership_to_transaction (BusTransaction *transaction,
                                     BusService      *service,
                                     BusOwner        *owner)
{
    OwnershipCancelData *d;

    d = dbus_new (OwnershipCancelData, 1);
    if (d == NULL)
        return FALSE;

    d->service = service;
    d->owner = owner;

    if (!bus_transaction_add_cancel_hook (transaction, cancel_ownership,
d,
                                     free_ownership_cancel_data))
    {
        dbus_free (d);
        return FALSE;
    }

    bus_service_ref (d->service);
    bus_owner_ref (owner);
    dbus_connection_ref (d->owner->conn);

    return TRUE;
}

/* this function is self-cancelling if you cancel the transaction */
dbus_bool_t
bus_service_add_owner (BusService      *service,
                      DBusConnection *connection,
                      dbus_uint32_t flags,
                      BusTransaction *transaction,
                      DBusError      *error)
{
    BusOwner *bus_owner;
    DBusList *bus_owner_link;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    /* Send service acquired message first, OOM will result
     * in cancelling the transaction
     */
    if (service->owners == NULL)
    {

```

```

        if (!bus_driver_send_service_acquired (connection, service-
>name, transaction, error))
            return FALSE;
    }

    bus_owner_link = _bus_service_find_owner_link (service, connection);

    if (bus_owner_link == NULL)
    {
        bus_owner = bus_owner_new (service, connection, flags);
        if (bus_owner == NULL)
        {
            BUS_SET_OOM (error);
            return FALSE;
        }

        bus_owner_set_flags (bus_owner, flags);
        if (!(flags & DBUS_NAME_FLAG_REPLACE_EXISTING) || service-
>owners == NULL)
        {
            if (!_dbus_list_append (&service->owners,
                                    bus_owner))
            {
                bus_owner_unref (bus_owner);
                BUS_SET_OOM (error);
                return FALSE;
            }
        }
        else
        {
            if (!_dbus_list_insert_after (&service->owners,
                                        _dbus_list_get_first_link
(&service->owners),
                                        bus_owner))
            {
                bus_owner_unref (bus_owner);
                BUS_SET_OOM (error);
                return FALSE;
            }
        }
    }
    else
    {
        /* Update the link since we are already in the queue
        * No need for operations that can produce OOM
        */

        bus_owner = (BusOwner *) bus_owner_link->data;
        if (flags & DBUS_NAME_FLAG_REPLACE_EXISTING)
        {
            DBusList *link;
            _dbus_list_unlink (&service->owners, bus_owner_link);

```

```

        link = _dbus_list_get_first_link (&service->owners);
        _dbus_assert (link != NULL);

        _dbus_list_insert_after_link (&service->owners, link,
bus_owner_link);
    }

    bus_owner_set_flags (bus_owner, flags);
    return TRUE;
}

if (!add_cancel_ownership_to_transaction (transaction,
                                         service,
                                         bus_owner))
{
    bus_service_unlink_owner (service, bus_owner);
    BUS_SET_OOM (error);
    return FALSE;
}

return TRUE;
}

typedef struct
{
    BusOwner      *owner;
    BusService    *service;
    BusOwner      *before_owner; /* restore to position before this
connection in owners list */
    DBusList      *owner_link;
    DBusList      *service_link;
    DBusPreallocatedHash *hash_entry;
} OwnershipRestoreData;

static void
restore_ownership (void *data)
{
    OwnershipRestoreData *d = data;
    DBusList *link;

    _dbus_assert (d->service_link != NULL);
    _dbus_assert (d->owner_link != NULL);

    if (d->service->owners == NULL)
    {
        _dbus_assert (d->hash_entry != NULL);
        bus_service_relink (d->service, d->hash_entry);
    }
    else
    {
        _dbus_assert (d->hash_entry == NULL);
    }
}

```

```

/* We don't need to send messages notifying of these
 * changes, since we're reverting something that was
 * cancelled (effectively never really happened)
 */
link = _dbus_list_get_first_link (&d->service->owners);
while (link != NULL)
{
    if (link->data == d->before_owner)
        break;

    link = _dbus_list_get_next_link (&d->service->owners, link);
}

_dbus_list_insert_before_link (&d->service->owners, link, d-
>owner_link);

/* Note that removing then restoring this changes the order in which
 * ServiceDeleted messages are sent on destruction of the
 * connection. This should be OK as the only guarantee there is
 * that the base service is destroyed last, and we never even
 * tentatively remove the base service.
 */
bus_connection_add_owned_service_link (d->owner->conn, d-
>service_link);

d->hash_entry = NULL;
d->service_link = NULL;
d->owner_link = NULL;
}

static void
free_ownership_restore_data (void *data)
{
    OwnershipRestoreData *d = data;

    if (d->service_link)
        _dbus_list_free_link (d->service_link);
    if (d->owner_link)
        _dbus_list_free_link (d->owner_link);
    if (d->hash_entry)
        _dbus_hash_table_free_preallocated_entry (d->service->registry-
>service_hash,
                                                d->hash_entry);

    dbus_connection_unref (d->owner->conn);
    bus_owner_unref (d->owner);
    bus_service_unref (d->service);

    dbus_free (d);
}

```

```

static dbus_bool_t
add_restore_ownership_to_transaction (BusTransaction *transaction,
                                     BusService      *service,
                                     BusOwner         *owner)
{
    OwnershipRestoreData *d;
    DBusList *link;

    d = dbus_new (OwnershipRestoreData, 1);
    if (d == NULL)
        return FALSE;

    d->service = service;
    d->owner = owner;
    d->service_link = _dbus_list_alloc_link (service);
    d->owner_link = _dbus_list_alloc_link (owner);
    d->hash_entry = _dbus_hash_table_preallocate_entry (service->registry->service_hash);

    bus_service_ref (d->service);
    bus_owner_ref (d->owner);
    dbus_connection_ref (d->owner->conn);

    d->before_owner = NULL;
    link = _dbus_list_get_first_link (&service->owners);
    while (link != NULL)
    {
        if (link->data == owner)
        {
            {
                link = _dbus_list_get_next_link (&service->owners, link);

                if (link)
                    d->before_owner = link->data;

                break;
            }

            link = _dbus_list_get_next_link (&service->owners, link);
        }

        if (d->service_link == NULL ||
            d->owner_link == NULL ||
            d->hash_entry == NULL ||
            !bus_transaction_add_cancel_hook (transaction,
restore_ownership, d,
                                     free_ownership_restore_data))
        {
            free_ownership_restore_data (d);
            return FALSE;
        }

    }

    return TRUE;
}

```

```

}

dbus_bool_t
bus_service_swap_owner (BusService      *service,
                        DBusConnection *connection,
                        BusTransaction *transaction,
                        DBusError       *error)
{
    DBusList *swap_link;
    BusOwner *primary_owner;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    /* We send out notifications before we do any work we
     * might have to undo if the notification-sending failed
     */

    /* Send service lost message */
    primary_owner = bus_service_get_primary_owner (service);
    if (primary_owner == NULL || primary_owner->conn != connection)
        _dbus_assert_not_reached ("Tried to swap a non primary owner");

    if (!bus_driver_send_service_lost (connection, service->name,
                                       transaction, error))
        return FALSE;

    if (service->owners == NULL)
    {
        _dbus_assert_not_reached ("Tried to swap owner of a service that
has no owners");
    }
    else if (_dbus_list_length_is_one (&service->owners))
    {
        _dbus_assert_not_reached ("Tried to swap owner of a service that
has no other owners in the queue");
    }
    else
    {
        DBusList *link;
        BusOwner *new_owner;
        DBusConnection *new_owner_conn;
        link = _dbus_list_get_first_link (&service->owners);
        _dbus_assert (link != NULL);
        link = _dbus_list_get_next_link (&service->owners, link);
        _dbus_assert (link != NULL);

        new_owner = (BusOwner *)link->data;
        new_owner_conn = new_owner->conn;

        if (!bus_driver_send_service_owner_changed (service->name,

```

```

        bus_connection_get_name
(connection),
        bus_connection_get_name
(new_owner_conn),
        transaction, error))
    return FALSE;

    /* This will be our new owner */
    if (!bus_driver_send_service_acquired (new_owner_conn,
        service->name,
        transaction,
        error))
        return FALSE;
}

if (!add_restore_ownership_to_transaction (transaction, service,
primary_owner))
{
    BUS_SET_OOM (error);
    return FALSE;
}

/* unlink the primary and make it the second link */
swap_link = _dbus_list_get_first_link (&service->owners);
_dbus_list_unlink (&service->owners, swap_link);

_dbus_list_insert_after_link (&service->owners,
        _dbus_list_get_first_link (&service-
>owners),
        swap_link);

return TRUE;
}

/* this function is self-cancelling if you cancel the transaction */
dbus_bool_t
bus_service_remove_owner (BusService      *service,
                          DBusConnection *connection,
                          BusTransaction *transaction,
                          DBusError      *error)
{
    BusOwner *primary_owner;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    /* We send out notifications before we do any work we
    * might have to undo if the notification-sending failed
    */

    /* Send service lost message */
    primary_owner = bus_service_get_primary_owner (service);
    if (primary_owner != NULL && primary_owner->conn == connection)

```



```

    {
        if (!bus_driver_send_service_lost (connection, service->name,
                                           transaction, error))
            return FALSE;
    }
else
    {
        /* if we are not the primary owner then just remove us from the
queue */
        DBusList *link;
        BusOwner *temp_owner;

        link = _bus_service_find_owner_link (service, connection);
        _dbus_list_unlink (&service->owners, link);
        temp_owner = (BusOwner *)link->data;
        bus_owner_unref (temp_owner);
        _dbus_list_free_link (link);

        return TRUE;
    }

if (service->owners == NULL)
    {
        _dbus_assert_not_reached ("Tried to remove owner of a service
that has no owners");
    }
else if (_dbus_list_length_is_one (&service->owners))
    {
        if (!bus_driver_send_service_owner_changed (service->name,
                                                    bus_connection_get_name
(connection),
                                                    NULL,
                                                    transaction, error))
            return FALSE;
    }
else
    {
        DBusList *link;
        BusOwner *new_owner;
        DBusConnection *new_owner_conn;
        link = _dbus_list_get_first_link (&service->owners);
        _dbus_assert (link != NULL);
        link = _dbus_list_get_next_link (&service->owners, link);
        _dbus_assert (link != NULL);

        new_owner = (BusOwner *)link->data;
        new_owner_conn = new_owner->conn;

        if (!bus_driver_send_service_owner_changed (service->name,
                                                    bus_connection_get_name
(connection),

```

```

        bus_connection_get_name
(new_owner_conn),
        transaction, error))
    return FALSE;

    /* This will be our new owner */
    if (!bus_driver_send_service_acquired (new_owner_conn,
        service->name,
        transaction,
        error))
        return FALSE;
}

if (!add_restore_ownership_to_transaction (transaction, service,
primary_owner))
{
    BUS_SET_OOM (error);
    return FALSE;
}

bus_service_unlink_owner (service, primary_owner);

if (service->owners == NULL)
    bus_service_unlink (service);

return TRUE;
}

BusService *
bus_service_ref (BusService *service)
{
    _dbus_assert (service->refcount > 0);

    service->refcount += 1;

    return service;
}

void
bus_service_unref (BusService *service)
{
    _dbus_assert (service->refcount > 0);

    service->refcount -= 1;

    if (service->refcount == 0)
    {
        _dbus_assert (service->owners == NULL);

        dbus_free (service->name);
        _dbus_mem_pool_dealloc (service->registry->service_pool,
service);
    }
}

```

```

    }
}

DBusConnection *
bus_service_get_primary_owners_connection (BusService *service)
{
    BusOwner *owner;

    owner = bus_service_get_primary_owner (service);

    if (owner != NULL)
        return owner->conn;
    else
        return NULL;
}

BusOwner*
bus_service_get_primary_owner (BusService *service)
{
    return _dbus_list_get_first (&service->owners);
}

const char*
bus_service_get_name (BusService *service)
{
    return service->name;
}

dbus_bool_t
bus_service_get_allow_replacement (BusService *service)
{
    BusOwner *owner;
    DBusList *link;

    _dbus_assert (service->owners != NULL);

    link = _dbus_list_get_first_link (&service->owners);
    owner = (BusOwner *) link->data;

    return owner->allow_replacement;
}

dbus_bool_t
bus_service_has_owner (BusService *service,
                      DBusConnection *connection)
{
    DBusList *link;

    link = _bus_service_find_owner_link (service, connection);

    if (link == NULL)
        return FALSE;
}

```

```

    else
        return TRUE;
}

dbus_bool_t
bus_service_list_queued_owners (BusService *service,
                                DBusList **return_list,
                                DBusError *error)
{
    DBusList *link;

    _dbus_assert (*return_list == NULL);

    link = _dbus_list_get_first_link (&service->owners);
    _dbus_assert (link != NULL);

    while (link != NULL)
    {
        BusOwner *owner;
        const char *uname;

        owner = (BusOwner *) link->data;
        uname = bus_connection_get_name (owner->conn);

        if (!_dbus_list_append (return_list, (char *)uname))
            goto oom;

        link = _dbus_list_get_next_link (&service->owners, link);
    }

    return TRUE;

oom:
    _dbus_list_clear (return_list);
    BUS_SET_OOM (error);
    return FALSE;
}

```

File = services.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* services.h Service management
 *
 * Copyright (C) 2003 Red Hat, Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
 * This program is free software; you can redistribute it and/or
modify

```

```

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by
* the Free Software Foundation; either version 2 of the License, or
* (at your option) any later version.
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* MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
* GNU General Public License for more details.
*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

```

```

#ifndef BUS_SERVICES_H
#define BUS_SERVICES_H

```

```

#include <dbus/dbus.h>
#include <dbus/dbus-string.h>
#include <dbus/dbus-hash.h>
#include "connection.h"
#include "bus.h"

```

```

typedef void (* BusServiceForeachFunction) (BusService      *service,
                                             void             *data);

BusRegistry* bus_registry_new          (BusContext
*context);
BusRegistry* bus_registry_ref          (BusRegistry
*registry);
void          bus_registry_unref       (BusRegistry
*registry);
BusService*  bus_registry_lookup      (BusRegistry
*registry,
                                     const DBusString
*service_name);
BusService*  bus_registry_ensure      (BusRegistry
*registry,
                                     const DBusString
*service_name,
                                     DBusConnection
*owner_connection_if_created,
                                     dbus_uint32_t      flags,
*transaction,
                                     BusTransaction
*error);
void          bus_registry_foreach     (BusRegistry
*registry,

```



```

DBusError
*error);
dbus_bool_t bus_service_swap_owner (DBusService
*service,
DBusConnection
*connection,
DBusTransaction
*transaction,
DBusError
*error);
dbus_bool_t bus_service_remove_owner (DBusService
*service,
DBusConnection
*connection,
DBusTransaction
*transaction,
DBusError
*error);
dbus_bool_t bus_service_has_owner (DBusService
*service,
DBusConnection
*connection);
BusOwner* bus_service_get_primary_owner (DBusService
*service);
dbus_bool_t bus_service_get_allow_replacement (DBusService
*service);
const char* bus_service_get_name (DBusService
*service);
dbus_bool_t bus_service_list_queued_owners (DBusService
*service,
DBusList
**return_list,
DBusError
*error);

DBusConnection* bus_service_get_primary_owners_connection (DBusService
*service);
#endif /* BUS_SERVICES_H */

```

File = session.conf

```

<!-- This configuration file controls the per-user-login-session
message bus.
    Add a session-local.conf and edit that rather than changing this
    file directly. -->

```

```

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>

```

```

<!-- Our well-known bus type, don't change this -->
<type>session</type>

<listen>unix:tmpdir=./</listen>

<servicedir></servicedir>

<policy context="default">
  <!-- Allow everything to be sent -->
  <allow send_destination="*" />
  <!-- Allow everything to be received -->
  <allow eavesdrop="true" />
  <!-- Allow anyone to own anything -->
  <allow own="*" />
</policy>

</busconfig>

File = session.conf.in

<!-- This configuration file controls the per-user-login-session
message bus.
      Add a session-local.conf and edit that rather than changing this
      file directly. -->

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-Bus Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <!-- Our well-known bus type, don't change this -->
  <type>session</type>

  <!-- If we fork, keep the user's original umask to avoid affecting
      the behavior of child processes. -->
  <keep_umask />

  <listen>@DBUS_SESSION_BUS_DEFAULT_ADDRESS@</listen>

  <standard_session_servicedirs />

  <policy context="default">
    <!-- Allow everything to be sent -->
    <allow send_destination="*" eavesdrop="true" />
    <!-- Allow everything to be received -->
    <allow eavesdrop="true" />
    <!-- Allow anyone to own anything -->
    <allow own="*" />
  </policy>

  <!-- Config files are placed here that among other things,

```



```

        further restrict the above policy for specific services. -->
<includedir>session.d</includedir>

<!-- This is included last so local configuration can override
what's
    in this standard file -->
<include ignore_missing="yes">session-local.conf</include>

<include if_selinux_enabled="yes"
selinux_root_relative="yes">contexts/dbus_contexts</include>

<!-- For the session bus, override the default relatively-low limits
need
    with essentially infinite limits, since the bus is just running
    as the user anyway, using up bus resources is not something we
    to worry about. In some cases, we do set the limits lower than
    "all available memory" if exceeding the limit is almost
certainly a bug,
    having the bus enforce a limit is nicer than a huge memory
leak. But the
    intent is that these limits should never be hit. -->

<!-- the memory limits are 1G instead of say 4G because they can't
exceed 32-bit signed int max -->
<limit name="max_incoming_bytes">1000000000</limit>
<limit name="max_incoming_unix_fds">250000000</limit>
<limit name="max_outgoing_bytes">1000000000</limit>
<limit name="max_outgoing_unix_fds">250000000</limit>
<limit name="max_message_size">1000000000</limit>
<limit name="max_message_unix_fds">4096</limit>
<limit name="service_start_timeout">120000</limit>
<limit name="auth_timeout">240000</limit>
<limit name="max_completed_connections">100000</limit>
<limit name="max_incomplete_connections">10000</limit>
<limit name="max_connections_per_user">100000</limit>
<limit name="max_pending_service_starts">10000</limit>
<limit name="max_names_per_connection">50000</limit>
<limit name="max_match_rules_per_connection">50000</limit>
<limit name="max_replies_per_connection">50000</limit>

</busconfig>

File = session.conf.~1~

<!-- This configuration file controls the per-user-login-session
message bus.
    Add a session-local.conf and edit that rather than changing this
    file directly. -->

```

```

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-Bus Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <!-- Our well-known bus type, don't change this -->
  <type>session</type>

  <!-- If we fork, keep the user's original umask to avoid affecting
        the behavior of child processes. -->
  <keep_umask/>

  <listen>unix:tmpdir=/tmp</listen>

  <standard_session_servicedirs />

  <policy context="default">
    <!-- Allow everything to be sent -->
    <allow send_destination="*" eavesdrop="true"/>
    <!-- Allow everything to be received -->
    <allow eavesdrop="true"/>
    <!-- Allow anyone to own anything -->
    <allow own="*" />
  </policy>

  <!-- Config files are placed here that among other things,
        further restrict the above policy for specific services. -->
  <includedir>session.d</includedir>

  <!-- This is included last so local configuration can override
what's
        in this standard file -->
  <include ignore_missing="yes">session-local.conf</include>

  <include if_selinux_enabled="yes"
selinux_root_relative="yes">contexts/dbus_contexts</include>

  <!-- For the session bus, override the default relatively-low limits
        with essentially infinite limits, since the bus is just running
        as the user anyway, using up bus resources is not something we
need
        to worry about. In some cases, we do set the limits lower than
        "all available memory" if exceeding the limit is almost
certainly a bug,
        having the bus enforce a limit is nicer than a huge memory
leak. But the
        intent is that these limits should never be hit. -->

  <!-- the memory limits are 1G instead of say 4G because they can't
exceed 32-bit signed int max -->
  <limit name="max_incoming_bytes">1000000000</limit>
  <limit name="max_incoming_unix_fds">250000000</limit>
  <limit name="max_outgoing_bytes">1000000000</limit>

```

```
<limit name="max_outgoing_unix_fds">250000000</limit>
<limit name="max_message_size">1000000000</limit>
<limit name="max_message_unix_fds">4096</limit>
<limit name="service_start_timeout">120000</limit>
<limit name="auth_timeout">240000</limit>
<limit name="max_completed_connections">100000</limit>
<limit name="max_incomplete_connections">10000</limit>
<limit name="max_connections_per_user">100000</limit>
<limit name="max_pending_service_starts">10000</limit>
<limit name="max_names_per_connection">50000</limit>
<limit name="max_match_rules_per_connection">50000</limit>
<limit name="max_replies_per_connection">50000</limit>
```

```
</busconfig>
```

```
File = shell-test.c
```

```
#include <config.h>
#include <stdio.h>
#include <stdlib.h>
#define DBUS_COMPILATION
#include <dbus/dbus-internals.h>
#include <dbus/dbus-list.h>
#include <dbus/dbus-memory.h>
#include <dbus/dbus-shell.h>
#include <dbus/dbus-string.h>
#include <dbus/dbus-sysdeps.h>

static dbus_bool_t
test_command_line (const char *arg1, ...)
{
    int i, original_argc, shell_argc;
    char **shell_argv;
    char **original_argv;
    char *command_line, *tmp;
    DBusString str;
    DBusList *list = NULL, *node;
    va_list var_args;
    DBusError error;

    va_start (var_args, arg1);
    _dbus_list_append (&list, (char *)arg1);
    do
    {
        tmp = va_arg (var_args, char *);
        if (!tmp)
            break;
        _dbus_list_append (&list, tmp);
    } while (tmp);
    va_end (var_args);
```

```

original_argc = _dbus_list_get_length (&list);
original_argv = dbus_new (char *, original_argc);
_dbus_string_init (&str);
for (i = 0, node = _dbus_list_get_first_link (&list); i <
original_argc && node;
    i++, node = _dbus_list_get_next_link (&list, node))
{
    original_argv[i] = node->data;
    if (i > 0)
        _dbus_string_append_byte (&str, ' ');
    _dbus_string_append (&str, original_argv[i]);
}

_dbus_list_clear (&list);
command_line = _dbus_string_get_data (&str);
printf ("\n\nTesting command line '%s'\n", command_line);

dbus_error_init (&error);
if (!_dbus_shell_parse_argv (command_line, &shell_argc, &shell_argv,
&error))
{
    fprintf (stderr, "Error parsing command line: %s\n",
error.message ? error.message : "");
    return FALSE;
}
else
{
    if (shell_argc != original_argc)
    {
        printf ("Number of arguments returned (%d) don't match
original (%d)\n",
            shell_argc, original_argc);
        return FALSE;
    }
    printf ("Number of arguments: %d\n", shell_argc);
    for (i = 0; i < shell_argc; i++)
    {
        char *unquoted;

        unquoted = _dbus_shell_unquote (original_argv[i]);
        if (strcmp (unquoted ? unquoted : "",
            shell_argv[i] ? shell_argv[i] : ""))
        {
            printf ("Position %d, returned argument (%s) does not
match original (%s)\n",
                i, shell_argv[i], unquoted);
            dbus_free (unquoted);
            return FALSE;
        }
        dbus_free (unquoted);
        if (shell_argv[i])

```

```

        printf ("Argument %d = %s\n", i, shell_argv[i]);
    }

    dbus_free_string_array (shell_argv);
}

_dbus_string_free (&str);

return TRUE;
}

int
main (int argc, char **argv)
{
    if (!test_command_line ("command", "-s", "--force-shutdown", "\"a
string\"", "123", NULL)
        || !test_command_line ("command", "-s", NULL)
        || !test_command_line ("/opt/gnome/bin/service-start", NULL)
        || !test_command_line ("grep", "-l", "-r", "-i", "'whatever'",
"files*.c", NULL)
        || !test_command_line ("/home/boston/johnp/devel-
local/dbus/test/test-segfault", NULL)
        || !test_command_line ("ls", "-l", "-a", "--colors",
_dbus_get_tmpdir(), NULL)
        || !test_command_line ("rsync-to-server", NULL)
        || !test_command_line ("test-segfault", "--no-segfault", NULL)
        || !test_command_line ("evolution", "mailto:pepe@cuco.com",
NULL)
        || !test_command_line ("run", "\"a \n multiline\"", NULL)
        || test_command_line ("ls", "\"a wrong string\"", NULL) /*
invalid command line */ )
        return -1;

    return 0;
}

```

File = signals.c

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* signals.c Bus signal connection implementation
 *
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 *
 * Licensed under the Academic Free License version 2.1
 *
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 * it under the terms of the GNU General Public License as published
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 * the Free Software Foundation; either version 2 of the License, or

```

```

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*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

```

```

#include <config.h>
#include "signals.h"
#include "services.h"
#include "utils.h"
#include <dbus/dbus-marshall-validate.h>

```

```

struct BusMatchRule
{
    int refcount;          /**< reference count */

    DBusConnection *matches_go_to; /**< Owner of the rule */

    unsigned int flags; /**< BusMatchFlags */

    int message_type;
    char *interface;
    char *member;
    char *sender;
    char *destination;
    char *path;

    unsigned int *arg_lens;
    char **args;
    int args_len;
};

```

```

#define BUS_MATCH_ARG_NAMESPACE 0x4000000u
#define BUS_MATCH_ARG_IS_PATH 0x8000000u

#define BUS_MATCH_ARG_FLAGS (BUS_MATCH_ARG_NAMESPACE |
BUS_MATCH_ARG_IS_PATH)

```

```

BusMatchRule*
bus_match_rule_new (DBusConnection *matches_go_to)
{
    BusMatchRule *rule;

    rule = dbus_new0 (BusMatchRule, 1);

```

```

    if (rule == NULL)
        return NULL;

    rule->refcount = 1;
    rule->matches_go_to = matches_go_to;

#ifdef DBUS_BUILD_TESTS
    _dbus_assert (rule->matches_go_to != NULL);
#endif

    return rule;
}

BusMatchRule *
bus_match_rule_ref (BusMatchRule *rule)
{
    _dbus_assert (rule->refcount > 0);

    rule->refcount += 1;

    return rule;
}

void
bus_match_rule_unref (BusMatchRule *rule)
{
    _dbus_assert (rule->refcount > 0);

    rule->refcount -= 1;
    if (rule->refcount == 0)
    {
        dbus_free (rule->interface);
        dbus_free (rule->member);
        dbus_free (rule->sender);
        dbus_free (rule->destination);
        dbus_free (rule->path);
        dbus_free (rule->arg_lens);

        /* can't use dbus_free_string_array() since there
         * are embedded NULL
         */
        if (rule->args)
        {
            int i;

            i = 0;
            while (i < rule->args_len)
            {
                if (rule->args[i])
                    dbus_free (rule->args[i]);
                ++i;
            }
        }
    }
}

```

```

        dbus_free (rule->args);
    }

    dbus_free (rule);
}

#ifdef DBUS_ENABLE_VERBOSE_MODE
/* Note this function does not do escaping, so it's only
 * good for debug spew at the moment
 */
static char*
match_rule_to_string (BusMatchRule *rule)
{
    DBusString str;
    char *ret;

    if (!_dbus_string_init (&str))
    {
        char *s;
        while ((s = _dbus_strdup ("nomem")) == NULL)
            ; /* only OK for debug spew... */
        return s;
    }

    if (rule->flags & BUS_MATCH_MESSAGE_TYPE)
    {
        if (!_dbus_string_append_printf (&str, "type='%s'",
            dbus_message_type_to_string (rule->message_type)))
            goto nomem;
    }

    if (rule->flags & BUS_MATCH_INTERFACE)
    {
        if (_dbus_string_get_length (&str) > 0)
        {
            if (!_dbus_string_append (&str, ","))
                goto nomem;
        }

        if (!_dbus_string_append_printf (&str, "interface='%s'", rule-
>interface))
            goto nomem;
    }

    if (rule->flags & BUS_MATCH_MEMBER)
    {
        if (_dbus_string_get_length (&str) > 0)
        {
            if (!_dbus_string_append (&str, ","))
                goto nomem;
        }
    }
}

```



```

    }

    if (!_dbus_string_append_printf (&str, "member='%s'", rule-
>member))
        goto nomem;
    }

    if (rule->flags & BUS_MATCH_PATH)
    {
        if (_dbus_string_get_length (&str) > 0)
        {
            if (!_dbus_string_append (&str, ","))
                goto nomem;
        }

        if (!_dbus_string_append_printf (&str, "path='%s'", rule->path))
            goto nomem;
    }

    if (rule->flags & BUS_MATCH_PATH_NAMESPACE)
    {
        if (_dbus_string_get_length (&str) > 0)
        {
            if (!_dbus_string_append (&str, ","))
                goto nomem;
        }

        if (!_dbus_string_append_printf (&str, "path_namespace='%s'",
rule->path))
            goto nomem;
    }

    if (rule->flags & BUS_MATCH_SENDER)
    {
        if (_dbus_string_get_length (&str) > 0)
        {
            if (!_dbus_string_append (&str, ","))
                goto nomem;
        }

        if (!_dbus_string_append_printf (&str, "sender='%s'", rule-
>sender))
            goto nomem;
    }

    if (rule->flags & BUS_MATCH_DESTINATION)
    {
        if (_dbus_string_get_length (&str) > 0)
        {
            if (!_dbus_string_append (&str, ","))
                goto nomem;
        }
    }

```

```

        if (!_dbus_string_append_printf (&str, "destination='%s'", rule-
>destination))
            goto nomem;
    }

    if (rule->flags & BUS_MATCH_CLIENT_IS_EAVESDROPPING)
    {
        if (_dbus_string_get_length (&str) > 0)
        {
            if (!_dbus_string_append (&str, ","))
                goto nomem;
        }

        if (!_dbus_string_append_printf (&str, "eavesdrop='%s'",
            (rule->flags & BUS_MATCH_CLIENT_IS_EAVESDROPPING) ?
            "true" : "false"))
            goto nomem;
    }

    if (rule->flags & BUS_MATCH_ARGS)
    {
        int i;

        _dbus_assert (rule->args != NULL);

        i = 0;
        while (i < rule->args_len)
        {
            if (rule->args[i] != NULL)
            {
                dbus_bool_t is_path, is_namespace;

                if (_dbus_string_get_length (&str) > 0)
                {
                    if (!_dbus_string_append (&str, ","))
                        goto nomem;
                }

                is_path = (rule->arg_lens[i] & BUS_MATCH_ARG_IS_PATH) !=
0;
                is_namespace = (rule->arg_lens[i] &
BUS_MATCH_ARG_NAMESPACE) != 0;

                if (!_dbus_string_append_printf (&str,
                    "arg%d%s='%s'",
                    i,
                    is_path ? "path" :
                    is_namespace ?
"namespace" : "",
                    rule->args[i]))
                    goto nomem;
            }
        }
    }

```

```

        }

        ++i;
    }
}

if (!_dbus_string_steal_data (&str, &ret))
    goto nomem;

_dbus_string_free (&str);
return ret;

nomem:
_dbus_string_free (&str);
{
    char *s;
    while ((s = _dbus_strdup ("nomem")) == NULL)
        ; /* only OK for debug spew... */
    return s;
}
}
#endif /* DBUS_ENABLE_VERBOSE_MODE */

dbus_bool_t
bus_match_rule_set_message_type (BusMatchRule *rule,
                                int             type)
{
    rule->flags |= BUS_MATCH_MESSAGE_TYPE;

    rule->message_type = type;

    return TRUE;
}

dbus_bool_t
bus_match_rule_set_interface (BusMatchRule *rule,
                              const char   *interface)
{
    char *new;

    _dbus_assert (interface != NULL);

    new = _dbus_strdup (interface);
    if (new == NULL)
        return FALSE;

    rule->flags |= BUS_MATCH_INTERFACE;
    dbus_free (rule->interface);
    rule->interface = new;

    return TRUE;
}

```

```

dbus_bool_t
bus_match_rule_set_member (BusMatchRule *rule,
                           const char *member)
{
    char *new;

    _dbus_assert (member != NULL);

    new = _dbus_strdup (member);
    if (new == NULL)
        return FALSE;

    rule->flags |= BUS_MATCH_MEMBER;
    dbus_free (rule->member);
    rule->member = new;

    return TRUE;
}

dbus_bool_t
bus_match_rule_set_sender (BusMatchRule *rule,
                           const char *sender)
{
    char *new;

    _dbus_assert (sender != NULL);

    new = _dbus_strdup (sender);
    if (new == NULL)
        return FALSE;

    rule->flags |= BUS_MATCH_SENDER;
    dbus_free (rule->sender);
    rule->sender = new;

    return TRUE;
}

dbus_bool_t
bus_match_rule_set_destination (BusMatchRule *rule,
                                const char *destination)
{
    char *new;

    _dbus_assert (destination != NULL);

    new = _dbus_strdup (destination);
    if (new == NULL)
        return FALSE;

    rule->flags |= BUS_MATCH_DESTINATION;

```

```

    dbus_free (rule->destination);
    rule->destination = new;

    return TRUE;
}

void
bus_match_rule_set_client_is_eavesdropping (BusMatchRule *rule,
                                             dbus_bool_t
is_eavesdropping)
{
    if (is_eavesdropping)
        rule->flags |= BUS_MATCH_CLIENT_IS_EAVESDROPPING;
    else
        rule->flags &= ~(BUS_MATCH_CLIENT_IS_EAVESDROPPING);
}

dbus_bool_t
bus_match_rule_set_path (BusMatchRule *rule,
                        const char *path,
                        dbus_bool_t is_namespace)
{
    char *new;

    _dbus_assert (path != NULL);

    new = _dbus_strdup (path);
    if (new == NULL)
        return FALSE;

    rule->flags &= ~(BUS_MATCH_PATH|BUS_MATCH_PATH_NAMESPACE);

    if (is_namespace)
        rule->flags |= BUS_MATCH_PATH_NAMESPACE;
    else
        rule->flags |= BUS_MATCH_PATH;

    dbus_free (rule->path);
    rule->path = new;

    return TRUE;
}

dbus_bool_t
bus_match_rule_set_arg (BusMatchRule *rule,
                       int arg,
                       const DBusString *value,
                       dbus_bool_t is_path,
                       dbus_bool_t is_namespace)
{
    int length;
    char *new;

```

```

_dbus_assert (value != NULL);

/* args_len is the number of args not including null termination
 * in the char**
 */
if (arg >= rule->args_len)
{
    unsigned int *new_arg_lens;
    char **new_args;
    int new_args_len;
    int i;

    new_args_len = arg + 1;

    /* add another + 1 here for null termination */
    new_args = dbus_realloc (rule->args,
                            sizeof (char *) * (new_args_len + 1));

    if (new_args == NULL)
        return FALSE;

    /* NULL the new slots */
    i = rule->args_len;
    while (i <= new_args_len) /* <= for null termination */
    {
        new_args[i] = NULL;
        ++i;
    }

    rule->args = new_args;

    /* and now add to the lengths */
    new_arg_lens = dbus_realloc (rule->arg_lens,
                                sizeof (int) * (new_args_len + 1));

    if (new_arg_lens == NULL)
        return FALSE;

    /* zero the new slots */
    i = rule->args_len;
    while (i <= new_args_len) /* <= for null termination */
    {
        new_arg_lens[i] = 0;
        ++i;
    }

    rule->arg_lens = new_arg_lens;
    rule->args_len = new_args_len;
}

length = _dbus_string_get_length (value);
if (!_dbus_string_copy_data (value, &new))

```

```

    return FALSE;

rule->flags |= BUS_MATCH_ARGS;

dbus_free (rule->args[arg]);
rule->arg_lens[arg] = length;
rule->args[arg] = new;

if (is_path)
    rule->arg_lens[arg] |= BUS_MATCH_ARG_IS_PATH;

if (is_namespace)
    rule->arg_lens[arg] |= BUS_MATCH_ARG_NAMESPACE;

/* NULL termination didn't get busted */
_dbus_assert (rule->args[rule->args_len] == NULL);
_dbus_assert (rule->arg_lens[rule->args_len] == 0);

return TRUE;
}

#define ISWHITE(c) (((c) == ' ') || ((c) == '\t') || ((c) == '\n') ||
((c) == '\r'))

static dbus_bool_t
find_key (const DBusString *str,
         int start,
         DBusString *key,
         int *value_pos,
         DBusError *error)
{
    const char *p;
    const char *s;
    const char *key_start;
    const char *key_end;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    s = _dbus_string_get_const_data (str);

    p = s + start;

    while (*p && ISWHITE (*p))
        ++p;

    key_start = p;

    while (*p && *p != '=' && !ISWHITE (*p))
        ++p;

    key_end = p;

```

```

while (*p && ISWHITE (*p))
    ++p;

if (key_start == key_end)
{
    /* Empty match rules or trailing whitespace are OK */
    *value_pos = p - s;
    return TRUE;
}

if (*p != '=')
{
    dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
        "Match rule has a key with no subsequent '='
character");
    return FALSE;
}
++p;

if (!_dbus_string_append_len (key, key_start, key_end - key_start))
{
    BUS_SET_OOM (error);
    return FALSE;
}

*value_pos = p - s;

return TRUE;
}

static dbus_bool_t
find_value (const DBusString *str,
            int start,
            const char *key,
            DBusString *value,
            int *value_end,
            DBusError *error)
{
    const char *p;
    const char *s;
    char quote_char;
    int orig_len;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    orig_len = _dbus_string_get_length (value);

    s = _dbus_string_get_const_data (str);

    p = s + start;

    quote_char = '\\0';

```



```

while (*p)
{
    if (quote_char == '\\0')
    {
        switch (*p)
        {
            case '\\0':
                goto done;

            case '\\':
                quote_char = '\\';
                goto next;

            case ',':
                ++p;
                goto done;

            case '\\\\':
                quote_char = '\\\\';
                goto next;

            default:
                if (!_dbus_string_append_byte (value, *p))
                {
                    BUS_SET_OOM (error);
                    goto failed;
                }
        }
    }
    else if (quote_char == '\\\\')
    {
        /* \ only counts as an escape if escaping a quote mark */
        if (*p != '\\')
        {
            if (!_dbus_string_append_byte (value, '\\\\'))
            {
                BUS_SET_OOM (error);
                goto failed;
            }
        }

        if (!_dbus_string_append_byte (value, *p))
        {
            BUS_SET_OOM (error);
            goto failed;
        }

        quote_char = '\\0';
    }
    else
    {

```

```

        _dbus_assert (quote_char == '\\');

        if (*p == '\\')
            {
                quote_char = '\\0';
            }
        else
            {
                if (!_dbus_string_append_byte (value, *p))
                    {
                        BUS_SET_OOM (error);
                        goto failed;
                    }
            }
    }

next:
    ++p;
}

done:

if (quote_char == '\\')
    {
        if (!_dbus_string_append_byte (value, '\\'))
            {
                BUS_SET_OOM (error);
                goto failed;
            }
    }
else if (quote_char == '\\')
    {
        dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
            "Unbalanced quotation marks in match rule");
        goto failed;
    }
else
    _dbus_assert (quote_char == '\\0');

/* Zero-length values are allowed */

*value_end = p - s;

return TRUE;

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    _dbus_string_set_length (value, orig_len);
    return FALSE;
}

/* duplicates aren't allowed so the real legitimate max is only 6 or

```

```

* so. Leaving extra so we don't have to bother to update it.
* FIXME this is sort of busted now with arg matching, but we let
* you match on up to 10 args for now
*/
#define MAX_RULE_TOKENS 16

/* this is slightly too high level to be termed a "token"
* but let's not be pedantic.
*/
typedef struct
{
    char *key;
    char *value;
} RuleToken;

static dbus_bool_t
tokenize_rule (const DBusString *rule_text,
               RuleToken         tokens[MAX_RULE_TOKENS],
               DBusError         *error)
{
    int i;
    int pos;
    DBusString key;
    DBusString value;
    dbus_bool_t retval;

    retval = FALSE;

    if (!_dbus_string_init (&key))
    {
        BUS_SET_OOM (error);
        return FALSE;
    }

    if (!_dbus_string_init (&value))
    {
        _dbus_string_free (&key);
        BUS_SET_OOM (error);
        return FALSE;
    }

    i = 0;
    pos = 0;
    while (i < MAX_RULE_TOKENS &&
           pos < _dbus_string_get_length (rule_text))
    {
        _dbus_assert (tokens[i].key == NULL);
        _dbus_assert (tokens[i].value == NULL);

        if (!find_key (rule_text, pos, &key, &pos, error))
            goto out;
    }
}

```

```

    if (_dbus_string_get_length (&key) == 0)
        goto next;

    if (!_dbus_string_steal_data (&key, &tokens[i].key))
    {
        BUS_SET_OOM (error);
        goto out;
    }

    if (!find_value (rule_text, pos, tokens[i].key, &value, &pos,
error))
        goto out;

    if (!_dbus_string_steal_data (&value, &tokens[i].value))
    {
        BUS_SET_OOM (error);
        goto out;
    }

next:
    ++i;
}

retval = TRUE;

out:
if (!retval)
{
    i = 0;
    while (tokens[i].key || tokens[i].value)
    {
        dbus_free (tokens[i].key);
        dbus_free (tokens[i].value);
        tokens[i].key = NULL;
        tokens[i].value = NULL;
        ++i;
    }
}

_dbus_string_free (&key);
_dbus_string_free (&value);

return retval;
}

static dbus_bool_t
bus_match_rule_parse_arg_match (BusMatchRule      *rule,
                                const char         *key,
                                const DBusString  *value,
                                DBusError         *error)
{
    dbus_bool_t is_path = FALSE;

```

```

dbus_bool_t is_namespace = FALSE;
DBusString key_str;
unsigned long arg;
int length;
int end;

/* For now, arg0='foo' always implies that 'foo' is a
 * DBUS_TYPE_STRING. Someday we could add an arg0type='int32' thing
 * if we wanted, which would specify another type, in which case
 * arg0='5' would have the 5 parsed as an int rather than string.
 */

/* First we need to parse arg0 = 0, arg27 = 27 */

_dbus_string_init_const (&key_str, key);
length = _dbus_string_get_length (&key_str);

if (_dbus_string_get_length (&key_str) < 4)
{
    dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                    "Key '%s' in match rule starts with 'arg' but
lacks an arg number. Should be 'arg0' or 'arg7' for example.\n", key);
    goto failed;
}

if (!_dbus_string_parse_uint (&key_str, 3, &arg, &end))
{
    dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                    "Key '%s' in match rule starts with 'arg' but
could not parse arg number. Should be 'arg0' or 'arg7' for
example.\n", key);
    goto failed;
}

if (end != length)
{
    if ((end + strlen ("path")) == length &&
        _dbus_string_ends_with_c_str (&key_str, "path"))
    {
        is_path = TRUE;
    }
    else if (_dbus_string_equal_c_str (&key_str, "arg0namespace"))
    {
        int value_len = _dbus_string_get_length (value);

        is_namespace = TRUE;

        if (!_dbus_validate_bus_namespace (value, 0, value_len))
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                            "arg0namespace='%s' is not a valid prefix of a bus
name",

```

```

        _dbus_string_get_const_data (value));
        goto failed;
    }
}
else
{
    dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
        "Key '%s' in match rule contains junk after argument
number (%u). Only 'arg%upath' (for example) or 'arg0namespace' are
valid", key, arg, arg);
    goto failed;
}
}

/* If we didn't check this we could allocate a huge amount of RAM */
if (arg > DBUS_MAXIMUM_MATCH_RULE_ARG_NUMBER)
{
    dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
        "Key '%s' in match rule has arg number %lu but
the maximum is %d.\n", key, (unsigned long) arg,
DBUS_MAXIMUM_MATCH_RULE_ARG_NUMBER);
    goto failed;
}

if ((rule->flags & BUS_MATCH_ARGS) &&
    rule->args_len > (int) arg &&
    rule->args[arg] != NULL)
{
    dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
        "Argument %d matched more than once in match
rule\n", key);
    goto failed;
}

if (!bus_match_rule_set_arg (rule, arg, value, is_path,
is_namespace))
{
    BUS_SET_OOM (error);
    goto failed;
}

return TRUE;

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    return FALSE;
}

/*
 * The format is comma-separated with strings quoted with single
quotes
 * as for the shell (to escape a literal single quote, use '\').
*/

```

```

*
*
type='signal',sender='org.freedesktop.DBus',interface='org.freedesktop
.DBus',member='Foo',
* path='/bar/foo',destination=':452345.34'
*
*/
BusMatchRule*
bus_match_rule_parse (DBusConnection  *matches_go_to,
                     const DBusString *rule_text,
                     DBusError        *error)
{
    BusMatchRule *rule;
    RuleToken tokens[MAX_RULE_TOKENS+1]; /* NULL termination + 1 */
    int i;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    if (_dbus_string_get_length (rule_text) >
        DBUS_MAXIMUM_MATCH_RULE_LENGTH)
    {
        dbus_set_error (error, DBUS_ERROR_LIMITS_EXCEEDED,
                       "Match rule text is %d bytes, maximum is %d",
                       _dbus_string_get_length (rule_text),
                       DBUS_MAXIMUM_MATCH_RULE_LENGTH);

        return NULL;
    }

    memset (tokens, '\0', sizeof (tokens));

    rule = bus_match_rule_new (matches_go_to);
    if (rule == NULL)
    {
        BUS_SET_OOM (error);
        goto failed;
    }

    if (!tokenize_rule (rule_text, tokens, error))
        goto failed;

    i = 0;
    while (tokens[i].key != NULL)
    {
        DBusString tmp_str;
        int len;
        const char *key = tokens[i].key;
        const char *value = tokens[i].value;

        _dbus_string_init_const (&tmp_str, value);
        len = _dbus_string_get_length (&tmp_str);

        if (strcmp (key, "type") == 0)

```

```

    {
        int t;

        if (rule->flags & BUS_MATCH_MESSAGE_TYPE)
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                "Key %s specified twice in match
rule\n", key);
            goto failed;
        }

        t = dbus_message_type_from_string (value);

        if (t == DBUS_MESSAGE_TYPE_INVALID)
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                "Invalid message type (%s) in match
rule\n", value);
            goto failed;
        }

        if (!bus_match_rule_set_message_type (rule, t))
        {
            BUS_SET_OOM (error);
            goto failed;
        }
    }
    else if (strcmp (key, "sender") == 0)
    {
        if (rule->flags & BUS_MATCH_SENDER)
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                "Key %s specified twice in match
rule\n", key);
            goto failed;
        }

        if (!_dbus_validate_bus_name (&tmp_str, 0, len))
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                "Sender name '%s' is invalid\n", value);
            goto failed;
        }

        if (!bus_match_rule_set_sender (rule, value))
        {
            BUS_SET_OOM (error);
            goto failed;
        }
    }
    else if (strcmp (key, "interface") == 0)
    {

```



```

    if (rule->flags & BUS_MATCH_INTERFACE)
    {
        dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
            "Key %s specified twice in match
rule\n", key);
        goto failed;
    }

    if (!_dbus_validate_interface (&tmp_str, 0, len))
    {
        dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
            "Interface name '%s' is invalid\n",
value);
        goto failed;
    }

    if (!bus_match_rule_set_interface (rule, value))
    {
        BUS_SET_OOM (error);
        goto failed;
    }
}
else if (strcmp (key, "member") == 0)
{
    if (rule->flags & BUS_MATCH_MEMBER)
    {
        dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
            "Key %s specified twice in match
rule\n", key);
        goto failed;
    }

    if (!_dbus_validate_member (&tmp_str, 0, len))
    {
        dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
            "Member name '%s' is invalid\n", value);
        goto failed;
    }

    if (!bus_match_rule_set_member (rule, value))
    {
        BUS_SET_OOM (error);
        goto failed;
    }
}
else if (strcmp (key, "path") == 0 ||
    strcmp (key, "path_namespace") == 0)
{
    dbus_bool_t is_namespace = (strcmp (key, "path_namespace")
== 0);

```

```

        if (rule->flags & (BUS_MATCH_PATH |
BUS_MATCH_PATH_NAMESPACE))
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                "path or path_namespace specified twice
in match rule\n");
            goto failed;
        }

        if (!_dbus_validate_path (&tmp_str, 0, len))
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                "Path '%s' is invalid\n", value);
            goto failed;
        }

        if (!bus_match_rule_set_path (rule, value, is_namespace))
        {
            BUS_SET_OOM (error);
            goto failed;
        }
    }
    else if (strcmp (key, "destination") == 0)
    {
        if (rule->flags & BUS_MATCH_DESTINATION)
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                "Key %s specified twice in match
rule\n", key);
            goto failed;
        }

        if (!_dbus_validate_bus_name (&tmp_str, 0, len))
        {
            dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                "Destination name '%s' is invalid\n",
value);
            goto failed;
        }

        if (!bus_match_rule_set_destination (rule, value))
        {
            BUS_SET_OOM (error);
            goto failed;
        }
    }
    else if (strcmp (key, "eavesdrop") == 0)
    {
        /* do not detect "eavesdrop" being used more than once in
rule:
        * 1) it's not possible, it's only in the flags

```

```

it's      * 2) it might be used twice to disable eavesdropping when
          * automatically added (eg dbus-monitor/bustle) */

          /* we accept only "true|false" as possible values */
          if ((strcmp (value, "true") == 0))
            {
              bus_match_rule_set_client_is_eavesdropping (rule, TRUE);
            }
          else if (strcmp (value, "false") == 0)
            {
              bus_match_rule_set_client_is_eavesdropping (rule,
FALSE);
            }
          else
            {
              dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                             "eavesdrop='%s' is invalid, "
                             "it should be 'true' or 'false'\n",
                             value);
              goto failed;
            }
        }
        else if (strncmp (key, "arg", 3) == 0)
            {
              if (!bus_match_rule_parse_arg_match (rule, key, &tmp_str,
error))
                goto failed;
            }
        else
            {
              dbus_set_error (error, DBUS_ERROR_MATCH_RULE_INVALID,
                             "Unknown key \"%s\" in match rule",
                             key);
              goto failed;
            }

        ++i;
    }

    goto out;

failed:
    _DBUS_ASSERT_ERROR_IS_SET (error);
    if (rule)
        {
            bus_match_rule_unref (rule);
            rule = NULL;
        }

out:

```

```

    i = 0;
    while (tokens[i].key || tokens[i].value)
        {
            _dbus_assert (i < MAX_RULE_TOKENS);
            dbus_free (tokens[i].key);
            dbus_free (tokens[i].value);
            ++i;
        }

    return rule;
}

typedef struct RulePool RulePool;
struct RulePool
{
    /* Maps non-NULL interface names to non-NULL (DBusList **)s */
    DBusHashTable *rules_by_iface;

    /* List of BusMatchRules which don't specify an interface */
    DBusList *rules_without_iface;
};

struct BusMatchmaker
{
    int refcount;

    /* Pools of rules, grouped by the type of message they match. 0
     * (DBUS_MESSAGE_TYPE_INVALID) represents rules that do not specify
     * a message
     * type.
     */
    RulePool rules_by_type[DBUS_NUM_MESSAGE_TYPES];
};

static void
rule_list_free (DBusList **rules)
{
    while (*rules != NULL)
        {
            BusMatchRule *rule;

            rule = (*rules)->data;
            bus_match_rule_unref (rule);
            _dbus_list_remove_link (rules, *rules);
        }
}

static void
rule_list_ptr_free (DBusList **list)
{

```

```

    /* We have to cope with NULL because the hash table frees the
    "existing"
    * value (which is NULL) when creating a new table entry...
    */
    if (list != NULL)
    {
        rule_list_free (list);
        dbus_free (list);
    }
}

BusMatchmaker*
bus_matchmaker_new (void)
{
    BusMatchmaker *matchmaker;
    int i;

    matchmaker = dbus_new0 (BusMatchmaker, 1);
    if (matchmaker == NULL)
        return NULL;

    matchmaker->refcount = 1;

    for (i = DBUS_MESSAGE_TYPE_INVALID; i < DBUS_NUM_MESSAGE_TYPES; i++)
    {
        RulePool *p = matchmaker->rules_by_type + i;

        p->rules_by_iface = _dbus_hash_table_new (DBUS_HASH_STRING,
            dbus_free, (DBusFreeFunction) rule_list_ptr_free);

        if (p->rules_by_iface == NULL)
            goto nomem;
    }

    return matchmaker;

nomem:
    for (i = DBUS_MESSAGE_TYPE_INVALID; i < DBUS_NUM_MESSAGE_TYPES; i++)
    {
        RulePool *p = matchmaker->rules_by_type + i;

        if (p->rules_by_iface == NULL)
            break;
        else
            _dbus_hash_table_unref (p->rules_by_iface);
    }
    dbus_free (matchmaker);

    return NULL;
}

static DBusList **

```

```

bus_matchmaker_get_rules (BusMatchmaker *matchmaker,
                          int            message_type,
                          const char    *interface,
                          dbus_bool_t   create)
{
    RulePool *p;

    _dbus_assert (message_type >= 0);
    _dbus_assert (message_type < DBUS_NUM_MESSAGE_TYPES);

    _dbus_verbose ("Looking up rules for message_type %d, interface
%s\n",
                  message_type,
                  interface != NULL ? interface : "<null>");

    p = matchmaker->rules_by_type + message_type;

    if (interface == NULL)
    {
        return &p->rules_without_iface;
    }
    else
    {
        DBusList **list;

        list = _dbus_hash_table_lookup_string (p->rules_by_iface,
interface);

        if (list == NULL && create)
        {
            char *duplicated_interface;

            list = dbus_new0 (DBusList *, 1);
            if (list == NULL)
                return NULL;

            duplicated_interface = _dbus_strdup (interface);
            if (duplicated_interface == NULL)
            {
                dbus_free (list);
                return NULL;
            }

            _dbus_verbose ("Adding list for type %d, iface %s\n",
message_type,
                          duplicated_interface);

            if (!_dbus_hash_table_insert_string (p->rules_by_iface,
duplicated_interface,
list))
            {
                dbus_free (list);
            }
        }
    }
}

```

```

        dbus_free (dupped_interface);
        return NULL;
    }
}

return list;
}
}

static void
bus_matchmaker_gc_rules (BusMatchmaker *matchmaker,
                        int             message_type,
                        const char     *interface,
                        DBusList       **rules)
{
    RulePool *p;

    if (interface == NULL)
        return;

    if (*rules != NULL)
        return;

    _dbus_verbose ("GCing HT entry for message_type %u, interface %s\n",
                  message_type, interface);

    p = matchmaker->rules_by_type + message_type;

    _dbus_assert (_dbus_hash_table_lookup_string (p->rules_by_iface,
                                                  interface)
                  == rules);

    _dbus_hash_table_remove_string (p->rules_by_iface, interface);
}

BusMatchmaker *
bus_matchmaker_ref (BusMatchmaker *matchmaker)
{
    _dbus_assert (matchmaker->refcount > 0);

    matchmaker->refcount += 1;

    return matchmaker;
}

void
bus_matchmaker_unref (BusMatchmaker *matchmaker)
{
    _dbus_assert (matchmaker->refcount > 0);

    matchmaker->refcount -= 1;
    if (matchmaker->refcount == 0)

```

```

    {
        int i;

        for (i = DBUS_MESSAGE_TYPE_INVALID; i < DBUS_NUM_MESSAGE_TYPES;
i++)
            {
                RulePool *p = matchmaker->rules_by_type + i;

                _dbus_hash_table_unref (p->rules_by_iface);
                rule_list_free (&p->rules_without_iface);
            }

        dbus_free (matchmaker);
    }
}

/* The rule can't be modified after it's added. */
dbus_bool_t
bus_matchmaker_add_rule (BusMatchmaker *matchmaker,
                        BusMatchRule *rule)
{
    DBusList **rules;

    _dbus_assert (bus_connection_is_active (rule->matches_go_to));

    _dbus_verbose ("Adding rule with message_type %d, interface %s\n",
                    rule->message_type,
                    rule->interface != NULL ? rule->interface :
"<null>");

    rules = bus_matchmaker_get_rules (matchmaker, rule->message_type,
                                     rule->interface, TRUE);

    if (rules == NULL)
        return FALSE;

    if (!_dbus_list_append (rules, rule))
        return FALSE;

    if (!bus_connection_add_match_rule (rule->matches_go_to, rule))
    {
        _dbus_list_remove_last (rules, rule);
        bus_matchmaker_gc_rules (matchmaker, rule->message_type,
                                rule->interface, rules);

        return FALSE;
    }

    bus_match_rule_ref (rule);

#ifdef DBUS_ENABLE_VERBOSE_MODE
    {
        char *s = match_rule_to_string (rule);

```



```

        _dbus_verbose ("Added match rule %s to connection %p\n",
                      s, rule->matches_go_to);
        dbus_free (s);
    }
#endif

    return TRUE;
}

static dbus_bool_t
match_rule_equal (BusMatchRule *a,
                 BusMatchRule *b)
{
    if (a->flags != b->flags)
        return FALSE;

    if (a->matches_go_to != b->matches_go_to)
        return FALSE;

    if ((a->flags & BUS_MATCH_MESSAGE_TYPE) &&
        a->message_type != b->message_type)
        return FALSE;

    if ((a->flags & BUS_MATCH_MEMBER) &&
        strcmp (a->member, b->member) != 0)
        return FALSE;

    if ((a->flags & BUS_MATCH_PATH) &&
        strcmp (a->path, b->path) != 0)
        return FALSE;

    if ((a->flags & BUS_MATCH_INTERFACE) &&
        strcmp (a->interface, b->interface) != 0)
        return FALSE;

    if ((a->flags & BUS_MATCH_SENDER) &&
        strcmp (a->sender, b->sender) != 0)
        return FALSE;

    if ((a->flags & BUS_MATCH_DESTINATION) &&
        strcmp (a->destination, b->destination) != 0)
        return FALSE;

    /* we already compared the value of flags, and
     * BUS_MATCH_CLIENT_IS_EAVESDROPPING does not have another struct
     * member */

    if (a->flags & BUS_MATCH_ARGS)
    {
        int i;
    }
}

```

```

    if (a->args_len != b->args_len)
        return FALSE;

    i = 0;
    while (i < a->args_len)
    {
        int length;

        if ((a->args[i] != NULL) != (b->args[i] != NULL))
            return FALSE;

        if (a->arg_lens[i] != b->arg_lens[i])
            return FALSE;

        length = a->arg_lens[i] & ~BUS_MATCH_ARG_FLAGS;

        if (a->args[i] != NULL)
        {
            _dbus_assert (b->args[i] != NULL);
            if (memcmp (a->args[i], b->args[i], length) != 0)
                return FALSE;
        }

        ++i;
    }

    return TRUE;
}

static void
bus_matchmaker_remove_rule_link (DBusList      **rules,
                                 DBusList      *link)
{
    BusMatchRule *rule = link->data;

    bus_connection_remove_match_rule (rule->matches_go_to, rule);
    _dbus_list_remove_link (rules, link);

#ifdef DBUS_ENABLE_VERBOSE_MODE
    {
        char *s = match_rule_to_string (rule);

        _dbus_verbose ("Removed match rule %s for connection %p\n",
                       s, rule->matches_go_to);
        dbus_free (s);
    }
#endif

    bus_match_rule_unref (rule);
}

```

```

void
bus_matchmaker_remove_rule (BusMatchmaker *matchmaker,
                             BusMatchRule *rule)
{
    DBusList **rules;

    _dbus_verbose ("Removing rule with message_type %d, interface %s\n",
                  rule->message_type,
                  rule->interface != NULL ? rule->interface :
" <null>");

    bus_connection_remove_match_rule (rule->matches_go_to, rule);

    rules = bus_matchmaker_get_rules (matchmaker, rule->message_type,
                                     rule->interface, FALSE);

    /* We should only be asked to remove a rule by identity right after
it was
    * added, so there should be a list for it.
    */
    _dbus_assert (rules != NULL);

    _dbus_list_remove (rules, rule);
    bus_matchmaker_gc_rules (matchmaker, rule->message_type, rule-
>interface,
        rules);

#ifdef DBUS_ENABLE_VERBOSE_MODE
    {
        char *s = match_rule_to_string (rule);

        _dbus_verbose ("Removed match rule %s for connection %p\n",
                      s, rule->matches_go_to);

        dbus_free (s);
    }
#endif

    bus_match_rule_unref (rule);
}

/* Remove a single rule which is equal to the given rule by value */
dbus_bool_t
bus_matchmaker_remove_rule_by_value (BusMatchmaker *matchmaker,
                                     BusMatchRule *value,
                                     DBusError *error)
{
    DBusList **rules;
    DBusList *link = NULL;

    _dbus_verbose ("Removing rule by value with message_type %d,
interface %s\n",
                  value->message_type,

```

```

        value->interface != NULL ? value->interface :
"<null>");

    rules = bus_matchmaker_get_rules (matchmaker, value->message_type,
        value->interface, FALSE);

    if (rules != NULL)
    {
        /* we traverse backward because
bus_connection_remove_match_rule()
        * removes the most-recently-added rule
        */
        link = _dbus_list_get_last_link (rules);
        while (link != NULL)
        {
            BusMatchRule *rule;
            DBusList *prev;

            rule = link->data;
            prev = _dbus_list_get_prev_link (rules, link);

            if (match_rule_equal (rule, value))
            {
                bus_matchmaker_remove_rule_link (rules, link);
                break;
            }

            link = prev;
        }
    }

    if (link == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_MATCH_RULE_NOT_FOUND,
            "The given match rule wasn't found and can't be
removed");
        return FALSE;
    }

    bus_matchmaker_gc_rules (matchmaker, value->message_type, value->interface,
        rules);

    return TRUE;
}

static void
rule_list_remove_by_connection (DBusList **rules,
                                DBusConnection *connection)
{
    DBusList *link;

```

```

link = _dbus_list_get_first_link (rules);
while (link != NULL)
{
    BusMatchRule *rule;
    DBusList *next;

    rule = link->data;
    next = _dbus_list_get_next_link (rules, link);

    if (rule->matches_go_to == connection)
    {
        bus_matchmaker_remove_rule_link (rules, link);
    }
    else if (((rule->flags & BUS_MATCH_SENDER) && *rule->sender ==
':') ||
            ((rule->flags & BUS_MATCH_DESTINATION) && *rule-
>destination == ':'))
    {
        /* The rule matches to/from a base service, see if it's the
        * one being disconnected, since we know this service name
        * will never be recycled.
        */
        const char *name;

        name = bus_connection_get_name (connection);
        _dbus_assert (name != NULL); /* because we're an active
connection */

        if (((rule->flags & BUS_MATCH_SENDER) &&
            strcmp (rule->sender, name) == 0) ||
            ((rule->flags & BUS_MATCH_DESTINATION) &&
            strcmp (rule->destination, name) == 0))
        {
            bus_matchmaker_remove_rule_link (rules, link);
        }
    }

    link = next;
}

void
bus_matchmaker_disconnected (BusMatchmaker *matchmaker,
                             DBusConnection *connection)
{
    int i;

    /* FIXME
    *
    * This scans all match rules on the bus. We could avoid that
    * for the rules belonging to the connection, since we keep
    * a list of those; but for the rules that just refer to

```

```

    * the connection we'd need to do something more elaborate.
    */

    _dbus_assert (bus_connection_is_active (connection));

    _dbus_verbose ("Removing all rules for connection %p\n",
connection);

    for (i = DBUS_MESSAGE_TYPE_INVALID; i < DBUS_NUM_MESSAGE_TYPES; i++)
    {
        RulePool *p = matchmaker->rules_by_type + i;
        DBusHashIter iter;

        rule_list_remove_by_connection (&p->rules_without_iface,
connection);

        _dbus_hash_iter_init (p->rules_by_iface, &iter);
        while (_dbus_hash_iter_next (&iter))
        {
            DBusList **items = _dbus_hash_iter_get_value (&iter);

            rule_list_remove_by_connection (items, connection);

            if (*items == NULL)
            {
                _dbus_hash_iter_remove_entry (&iter);
            }
        }
    }

static dbus_bool_t
connection_is_primary_owner (DBusConnection *connection,
                             const char *service_name)
{
    BusService *service;
    DBusString str;
    BusRegistry *registry;

    _dbus_assert (connection != NULL);

    registry = bus_connection_get_registry (connection);

    _dbus_string_init_const (&str, service_name);
    service = bus_registry_lookup (registry, &str);

    if (service == NULL)
        return FALSE; /* Service doesn't exist so connection can't own it.
*/

    return bus_service_get_primary_owners_connection (service) ==
connection;
}

```

```

static dbus_bool_t
str_has_prefix (const char *str, const char *prefix)
{
    size_t prefix_len;
    prefix_len = strlen (prefix);
    if (strncmp (str, prefix, prefix_len) == 0)
        return TRUE;
    else
        return FALSE;
}

static dbus_bool_t
match_rule_matches (BusMatchRule *rule,
                   DBusConnection *sender,
                   DBusConnection *addressed_recipient,
                   DBusMessage *message,
                   BusMatchFlags already_matched)
{
    dbus_bool_t wants_to_eavesdrop = FALSE;
    int flags;

    /* All features of the match rule are AND'd together,
     * so FALSE if any of them don't match.
     */

    /* sender/addressed_recipient of #NULL may mean bus driver,
     * or for addressed_recipient may mean a message with no
     * specific recipient (i.e. a signal)
     */

    /* Don't bother re-matching features we've already checked
    implicitly. */
    flags = rule->flags & (~already_matched);

    if (flags & BUS_MATCH_CLIENT_IS_EAVESDROPPING)
        wants_to_eavesdrop = TRUE;

    if (flags & BUS_MATCH_MESSAGE_TYPE)
    {
        _dbus_assert (rule->message_type != DBUS_MESSAGE_TYPE_INVALID);

        if (rule->message_type != dbus_message_get_type (message))
            return FALSE;
    }

    if (flags & BUS_MATCH_INTERFACE)
    {
        const char *iface;

        _dbus_assert (rule->interface != NULL);

        iface = dbus_message_get_interface (message);
    }
}

```

```

    if (iface == NULL)
        return FALSE;

    if (strcmp (iface, rule->interface) != 0)
        return FALSE;
}

if (flags & BUS_MATCH_MEMBER)
{
    const char *member;

    _dbus_assert (rule->member != NULL);

    member = dbus_message_get_member (message);
    if (member == NULL)
        return FALSE;

    if (strcmp (member, rule->member) != 0)
        return FALSE;
}

if (flags & BUS_MATCH_SENDER)
{
    _dbus_assert (rule->sender != NULL);

    if (sender == NULL)
    {
        if (strcmp (rule->sender,
                    DBUS_SERVICE_DBUS) != 0)
            return FALSE;
    }
    else
    {
        if (!connection_is_primary_owner (sender, rule->sender))
            return FALSE;
    }
}

/* Note: this part is relevant for eavesdropper rules:
 * Two cases:
 * 1) rule has a destination to be matched
 * (flag BUS_MATCH_DESTINATION present). Rule will match if:
 * - rule->destination matches the addressed_recipient
 * AND
 * - wants_to_eavesdrop=TRUE
 *
 * Note: (the case in which addressed_recipient is the actual rule
owner
 * is handled elsewhere in dispatch.c:bus_dispatch_matches().
 *
 * 2) rule has no destination. Rule will match if:
 * - message has no specified destination (ie broadcasts)

```



```

*      (Note: this will rule out unicast method calls and unicast
signals,
*      fixing FDO#269748)
*      OR
*      - wants_to_eavesdrop=TRUE (destination-catch-all situation)
*/
if (flags & BUS_MATCH_DESTINATION)
{
    const char *destination;

    _dbus_assert (rule->destination != NULL);

    destination = dbus_message_get_destination (message);
    if (destination == NULL)
        /* broadcast, but this rule specified a destination: no match
*/
        return FALSE;

    /* rule owner does not intend to eavesdrop: we'll deliver only
msgs
    * directed to it, NOT MATCHING */
    if (!wants_to_eavesdrop)
        return FALSE;

    if (addressed_recipient == NULL)
        {
            if (strcmp (rule->destination,
                DBUS_SERVICE_DBUS) != 0)
                return FALSE;
        }
    else
        {
            if (!connection_is_primary_owner (addressed_recipient, rule-
>destination))
                return FALSE;
        }
    } else { /* no destination in rule */
        dbus_bool_t msg_is_broadcast;

        _dbus_assert (rule->destination == NULL);

        msg_is_broadcast = (dbus_message_get_destination (message) ==
NULL);

        if (!wants_to_eavesdrop && !msg_is_broadcast)
            return FALSE;

        /* if we are here rule owner intends to eavesdrop
        * OR
        * message is being broadcasted */
    }
}

```

```

if (flags & BUS_MATCH_PATH)
{
    const char *path;

    _dbus_assert (rule->path != NULL);

    path = dbus_message_get_path (message);
    if (path == NULL)
        return FALSE;

    if (strcmp (path, rule->path) != 0)
        return FALSE;
}

if (flags & BUS_MATCH_PATH_NAMESPACE)
{
    const char *path;
    int len;

    _dbus_assert (rule->path != NULL);

    path = dbus_message_get_path (message);
    if (path == NULL)
        return FALSE;

    if (!str_has_prefix (path, rule->path))
        return FALSE;

    len = strlen (rule->path);

    /* Check that the actual argument is within the expected
     * namespace, rather than just starting with that string,
     * by checking that the matched prefix is followed by a '/'
     * or the end of the path.
     */
    if (path[len] != '\0' && path[len] != '/')
        return FALSE;
}

if (flags & BUS_MATCH_ARGS)
{
    int i;
    DBusMessageIter iter;

    _dbus_assert (rule->args != NULL);

    dbus_message_iter_init (message, &iter);

    i = 0;
    while (i < rule->args_len)
    {
        int current_type;

```

```

const char *expected_arg;
int expected_length;
dbus_bool_t is_path, is_namespace;

expected_arg = rule->args[i];
expected_length = rule->arg_lens[i] & ~BUS_MATCH_ARG_FLAGS;
is_path = (rule->arg_lens[i] & BUS_MATCH_ARG_IS_PATH) != 0;
is_namespace = (rule->arg_lens[i] & BUS_MATCH_ARG_NAMESPACE)
!= 0;

current_type = dbus_message_iter_get_arg_type (&iter);

if (expected_arg != NULL)
{
    const char *actual_arg;
    int actual_length;

    if (current_type != DBUS_TYPE_STRING &&
        (!is_path || current_type != DBUS_TYPE_OBJECT_PATH))
        return FALSE;

    actual_arg = NULL;
    dbus_message_iter_get_basic (&iter, &actual_arg);
    _dbus_assert (actual_arg != NULL);

    actual_length = strlen (actual_arg);

    if (is_path)
    {
        if (actual_length < expected_length &&
            actual_arg[actual_length - 1] != '/')
            return FALSE;

        if (expected_length < actual_length &&
            expected_arg[expected_length - 1] != '/')
            return FALSE;

        if (memcmp (actual_arg, expected_arg,
                    MIN (actual_length, expected_length)) !=
0)
            return FALSE;
    }
    else if (is_namespace)
    {
        if (expected_length > actual_length)
            return FALSE;

        /* If the actual argument doesn't start with the
expected
        * namespace, then we don't match.
        */

```

```

        if (memcmp (expected_arg, actual_arg,
expected_length) != 0)
            return FALSE;

        if (expected_length < actual_length)
        {
            /* Check that the actual argument is within the
expected
            * namespace, rather than just starting with
that string,
            * by checking that the matched prefix ends in a
            * '.'.
            *
            * This doesn't stop "foo.bar." matching
            * which is an invalid namespace, but at some
            * point the
            * daemon can't cover up for broken services.
            */
            if (actual_arg[expected_length] != '.')
                return FALSE;
        }
        /* otherwise we had an exact match. */
    }
    else
    {
        if (expected_length != actual_length ||
expected_length) != 0)
            return FALSE;
    }
}

    if (current_type != DBUS_TYPE_INVALID)
        dbus_message_iter_next (&iter);

    ++i;
}
}

return TRUE;
}

static dbus_bool_t
get_recipients_from_list (DBusList      **rules,
                          DBusConnection *sender,
                          DBusConnection *addressed_recipient,
                          DBusMessage   *message,
                          DBusList      **recipients_p)
{
    DBusList *link;

```

```

if (rules == NULL)
    return TRUE;

link = _dbus_list_get_first_link (rules);
while (link != NULL)
{
    BusMatchRule *rule;

    rule = link->data;

#ifdef DBUS_ENABLE_VERBOSE_MODE
    {
        char *s = match_rule_to_string (rule);

        _dbus_verbose ("Checking whether message matches rule %s for
connection %p\n",
                        s, rule->matches_go_to);
        dbus_free (s);
    }
#endif

    if (match_rule_matches (rule,
                            sender, addressed_recipient, message,
                            BUS_MATCH_MESSAGE_TYPE |
BUS_MATCH_INTERFACE))
    {
        _dbus_verbose ("Rule matched\n");

        /* Append to the list if we haven't already */
        if (bus_connection_mark_stamp (rule->matches_go_to))
        {
            if (!_dbus_list_append (recipients_p, rule-
>matches_go_to))
                return FALSE;
        }
#ifdef DBUS_ENABLE_VERBOSE_MODE
        else
        {
            _dbus_verbose ("Connection already receiving this
message, so not adding again\n");
        }
#endif /* DBUS_ENABLE_VERBOSE_MODE */
    }

    link = _dbus_list_get_next_link (rules, link);
}

return TRUE;
}

dbus_bool_t

```

```

bus_matchmaker_get_recipients (BusMatchmaker    *matchmaker,
                               BusConnections    *connections,
                               DBusConnection    *sender,
                               DBusConnection    *addressed_recipient,
                               DBusMessage       *message,
                               DBusList         **recipients_p)
{
    int type;
    const char *interface;
    DBusList **neither, **just_type, **just_iface, **both;

    _dbus_assert (*recipients_p == NULL);

    /* This avoids sending same message to the same connection twice.
     * Purpose of the stamp instead of a bool is to avoid iterating over
     * all connections resetting the bool each time.
     */
    bus_connections_increment_stamp (connections);

    /* addressed_recipient is already receiving the message, don't add
     to list.
     * NULL addressed_recipient means either bus driver, or this is a
     signal
     * and thus lacks a specific addressed_recipient.
     */
    if (addressed_recipient != NULL)
        bus_connection_mark_stamp (addressed_recipient);

    type = dbus_message_get_type (message);
    interface = dbus_message_get_interface (message);

    neither = bus_matchmaker_get_rules (matchmaker,
        DBUS_MESSAGE_TYPE_INVALID,
        NULL, FALSE);
    just_type = just_iface = both = NULL;

    if (interface != NULL)
        just_iface = bus_matchmaker_get_rules (matchmaker,
            DBUS_MESSAGE_TYPE_INVALID, interface, FALSE);

    if (type > DBUS_MESSAGE_TYPE_INVALID && type <
        DBUS_NUM_MESSAGE_TYPES)
    {
        just_type = bus_matchmaker_get_rules (matchmaker, type, NULL,
            FALSE);

        if (interface != NULL)
            both = bus_matchmaker_get_rules (matchmaker, type, interface,
                FALSE);
    }
}

```

```

    if (!(get_recipients_from_list (neither, sender,
addressed_recipient,
                                message, recipients_p) &&
        get_recipients_from_list (just_iface, sender,
addressed_recipient,
                                message, recipients_p) &&
        get_recipients_from_list (just_type, sender,
addressed_recipient,
                                message, recipients_p) &&
        get_recipients_from_list (both, sender, addressed_recipient,
                                message, recipients_p)))
    {
        _dbus_list_clear (recipients_p);
        return FALSE;
    }

    return TRUE;
}

#ifdef DBUS_BUILD_TESTS
#include "test.h"
#include <stdlib.h>

static BusMatchRule*
check_parse (dbus_bool_t should_succeed,
            const char *text)
{
    BusMatchRule *rule;
    DBusString str;
    DBusError error;

    dbus_error_init (&error);

    _dbus_string_init_const (&str, text);

    rule = bus_match_rule_parse (NULL, &str, &error);
    if (dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY)
        {
            dbus_error_free (&error);
            return NULL;
        }

    if (should_succeed && rule == NULL)
    {
        _dbus_warn ("Failed to parse: %s: %s: \"%s\"\n",
                    error.name, error.message,
                    _dbus_string_get_const_data (&str));
        exit (1);
    }

    if (!should_succeed && rule != NULL)
    {

```

```

        _dbus_warn ("Failed to fail to parse: \"%s\"\n",
                    _dbus_string_get_const_data (&str));
        exit (1);
    }

    dbus_error_free (&error);

    return rule;
}

static void
assert_large_rule (BusMatchRule *rule)
{
    _dbus_assert (rule->flags & BUS_MATCH_MESSAGE_TYPE);
    _dbus_assert (rule->flags & BUS_MATCH_SENDER);
    _dbus_assert (rule->flags & BUS_MATCH_INTERFACE);
    _dbus_assert (rule->flags & BUS_MATCH_MEMBER);
    _dbus_assert (rule->flags & BUS_MATCH_DESTINATION);
    _dbus_assert (rule->flags & BUS_MATCH_PATH);

    _dbus_assert (rule->message_type == DBUS_MESSAGE_TYPE_SIGNAL);
    _dbus_assert (rule->interface != NULL);
    _dbus_assert (rule->member != NULL);
    _dbus_assert (rule->sender != NULL);
    _dbus_assert (rule->destination != NULL);
    _dbus_assert (rule->path != NULL);

    _dbus_assert (strcmp (rule->interface,
"org.freedesktop.DBusInterface") == 0);
    _dbus_assert (strcmp (rule->sender, "org.freedesktop.DBusSender") ==
0);
    _dbus_assert (strcmp (rule->member, "Foo") == 0);
    _dbus_assert (strcmp (rule->path, "/bar/foo") == 0);
    _dbus_assert (strcmp (rule->destination, ":452345.34") == 0);
}

static dbus_bool_t
test_parsing (void *data)
{
    BusMatchRule *rule;

    rule = check_parse (TRUE,
"type='signal',sender='org.freedesktop.DBusSender',interface='org.free
desktop.DBusInterface',member='Foo',path='/bar/foo',destination=':4523
45.34'");
    if (rule != NULL)
    {
        assert_large_rule (rule);
        bus_match_rule_unref (rule);
    }

    /* With extra whitespace and useless quotes */

```



```

    rule = check_parse (TRUE, "    type='signal',
\tsender='org.freedesktop.ktop.DBusSender',
interface='org.freedesktop.DBusInterface''''',
\tmember='Foo',path='/bar/foo',destination=':452345.34''''');
    if (rule != NULL)
    {
        assert_large_rule (rule);
        bus_match_rule_unref (rule);
    }

/* A simple signal connection */
rule = check_parse (TRUE,
"type='signal',path='/foo',interface='org.Bar'");
if (rule != NULL)
{
    _dbus_assert (rule->flags & BUS_MATCH_MESSAGE_TYPE);
    _dbus_assert (rule->flags & BUS_MATCH_INTERFACE);
    _dbus_assert (rule->flags & BUS_MATCH_PATH);

    _dbus_assert (rule->message_type == DBUS_MESSAGE_TYPE_SIGNAL);
    _dbus_assert (rule->interface != NULL);
    _dbus_assert (rule->path != NULL);

    _dbus_assert (strcmp (rule->interface, "org.Bar") == 0);
    _dbus_assert (strcmp (rule->path, "/foo") == 0);

    bus_match_rule_unref (rule);
}

/* argN */
rule = check_parse (TRUE, "arg0='foo'");
if (rule != NULL)
{
    _dbus_assert (rule->flags == BUS_MATCH_ARGS);
    _dbus_assert (rule->args != NULL);
    _dbus_assert (rule->args_len == 1);
    _dbus_assert (rule->args[0] != NULL);
    _dbus_assert (rule->args[1] == NULL);
    _dbus_assert (strcmp (rule->args[0], "foo") == 0);

    bus_match_rule_unref (rule);
}

rule = check_parse (TRUE, "arg1='foo'");
if (rule != NULL)
{
    _dbus_assert (rule->flags == BUS_MATCH_ARGS);
    _dbus_assert (rule->args != NULL);
    _dbus_assert (rule->args_len == 2);
    _dbus_assert (rule->args[0] == NULL);
    _dbus_assert (rule->args[1] != NULL);
}

```

```

    _dbus_assert (rule->args[2] == NULL);
    _dbus_assert (strcmp (rule->args[1], "foo") == 0);

    bus_match_rule_unref (rule);
}

rule = check_parse (TRUE, "arg2='foo'");
if (rule != NULL)
{
    _dbus_assert (rule->flags == BUS_MATCH_ARGS);
    _dbus_assert (rule->args != NULL);
    _dbus_assert (rule->args_len == 3);
    _dbus_assert (rule->args[0] == NULL);
    _dbus_assert (rule->args[1] == NULL);
    _dbus_assert (rule->args[2] != NULL);
    _dbus_assert (rule->args[3] == NULL);
    _dbus_assert (strcmp (rule->args[2], "foo") == 0);

    bus_match_rule_unref (rule);
}

rule = check_parse (TRUE, "arg40='foo'");
if (rule != NULL)
{
    _dbus_assert (rule->flags == BUS_MATCH_ARGS);
    _dbus_assert (rule->args != NULL);
    _dbus_assert (rule->args_len == 41);
    _dbus_assert (rule->args[0] == NULL);
    _dbus_assert (rule->args[1] == NULL);
    _dbus_assert (rule->args[40] != NULL);
    _dbus_assert (rule->args[41] == NULL);
    _dbus_assert (strcmp (rule->args[40], "foo") == 0);

    bus_match_rule_unref (rule);
}

rule = check_parse (TRUE, "arg63='foo'");
if (rule != NULL)
{
    _dbus_assert (rule->flags == BUS_MATCH_ARGS);
    _dbus_assert (rule->args != NULL);
    _dbus_assert (rule->args_len == 64);
    _dbus_assert (rule->args[0] == NULL);
    _dbus_assert (rule->args[1] == NULL);
    _dbus_assert (rule->args[63] != NULL);
    _dbus_assert (rule->args[64] == NULL);
    _dbus_assert (strcmp (rule->args[63], "foo") == 0);

    bus_match_rule_unref (rule);
}

rule = check_parse (TRUE, "arg7path='/foo'");

```

```

if (rule != NULL)
{
    _dbus_assert (rule->flags = BUS_MATCH_ARGS);
    _dbus_assert (rule->args != NULL);
    _dbus_assert (rule->args_len == 8);
    _dbus_assert (rule->args[7] != NULL);
    _dbus_assert (rule->args[8] == NULL);
    _dbus_assert (strcmp (rule->args[7], "/foo") == 0);
    _dbus_assert ((rule->arg_lens[7] & BUS_MATCH_ARG_IS_PATH)
        == BUS_MATCH_ARG_IS_PATH);

    bus_match_rule_unref (rule);
}

/* Arg 0 namespace matches */
rule = check_parse (TRUE, "arg0namespace='foo'");
if (rule != NULL)
{
    _dbus_assert (rule->flags == BUS_MATCH_ARGS);
    _dbus_assert (rule->args != NULL);
    _dbus_assert (rule->args_len == 1);
    _dbus_assert (strcmp (rule->args[0], "foo") == 0);
    _dbus_assert ((rule->arg_lens[0] & BUS_MATCH_ARG_NAMESPACE)
        == BUS_MATCH_ARG_NAMESPACE);

    bus_match_rule_unref (rule);
}

rule = check_parse (TRUE, "arg0namespace='foo.bar'");
if (rule != NULL)
{
    _dbus_assert (rule->flags == BUS_MATCH_ARGS);
    _dbus_assert (rule->args != NULL);
    _dbus_assert (rule->args_len == 1);
    _dbus_assert (strcmp (rule->args[0], "foo.bar") == 0);
    _dbus_assert ((rule->arg_lens[0] & BUS_MATCH_ARG_NAMESPACE)
        == BUS_MATCH_ARG_NAMESPACE);

    bus_match_rule_unref (rule);
}

/* Only arg0namespace is supported. */
rule = check_parse (FALSE, "arg1namespace='foo'");
_dbus_assert (rule == NULL);

/* An empty string isn't a valid namespace prefix (you should just
not
* specify this key at all).
*/
rule = check_parse (FALSE, "arg0namespace='');
_dbus_assert (rule == NULL);

```

```

/* Trailing periods aren't allowed (earlier versions of the
arg0namespace
* spec allowed a single trailing period, which altered the
semantics) */
rule = check_parse (FALSE, "arg0namespace='foo.'");
_dbus_assert (rule == NULL);

rule = check_parse (FALSE, "arg0namespace='foo.bar.'");
_dbus_assert (rule == NULL);

rule = check_parse (FALSE, "arg0namespace='foo..'");
_dbus_assert (rule == NULL);

rule = check_parse (FALSE, "arg0namespace='foo.bar..'");
_dbus_assert (rule == NULL);

/* Too-large argN */
rule = check_parse (FALSE, "arg300='foo'");
_dbus_assert (rule == NULL);
rule = check_parse (FALSE, "arg64='foo'");
_dbus_assert (rule == NULL);

/* No N in argN */
rule = check_parse (FALSE, "arg='foo'");
_dbus_assert (rule == NULL);
rule = check_parse (FALSE, "argv='foo'");
_dbus_assert (rule == NULL);
rule = check_parse (FALSE, "arg3junk='foo'");
_dbus_assert (rule == NULL);
rule = check_parse (FALSE, "argument='foo'");
_dbus_assert (rule == NULL);

/* Reject duplicates */
rule = check_parse (FALSE, "type='signal',type='method_call'");
_dbus_assert (rule == NULL);

rule = check_parse (TRUE, "path_namespace='/foo/bar'");
if (rule != NULL)
{
    _dbus_assert (rule->flags == BUS_MATCH_PATH_NAMESPACE);
    _dbus_assert (rule->path != NULL);
    _dbus_assert (strcmp (rule->path, "/foo/bar") == 0);

    bus_match_rule_unref (rule);
}

/* Almost a duplicate */
rule = check_parse (FALSE, "path='/foo',path_namespace='/foo'");
_dbus_assert (rule == NULL);

/* Trailing / was supported in the initial proposal, but now isn't
*/

```

```

rule = check_parse (FALSE, "path_namespace='/foo/'");
_dbus_assert (rule == NULL);

/* Duplicates with the argN code */
rule = check_parse (FALSE, "arg0='foo',arg0='bar'");
_dbus_assert (rule == NULL);
rule = check_parse (FALSE, "arg3='foo',arg3='bar'");
_dbus_assert (rule == NULL);
rule = check_parse (FALSE, "arg30='foo',arg30='bar'");
_dbus_assert (rule == NULL);

/* Reject broken keys */
rule = check_parse (FALSE, "blah='signal'");
_dbus_assert (rule == NULL);

/* Reject broken values */
rule = check_parse (FALSE, "type='chouin'");
_dbus_assert (rule == NULL);
rule = check_parse (FALSE, "interface='abc@def++'");
_dbus_assert (rule == NULL);
rule = check_parse (FALSE, "service='youpi'");
_dbus_assert (rule == NULL);

/* Allow empty rule */
rule = check_parse (TRUE, "");
if (rule != NULL)
{
    _dbus_assert (rule->flags == 0);

    bus_match_rule_unref (rule);
}

/* All-whitespace rule is the same as empty */
rule = check_parse (TRUE, " \t");
if (rule != NULL)
{
    _dbus_assert (rule->flags == 0);

    bus_match_rule_unref (rule);
}

/* But with non-whitespace chars and no =value, it's not OK */
rule = check_parse (FALSE, "type");
_dbus_assert (rule == NULL);

return TRUE;
}

static struct {
    const char *first;
    const char *second;
} equality_tests[] = {

```

```

    { "type='signal'", "type='signal'" },
    { "type='signal',interface='foo.bar'",
"interface='foo.bar',type='signal'" },
    { "type='signal',member='bar'", "member='bar',type='signal'" },
    { "type='method_call',sender=':1.0'",
"sender=':1.0',type='method_call'" },
    { "type='method_call',destination=':1.0'",
"destination=':1.0',type='method_call'" },
    { "type='method_call',path='/foo/bar'",
"path='/foo/bar',type='method_call'" },
    { "type='method_call',arg0='blah'", "arg0='blah',type='method_call'"
},
    { "type='method_call',arg0='boo'", "arg0='boo',type='method_call'"
},
    { "type='method_call',arg0='blah',arg1='baz'",
"arg0='blah',arg1='baz',type='method_call'" },
    { "type='method_call',arg3='foosh'",
"arg3='foosh',type='method_call'" },
    { "arg3='fool'", "arg3='fool'" },
    { "arg0namespace='fool'", "arg0namespace='fool'" },
    { "member='food'", "member='food'" }
};

```

```

static void
test_equality (void)
{
    int i;

    i = 0;
    while (i < _DBUS_N_ELEMENTS (equality_tests))
    {
        BusMatchRule *first;
        BusMatchRule *second;
        int j;

        first = check_parse (TRUE, equality_tests[i].first);
        _dbus_assert (first != NULL);
        second = check_parse (TRUE, equality_tests[i].second);
        _dbus_assert (second != NULL);

        if (!match_rule_equal (first, second))
        {
            _dbus_warn ("rule %s and %s should have been equal\n",
                equality_tests[i].first,
                equality_tests[i].second);
            exit (1);
        }

        bus_match_rule_unref (second);

        /* Check that the rule is not equal to any of the
         * others besides its pair match

```

```

    */
    j = 0;
    while (j < _DBUS_N_ELEMENTS (equality_tests))
    {
        if (i != j)
        {
            second = check_parse (TRUE, equality_tests[j].second);

            if (match_rule_equal (first, second))
            {
                _dbus_warn ("rule %s and %s should not have been
equal\n",
                            equality_tests[i].first,
                            equality_tests[j].second);
                exit (1);
            }

            bus_match_rule_unref (second);
        }

        ++j;
    }

    bus_match_rule_unref (first);

    ++i;
}

static const char*
should_match_message_1[] = {
    "type='signal'",
    "member='Frobated'",
    "arg0='foobar'",
    "type='signal',member='Frobated'",
    "type='signal',member='Frobated',arg0='foobar'",
    "member='Frobated',arg0='foobar'",
    "type='signal',arg0='foobar'",
    /* The definition of argXpath matches says: "As with normal argument
matches,
* if the argument is exactly equal to the string given in the match
rule
* then the rule is satisfied." So this should match (even though
the
* argument is not a valid path)!
*/
    "arg0path='foobar'",
    "arg0namespace='foobar'",
    NULL
};

static const char*

```

```

should_not_match_message_1[] = {
    "type='method_call'",
    "type='error'",
    "type='method_return'",
    "type='signal',member='Oopsed'",
    "arg0='blah'",
    "arg1='foobar'",
    "arg2='foobar'",
    "arg3='foobar'",
    "arg0='3'",
    "arg1='3'",
    "arg0='foobar',arg1='abcdef'",

    "arg0='foobar',arg1='abcdef',arg2='abcdefghi',arg3='abcdefghi',arg4='a
bcdefghi'",

    "arg0='foobar',arg1='abcdef',arg4='abcdefghi',arg3='abcdefghi',arg2='a
bcdefghi'",
    "arg0path='foo'",
    "arg0path='foobar/'",
    "arg1path='3'",
    "arg0namespace='foo'",
    "arg0namespace='foo',arg1='abcdef'",
    "arg0namespace='moo'",
    NULL
};

#define EXAMPLE_NAME "com.example.backend.foo"

static const char *
should_match_message_2[] = {
    /* EXAMPLE_NAME is in all of these namespaces */
    "arg0namespace='com.example.backend'",
    "arg0namespace='com.example'",
    "arg0namespace='com'",

    /* If the client specifies the name exactly, with no trailing
period, then
    * it should match.
    */
    "arg0namespace='com.example.backend.foo'",

    NULL
};

static const char *
should_not_match_message_2[] = {
    /* These are not even prefixes */
    "arg0namespace='com.example.backend.foo.bar'",
    "arg0namespace='com.example.backend.foobar'",

    /* These are prefixes, but they're not parent namespaces. */

```



```

    "arg0namespace='com.example.backend.fo'",
    "arg0namespace='com.example.backen'",
    "arg0namespace='com.exempl'",
    "arg0namespace='co'",

    NULL
};

static void
check_matches (dbus_bool_t expected_to_match,
               int number,
               DBusMessage *message,
               const char *rule_text)
{
    BusMatchRule *rule;
    dbus_bool_t matched;

    rule = check_parse (TRUE, rule_text);
    _dbus_assert (rule != NULL);

    /* We can't test sender/destination rules since we pass NULL here */
    matched = match_rule_matches (rule, NULL, NULL, message, 0);

    if (matched != expected_to_match)
    {
        _dbus_warn ("Expected rule %s to %s message %d, failed\n",
                   rule_text, expected_to_match ?
                   "match" : "not match", number);
        exit (1);
    }

    bus_match_rule_unref (rule);
}

static void
check_matching (DBusMessage *message,
               int number,
               const char **should_match,
               const char **should_not_match)
{
    int i;

    i = 0;
    while (should_match[i] != NULL)
    {
        check_matches (TRUE, number, message, should_match[i]);
        ++i;
    }

    i = 0;
    while (should_not_match[i] != NULL)
    {

```

```

        check_matches (FALSE, number, message, should_not_match[i]);
        ++i;
    }
}

static void
test_matching (void)
{
    DBusMessage *message1, *message2;
    const char *v_STRING;
    dbus_int32_t v_INT32;

    message1 = dbus_message_new (DBUS_MESSAGE_TYPE_SIGNAL);
    _dbus_assert (message1 != NULL);
    if (!dbus_message_set_member (message1, "Frobated"))
        _dbus_assert_not_reached ("oom");

    v_STRING = "foobar";
    v_INT32 = 3;
    if (!dbus_message_append_args (message1,
                                   DBUS_TYPE_STRING, &v_STRING,
                                   DBUS_TYPE_INT32, &v_INT32,
                                   NULL))
        _dbus_assert_not_reached ("oom");

    check_matching (message1, 1,
                   should_match_message_1,
                   should_not_match_message_1);

    dbus_message_unref (message1);

    message2 = dbus_message_new (DBUS_MESSAGE_TYPE_SIGNAL);
    _dbus_assert (message2 != NULL);
    if (!dbus_message_set_member (message2, "NameOwnerChanged"))
        _dbus_assert_not_reached ("oom");

    /* Obviously this isn't really a NameOwnerChanged signal. */
    v_STRING = EXAMPLE_NAME;
    if (!dbus_message_append_args (message2,
                                   DBUS_TYPE_STRING, &v_STRING,
                                   NULL))
        _dbus_assert_not_reached ("oom");

    check_matching (message2, 2,
                   should_match_message_2,
                   should_not_match_message_2);

    dbus_message_unref (message2);
}

#define PATH_MATCH_RULE "arg0path='/aa/bb/'"

```

```

/* This is a list of paths that should be matched by PATH_MATCH_RULE,
taken
 * from the specification. Notice that not all of them are actually
legal D-Bus
 * paths.
 *
 * The author of this test takes no responsibility for the semantics
of
 * this match rule key.
 */
static const char *paths_that_should_be_matched[] = {
    "/aa/",
    "/aa/bb/",
    "/aa/bb/cc/",
#define FIRST_VALID_PATH_WHICH_SHOULD_MATCH 3
    "/",
    "/aa/bb/cc",
    NULL
};

/* These paths should not be matched by PATH_MATCH_RULE. */
static const char *paths_that_should_not_be_matched[] = {
    "/aa/b",
    "/aa",
    /* or even... */
    "/aa/bb",
    NULL
};

static void
test_path_match (int type,
                 const char *path,
                 const char *rule_text,
                 BusMatchRule *rule,
                 dbus_bool_t should_match)
{
    DBusMessage *message = dbus_message_new (DBUS_MESSAGE_TYPE_SIGNAL);
    dbus_bool_t matched;

    _dbus_assert (message != NULL);
    if (!dbus_message_set_member (message, "Foo"))
        _dbus_assert_not_reached ("oom");

    if (!dbus_message_append_args (message,
                                   type, &path,
                                   NULL))
        _dbus_assert_not_reached ("oom");

    matched = match_rule_matches (rule, NULL, NULL, message, 0);

    if (matched != should_match)
        {

```

```

        _dbus_warn ("Expected rule %s to %s message "
                    "with first arg %s of type '%c', failed\n",
                    rule_text,
                    should_match ? "match" : "not match",
                    path,
                    (char) type);
    exit (1);
}

dbus_message_unref (message);
}

static void
test_path_matching (void)
{
    BusMatchRule *rule;
    const char **s;

    rule = check_parse (TRUE, PATH_MATCH_RULE);
    _dbus_assert (rule != NULL);

    for (s = paths_that_should_be_matched; *s != NULL; s++)
        test_path_match (DBUS_TYPE_STRING, *s, PATH_MATCH_RULE, rule,
                        TRUE);

    for (s = paths_that_should_be_matched +
         FIRST_VALID_PATH_WHICH_SHOULD_MATCH;
         *s != NULL; s++)
        test_path_match (DBUS_TYPE_OBJECT_PATH, *s, PATH_MATCH_RULE, rule,
                        TRUE);

    for (s = paths_that_should_not_be_matched; *s != NULL; s++)
    {
        test_path_match (DBUS_TYPE_STRING, *s, PATH_MATCH_RULE, rule,
                        FALSE);
        test_path_match (DBUS_TYPE_OBJECT_PATH, *s, PATH_MATCH_RULE,
                        rule, FALSE);
    }

    bus_match_rule_unref (rule);
}

static const char*
path_namespace_should_match_message_1[] = {
    "type='signal',path_namespace='/foo'",
    "type='signal',path_namespace='/foo/TheObjectManager'",
    NULL
};

static const char*
path_namespace_should_not_match_message_1[] = {
    "type='signal',path_namespace='/bar'",

```

```

    "type='signal',path_namespace='/bar/TheObjectManager'",
    NULL
};

static const char*
path_namespace_should_match_message_2[] = {
    "type='signal',path_namespace='/foo/TheObjectManager'",
    NULL
};

static const char*
path_namespace_should_not_match_message_2[] = {
    NULL
};

static const char*
path_namespace_should_match_message_3[] = {
    NULL
};

static const char*
path_namespace_should_not_match_message_3[] = {
    "type='signal',path_namespace='/foo/TheObjectManager'",
    NULL
};

static void
test_matching_path_namespace (void)
{
    DBusMessage *message1;
    DBusMessage *message2;
    DBusMessage *message3;

    message1 = dbus_message_new (DBUS_MESSAGE_TYPE_SIGNAL);
    _dbus_assert (message1 != NULL);
    if (!dbus_message_set_path (message1, "/foo/TheObjectManager"))
        _dbus_assert_not_reached ("oom");

    message2 = dbus_message_new (DBUS_MESSAGE_TYPE_SIGNAL);
    _dbus_assert (message2 != NULL);
    if (!dbus_message_set_path (message2,
"/foo/TheObjectManager/child_object"))
        _dbus_assert_not_reached ("oom");

    message3 = dbus_message_new (DBUS_MESSAGE_TYPE_SIGNAL);
    _dbus_assert (message3 != NULL);
    if (!dbus_message_set_path (message3, "/foo/TheObjectManagerOther"))
        _dbus_assert_not_reached ("oom");

    check_matching (message1, 1,
                    path_namespace_should_match_message_1,
                    path_namespace_should_not_match_message_1);

```

```

    check_matching (message2, 2,
                   path_namespace_should_match_message_2,
                   path_namespace_should_not_match_message_2);
    check_matching (message3, 3,
                   path_namespace_should_match_message_3,
                   path_namespace_should_not_match_message_3);

    dbus_message_unref (message3);
    dbus_message_unref (message2);
    dbus_message_unref (message1);
}

dbus_bool_t
bus_signals_test (const DBusString *test_data_dir)
{
    BusMatchmaker *matchmaker;

    matchmaker = bus_matchmaker_new ();
    bus_matchmaker_ref (matchmaker);
    bus_matchmaker_unref (matchmaker);
    bus_matchmaker_unref (matchmaker);

    if (!_dbus_test_oom_handling ("parsing match rules", test_parsing,
                                NULL))
        _dbus_assert_not_reached ("Parsing match rules test failed");

    test_equality ();
    test_matching ();
    test_path_matching ();
    test_matching_path_namespace ();

    return TRUE;
}

#endif /* DBUS_BUILD_TESTS */

```

File = signals.h

```

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* signals.h  Bus signal connection implementation
 *
 * Copyright (C) 2003  Red Hat, Inc.
 *
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modify
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* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*/

```

```

#ifndef BUS_SIGNALS_H
#define BUS_SIGNALS_H

```

```

#include <dbus/dbus.h>
#include <dbus/dbus-string.h>
#include <dbus/dbus-sysdeps.h>
#include "connection.h"

```

```

typedef enum

```

```

{
    BUS_MATCH_MESSAGE_TYPE           = 1 << 0,
    BUS_MATCH_INTERFACE              = 1 << 1,
    BUS_MATCH_MEMBER                 = 1 << 2,
    BUS_MATCH_SENDER                 = 1 << 3,
    BUS_MATCH_DESTINATION            = 1 << 4,
    BUS_MATCH_PATH                   = 1 << 5,
    BUS_MATCH_ARGS                   = 1 << 6,
    BUS_MATCH_PATH_NAMESPACE         = 1 << 7,
    BUS_MATCH_CLIENT_IS_EAVESDROPPING = 1 << 8
} BusMatchFlags;

```

```

BusMatchRule* bus_match_rule_new      (DBusConnection *matches_go_to);
BusMatchRule* bus_match_rule_ref     (BusMatchRule *rule);
void          bus_match_rule_unref   (BusMatchRule *rule);

dbus_bool_t bus_match_rule_set_message_type (BusMatchRule *rule,
                                             int             type);
dbus_bool_t bus_match_rule_set_interface  (BusMatchRule *rule,
                                             const char     *interface);
dbus_bool_t bus_match_rule_set_member    (BusMatchRule *rule,
                                             const char     *member);
dbus_bool_t bus_match_rule_set_sender    (BusMatchRule *rule,
                                             const char     *sender);
dbus_bool_t bus_match_rule_set_destination (BusMatchRule *rule,

```

```

                                const char
*destination);
dbus_bool_t bus_match_rule_set_path (BusMatchRule *rule,
                                const char *path,
                                dbus_bool_t

is_namespace);
dbus_bool_t bus_match_rule_set_arg (BusMatchRule *rule,
                                int arg,
                                const DBusString *value,
                                dbus_bool_t

is_path,
                                dbus_bool_t

is_namespace);

/* Calling this methods a client declares that it is creating a rule
which
* needs to eavesdrop (e.g., dbus-monitor), any other created rules
not
* setting themselves as eavesdropping won't receive any message not
addressed
* to them, when eavedrop is enabled in the policy. On the other
hand, when
* eavedrop is not enabled in policy, this method won't have any
effect */
void bus_match_rule_set_client_is_eavesdropping (BusMatchRule
*rule,
                                                dbus_bool_t

is_eavesdropping);

BusMatchRule* bus_match_rule_parse (DBusConnection *matches_go_to,
                                const DBusString *rule_text,
                                DBusError *error);

BusMatchmaker* bus_matchmaker_new (void);
BusMatchmaker* bus_matchmaker_ref (BusMatchmaker *matchmaker);
void bus_matchmaker_unref (BusMatchmaker *matchmaker);

dbus_bool_t bus_matchmaker_add_rule (BusMatchmaker
*matchmaker,
                                BusMatchRule
*rule);
dbus_bool_t bus_matchmaker_remove_rule_by_value (BusMatchmaker
*matchmaker,
                                BusMatchRule
*value,
                                DBusError
*error);
void bus_matchmaker_remove_rule (BusMatchmaker
*matchmaker,
                                BusMatchRule
*rule);

```



```

void          bus_matchmaker_disconnected          (BusMatchmaker
*matchmaker,                                     DBusConnection
*connection);
dbus_bool_t bus_matchmaker_get_recipients        (BusMatchmaker
*matchmaker,                                     BusConnections
*connections,                                   DBusConnection
*sender,                                         DBusConnection
*addressed_recipient,                           DBusMessage
*message,                                        DBusList
**recipients_p);

#endif /* BUS_SIGNALS_H */

```

File = simplest-manual.message

```

## like simplest.message, but doesn't use VALID_HEADER
## convenience command. mostly to test the test framework.

```

```

LITTLE_ENDIAN
BYTE 'l'
BYTE 1
BYTE 0
BYTE 0
LENGTH Header
LENGTH Body
## client serial
INT32 7

HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/foo'
HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.Foo'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'Bar'
HEADER_FIELD SIGNATURE
TYPE STRING
STRING ''

ALIGN 8
END_LENGTH Header
START_LENGTH Body

```

```
END_LENGTH Body
```

```
File = simplest.message
```

```
## simplest possible valid message
```

```
## VALID_HEADER includes a LENGTH Header and LENGTH Body  
VALID_HEADER method_call  
REQUIRED_FIELDS
```

```
ALIGN 8  
END_LENGTH Header  
START_LENGTH Body  
END_LENGTH Body
```

```
File = sm-marshal.c
```

```
#include <config.h>
```

```
#ifndef __sm_marshal_MARSHAL_H__  
#define __sm_marshal_MARSHAL_H__
```

```
#include <glib-object.h>
```

```
G_BEGIN_DECLS
```

```
#ifdef G_ENABLE_DEBUG  
#define g_marshal_value_peek_boolean(v) g_value_get_boolean (v)  
#define g_marshal_value_peek_char(v) g_value_get_schar (v)  
#define g_marshal_value_peek_uchar(v) g_value_get_uchar (v)  
#define g_marshal_value_peek_int(v) g_value_get_int (v)  
#define g_marshal_value_peek_uint(v) g_value_get_uint (v)  
#define g_marshal_value_peek_long(v) g_value_get_long (v)  
#define g_marshal_value_peek_ulong(v) g_value_get_ulong (v)  
#define g_marshal_value_peek_int64(v) g_value_get_int64 (v)  
#define g_marshal_value_peek_uint64(v) g_value_get_uint64 (v)  
#define g_marshal_value_peek_enum(v) g_value_get_enum (v)  
#define g_marshal_value_peek_flags(v) g_value_get_flags (v)  
#define g_marshal_value_peek_float(v) g_value_get_float (v)  
#define g_marshal_value_peek_double(v) g_value_get_double (v)  
#define g_marshal_value_peek_string(v) (char*) g_value_get_string  
(v)  
#define g_marshal_value_peek_param(v) g_value_get_param (v)  
#define g_marshal_value_peek_boxed(v) g_value_get_boxed (v)  
#define g_marshal_value_peek_pointer(v) g_value_get_pointer (v)  
#define g_marshal_value_peek_object(v) g_value_get_object (v)  
#define g_marshal_value_peek_variant(v) g_value_get_variant (v)  
#else /* !G_ENABLE_DEBUG */
```



```

                                                                    gpointer
data2);
register GMarshalFunc_VOID__STRING_BOXED callback;
register GCClosure *cc = (GCClosure*) closure;
register gpointer data1, data2;

g_return_if_fail (n_param_values == 3);

if (G_CCLOSURE_SWAP_DATA (closure))
{
    data1 = closure->data;
    data2 = g_value_peek_pointer (param_values + 0);
}
else
{
    data1 = g_value_peek_pointer (param_values + 0);
    data2 = closure->data;
}
callback = (GMarshalFunc_VOID__STRING_BOXED) (marshal_data ?
marshal_data : cc->callback);

callback (data1,
          g_marshal_value_peek_string (param_values + 1),
          g_marshal_value_peek_boxed (param_values + 2),
          data2);
}

G_END_DECLS

#endif /* __sm_marshal_MARSHAL_H__ */

```

File = sm-marshal.list

VOID:STRING,BOXED

File = spawn-test.c

```

#include <config.h>
#include <dbus/dbus.h>

#define DBUS_COMPILATION /* cheat and use dbus-sysdeps */
#include <dbus/dbus-sysdeps.h>
#include <dbus/dbus-spawn.h>
#undef DBUS_COMPILATION
#include <stdio.h>

static void

```

```

setup_func (void *data)
{
    printf ("entering setup func.\n");
}

int
main (int argc, char **argv)
{
    char **argv_copy;
    int i;
    DBusError error;

    if (argc < 2)
    {
        fprintf (stderr, "You need to specify a program to launch.\n");

        return -1;
    }

    argv_copy = dbus_new (char *, argc);
    for (i = 0; i < argc - 1; i++)
        argv_copy [i] = argv[i + 1];
    argv_copy[argc - 1] = NULL;

    if (!_dbus_spawn_async_with_babysitter (NULL, argv_copy, NULL,
    setup_func, NULL, &error))
    {
        fprintf (stderr, "Could not launch application: \"%s\"\n",
            error.message);
    }

    dbus_free(argv_copy);

    return 0;
}

```

File = stamp-h1

timestamp for config.h

File = stamp-h1.~1~

timestamp for config.h

File = standard-acquire-service.message

```
# Standard org.freedesktop.DBus.AcquireService message
```

```
VALID_HEADER method_call
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/org/freedesktop/DBus'
HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.DBus'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'AcquireService'
HEADER_FIELD DESTINATION
TYPE STRING
STRING 'org.freedesktop.DBus'
HEADER_FIELD SIGNATURE
TYPE STRING
STRING 'su'
ALIGN 8
END_LENGTH Header
START_LENGTH Body
TYPE STRING
STRING 'org.freedesktop.DBus.Sample'
TYPE UINT32
UINT32 0
END_LENGTH Body
```

```
File = standard-hello.message
```

```
# Standard org.freedesktop.DBus.Hello message
```

```
VALID_HEADER method_call
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/org/freedesktop/DBus'
HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.DBus'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'Hello'
HEADER_FIELD DESTINATION
TYPE STRING
STRING 'org.freedesktop.DBus'
HEADER_FIELD SIGNATURE
TYPE STRING
STRING ''
ALIGN 8
END_LENGTH Header
START_LENGTH Body
```

END_LENGTH Body

File = standard-list-services.message

Standard org.freedesktop.DBus.ListServices message

```
VALID_HEADER method_call
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/org/freedesktop/DBus'
HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.DBus'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'ListServices'
HEADER_FIELD DESTINATION
TYPE STRING
STRING 'org.freedesktop.DBus'
HEADER_FIELD SIGNATURE
TYPE STRING
STRING ''
ALIGN 8
END_LENGTH Header
START_LENGTH Body
END_LENGTH Body
```

File = standard-service-exists.message

Standard org.freedesktop.DBus.ServiceExists message

```
VALID_HEADER method_call
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/org/freedesktop/DBus'
HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.DBus'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'ServiceExists'
HEADER_FIELD DESTINATION
TYPE STRING
STRING 'org.freedesktop.DBus'
HEADER_FIELD SIGNATURE
TYPE STRING
STRING 's'
ALIGN 8
```

```
END_LENGTH Header
START_LENGTH Body
TYPE STRING
STRING 'org.freedesktop.DBus.Sample'
END_LENGTH Body
```

```
File = statemachine-server.c
```

```
#include <config.h>
```

```
#include <dbus/dbus-glib.h>
```

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
#include "statemachine.h"
```

```
#include "sm-marshal.h"
```

```
#include "statemachine-server.h"
```

```
enum
```

```
{
    PROP_O,
    PROP_BUS
};
```

```
enum
```

```
{
    MACHINE_CREATED,
    LAST_SIGNAL
};
```

```
static guint sm_server_signals[LAST_SIGNAL] = { 0 };
```

```
static void      sm_server_set_property      (GObject
*object,
                                               guint          prop_id,
                                               const GValue *value,
                                               GParamSpec   *pspec);
```

```
static void      sm_server_get_property     (GObject
*object,
                                               guint          prop_id,
                                               GValue        *value,
                                               GParamSpec   *pspec);
```

```
G_DEFINE_TYPE(SMServer, sm_server, G_TYPE_OBJECT)
```

```
#include "statemachine-server-glue.h"
```

```
#include "statemachine-glue.h"
```

```
static void
sm_server_init (SMServer *obj)
```



```

{
    obj->machines = g_hash_table_new_full (g_str_hash, g_str_equal,
g_free, g_object_unref);
}

static void
sm_server_class_init (SMServerClass *klass)
{
    GObjectClass *object_class = G_OBJECT_CLASS (klass);

    object_class->set_property = sm_server_set_property;
    object_class->get_property = sm_server_get_property;

    g_object_class_install_property (object_class,
PROP_BUS,
g_param_spec_boxed ("bus",
                    "bus",
                    "bus",
                    DBUS_TYPE_G_CONNECTION,
                    G_PARAM_READWRITE |
G_PARAM_CONSTRUCT_ONLY));

    sm_server_signals[MACHINE_CREATED] =
g_signal_new ("machine-created",
G_OBJECT_CLASS_TYPE (klass),
G_SIGNAL_RUN_LAST | G_SIGNAL_DETAILED,
0,
NULL, NULL,
sm_marshal_VOID__STRING_BOXED,
G_TYPE_NONE, 2, G_TYPE_STRING,
DBUS_TYPE_G_OBJECT_PATH);
}

static void
sm_server_set_property (GObject *object,
guint prop_id,
const GValue *value,
GParamSpec *pspec)
{
    SMServer *server = SM_SERVER (object);

    switch (prop_id)
    {
        case PROP_BUS:
            server->bus = g_value_get_boxed (value);
            break;
        default:
            G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
            break;
    }
}

```

```

static void
sm_server_get_property (GObject *object,
                       guint prop_id,
                       GValue *value,
                       GParamSpec *pspec)
{
    SMServer *server = SM_SERVER (object);

    switch (prop_id)
    {
        case PROP_BUS:
            g_value_set_boxed (value, server->bus);
            break;
        default:
            G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
            break;
    }
}

static void
machine_state_changed_cb (SMObject *obj, const char *state, gpointer
data)
{
    char *name;

    g_object_get (obj, "name", &name, NULL);
    g_print ("Machine %s switching to state %s\n", name, state);
    g_free (name);
}

static void
machine_acquisition_changed_cb (SMObject *obj, gdouble progress,
gpointer data)
{
    char *name;

    g_object_get (obj, "name", &name, NULL);
    g_print ("Machine %s got progress %f\n", name, progress);
    g_free (name);
}

gboolean
sm_server_create_machine (SMServer *server, const char *name, GError
**error)
{
    SMObject *machine;
    char *path;

    machine = g_hash_table_lookup (server->machines, name);
    if (machine != NULL)
    {
        g_set_error (error,

```

```

        SM_ERROR,
        SM_ERROR_NAME_IN_USE,
        "Statemachine name \"%s\" is already in use",
        name);
    return FALSE;
}

machine = g_object_new (SM_TYPE_OBJECT, "name", name, NULL);

path = g_strdup_printf ("/com/example/StateMachines/%s", name);
dbus_g_connection_register_g_object (server->bus, path, G_OBJECT
(machine));

g_hash_table_insert (server->machines, g_strdup (name), machine);

g_print ("Created state machine with name %s at %s\n", name, path);

g_signal_connect_object (machine, "state-changed",
        G_CALLBACK (machine_state_changed_cb),
        NULL, 0);
g_signal_connect_object (machine, "acquisition-progress",
        G_CALLBACK (machine_acquisition_changed_cb),
        NULL, 0);

g_signal_emit (server, sm_server_signals[MACHINE_CREATED], 0, name,
path);
g_free (path);

return TRUE;
}

static void
add_machine_to_ptr_array (gpointer key, gpointer val, gpointer data)
{
    const char *name = key;
    /* SMOject *sm = val; */
    GPtrArray *ptrarray = data;

    g_ptr_array_add (ptrarray, g_strdup_printf
("/com/example/StateMachines/%s",
        name));
}

gboolean
sm_server_get_machines (SMServer *server, GPtrArray **machines, GError
**error)
{
    *machines = g_ptr_array_new ();

    g_hash_table_foreach (server->machines, add_machine_to_ptr_array,
*machines);
}

```

```

    return TRUE;
}

int
main (int argc, char **argv)
{
    DBusGConnection *bus;
    DBusGProxy *bus_proxy;
    GError *error = NULL;
    SMServer *server;
    GMainLoop *mainloop;
    guint request_name_result;

    g_type_init ();

    dbus_g_object_type_install_info (SM_TYPE_SERVER,
&dbus_glib_sm_server_object_info);
    dbus_g_object_type_install_info (SM_TYPE_OBJECT,
&dbus_glib_sm_object_object_info);
    dbus_g_error_domain_register (SM_ERROR, NULL, SM_TYPE_ERROR);

    mainloop = g_main_loop_new (NULL, FALSE);

    bus = dbus_g_bus_get (DBUS_BUS_SESSION, &error);
    if (!bus)
        g_critical ("Couldn't connect to session bus: %s\n", error-
>message);

    bus_proxy = dbus_g_proxy_new_for_name (bus, "org.freedesktop.DBus",
"/org/freedesktop/DBus",
"org.freedesktop.DBus");

    if (!dbus_g_proxy_call (bus_proxy, "RequestName", &error,
G_TYPE_STRING, "com.example.StateServer",
G_TYPE_UINT, 0,
G_TYPE_INVALID,
G_TYPE_UINT, &request_name_result,
G_TYPE_INVALID))
        g_critical ("Couldn't acquire com.example.StateServer: %s\n",
error->message);

    server = g_object_new (SM_TYPE_SERVER, "bus", bus, NULL);

    dbus_g_connection_register_g_object (bus,
"/com/example/StateServer", G_OBJECT (server));

    g_print ("StateMachine server initialized\n");

    g_main_loop_run (mainloop);

    exit (0);
}

```

```

File = statemachine-server.h

#ifndef _SM_SERVER_H
#define _SM_SERVER_H

#include "statemachine.h"
#include <dbus/dbus-glib.h>

typedef struct SMServer SMServer;
typedef struct SMServerClass SMServerClass;

struct SMServer
{
    GObject parent;

    /* Private */
    DBusGConnection *bus;
    GHashTable *machines;
};

struct SMServerClass
{
    GObjectClass parent;
};

#define SM_TYPE_SERVER (sm_server_get_type ())
#define SM_SERVER(object) (G_TYPE_CHECK_INSTANCE_CAST ((object), SM_TYPE_SERVER, SMServer))
#define SM_SERVER_CLASS(klass) (G_TYPE_CHECK_CLASS_CAST ((klass), SM_TYPE_SERVER, SMServerClass))
#define SM_IS_SERVER(object) (G_TYPE_CHECK_INSTANCE_TYPE ((object), SM_TYPE_SERVER))
#define SM_IS_SERVER_CLASS(klass) (G_TYPE_CHECK_CLASS_TYPE ((klass), SM_TYPE_SERVER))
#define SM_SERVER_GET_CLASS(obj) (G_TYPE_INSTANCE_GET_CLASS ((obj), SM_TYPE_SERVER, SMServerClass))

GType sm_server_get_type (void);

gboolean sm_server_create_machine (SMServer *server, const char *name,
GError **error);

gboolean sm_server_get_machines (SMServer *server, GPtrArray
**machines, GError **error);

#endif

```

File = statemachine-server.xml

```
<?xml version="1.0" encoding="UTF-8" ?>

<node name="/">
  <interface name="com.example.StateMachineServer">
    <method name="CreateMachine">
      <arg type="s" name="name" direction="in"/>
    </method>

    <method name="GetMachines">
      <arg type="ao" direction="out"/>
    </method>
    <signal name="MachineCreated"/>
  </interface>
</node>
```

File = statemachine.c

```
#include <config.h>

#include <stdio.h>
#include <stdlib.h>
#include "statemachine.h"

static void clear_pending_tasks (SMObject *object);
static void state_change (SMObject *object, SMObjectState new_state);
static void sm_object_set_property (GObject *object,
                                     guint prop_id,
                                     const GValue *value,
                                     GParamSpec *pspec);
static void sm_object_get_property (GObject *object,
                                     guint prop_id,
                                     GValue *value,
                                     GParamSpec *pspec);

enum
{
  PROP_0,
  PROP_NAME
};

enum
{
  STATE_CHANGED,
  ACQUISITION_FAILED,
  ACQUISITION_PROGRESS,
  LAST_SIGNAL
};

static guint sm_object_signals[LAST_SIGNAL] = { 0 };
```

```

G_DEFINE_TYPE(SMObject, sm_object, G_TYPE_OBJECT)

static void
sm_object_init (SMObject *obj)
{
    obj->state = SM_OBJECT_STATE_SHUTDOWN;
}

static void
sm_object_class_init (SMObjectClass *klass)
{
    GObjectClass *object_class;

    object_class = G_OBJECT_CLASS (klass);

    object_class->set_property = sm_object_set_property;
    object_class->get_property = sm_object_get_property;

    g_object_class_install_property (object_class,
                                     PROP_NAME,
                                     g_param_spec_string ("name",
                                                         "name",
                                                         "name",
                                                         NULL,
                                                         G_PARAM_READWRITE |
G_PARAM_CONSTRUCT_ONLY));
    sm_object_signals[STATE_CHANGED] =
        g_signal_new ("state-changed",
                     G_OBJECT_CLASS_TYPE (klass),
                     G_SIGNAL_RUN_LAST | G_SIGNAL_Detailed,
                     0,
                     NULL, NULL,
                     g_cclosure_marshal_VOID__STRING,
                     G_TYPE_NONE, 1, G_TYPE_STRING);
    sm_object_signals[ACQUISITION_PROGRESS] =
        g_signal_new ("acquisition-progress",
                     G_OBJECT_CLASS_TYPE (klass),
                     G_SIGNAL_RUN_LAST | G_SIGNAL_Detailed,
                     0,
                     NULL, NULL,
                     g_cclosure_marshal_VOID__DOUBLE,
                     G_TYPE_NONE, 1, G_TYPE_DOUBLE);
    sm_object_signals[ACQUISITION_FAILED] =
        g_signal_new ("acquisition-failed",
                     G_OBJECT_CLASS_TYPE (klass),
                     G_SIGNAL_RUN_LAST | G_SIGNAL_Detailed,
                     0,
                     NULL, NULL,
                     g_cclosure_marshal_VOID__VOID,
                     G_TYPE_NONE, 0);
}

```

```

/* This should really be standard. */
#define ENUM_ENTRY(NAME, DESC) { NAME, "" #NAME "", DESC }

GQuark
sm_error_quark (void)
{
    static GQuark ret = 0;
    if (!ret)
        ret = g_quark_from_static_string ("SMObjectErrorQuark");
    return ret;
}

GType
sm_object_state_get_type (void)
{
    static GType etype = 0;

    if (etype == 0)
    {
        static const GEnumValue values[] =
        {
            ENUM_ENTRY (SM_OBJECT_STATE_SHUTDOWN, "Shutdown"),
            ENUM_ENTRY (SM_OBJECT_STATE_INITIALIZED, "Loading"),
            ENUM_ENTRY (SM_OBJECT_STATE_ACQUIRED, "Acquired"),
            ENUM_ENTRY (SM_OBJECT_STATE_OPERATING, "Operating"),
            { 0, 0, 0 }
        };

        etype = g_enum_register_static ("SMObjectState", values);
    }

    return etype;
}

GType
sm_error_get_type (void)
{
    static GType etype = 0;

    if (etype == 0)
    {
        static const GEnumValue values[] =
        {
            ENUM_ENTRY (SM_ERROR_INVALID_STATE, "InvalidState"),
            ENUM_ENTRY (SM_ERROR_NAME_IN_USE, "NameInUse"),
            { 0, 0, 0 }
        };

        g_assert (SM_NUM_ERRORS == G_N_ELEMENTS (values) - 1);
    }
}

```



```

    etype = g_enum_register_static ("SMError", values);
}

return etype;
}

static void
sm_object_set_property (GObject *object,
                       guint prop_id,
                       const GValue *value,
                       GParamSpec *pspec)
{
    SMOBJECT *sm = SM_OBJECT (object);

    switch (prop_id)
    {
        case PROP_NAME:
            sm->name = g_strdup (g_value_get_string (value));
            break;
        default:
            G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
            break;
    }
}

static void
sm_object_get_property (GObject *object,
                       guint prop_id,
                       GValue *value,
                       GParamSpec *pspec)
{
    SMOBJECT *sm= SM_OBJECT (object);

    switch (prop_id)
    {
        case PROP_NAME:
            g_value_set_string (value, sm->name);
            break;
        default:
            G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
            break;
    }
}

static const char *
state_to_string (SMObjectState state)
{
    GEnumValue *value;
    GEnumClass *prop_class;
    const char *ret;

```

```

prop_class = g_type_class_ref (SM_TYPE_OBJECT_STATE);
value = g_enum_get_value (prop_class, state);
ret = value->value_nick;

g_type_class_unref (prop_class);
return ret;
}

static void
queue_task (SMObject *object, guint delay, GSourceFunc func)
{
    guint id;
    id = g_timeout_add (delay, func, object);
    object->pending_tasks = g_slist_prepend (object->pending_tasks,
GUINT_TO_POINTER (id));
}

static gboolean
idle_state_change (gpointer data)
{
    SMObject *object = data;

    g_print ("doing idle state change for %s to %s\n",
            object->name, state_to_string (object->requested_state));
    state_change (object, object->requested_state);
    return FALSE;
}

static gboolean
idle_further_acquire (gpointer data)
{
    SMObject *object = data;

    g_print ("doing idle acquisition for machine %s\n", object->name);
    object->acquisition_progress += g_random_double_range (0.20, 0.7);
    if (object->acquisition_progress > 1.0)
    {
        object->acquisition_progress = 1.0;
        return FALSE;
    }
    else
    {
        g_signal_emit (object, sm_object_signals[ACQUISITION_PROGRESS],
0, object->acquisition_progress);
        return TRUE;
    }
}

static void
clear_pending_tasks (SMObject *object)
{
    GSList *tmp;

```

```

    for (tmp = object->pending_tasks; tmp; tmp = tmp->next)
        g_source_remove (GPOINTER_TO_UINT (tmp->data));
    g_slist_free (object->pending_tasks);
    object->pending_tasks = NULL;
}

static void
state_change (SMObject *object, SMObjectState new_state)
{
    g_signal_emit (object, sm_object_signals[STATE_CHANGED], 0,
        state_to_string (new_state));

    clear_pending_tasks (object);

    if (new_state == SM_OBJECT_STATE_ACQUIRED)
    {
        object->acquisition_progress = 0.0;
        queue_task (object, 1000, idle_further_acquire);
    }
    else if (new_state == SM_OBJECT_STATE_INITIALIZED)
    {
        if (g_random_int_range (0, 2) == 0)
        {
            object->requested_state = SM_OBJECT_STATE_ACQUIRED;
            queue_task (object, 3000, idle_state_change);
        }
    }

    object->state = new_state;
}

gboolean
sm_object_get_info (SMObject *object, char **name, char **state,
    GError **error)
{
    *name= g_strdup (object->name);
    *state = g_strdup (state_to_string (object->state));
    return TRUE;
}

gboolean
sm_object_start (SMObject *object, GError **error)
{
    if (object->state != SM_OBJECT_STATE_SHUTDOWN)
    {
        g_set_error (error,
            SM_ERROR,
            SM_ERROR_INVALID_STATE,
            "%s",
            "Can't start from non-shutdown state");
        return FALSE;
    }
}

```

```

    state_change (object, SM_OBJECT_STATE_INITIALIZED);
    return TRUE;
}

gboolean
sm_object_shutdown (SMObject *object, GError **error)
{
    if (object->state == SM_OBJECT_STATE_SHUTDOWN)
    {
        g_set_error (error,
                    SM_ERROR,
                    SM_ERROR_INVALID_STATE,
                    "%s",
                    "Can't shutdown from shutdown state");
        return FALSE;
    }
    state_change (object, SM_OBJECT_STATE_SHUTDOWN);
    return TRUE;
}

gboolean
sm_object_reinitialize (SMObject *object, GError **error)
{
    if (object->state != SM_OBJECT_STATE_ACQUIRED
        && object->state != SM_OBJECT_STATE_OPERATING)
    {
        g_set_error (error,
                    SM_ERROR,
                    SM_ERROR_INVALID_STATE,
                    "Can't reinitialize from state %d",
                    object->state);
        return FALSE;
    }
    state_change (object, SM_OBJECT_STATE_INITIALIZED);
    return TRUE;
}

gboolean
sm_object_reacquire (SMObject *object, GError **error)
{
    if (object->state == SM_OBJECT_STATE_ACQUIRED)
    {
        g_set_error (error,
                    SM_ERROR,
                    SM_ERROR_INVALID_STATE,
                    "Can't reacquire from state %d",
                    object->state);
        return FALSE;
    }
    state_change (object, SM_OBJECT_STATE_ACQUIRED);
    return TRUE;
}

```

```

gboolean
sm_object_get_acquiring_progress (SMObject *object, gdouble *out,
GError **error)
{
    if (object->state != SM_OBJECT_STATE_ACQUIRED)
    {
        g_set_error (error,
                    SM_ERROR,
                    SM_ERROR_INVALID_STATE,
                    "Can't get progress from state %d",
                    object->state);
        return FALSE;
    }
    *out = object->acquisition_progress;
    return TRUE;
}

```

File = statemachine.h

```

#ifndef _SM_OBJECT_H
#define _SM_OBJECT_H

#include <glib.h>
#include <glib-object.h>

GQuark sm_error_quark (void);

#define SM_ERROR (sm_error_quark ())

typedef enum
{
    SM_ERROR_INVALID_STATE = 0,
    SM_ERROR_NAME_IN_USE,
    SM_NUM_ERRORS
} SLError;

GType sm_error_get_type (void);
#define SM_TYPE_ERROR (sm_error_get_type ())

typedef enum
{
    SM_OBJECT_STATE_SHUTDOWN = 0,
    SM_OBJECT_STATE_INITIALIZED,
    SM_OBJECT_STATE_ACQUIRED,
    SM_OBJECT_STATE_OPERATING,
    SM_OBJECT_NUM_STATES
} SMObjectState;

GType sm_object_state_get_type (void);

```

```

#define SM_TYPE_OBJECT_STATE (sm_object_state_get_type ())

typedef struct SMOBJECT SMOBJECT;
typedef struct SMOBJECTCLASS SMOBJECTCLASS;

struct SMOBJECT
{
    GObject parent;

    /* Private */
    char *name;
    SMOBJECTSTATE state;
    double acquisition_progress;

    GSList /* guint */ *pending_tasks;

    SMOBJECTSTATE requested_state;
};

struct SMOBJECTCLASS
{
    GObjectCLASS parent;
};

#define SM_TYPE_OBJECT (sm_object_get_type ())
#define SM_OBJECT(object) (G_TYPE_CHECK_INSTANCE_CAST ((object), SM_TYPE_OBJECT, SMOBJECT))
#define SM_OBJECT_CLASS(klass) (G_TYPE_CHECK_CLASS_CAST ((klass), SM_TYPE_OBJECT, SMOBJECTCLASS))
#define SM_IS_OBJECT(object) (G_TYPE_CHECK_INSTANCE_TYPE ((object), SM_TYPE_OBJECT))
#define SM_IS_OBJECT_CLASS(klass) (G_TYPE_CHECK_CLASS_TYPE ((klass), SM_TYPE_OBJECT))
#define SM_OBJECT_GET_CLASS(obj) (G_TYPE_INSTANCE_GET_CLASS ((obj), SM_TYPE_OBJECT, SMOBJECTCLASS))

GType sm_object_get_type (void);

gboolean sm_object_get_info (SMOBJECT *object, char **name, char **state, GError **error);

gboolean sm_object_start (SMOBJECT *object, GError **error);

gboolean sm_object_shutdown (SMOBJECT *object, GError **error);

gboolean sm_object_reinitialize (SMOBJECT *object, GError **error);

gboolean sm_object_reacquire (SMOBJECT *object, GError **error);

gboolean sm_object_get_acquiring_progress (SMOBJECT *object, gdouble *out, GError **error);

```

```
#endif
```

```
File = statemachine.xml
```

```
<?xml version="1.0" encoding="UTF-8" ?>
```

```
<node name="/">
```

```
  <interface name="com.example.StateMachine">
```

```
    <method name="GetInfo">
```

```
      <arg type="s" name="name" direction="out"/>
```

```
      <arg type="s" name="state" direction="out"/>
```

```
    </method>
```

```
    <method name="Start">
```

```
    </method>
```

```
    <method name="Shutdown">
```

```
    </method>
```

```
    <method name="Reinitialize">
```

```
    </method>
```

```
    <method name="Reacquire">
```

```
    </method>
```

```
    <method name="GetAcquiringProgress">
```

```
      <arg type="d" direction="out"/>
```

```
    </method>
```

```
    <!-- Mark the signals as exported -->
```

```
    <signal name="StateChanged"/>
```

```
    <signal name="AcquisitionFailed"/>
```

```
    <signal name="AcquisitionProgress"/>
```

```
  </interface>
```

```
</node>
```

```
File = stats.c
```

```
/* stats.c - statistics from the bus driver
```

```
 *
```

```
 * Licensed under the Academic Free License version 2.1
```

```
 *
```

```
 * This program is free software; you can redistribute it and/or  
modify
```

```
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* (at your option) any later version.
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*
* You should have received a copy of the GNU General Public License
* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
* 02110-1301 USA
*/
```

```
#include <config.h>
#include "stats.h"
```

```
#include <dbus/dbus-internals.h>
#include <dbus/dbus-connection-internal.h>
```

```
#include "connection.h"
#include "services.h"
#include "utils.h"
```

```
#ifdef DBUS_ENABLE_STATS
```

```
static DBusMessage *
new_asv_reply (DBusMessage      *message,
              DBusMessageIter  *iter,
              DBusMessageIter  *arr_iter)
{
    DBusMessage *reply = dbus_message_new_method_return (message);

    if (reply == NULL)
        return NULL;

    dbus_message_iter_init_append (reply, iter);

    if (!dbus_message_iter_open_container (iter, DBUS_TYPE_ARRAY,
    "{sv}",
                                         arr_iter))
    {
        dbus_message_unref (reply);
        return NULL;
    }

    return reply;
}
```

```
static dbus_bool_t
```



```

open_asv_entry (DBusMessageIter *arr_iter,
                DBusMessageIter *entry_iter,
                const char      *key,
                const char      *type,
                DBusMessageIter *var_iter)
{
    if (!dbus_message_iter_open_container (arr_iter,
    DBUS_TYPE_DICT_ENTRY,
                                NULL, entry_iter))
        return FALSE;

    if (!dbus_message_iter_append_basic (entry_iter, DBUS_TYPE_STRING,
    &key))
    {
        dbus_message_iter_abandon_container (arr_iter, entry_iter);
        return FALSE;
    }

    if (!dbus_message_iter_open_container (entry_iter,
    DBUS_TYPE_VARIANT,
                                type, var_iter))
    {
        dbus_message_iter_abandon_container (arr_iter, entry_iter);
        return FALSE;
    }

    return TRUE;
}

static dbus_bool_t
close_asv_entry (DBusMessageIter *arr_iter,
                DBusMessageIter *entry_iter,
                DBusMessageIter *var_iter)
{
    if (!dbus_message_iter_close_container (entry_iter, var_iter))
    {
        dbus_message_iter_abandon_container (arr_iter, entry_iter);
        return FALSE;
    }

    if (!dbus_message_iter_close_container (arr_iter, entry_iter))
        return FALSE;

    return TRUE;
}

static dbus_bool_t
close_asv_reply (DBusMessageIter *iter,
                DBusMessageIter *arr_iter)
{
    return dbus_message_iter_close_container (iter, arr_iter);
}

```

```

static void
abandon_asv_entry (DBusMessageIter *arr_iter,
                  DBusMessageIter *entry_iter,
                  DBusMessageIter *var_iter)
{
    dbus_message_iter_abandon_container (entry_iter, var_iter);
    dbus_message_iter_abandon_container (arr_iter, entry_iter);
}

static void
abandon_asv_reply (DBusMessageIter *iter,
                  DBusMessageIter *arr_iter)
{
    dbus_message_iter_abandon_container (iter, arr_iter);
}

static dbus_bool_t
asv_add_uint32 (DBusMessageIter *iter,
               DBusMessageIter *arr_iter,
               const char *key,
               dbus_uint32_t value)
{
    DBusMessageIter entry_iter, var_iter;

    if (!open_asv_entry (arr_iter, &entry_iter, key,
                        DBUS_TYPE_UINT32_AS_STRING,
                        &var_iter))
        goto oom;

    if (!dbus_message_iter_append_basic (&var_iter, DBUS_TYPE_UINT32,
                                         &value))
    {
        abandon_asv_entry (arr_iter, &entry_iter, &var_iter);
        goto oom;
    }

    if (!close_asv_entry (arr_iter, &entry_iter, &var_iter))
        goto oom;

    return TRUE;

oom:
    abandon_asv_reply (iter, arr_iter);
    return FALSE;
}

static dbus_bool_t
asv_add_string (DBusMessageIter *iter,
                DBusMessageIter *arr_iter,
                const char *key,
                const char *value)

```

```

{
    DBusMessageIter entry_iter, var_iter;

    if (!open_asv_entry (arr_iter, &entry_iter, key,
        DBUS_TYPE_STRING_AS_STRING,
        &var_iter))
        goto oom;

    if (!dbus_message_iter_append_basic (&var_iter, DBUS_TYPE_STRING,
        &value))
    {
        abandon_asv_entry (arr_iter, &entry_iter, &var_iter);
        goto oom;
    }

    if (!close_asv_entry (arr_iter, &entry_iter, &var_iter))
        goto oom;

    return TRUE;

oom:
    abandon_asv_reply (iter, arr_iter);
    return FALSE;
}

dbus_bool_t
bus_stats_handle_get_stats (DBusConnection *connection,
    BusTransaction *transaction,
    DBusMessage *message,
    DBusError *error)
{
    BusConnections *connections;
    DBusMessage *reply = NULL;
    DBusMessageIter iter, arr_iter;
    static dbus_uint32_t stats_serial = 0;
    dbus_uint32_t in_use, in_free_list, allocated;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    connections = bus_transaction_get_connections (transaction);

    reply = new_asv_reply (message, &iter, &arr_iter);

    if (reply == NULL)
        goto oom;

    /* Globals */

    if (!asv_add_uint32 (&iter, &arr_iter, "Serial", stats_serial++))
        goto oom;

    _dbus_list_get_stats (&in_use, &in_free_list, &allocated);

```

```

    if (!asv_add_uint32 (&iter, &arr_iter, "ListMemPoolUsedBytes",
in_use) ||
        !asv_add_uint32 (&iter, &arr_iter, "ListMemPoolCachedBytes",
                        in_free_list) ||
        !asv_add_uint32 (&iter, &arr_iter, "ListMemPoolAllocatedBytes",
                        allocated))
        goto oom;

/* Connections */

if (!asv_add_uint32 (&iter, &arr_iter, "ActiveConnections",
    bus_connections_get_n_active (connections)) ||
    !asv_add_uint32 (&iter, &arr_iter, "IncompleteConnections",
    bus_connections_get_n_incomplete (connections)) ||
    !asv_add_uint32 (&iter, &arr_iter, "MatchRules",
    bus_connections_get_total_match_rules (connections)) ||
    !asv_add_uint32 (&iter, &arr_iter, "PeakMatchRules",
    bus_connections_get_peak_match_rules (connections)) ||
    !asv_add_uint32 (&iter, &arr_iter,
"PeakMatchRulesPerConnection",
    bus_connections_get_peak_match_rules_per_conn (connections))
||
    !asv_add_uint32 (&iter, &arr_iter, "BusNames",
    bus_connections_get_total_bus_names (connections)) ||
    !asv_add_uint32 (&iter, &arr_iter, "PeakBusNames",
    bus_connections_get_peak_bus_names (connections)) ||
    !asv_add_uint32 (&iter, &arr_iter, "PeakBusNamesPerConnection",
    bus_connections_get_peak_bus_names_per_conn (connections)))
    goto oom;

/* end */

if (!close_asv_reply (&iter, &arr_iter))
    goto oom;

if (!bus_transaction_send_from_driver (transaction, connection,
reply))
    goto oom;

dbus_message_unref (reply);
return TRUE;

oom:
if (reply != NULL)
    dbus_message_unref (reply);

BUS_SET_OOM (error);
return FALSE;
}

dbus_bool_t

```

```

bus_stats_handle_get_connection_stats (DBusConnection
*caller_connection,
                                     BusTransaction *transaction,
                                     DBusMessage     *message,
                                     DBusError       *error)
{
    const char *bus_name = NULL;
    DBusString bus_name_str;
    DBusMessage *reply = NULL;
    DBusMessageIter iter, arr_iter;
    static dbus_uint32_t stats_serial = 0;
    dbus_uint32_t in_messages, in_bytes, in_fds, in_peak_bytes,
in_peak_fds;
    dbus_uint32_t out_messages, out_bytes, out_fds, out_peak_bytes,
out_peak_fds;
    BusRegistry *registry;
    BusService *service;
    DBusConnection *stats_connection;

    _DBUS_ASSERT_ERROR_IS_CLEAR (error);

    registry = bus_connection_get_registry (caller_connection);

    if (! dbus_message_get_args (message, error,
                                DBUS_TYPE_STRING, &bus_name,
                                DBUS_TYPE_INVALID))
        return FALSE;

    _dbus_string_init_const (&bus_name_str, bus_name);
    service = bus_registry_lookup (registry, &bus_name_str);

    if (service == NULL)
    {
        dbus_set_error (error, DBUS_ERROR_NAME_HAS_NO_OWNER,
                        "Bus name '%s' has no owner", bus_name);
        return FALSE;
    }

    stats_connection = bus_service_get_primary_owners_connection
(service);
    _dbus_assert (stats_connection != NULL);

    reply = new_asv_reply (message, &iter, &arr_iter);

    if (reply == NULL)
        goto oom;

    /* Bus daemon per-connection stats */

    if (!asv_add_uint32 (&iter, &arr_iter, "Serial", stats_serial++) ||
        !asv_add_uint32 (&iter, &arr_iter, "MatchRules",
                        bus_connection_get_n_match_rules (stats_connection)) ||

```

```

    !asv_add_uint32 (&iter, &arr_iter, "PeakMatchRules",
        bus_connection_get_peak_match_rules (stats_connection)) ||
    !asv_add_uint32 (&iter, &arr_iter, "BusNames",
        bus_connection_get_n_services_owned (stats_connection)) ||
    !asv_add_uint32 (&iter, &arr_iter, "PeakBusNames",
        bus_connection_get_peak_bus_names (stats_connection)) ||
    !asv_add_string (&iter, &arr_iter, "UniqueName",
        bus_connection_get_name (stats_connection))
goto oom;

/* DBusConnection per-connection stats */

_dbus_connection_get_stats (stats_connection,
                            &in_messages, &in_bytes, &in_fds,
                            &in_peak_bytes, &in_peak_fds,
                            &out_messages, &out_bytes, &out_fds,
                            &out_peak_bytes, &out_peak_fds);

if (!asv_add_uint32 (&iter, &arr_iter, "IncomingMessages",
in_messages) ||
    !asv_add_uint32 (&iter, &arr_iter, "IncomingBytes", in_bytes) ||
    !asv_add_uint32 (&iter, &arr_iter, "IncomingFDs", in_fds) ||
    !asv_add_uint32 (&iter, &arr_iter, "PeakIncomingBytes",
in_peak_bytes) ||
    !asv_add_uint32 (&iter, &arr_iter, "PeakIncomingFDs",
in_peak_fds) ||
    !asv_add_uint32 (&iter, &arr_iter, "OutgoingMessages",
out_messages) ||
    !asv_add_uint32 (&iter, &arr_iter, "OutgoingBytes", out_bytes)
||
    !asv_add_uint32 (&iter, &arr_iter, "OutgoingFDs", out_fds) ||
    !asv_add_uint32 (&iter, &arr_iter, "PeakOutgoingBytes",
out_peak_bytes) ||
    !asv_add_uint32 (&iter, &arr_iter, "PeakOutgoingFDs",
out_peak_fds))
    goto oom;

/* end */

if (!close_asv_reply (&iter, &arr_iter))
    goto oom;

if (!bus_transaction_send_from_driver (transaction,
caller_connection,
                                        reply))
    goto oom;

dbus_message_unref (reply);
return TRUE;

oom:
if (reply != NULL)

```


DBusError

```
*error);
```

```
#endif /* multiple-inclusion guard */
```

```
File = style.css
```

```
.synopsis, .classsynopsis
```

```
{  
  /* tango:aluminium 1/2 */  
  background: #eeeeec;  
  border: solid 1px #d3d7cf;  
  padding: 0.5em;  
}
```

```
.programlisting
```

```
{  
  /* tango:sky blue 0/1 */  
  background: #e6f3ff;  
  border: solid 1px #729fcf;  
  padding: 0.5em;  
}
```

```
.variablelist
```

```
{  
  padding: 4px;  
  margin-left: 3em;  
}
```

```
.variablelist td:first-child
```

```
{  
  vertical-align: top;  
}
```

```
@media screen {
```

```
  sup a.footnote  
  {  
    position: relative;  
    top: 0em ! important;
```

```
  }
```

```
  /* this is needed so that the local anchors are displayed below the  
  navigation */
```

```
  div.footnote a[name], div.refnamediv a[name], div.refsect1 a[name],  
  div.refsect2 a[name], div.index a[name], div.glossary a[name],  
  div.sect1 a[name]
```

```
  {  
    display: inline-block;  
    position: relative;  
    top: -5em;
```

```
  }
```

```
  /* this seems to be a bug in the xsl style sheets when generating  
  indexes */
```



```

div.index div.index
{
  top: 0em;
}
/* make space for the fixed navigation bar and add space at the
bottom so that
* link targets appear somewhat close to top
*/
body
{
  padding-top: 3.2em;
  padding-bottom: 20em;
}
/* style and size the navigation bar */
table.navigation#top
{
  position: fixed;
  /* tango:scarlet red 0/1 */
  background: #ffe6e6;
  border: solid 1px #ef2929;
  margin-top: 0;
  margin-bottom: 0;
  top: 0;
  left: 0;
  height: 3em;
  z-index: 10;
}
.navigation a, .navigation a:visited
{
  /* tango:scarlet red 3 */
  color: #a40000;
}
.navigation a:hover
{
  /* tango:scarlet red 1 */
  color: #ef2929;
}
td.shortcuts
{
  /* tango:scarlet red 1 */
  color: #ef2929;
  font-size: 80%;
  white-space: nowrap;
}
}
@media print {
  table.navigation {
    visibility: collapse;
    display: none;
  }
  div.titlepage table.navigation {
    visibility: visible;
  }
}

```

```
        display: table;
        /* tango:scarlet red 0/1 */
        background: #ffe6e6;
        border: solid 1px #ef2929;
        margin-top: 0;
        margin-bottom: 0;
        top: 0;
        left: 0;
        height: 3em;
    }
}

.navigation .title
{
    font-size: 200%;
}

div.gallery-float
{
    float: left;
    padding: 10px;
}
div.gallery-float img
{
    border-style: none;
}
div.gallery-spacer
{
    clear: both;
}

a, a:visited
{
    text-decoration: none;
    /* tango:sky blue 2 */
    color: #3465a4;
}
a:hover
{
    text-decoration: underline;
    /* tango:sky blue 1 */
    color: #729fcf;
}

div.table table
{
    border-collapse: collapse;
    border-spacing: 0px;
    /* tango:aluminium 3 */
    border: solid 1px #babdb6;
}
```

```
div.table table td, div.table table th
{
  /* tango:aluminium 3 */
  border: solid 1px #babdb6;
  padding: 3px;
  vertical-align: top;
}

div.table table th
{
  /* tango:aluminium 2 */
  background-color: #d3d7cf;
}

hr
{
  /* tango:aluminium 3 */
  color: #babdb6;
  background: #babdb6;
  border: none 0px;
  height: 1px;
  clear: both;
}

.footer
{
  padding-top: 3.5em;
  /* tango:aluminium 3 */
  color: #babdb6;
  text-align: center;
  font-size: 80%;
}

.warning
{
  /* tango:orange 0/1 */
  background: #ffeed9;
  border-color: #ffb04f;
}

.note
{
  /* tango:chameleon 0/0.5 */
  background: #d8ffb2;
  border-color: #abf562;
}

.note, .warning
{
  padding: 0.5em;
  border-width: 1px;
  border-style: solid;
}

.note h3, .warning h3
```

```

{
  margin-top: 0.0em
}
.note p, .warning p
{
  margin-bottom: 0.0em
}

/* blob links */
h2 .extralinks, h3 .extralinks
{
  float: right;
  /* tango:aluminium 3 */
  color: #babdb6;
  font-size: 80%;
  font-weight: normal;
}

.annotation
{
  /* tango:aluminium 5 */
  color: #555753;
  font-size: 80%;
  font-weight: normal;
}

/* code listings */

.listing_code .programlisting .cbracket { color: #a40000; } /*
tango: scarlet red 3 */
.listing_code .programlisting .comment { color: #a1a39d; } /*
tango: aluminium 4 */
.listing_code .programlisting .function { color: #000000; font-
weight: bold; }
.listing_code .programlisting .function a { color: #11326b; font-
weight: bold; } /* tango: sky blue 4 */
.listing_code .programlisting .keyword { color: #4e9a06; } /*
tango: chameleon 3 */
.listing_code .programlisting .linenum { color: #babdb6; } /*
tango: aluminium 3 */
.listing_code .programlisting .normal { color: #000000; }
.listing_code .programlisting .number { color: #75507b; } /*
tango: plum 2 */
.listing_code .programlisting .preproc { color: #204a87; } /*
tango: sky blue 3 */
.listing_code .programlisting .string { color: #c17d11; } /*
tango: chocolate 2 */
.listing_code .programlisting .type { color: #000000; }
.listing_code .programlisting .type a { color: #11326b; } /*
tango: sky blue 4 */
.listing_code .programlisting .symbol { color: #ce5c00; } /*
tango: orange 3 */

```

```

.listing_frame {
  /* tango:sky blue 1 */
  border: solid 1px #729fcf;
  padding: 0px;
}

.listing_lines, .listing_code {
  margin-top: 0px;
  margin-bottom: 0px;
  padding: 0.5em;
}

.listing_lines {
  /* tango:sky blue 0.5 */
  background: #a6c5e3;
  /* tango:aluminium 6 */
  color: #2e3436;
}

.listing_code {
  /* tango:sky blue 0 */
  background: #e6f3ff;
}

.listing_code .programlisting {
  /* override from previous */
  border: none 0px;
  padding: 0px;
}

.listing_lines pre, .listing_code pre {
  margin: 0px;
}

```

File = system-activation.txt

D-BUS System Activation

Introduction:

The dbus-daemon runs as the dbus user, and is therefore unprivileged. Earlier attempts [1] by David Zeuthen at launching system scripts using a custom DBUS protocol were reviewed, but deemed too difficult to audit, and also due to a multi-threaded design, too difficult to test. In the next few paragraphs I will outline a simpler setuid approach for launching daemons as a configured user.

Scope:

Launching programs using dbus has been a topic of interest for many months.

This would allow simple systems to only start services that are needed,

and that are automatically started only when first requested.

This removes the need for an init system, and means that we can trivially

startup services in parallel.

This has immediate pressing need for OLPC, with a longer term evaluation for

perhaps Fedora and RHEL.

Details:

Setuid applications have to be used only when absolutely necessary.

In this implementation I have a single executable,

dbus-daemon-launch-helper, with the ownership root:dbus.

This has the permissions 4750, i.e. u+rx g+rx +setuid.

It is located in /usr/libexec/ and thus is not designed to be invoked by a

user directly.

The helper must not be passed input that can be changed maliciously, and

therefore passing a random path with user id is totally out of the question.

In this implementation a similar idea as discussed with Davids' patch was

taken, that to pass a single name argument to the helper.

The service filename of "org.me.test.service" is then searched for in /usr/share/dbus-1/system-services or other specified directories.

If applications want to be activated on the system _and_ session busses, then

service files should be installed in both directories.

A typical service file would look like:

```
[D-BUS Service]
Name=org.me.test
Exec=/usr/sbin/dbus-test-server.py
User=ftp
```

This gives the user to switch to, and also the path of the executable. The service name must match that specified in the /etc/dbus-1/system.d conf file.

Precautions taken:

* Only the bus name is passed to the helper, and this is validated

* We are super paranoid about the user that called us, and what permissions we have.

- * We clear all environment variables except for DBUS_VERBOSE which is used for debugging
- * Anything out of the ordinary causes the helper to abort.

Launching services:

Trivial methods on services can be called directly and the launch helper will start the service and execute the method on the service. The launching of the service is completely transparent to the caller, e.g.:

```
dbus-send --system --print-reply          \
  --dest=org.freedesktop.Hal              \
  /org/freedesktop/Hal/Manager            \
  org.freedesktop.Hal.Manager.DeviceExists \
  string:/org/freedesktop/Hal/devices/computer
```

If you wish to activate the service without calling a well known method, the standard dbus method StartServiceByName can be used:

```
dbus-send --system --print-reply          \
  --dest=org.freedesktop.DBus             \
  /org/freedesktop/DBus                   \
  org.freedesktop.DBus.StartServiceByName \
  string:org.freedesktop.Hal uint32:0
```

[1] <http://lists.freedesktop.org/archives/dbus/2006-October/006096.html>

File = system.conf

```
<!-- This configuration file controls the systemwide message bus.
Add a system-local.conf and edit that rather than changing this
file directly. -->
```

```
<!-- Note that there are any number of ways you can hose yourself
security-wise by screwing up this file; in particular, you
probably don't want to listen on any more addresses, add any more
auth mechanisms, run as a different user, etc. -->
```

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-Bus Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
```

```
<!-- Our well-known bus type, do not change this -->
<type>system</type>
```

```

<!-- Run as special user -->
<user>messagebus</user>

<!-- Fork into daemon mode -->
<fork/>

<!-- We use system service launching using a helper -->
<standard_system_servicedirs/>

<!-- This is a setuid helper that is used to launch system services
-->
<servicehelper>/usr/lib/dbus/dbus-daemon-launch-
helper</servicehelper>

<!-- Write a pid file -->
<pidfile>/var/run/dbus/pid</pidfile>

<!-- Enable logging to syslog -->
<syslog/>

<!-- Only allow socket-credentials-based authentication -->
<auth>EXTERNAL</auth>

<!-- Only listen on a local socket. (abstract=/path/to/socket
      means use abstract namespace, don't really create filesystem
      file; only Linux supports this. Use path=/whatever on other
      systems.) -->
<listen>unix:path=/var/run/dbus/system_bus_socket</listen>

<policy context="default">
  <!-- All users can connect to system bus -->
  <allow user="*" />

  <!-- Holes must be punched in service configuration files for
        name ownership and sending method calls -->
  <deny own="*" />
  <deny send_type="method_call" />

  <!-- Signals and reply messages (method returns, errors) are
allowed
        by default -->
  <allow send_type="signal" />
  <allow send_requested_reply="true" send_type="method_return" />
  <allow send_requested_reply="true" send_type="error" />

  <!-- All messages may be received by default -->
  <allow receive_type="method_call" />
  <allow receive_type="method_return" />
  <allow receive_type="error" />
  <allow receive_type="signal" />

```



```

    <!-- Allow anyone to talk to the message bus -->
    <allow send_destination="org.freedesktop.DBus"/>
    <!-- But disallow some specific bus services -->
    <deny send_destination="org.freedesktop.DBus"
        send_interface="org.freedesktop.DBus"
        send_member="UpdateActivationEnvironment"/>
</policy>

<!-- Config files are placed here that among other things, punch
     holes in the above policy for specific services. -->
<includedir>system.d</includedir>

<!-- This is included last so local configuration can override
what's
     in this standard file -->
<include ignore_missing="yes">system-local.conf</include>

<include if_selinux_enabled="yes"
selinux_root_relative="yes">contexts/dbus_contexts</include>

</busconfig>

File = system.conf.cmake

<!-- This configuration file controls the systemwide message bus.
     Add a system-local.conf and edit that rather than changing this
     file directly. -->

<!-- Note that there are any number of ways you can hose yourself
     security-wise by screwing up this file; in particular, you
     probably don't want to listen on any more addresses, add any more
     auth mechanisms, run as a different user, etc. -->

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>

    <!-- Our well-known bus type, do not change this -->
    <type>system</type>

    <!-- Run as special user -->
    <user>@DBUS_USER@</user>

    <!-- Fork into daemon mode -->
    <fork/>

    <!-- Write a pid file -->
    <pidfile>@DBUS_SYSTEM_PID_FILE@</pidfile>

```

```

<!-- Only allow socket-credentials-based authentication -->
<auth>EXTERNAL</auth>

<!-- Only listen on a local socket. (abstract=/path/to/socket
      means use abstract namespace, don't really create filesystem
      file; only Linux supports this. Use path=/whatever on other
      systems.) -->
<listen>@DBUS_SYSTEM_BUS_DEFAULT_ADDRESS@</listen>

<policy context="default">
  <!-- Deny everything then punch holes -->
  <deny send_interface="*" />
  <deny receive_interface="*" />
  <deny own="*" />
  <!-- But allow all users to connect -->
  <allow user="*" />
  <!-- Allow anyone to talk to the message bus -->
  <!-- FIXME I think currently these allow rules are always implicit
        even if they aren't in here -->
  <allow send_destination="org.freedesktop.DBus" />
  <allow receive_sender="org.freedesktop.DBus" />
  <!-- valid replies are always allowed -->
  <allow send_requested_reply="true" />
  <allow receive_requested_reply="true" />
</policy>

<!-- Config files are placed here that among other things, punch
      holes in the above policy for specific services. -->
<includedir>system.d</includedir>

<!-- This is included last so local configuration can override
what's
      in this standard file -->
<include ignore_missing="yes">system-local.conf</include>

<include if_selinux_enabled="yes"
selinux_root_relative="yes">contexts/dbus_contexts</include>

</busconfig>

```

File = system.conf.in

```

<!-- This configuration file controls the systemwide message bus.
      Add a system-local.conf and edit that rather than changing this
      file directly. -->

```

```

<!-- Note that there are any number of ways you can hose yourself
      security-wise by screwing up this file; in particular, you
      probably don't want to listen on any more addresses, add any more
      auth mechanisms, run as a different user, etc. -->

```

```

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-Bus Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>

  <!-- Our well-known bus type, do not change this -->
  <type>system</type>

  <!-- Run as special user -->
  <user>@DBUS_USER@</user>

  <!-- Fork into daemon mode -->
  <fork/>

  <!-- We use system service launching using a helper -->
  <standard_system_servicedirs/>

  <!-- This is a setuid helper that is used to launch system services
  -->
  <servicehelper>@DBUS_LIBEXECDIR@/dbus-daemon-launch-
  helper</servicehelper>

  <!-- Write a pid file -->
  <pidfile>@DBUS_SYSTEM_PID_FILE@</pidfile>

  <!-- Enable logging to syslog -->
  <syslog/>

  <!-- Only allow socket-credentials-based authentication -->
  <auth>EXTERNAL</auth>

  <!-- Only listen on a local socket. (abstract=/path/to/socket
  means use abstract namespace, don't really create filesystem
  file; only Linux supports this. Use path=/whatever on other
  systems.) -->
  <listen>@DBUS_SYSTEM_BUS_DEFAULT_ADDRESS@</listen>

  <policy context="default">
    <!-- All users can connect to system bus -->
    <allow user="*" />

    <!-- Holes must be punched in service configuration files for
    name ownership and sending method calls -->
    <deny own="*" />
    <deny send_type="method_call" />

    <!-- Signals and reply messages (method returns, errors) are
    allowed
    by default -->
    <allow send_type="signal" />
    <allow send_requested_reply="true" send_type="method_return" />

```

```

<allow send_requested_reply="true" send_type="error"/>

<!-- All messages may be received by default -->
<allow receive_type="method_call"/>
<allow receive_type="method_return"/>
<allow receive_type="error"/>
<allow receive_type="signal"/>

<!-- Allow anyone to talk to the message bus -->
<allow send_destination="org.freedesktop.DBus"/>
<!-- But disallow some specific bus services -->
<deny send_destination="org.freedesktop.DBus"
      send_interface="org.freedesktop.DBus"
      send_member="UpdateActivationEnvironment"/>
</policy>

<!-- Config files are placed here that among other things, punch
      holes in the above policy for specific services. -->
<includedir>system.d</includedir>

<!-- This is included last so local configuration can override
what's
      in this standard file -->
<include ignore_missing="yes">system-local.conf</include>

<include if_selinux_enabled="yes"
selinux_root_relative="yes">contexts/dbus_contexts</include>

</busconfig>

```

File = test-activation-forking.py

```
#!/usr/bin/env python
```

```
import os,sys
```

```
try:
```

```
    import gobject
    import dbus
    import dbus.mainloop.glib
```

```
except:
```

```
    print "Failed import, aborting test"
    sys.exit(0)
```

```
dbus.mainloop.glib.DBusGMainLoop(set_as_default=True)
loop = gobject.MainLoop()
```

```
exitcode = 0
```

```
bus = dbus.SessionBus()
```

```

bus_iface = dbus.Interface(bus.get_object('org.freedesktop.DBus',
'/org/freedesktop/DBus'), 'org.freedesktop.DBus')

o = bus.get_object('org.freedesktop.DBus.TestSuiteForkingEchoService',
'/org/freedesktop/TestSuite')
i = dbus.Interface(o, 'org.freedesktop.TestSuite')

# Start it up
reply = i.Echo("hello world")
print "TestSuiteForkingEchoService initial reply OK"

def ignore(*args, **kwargs):
    pass

# Now monitor for exits, when that happens, start it up again.
# The goal here is to try to hit any race conditions in activation.
counter = 0
def on_forking_echo_owner_changed(name, old, new):
    global counter
    global o
    global i
    if counter > 10:
        print "Activated 10 times OK, TestSuiteForkingEchoService
pass"
        loop.quit()
        return
    counter += 1
    if new == '':
        o =
bus.get_object('org.freedesktop.DBus.TestSuiteForkingEchoService',
'/org/freedesktop/TestSuite')
        i = dbus.Interface(o, 'org.freedesktop.TestSuite')
        i.Echo("counter %r" % counter)
        i.Exit(reply_handler=ignore, error_handler=ignore)

bus_iface.connect_to_signal('NameOwnerChanged',
on_forking_echo_owner_changed,
arg0='org.freedesktop.DBus.TestSuiteForkingEchoService')

i.Exit(reply_handler=ignore, error_handler=ignore)

def check_counter():
    if counter == 0:
        print "Failed to get NameOwnerChanged for
TestSuiteForkingEchoService"
        sys.exit(1)
gobject.timeout_add(15000, check_counter)

loop.run()
sys.exit(0)

```

File = test-autolaunch.c

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#ifdef HAVE_UNISTD_H
#include <unistd.h>
#endif

#include <dbus/dbus.h>
#include "dbus/dbus-sysdeps.h"

int
main (int argc, char *argv[])
{
    DBusConnection *conn = NULL;
    DBusError error;

    _dbus_setenv ("DBUS_SESSION_BUS_ADDRESS", NULL);

    dbus_error_init (&error);

    conn = dbus_bus_get (DBUS_BUS_SESSION, &error);

#ifdef DBUS_ENABLE_X11_AUTOLAUNCH
    if (dbus_error_is_set (&error))
    {
        fprintf (stderr, "*** Failed to autolaunch session bus: %s\n",
                error.message);
        dbus_error_free (&error);
        return 1;
    }
#else
    /* We don't necessarily expect it to *work* without X (although it
    might -
    * for instance on Mac OS it might have used launchd). Just check
    that the
    * results are consistent. */

    if (dbus_error_is_set (&error) && conn != NULL)
    {
        fprintf (stderr, "*** Autolaunched session bus, but an error was
set!\n");
        return 1;
    }
#endif

    if (!dbus_error_is_set (&error) && conn == NULL)
    {
        fprintf (stderr, "*** Failed to autolaunch session bus but no
error was set\n");
    }
}
```



```

    g_value_unset (&set_value);
    if (!success)
    {
        g_print ("Error while setting DupProp Interface %s property:
%s\n", detail, error->message);
        g_error_free (error);
        exit(1);
    }
    else
        g_print ("Set DupProp Interface %s property with success\n",
detail);
}

success = dbus_g_proxy_call (proxy, "Get", &error,
                             G_TYPE_STRING, iface,
                             G_TYPE_STRING, "Foobar",
                             G_TYPE_INVALID,
                             G_TYPE_VALUE, &get_value,
                             G_TYPE_INVALID);

if (!success)
{
    g_print ("Error while getting DupProp Interface %s property:
%s\n", detail, error->message);
    g_error_free (error);
    exit(1);
}
else
    g_print ("Got DupProp Interface %s property with success\n",
detail);

if (!G_VALUE HOLDS_UINT (&get_value))
{
    g_print ("Error comparing DupProp %s Interface property:
unexpected type %s\n",
            detail, G_VALUE_TYPE_NAME (&get_value));
    g_error_free (error);
    exit(1);
}
else if (g_value_get_uint (&get_value) != expected)
{
    g_print ("Error comparing DupProp %s Interface property:
expected %d, got %d\n",
            detail, expected, g_value_get_uint (&get_value));
    g_error_free (error);
    exit(1);
}
else
    g_print ("Got DupProp Interface %s property value matched
expected\n", detail);
}

int

```



```

main (int    argc,
      char **argv)
{
    DBusGConnection *connection;
    DBusGProxy *proxy;
    GError *error = NULL;
    gchar *str;
    gboolean success;
    DBusGProxy *dp_proxy;

    g_type_init ();

    connection = dbus_g_bus_get (DBUS_BUS_SESSION, &error);
    if (connection == NULL)
    {
        g_error ("Failed to make connection to session bus: %s", error-
>message);
        g_error_free (error);
        exit(1);
    }

    proxy = dbus_g_proxy_new_for_name (connection, TEST_NAMESPACE,
TEST_OBJECT_PATH,

"org.freedesktop.DBus.GLib.Test.Interfaces.Song");
    success = org_freedesktop_DBus_GLib_Test_Interfaces_Song_get_title
(proxy, &str, &error);
    g_object_unref (proxy);

    if (!success)
    {
        g_print ("Error while calling Parent object method: %s\n",
error->message);
        g_error_free (error);
        exit(1);
    }
    else
    {
        g_free (str);
        g_print ("Called Parent object method with success\n");
    }

    proxy = dbus_g_proxy_new_for_name (connection, TEST_NAMESPACE,
TEST_OBJECT_PATH,

"org.freedesktop.DBus.GLib.Test.Interfaces.Hello");
    g_assert (proxy != NULL);
    success = org_freedesktop_DBus_GLib_Test_Interfaces_Hello_say_hello
(proxy, &str, &error);
    g_object_unref (proxy);

    if (!success)

```

```

    {
        g_print ("Error while calling Parent Interface object method:
%s\n", error->message);
        g_error_free (error);
        exit(1);
    }
    else
    {
        g_free (str);
        g_print ("Called Parent Interface object method with
success\n");
    }

    proxy = dbus_g_proxy_new_for_name (connection, TEST_NAMESPACE,
TEST_OBJECT_PATH,

"org.freedesktop.DBus.GLib.Test.Interfaces.Goodbye");
    success =
org_freedesktop_DBus_GLib_Test_Interfaces_Goodbye_say_goodbye (proxy,
&str, &error);
    g_object_unref (proxy);

    if (!success)
    {
        g_print ("Error while calling Object Interface object method:
%s\n", error->message);
        g_error_free (error);
        exit(1);
    }
    else
    {
        g_free (str);
        g_print ("Called Object Interface object method with
success\n");
    }

    /* Test interfaces with conflicting property names on the same
GObject */
    dp_proxy = dbus_g_proxy_new_for_name (connection, TEST_NAMESPACE,
TEST_DP_OBJECT_PATH,

"org.freedesktop.DBus.Properties");

    /* test that setting the property and reading it back works */
    test_dp_property (dp_proxy, "A", TEST_DP_IFACE_A, 235235, FALSE);
    test_dp_property (dp_proxy, "B", TEST_DP_IFACE_B, 11981241, FALSE);

    /* Test that setting A does not change B */
    test_dp_property (dp_proxy, "B", TEST_DP_IFACE_B, 11981241, FALSE);
    test_dp_property (dp_proxy, "A", TEST_DP_IFACE_A, 235235, FALSE);
    test_dp_property (dp_proxy, "B", TEST_DP_IFACE_B, 11981241, TRUE);

```

```

/* And test that setting B does not change A */
test_dp_property (dp_proxy, "A", TEST_DP_IFACE_A, 235235, FALSE);
test_dp_property (dp_proxy, "B", TEST_DP_IFACE_B, 11981241, FALSE);
test_dp_property (dp_proxy, "A", TEST_DP_IFACE_A, 235235, TRUE);

g_object_unref (dp_proxy);

/* Ensure the properties are introspectable */
dp_proxy = dbus_g_proxy_new_for_name (connection, TEST_NAMESPACE,
TEST_DP_OBJECT_PATH,

"org.freedesktop.DBus.Introspectable");

g_print ("Testing duplicate property name introspection\n");
if (!dbus_g_proxy_call (dp_proxy, "Introspect", &error,
                        G_TYPE_INVALID,
                        G_TYPE_STRING, &str,
                        G_TYPE_INVALID))
    {
        g_print ("Error while introspecting duplicate properties: %s\n",
error->message);
        g_error_free (error);
        exit(1);
    }
else
    g_print ("Introspected duplicate properties with success\n");

{
    NodeInfo *node;
    GSList *elt;
    gboolean found_introspectable = FALSE;
    gboolean found_properties = FALSE;
    gboolean found_iface_a = FALSE;
    gboolean found_iface_a_prop = FALSE;
    gboolean found_iface_b = FALSE;
    gboolean found_iface_b_prop = FALSE;

    node = description_load_from_string (str, strlen (str), &error);
    if (!node)
        {
            g_print ("Failed to parse introspection data: %s\n", error-
>message);
            g_error_free (error);
            exit(1);
        }

    for (elt = node_info_get_interfaces (node); elt ; elt = elt->next)
        {
            InterfaceInfo *iface = elt->data;

            if (!found_introspectable && strcmp (interface_info_get_name
(iface), "org.freedesktop.DBus.Introspectable") == 0)

```

```

        found_introspectable = TRUE;
        else if (!found_properties && strcmp (interface_info_get_name
(iface), "org.freedesktop.DBus.Properties") == 0)
            found_properties = TRUE;
        else if (!found_iface_a && strcmp (interface_info_get_name
(iface), "org.freedesktop.DBus.GLib.Test.Interfaces.A") == 0)
            {
                GSList *elt;

                found_iface_a = TRUE;

                for (elt = interface_info_get_properties (iface); elt; elt
= elt->next)
                    {
                        PropertyInfo *prop;

                        prop = elt->data;
                        if (strcmp (property_info_get_name (prop), "Foobar")
== 0)
                            {
                                found_iface_a_prop = TRUE;
                                break;
                            }
                    }
                }
            else if (!found_iface_b && strcmp (interface_info_get_name
(iface), "org.freedesktop.DBus.GLib.Test.Interfaces.B") == 0)
                {
                    GSList *elt;

                    found_iface_b = TRUE;

                    for (elt = interface_info_get_properties (iface); elt; elt
= elt->next)
                        {
                            PropertyInfo *prop;

                            prop = elt->data;
                            if (strcmp (property_info_get_name (prop), "Foobar")
== 0)
                                {
                                    found_iface_b_prop = TRUE;
                                    break;
                                }
                        }
                }
            }
        g_free (str);

        if (!found_iface_a_prop || !found_iface_b_prop)
            {

```

```

        g_print ("Failed to find Foobar properties in introspection
data\n");
        g_error_free (error);
        exit(1);
    }
}

exit(0);
}

/* ex:ts=2:et: */

```

File = test-compile-nested.sh

```
#!/bin/sh
```

```

# http://bugs.freedesktop.org/show_bug.cgi?id=19065
echo ${DEBUG} ${top_builddir}/dbus/dbus-binding-tool --mode=glib-
server --prefix=test ${srcdir}/data/nested-introspect.xml
${DEBUG} ${top_builddir}/dbus/dbus-binding-tool --mode=glib-server --
prefix=test ${srcdir}/data/nested-introspect.xml >/dev/null

```

File = test-dbus-glib.c

```

/* General tests for dbus-glib. Please make new tests into a
standalone
* binary using GTest instead, where feasible.
*
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```

```

* along with this program; if not, write to the Free Software
* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston,
* MA 02110-1301 USA
*/

#include <config.h>

/* -*- mode: C; c-file-style: "gnu" -*- */
#include <dbus/dbus-glib.h>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include "test-service-glib-bindings.h"
#include <dbus/dbus-gidl.h>
#include <dbus/dbus-gparser.h>
#include <glib.h>
#include <glib-object.h>
#include "my-object.h"

GMainLoop *loop = NULL;

static const char *await_terminating_service = NULL;
static int n_times_foo_received = 0;
static int n_times_froblicate_received = 0;
static int n_times_froblicate_received_2 = 0;
static int n_times_compat_froblicate_received = 0;
static int n_times_sig0_received = 0;
static int n_times_sig1_received = 0;
static int n_times_sig2_received = 0;
static guint exit_timeout = 0;
static gboolean proxy_destroyed = FALSE;
static gboolean proxy_destroy_and_nameowner = FALSE;
static gboolean proxy_destroy_and_nameowner_complete = FALSE;

static DBusGProxy *test_terminate_proxy1 = NULL;
static DBusGProxy *test_terminate_proxy2 = NULL;

#define lose(...) g_error (__VA_ARGS__)

static void lose_gerror (const char *prefix, GError *error)
G_GNUC_NORETURN;

static void
unset_and_free_gvalue (gpointer val)
{
    g_value_unset (val);
    g_free (val);
}

static gboolean
timed_exit (gpointer loop)
{

```

```

    g_print ("timed exit!\n");
    g_main_loop_quit (loop);
    return TRUE;
}

static void
proxy_destroyed_cb (DBusGProxy *proxy, gpointer user_data)
{
    proxy_destroyed = TRUE;
    if (proxy_destroy_and_nameowner &&
!proxy_destroy_and_nameowner_complete && await_terminating_service ==
NULL)
    {
        g_source_remove (exit_timeout);
        g_main_loop_quit (loop);
        proxy_destroy_and_nameowner_complete = TRUE;
    }
}

static void
test_terminate_proxy1_destroyed_cb (DBusGProxy *proxy, gpointer
user_data)
{
    proxy_destroyed = TRUE;
    if (proxy_destroy_and_nameowner &&
!proxy_destroy_and_nameowner_complete && await_terminating_service ==
NULL)
    {
        g_object_unref(test_terminate_proxy2);
        test_terminate_proxy2 = NULL;
        g_source_remove (exit_timeout);
        g_main_loop_quit (loop);
        proxy_destroy_and_nameowner_complete = TRUE;
    }
}

static void
name_owner_changed (DBusGProxy *proxy,
                    const char *name,
                    const char *prev_owner,
                    const char *new_owner,
                    gpointer user_data)
{
    g_print ("(signal NameOwnerChanged) name owner changed for %s from
%s to %s\n",
            name, prev_owner, new_owner);
    if (await_terminating_service &&
!strcmp (name, await_terminating_service)
&& !strcmp ("", new_owner))
    {
        g_print ("Caught expected ownership loss for %s\n", name);
    }
}

```

```

        await_terminating_service = NULL;
        if (proxy_destroy_and_nameowner &&
!proxy_destroy_and_nameowner_complete && proxy_destroyed)
        {
            g_source_remove (exit_timeout);
            g_main_loop_quit (loop);
            proxy_destroy_and_nameowner_complete = TRUE;
        }
        else if (!proxy_destroy_and_nameowner)
        {
            g_source_remove (exit_timeout);
            g_main_loop_quit (loop);
        }
    }
}

```

```

static void
foo_signal_handler (DBusGProxy *proxy,
                   double      d,
                   void        *user_data)
{
    n_times_foo_received += 1;

    g_print ("Got Foo signal\n");

    g_main_loop_quit (loop);
    g_source_remove (exit_timeout);
}

```

```

static void
froblicate_signal_handler (DBusGProxy *proxy,
                           int         val,
                           void        *user_data)
{
    n_times_froblicate_received += 1;

    g_assert (val == 42);
    g_print ("Got Frobnicate signal\n");

    g_main_loop_quit (loop);
    g_source_remove (exit_timeout);
}

```

```

static void
froblicate_signal_handler_2 (DBusGProxy *proxy,
                             int         val,
                             void        *user_data)
{
    n_times_froblicate_received_2 += 1;

    g_assert (val == 42);
    g_print ("Got Frobnicate signal (again)\n");
}

```



```

}

static void
frob_nicate_signal_handler_compat (DBusGProxy *proxy,
                                   int          val,
                                   void         *user_data)
{
    n_times_compat_frob_nicate_received += 1;

    g_assert (val == 42);
    g_print ("Got Frobnicate signal (compat)\n");

    g_main_loop_quit (loop);
    g_source_remove (exit_timeout);
}

static void
sig0_signal_handler (DBusGProxy *proxy,
                    const char *str0,
                    int         val,
                    const char *str1,
                    void         *user_data)
{
    n_times_sig0_received += 1;

    g_assert (!strcmp (str0, "foo"));

    g_assert (val == 22);

    g_assert (!strcmp (str1, "moo"));

    g_print ("Got Sig0 signal\n");

    g_main_loop_quit (loop);
    g_source_remove (exit_timeout);
}

static void
sig1_signal_handler (DBusGProxy *proxy,
                    const char *str0,
                    GValue       *value,
                    void         *user_data)
{
    n_times_sig1_received += 1;

    g_assert (!strcmp (str0, "baz"));

    g_assert (G_VALUE_HOLDS_STRING (value));

    g_assert (!strcmp (g_value_get_string (value), "bar"));

    g_print ("Got Sig1 signal\n");
}

```

```

    g_main_loop_quit (loop);
    g_source_remove (exit_timeout);
}

static void
sig2_signal_handler (DBusGProxy *proxy,
                    GHashTable *table,
                    void *user_data)
{
    n_times_sig2_received += 1;

    g_assert (g_hash_table_size (table) == 2);

    g_assert (g_hash_table_lookup (table, "baz") != NULL);
    g_assert (!strcmp (g_hash_table_lookup (table, "baz"), "cow"));
    g_assert (g_hash_table_lookup (table, "bar") != NULL);
    g_assert (!strcmp (g_hash_table_lookup (table, "bar"), "foo"));

    g_print ("Got Sig2 signal\n");

    g_main_loop_quit (loop);
    g_source_remove (exit_timeout);
}

static DBusGProxyCall *echo_call;
static guint n_times_echo_cb_entered;
static void
echo_received_cb (DBusGProxy *proxy,
                 DBusGProxyCall *call,
                 gpointer data)
{
    GError *error;
    char *echo_data;

    g_assert (call == echo_call);
    g_assert (data == NULL);

    error = NULL;
    echo_data = NULL;
    n_times_echo_cb_entered++;

    if (!dbus_g_proxy_end_call (proxy, call, &error,
                              G_TYPE_STRING,
                              &echo_data,
                              G_TYPE_INVALID))
        lose_gerror ("Failed to complete async Echo", error);
    g_assert (echo_data != NULL);
    g_print ("Async echo gave \"%s\"\n", echo_data);
    g_free (echo_data);
    g_main_loop_quit (loop);
    g_source_remove (exit_timeout);
}

```



```

DBusGProxy *proxy;
GError *error = NULL;
GHashTable *hash = NULL;

/* g_test_bug (19145); */

g_assert (expected_string_value != NULL);
g_assert (object_path != NULL);

/* Test GetAll with interfaces on the base class */

proxy = dbus_g_proxy_new_for_name (connection,
                                   "org.freedesktop.DBus.GLib.TestService",
                                   object_path,
                                   DBUS_INTERFACE_PROPERTIES);
g_assert (proxy != NULL);

g_print ("%s: Calling GetAll for unknown interface\n", object_path);
{
    if (dbus_g_proxy_call (proxy, "GetAll", &error,
                          G_TYPE_STRING,
                          "org.freedesktop.DBus.foobar.blahblah",
                          G_TYPE_INVALID,
                          DBUS_TYPE_G_MAP_OF_VARIANT, &hash,
                          G_TYPE_INVALID))
        lose ("Unexpected success for GetAll call of unknown
interface\n");
    g_clear_error (&error);
    hash = NULL;
}

g_print ("%s: Calling GetAll for base class interface\n",
object_path);
{
    GValue *value;
    const char *foo = NULL;

    if (!dbus_g_proxy_call (proxy, "GetAll", &error,
                          G_TYPE_STRING,
                          "org.freedesktop.DBus.GLib.Tests.MyObject",
                          G_TYPE_INVALID,
                          DBUS_TYPE_G_MAP_OF_VARIANT, &hash,
                          G_TYPE_INVALID))
        lose_gerror ("Unexpected error for GetProperty call of base
class interface", error);
    g_clear_error (&error);

    if (!hash)
    {
        lose ("%s: Unexpected NULL hash table returned for GetAll call
of base "
            "class interface", object_path);
    }
}

```

```

    }

    if (g_hash_table_size (hash) != 3)
    {
        lose ("%s: Unexpected hash table size %d (expected 3) returned
for GetAll "
            " call of base class interface", object_path,
g_hash_table_size (hash));
    }
    value = g_hash_table_lookup (hash, "this_is_a_string");
    if (!value)
    {
        lose ("%s: Unexpected missing 'this_is_a_string' property for
GetAll "
            "call of base class interface", object_path);
    }
    if (!G_VALUE_HOLDS_STRING (value))
    {
        lose ("%s: Unexpected wrong type for 'this_is_a_string'
property for "
            "GetAll call of base class interface", object_path);
    }
    foo = g_value_get_string (value);
    if (!foo || strcmp (foo, expected_string_value))
    {
        lose ("%s: Unexpected value for 'this_is_a_string' property for
for GetAll "
            "call of base class interface", object_path);
    }

    value = g_hash_table_lookup (hash, "no-touching");
    if (!value)
        lose ("%s: Unexpected missing 'no-touching' property for GetAll
"
            "call of base class interface", object_path);
    if (!G_VALUE_HOLDS_UINT (value))
        lose ("%s: Unexpected wrong type for 'no-touching' property for
"
            "GetAll call of base class interface", object_path);
    if (g_value_get_uint (value) != 42)
        lose ("%s: Unexpected wrong value \"%d\" for 'no-touching'
property for "
            "GetAll call of base class interface", object_path,
g_value_get_uint (value));
    g_hash_table_destroy (hash);
    hash = NULL;
}

g_object_unref (proxy);
return TRUE;
}

```

```

static gboolean
test_subclass_get_all (DBusGConnection *connection,
                      const char *object_path)
{
    DBusGProxy *proxy;
    GError *error = NULL;
    GHashTable *hash = NULL;

    /* g_test_bug (19145); */

    g_assert (object_path != NULL);

    /* Test GetAll with interfaces on the subclass */

    proxy = dbus_g_proxy_new_for_name (connection,
                                       "org.freedesktop.DBus.GLib.TestService",
                                       object_path,
                                       DBUS_INTERFACE_PROPERTIES);
    g_assert (proxy != NULL);

    g_print ("%s: Calling GetAll for subclass interface\n",
             object_path);
    {
        GValue *value;
        const char *string = NULL;
        guint num = 0;

        if (!dbus_g_proxy_call (proxy, "GetAll", &error,
                               G_TYPE_STRING,
                               "org.freedesktop.DBus.GLib.Tests.MyObjectSubclass",
                               G_TYPE_INVALID,
                               DBUS_TYPE_G_MAP_OF_VARIANT, &hash,
                               G_TYPE_INVALID))
            lose_gerror ("Unexpected error for GetProperty call of base
subclass interface\n", error);
        g_clear_error (&error);

        if (!hash)
            {
                lose ("%s: Unexpected NULL hash table returned for GetAll call
of "
                    "subclass interface\n", object_path);
            }

        if (g_hash_table_size (hash) != 2)
            {
                lose ("%s: Unexpected hash table size %d (expected 2) returned
for GetAll "
                    " call of subclass interface\n", object_path,
                    g_hash_table_size (hash));
            }
    }
}

```

```

/* Test the string property */
value = g_hash_table_lookup (hash, "this_is_a_subclass_string");
if (!value)
{
    lose ("%s: Unexpected missing 'this_is_a_subclass_string'
property for "
        "GetAll call of subclass interface\n", object_path);
}
if (!G_VALUE HOLDS_STRING (value))
{
    lose ("%s: Unexpected wrong type for
'this_is_a_subclass_string' "
        "property for GetAll call of subclass interface\n",
object_path);
}
string = g_value_get_string (value);
if (!string || strcmp (string, "default subclass value"))
{
    lose ("%s: Unexpected value for 'this_is_a_subclass_string'
property "
        "for GetAll call of subclass interface\n", object_path);
}

/* Test the uint property */
value = g_hash_table_lookup (hash, "this_is_a_subclass_uint");
if (!value)
{
    lose ("%s: Unexpected missing 'this_is_a_subclass_uint'
property for "
        "GetAll call of subclass interface\n", object_path);
}
if (!G_VALUE HOLDS_UINT (value))
{
    lose ("%s: Unexpected wrong type for 'this_is_a_subclass_uint'
"
        "property for GetAll call of subclass interface\n",
object_path);
}
num = g_value_get_uint (value);
if (num != 1234567)
{
    lose ("%s: Unexpected value for 'this_is_a_subclass_uint'
property "
        "for GetAll call of subclass interface\n", object_path);
}

g_hash_table_destroy (hash);
hash = NULL;
}

g_object_unref (proxy);
return TRUE;

```

```

}

static void
lose_gerror (const char *prefix, GError *error)
{
    if (error->domain == DBUS_GERROR && error->code ==
        DBUS_GERROR_REMOTE_EXCEPTION)
        lose ("%s (%s): %s", prefix, dbus_g_error_get_name (error),
            error->message);
    else
        lose ("%s: %s#%d: %s", prefix, g_quark_to_string (error->domain),
            error->code, error->message);
}

static void
run_mainloop (void)
{
    GMainContext *ctx;

    ctx = g_main_loop_get_context (loop);

    while (g_main_context_pending (ctx))
        g_main_context_iteration (ctx, FALSE);
}

int
main (int argc, char **argv)
{
    DBusGConnection *connection;
    GError *error;
    DBusGProxy *driver;
    DBusGProxy *proxy;
    DBusGProxy *proxy2;
    DBusGProxy *property_proxy;
    char **name_list;
    guint name_list_len;
    guint i;
    DBusGProxyCall *call;
    guint32 result;
    char *v_STRING_2;
    guint32 v_UINT32_2;
    double v_DOUBLE_2;

    g_type_init ();

    g_log_set_always_fatal (G_LOG_LEVEL_WARNING | G_LOG_LEVEL_CRITICAL);

    loop = g_main_loop_new (NULL, FALSE);

    error = NULL;
    connection = dbus_g_bus_get (DBUS_BUS_SESSION,
                                &error);

```



```

if (connection == NULL)
    lose_gerror ("Failed to open connection to bus", error);

/* should always get the same one */
g_assert (connection == dbus_g_bus_get (DBUS_BUS_SESSION, NULL));
g_assert (connection == dbus_g_bus_get (DBUS_BUS_SESSION, NULL));
g_assert (connection == dbus_g_bus_get (DBUS_BUS_SESSION, NULL));

/* Create a proxy object for the "bus driver" */

driver = dbus_g_proxy_new_for_name (connection,
                                    DBUS_SERVICE_DBUS,
                                    DBUS_PATH_DBUS,
                                    DBUS_INTERFACE_DBUS);

dbus_g_proxy_add_signal (driver,
                        "NameOwnerChanged",
                        G_TYPE_STRING,
                        G_TYPE_STRING,
                        G_TYPE_STRING,
                        G_TYPE_INVALID);

dbus_g_proxy_connect_signal (driver,
                            "NameOwnerChanged",
                            G_CALLBACK (name_owner_changed),
                            NULL,
                            NULL);

/* Call ListNames method */

error = NULL;
if (!dbus_g_proxy_call (driver, "ListNames", &error,
                       G_TYPE_INVALID,
                       G_TYPE_STRV, &name_list,
                       G_TYPE_INVALID))
    lose_gerror ("Failed to complete ListNames call", error);

g_print ("Names on the message bus:\n");
i = 0;
name_list_len = g_strv_length (name_list);
while (i < name_list_len)
{
    g_assert (name_list[i] != NULL);
    g_print (" %s\n", name_list[i]);
    ++i;
}
g_assert (name_list[i] == NULL);

g_strfreev (name_list);

g_print ("calling ThisMethodDoesNotExist\n");
/* Test handling of unknown method */
if (dbus_g_proxy_call (driver, "ThisMethodDoesNotExist", &error,

```

```

        G_TYPE_STRING,
        "blah blah blah blah",
        G_TYPE_INT,
        10,
        G_TYPE_INVALID, G_TYPE_INVALID) != FALSE)
lose ("Calling nonexistent method succeeded!");

g_print ("Got EXPECTED error from calling unknown method: %s\n",
error->message);
g_clear_error (&error);

run_mainloop ();

/* Activate a service */
g_print ("Activating echo service\n");
if (!dbus_g_proxy_call (driver, "StartServiceByName", &error,
        G_TYPE_STRING,
        "org.freedesktop.DBus.GLib.TestEchoService",
        G_TYPE_UINT, 0,
        G_TYPE_INVALID,
        G_TYPE_UINT, &result,
        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Activate call", error);

g_print ("Starting echo service result = 0x%x\n", result);

/* Activate a service again */
g_print ("Activating echo service again\n");
if (!dbus_g_proxy_call (driver, "StartServiceByName", &error,
        G_TYPE_STRING,
        "org.freedesktop.DBus.GLib.TestEchoService",
        G_TYPE_UINT,
        0,
        G_TYPE_INVALID,
        G_TYPE_UINT, &result,
        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Activate call", error);

g_print ("Duplicate start of echo service = 0x%x\n", result);

/* Talk to the new service */

g_print ("Creating proxy for echo service\n");
proxy = dbus_g_proxy_new_for_name_owner (connection,
"org.freedesktop.DBus.GLib.TestEchoService",
"/org/freedesktop/DBus/GLib/TestSuite",
"org.freedesktop.DBus.GLib.TestSuite",
&error);

```

```

if (proxy == NULL)
    lose_gerror ("Failed to create proxy for name owner", error);

run_mainloop ();

g_print ("Calling Echo\n");
if (!dbus_g_proxy_call (proxy, "Echo", &error,
                        G_TYPE_STRING, "my string hello",
                        G_TYPE_INVALID,
                        G_TYPE_STRING, &v_STRING_2,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Echo call", error);

g_print ("String echoed = \"%s\"\n", v_STRING_2);
g_free (v_STRING_2);

g_print ("Calling Echo (async)\n");
echo_call = dbus_g_proxy_begin_call (proxy, "Echo",
                                     echo_received_cb, NULL, NULL,
                                     G_TYPE_STRING, "my string hello",
                                     G_TYPE_INVALID);
dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

/* Exercise invalid number/type of return values */

g_print ("Invalid args; calling Echo\n");
if (dbus_g_proxy_call (proxy, "Echo", &error,
                        G_TYPE_STRING, "my string hello",
                        G_TYPE_INVALID,
                        G_TYPE_INVALID))
    lose ("Unexpected success for invalid Echo return values");
g_clear_error (&error);

g_print ("Invalid args 2; calling Echo\n");
if (dbus_g_proxy_call (proxy, "Echo", &error,
                        G_TYPE_STRING, "my string hello",
                        G_TYPE_INVALID,
                        G_TYPE_UINT, &v_UINT32_2,
                        G_TYPE_INVALID))
    lose ("Unexpected success for invalid Echo return values");
g_clear_error (&error);

g_print ("Invalid args 3; calling Echo\n");
if (dbus_g_proxy_call (proxy, "Echo", &error,
                        G_TYPE_STRING, "my string hello",
                        G_TYPE_INVALID,
                        G_TYPE_STRING, &v_STRING_2,
                        G_TYPE_UINT, &v_UINT32_2,
                        G_TYPE_INVALID))
    lose ("Unexpected success for invalid Echo return values");

```

```

g_clear_error (&error);

/* Test oneway call and signal handling */

g_print ("Testing Foo emission\n");
dbus_g_proxy_add_signal (proxy, "Foo", G_TYPE_DOUBLE,
G_TYPE_INVALID);

dbus_g_proxy_connect_signal (proxy, "Foo",
                             G_CALLBACK (foo_signal_handler),
                             NULL, NULL);

dbus_g_proxy_call_no_reply (proxy, "EmitFoo",
                             G_TYPE_INVALID);

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (n_times_foo_received != 1)
    lose ("Foo signal received %d times, should have been 1",
n_times_foo_received);

/* Activate test servie */
g_print ("Activating GLib.TestService\n");
error = NULL;
if (!dbus_g_proxy_call (driver, "StartServiceByName", &error,
                        G_TYPE_STRING,
                        "org.freedesktop.DBus.GLib.TestService",
                        G_TYPE_UINT,
                        0,
                        G_TYPE_INVALID,
                        G_TYPE_UINT, &result,
                        G_TYPE_INVALID)) {
    lose_gerror ("Failed to complete Activate call", error);
}

g_print ("GLib.TestService activated\n");

if (getenv ("DBUS_GLIB_TEST_SLEEP_AFTER_ACTIVATION"))
    g_usleep (8 * G_USEC_PER_SEC);

g_object_unref (G_OBJECT (proxy));

run_mainloop ();

proxy = dbus_g_proxy_new_for_name_owner (connection,
"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/MyTestObject",

```

```

"org.freedesktop.DBus.GLib.Tests.MyObject",
                                &error);

if (proxy == NULL)
    lose_gerror ("Failed to create proxy for name owner", error);

g_print ("Calling DoNothing\n");
if (!dbus_g_proxy_call (proxy, "DoNothing", &error,
                        G_TYPE_INVALID, G_TYPE_INVALID))
    lose_gerror ("Failed to complete DoNothing call", error);

g_print ("Calling Increment\n");
error = NULL;
if (!dbus_g_proxy_call (proxy, "Increment", &error,
                        G_TYPE_UINT, 42,
                        G_TYPE_INVALID,
                        G_TYPE_UINT, &v_UINT32_2,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Increment call", error);
if (v_UINT32_2 != 43)
    lose ("Increment call returned %d, should be 43", v_UINT32_2);

v_UINT32_2 = 0;
g_print ("Calling Increment (async)\n");
call = dbus_g_proxy_begin_call (proxy, "Increment",
                                increment_received_cb, g_strdup ("moo"),
g_free,
                                G_TYPE_UINT, 42,
                                G_TYPE_INVALID);

if (call == NULL)
    lose ("Failed to begin Increment call");

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

g_print ("Calling IncrementRetval\n");
error = NULL;
v_UINT32_2 = 0;
if (!dbus_g_proxy_call (proxy, "IncrementRetval", &error,
                        G_TYPE_UINT, 42,
                        G_TYPE_INVALID,
                        G_TYPE_UINT, &v_UINT32_2,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Increment call", error);
if (v_UINT32_2 != 43)
    lose ("IncrementRetval call returned %d, should be 43",
v_UINT32_2);

g_print ("Calling IncrementRetvalError\n");
error = NULL;

```

```

v_UINT32_2 = 0;
if (!dbus_g_proxy_call (proxy, "IncrementRetValError", &error,
                        G_TYPE_UINT, 5,
                        G_TYPE_INVALID,
                        G_TYPE_UINT, &v_UINT32_2,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Increment call", error);
if (v_UINT32_2 != 6)
    lose ("IncrementRetVal call returned %d, should be 6",
v_UINT32_2);

g_print ("Calling ThrowError\n");
if (dbus_g_proxy_call (proxy, "ThrowError", &error,
                        G_TYPE_INVALID, G_TYPE_INVALID) != FALSE)
    lose ("ThrowError call unexpectedly succeeded!");

if (!dbus_g_error_has_name (error,
"org.freedesktop.DBus.GLib.Tests.MyObject.Foo"))
    lose ("ThrowError call returned unexpected error \"%s\": %s",
dbus_g_error_get_name (error),
    error->message);

g_print ("ThrowError failed (as expected) returned error: %s\n",
error->message);
g_clear_error (&error);

g_print ("Calling IncrementRetValError (for error)\n");
error = NULL;
v_UINT32_2 = 0;
if (dbus_g_proxy_call (proxy, "IncrementRetValError", &error,
                        G_TYPE_UINT, 20,
                        G_TYPE_INVALID,
                        G_TYPE_UINT, &v_UINT32_2,
                        G_TYPE_INVALID) != FALSE)
    lose ("IncrementRetValError call unexpectedly succeeded!");
if (!dbus_g_error_has_name (error,
"org.freedesktop.DBus.GLib.Tests.MyObject.Foo"))
    lose ("IncrementRetValError call returned unexpected error \"%s\":
%s", dbus_g_error_get_name (error), error->message);
g_clear_error (&error);

error = NULL;
g_print ("Calling Uppercase\n");
if (!dbus_g_proxy_call (proxy, "Uppercase", &error,
                        G_TYPE_STRING, "foobar",
                        G_TYPE_INVALID,
                        G_TYPE_STRING, &v_STRING_2,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Uppercase call", error);
if (strcmp ("FOOBAR", v_STRING_2) != 0)
    lose ("Uppercase call returned unexpected string %s", v_STRING_2);
g_free (v_STRING_2);

```

```

run_mainloop ();

g_print ("Calling ManyArgs\n");
if (!dbus_g_proxy_call (proxy, "ManyArgs", &error,
                        G_TYPE_UINT, 26,
                        G_TYPE_STRING, "bazwhee",
                        G_TYPE_DOUBLE, G_PI,
                        G_TYPE_INVALID,
                        G_TYPE_DOUBLE, &v_DOUBLE_2,
                        G_TYPE_STRING, &v_STRING_2,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to complete ManyArgs call", error);
if (v_DOUBLE_2 < 55 || v_DOUBLE_2 > 56)
    lose ("ManyArgs call returned unexpected double value %f",
v_DOUBLE_2);
if (strcmp ("BAZWHEE", v_STRING_2) != 0)
    lose ("ManyArgs call returned unexpected string %s", v_STRING_2);
g_free (v_STRING_2);

g_print ("Calling (wrapped) do_nothing\n");
if (!org_freedesktop_DBus_GLib_Tests_MyObject_do_nothing (proxy,
&error))
    lose_gerror ("Failed to complete (wrapped) DoNothing call",
error);

g_print ("Calling (wrapped) increment\n");
if (!org_freedesktop_DBus_GLib_Tests_MyObject_increment (proxy, 42,
&v_UINT32_2, &error))
    lose_gerror ("Failed to complete (wrapped) Increment call",
error);

if (v_UINT32_2 != 43)
    lose ("(wrapped) increment call returned %d, should be 43",
v_UINT32_2);

g_print ("Calling (wrapped async) increment\n");
if (!org_freedesktop_DBus_GLib_Tests_MyObject_increment_async
(proxy, 42, increment_async_cb, NULL))
    lose_gerror ("Failed to complete (wrapped) Increment call",
error);
dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

v_UINT32_2 = 0;
if (!org_freedesktop_DBus_GLib_Tests_MyObject_async_increment
(proxy, 42, &v_UINT32_2, &error))
    lose_gerror ("Failed to complete (wrapped) AsyncIncrement call",
error);

if (v_UINT32_2 != 43)

```

```

    lose ("(wrapped) async increment call returned %d, should be 43",
v_UINT32_2);

    g_print ("Calling (wrapped) throw_error\n");
    if (org_freedesktop_DBus_GLib_Tests_MyObject_throw_error (proxy,
&error) != FALSE)
        lose ("(wrapped) ThrowError call unexpectedly succeeded!");

    g_print ("(wrapped) ThrowError failed (as expected) returned error:
%s\n", error->message);
    g_clear_error (&error);

    g_print ("Calling (wrapped) uppercase\n");
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_uppercase (proxy,
"foobar", &v_STRING_2, &error))
        lose_gerror ("Failed to complete (wrapped) Uppercase call",
error);
    if (strcmp ("FOOBAR", v_STRING_2) != 0)
        lose ("(wrapped) Uppercase call returned unexpected string %s",
v_STRING_2);
    g_free (v_STRING_2);

    g_print ("Calling (wrapped) many_args\n");
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_many_args (proxy, 26,
"bazwhee", G_PI,
                                &v_DOUBLE_2, &v_STRING_2,
&error))
        lose_gerror ("Failed to complete (wrapped) ManyArgs call", error);

    if (v_DOUBLE_2 < 55 || v_DOUBLE_2 > 56)

        lose ("(wrapped) ManyArgs call returned unexpected double value
%f", v_DOUBLE_2);

    if (strcmp ("BAZWHEE", v_STRING_2) != 0)
        lose ("(wrapped) ManyArgs call returned unexpected string %s",
v_STRING_2);
    g_free (v_STRING_2);

    {
        guint32 arg0;
        char *arg1;
        gint32 arg2;
        guint32 arg3;
        guint32 arg4;
        char *arg5;

        g_print ("Calling (wrapped) many_return\n");
        if (!org_freedesktop_DBus_GLib_Tests_MyObject_many_return (proxy,
&arg0, &arg1, &arg2, &arg3, &arg4, &arg5, &error))
            lose_gerror ("Failed to complete (wrapped) ManyReturn call",
error);
    }

```



```

    if (arg0 != 42)
        lose ("(wrapped) ManyReturn call returned unexpected guint32
value %u", arg0);

    if (strcmp ("42", arg1) != 0)
        lose ("(wrapped) ManyReturn call returned unexpected string %s",
arg1);
    g_free (arg1);

    if (arg2 != -67)
        lose ("(wrapped) ManyReturn call returned unexpected gint32
value %u", arg2);

    if (arg3 != 2)
        lose ("(wrapped) ManyReturn call returned unexpected guint32
value %u", arg3);

    if (arg4 != 26)
        lose ("(wrapped) ManyReturn call returned unexpected guint32
value %u", arg4);

    if (strcmp ("hello world", arg5))
        lose ("(wrapped) ManyReturn call returned unexpected string %s",
arg5);
    g_free (arg5);
}

run_mainloop ();

{
    GValue value = {0, };

    g_value_init (&value, G_TYPE_STRING);
    g_value_set_string (&value, "foo");

    g_print ("Calling (wrapped) stringify, with string\n");
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_stringify (proxy,
                                                                &value,
                                                                &v_STRING_2,
                                                                &error))
        lose_gerror ("Failed to complete (wrapped) stringify call",
error);
    if (strcmp ("foo", v_STRING_2) != 0)
        lose ("(wrapped) stringify call returned unexpected string %s",
v_STRING_2);
    g_free (v_STRING_2);

    g_value_unset (&value);
    g_value_init (&value, G_TYPE_INT);
    g_value_set_int (&value, 42);
}

```

```

g_print ("Calling (wrapped) stringify, with int\n");
if (!org_freedesktop_DBus_GLib_Tests_MyObject_stringify (proxy,
                                                         &value,
                                                         &v_STRING_2,
                                                         &error))
    lose_gerror ("Failed to complete (wrapped) stringify call 2",
error);
if (strcmp ("42", v_STRING_2) != 0)
    lose ("(wrapped) stringify call 2 returned unexpected string
%s", v_STRING_2);
g_value_unset (&value);
g_free (v_STRING_2);

g_value_init (&value, G_TYPE_INT);
g_value_set_int (&value, 88);
g_print ("Calling (wrapped) stringify, with another int\n");
if (!org_freedesktop_DBus_GLib_Tests_MyObject_stringify (proxy,
                                                         &value,
                                                         NULL,
                                                         &error))
    lose_gerror ("Failed to complete (wrapped) stringify call 3",
error);
g_value_unset (&value);

g_print ("Calling (wrapped) unstringify, for string\n");
if (!org_freedesktop_DBus_GLib_Tests_MyObject_unstringify (proxy,
                                                           "foo",
                                                           &value,
                                                           &error))
    lose_gerror ("Failed to complete (wrapped) unstringify call",
error);
if (!G_VALUE HOLDS_STRING (&value))
    lose ("(wrapped) unstringify call returned unexpected value type
%d", (int) G_VALUE_TYPE (&value));
if (strcmp (g_value_get_string (&value), "foo"))
    lose ("(wrapped) unstringify call returned unexpected string
%s",
        g_value_get_string (&value));

g_value_unset (&value);

g_print ("Calling (wrapped) unstringify, for int\n");
if (!org_freedesktop_DBus_GLib_Tests_MyObject_unstringify (proxy,
                                                           "10",
                                                           &value,
                                                           &error))
    lose_gerror ("Failed to complete (wrapped) unstringify call",
error);
if (!G_VALUE HOLDS_INT (&value))
    lose ("(wrapped) unstringify call returned unexpected value type
%d", (int) G_VALUE_TYPE (&value));
if (g_value_get_int (&value) != 10)

```

```

    lose ("(wrapped) unstringify call returned unexpected integer
%d",
        g_value_get_int (&value));

    g_value_unset (&value);
}

run_mainloop ();

{
    GArray *array;
    guint32 arraylen;

    array = g_array_new (FALSE, TRUE, sizeof (guint32));

    arraylen = 0;
    g_print ("Calling (wrapped) zero-length recursive1\n");
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_recursive1 (proxy,
array,
                                &arraylen, &error))
        lose_gerror ("Failed to complete (wrapped) zero-length
recursive1 call", error);
    if (arraylen != 0)
        lose ("(wrapped) zero-length recursive1 call returned invalid
length %u", arraylen);
}

{
    GArray *array;
    guint32 val;
    guint32 arraylen;

    array = g_array_new (FALSE, TRUE, sizeof (guint32));
    val = 42;
    g_array_append_val (array, val);
    val = 69;
    g_array_append_val (array, val);
    val = 88;
    g_array_append_val (array, val);
    val = 26;
    g_array_append_val (array, val);
    val = 2;
    g_array_append_val (array, val);

    arraylen = 0;
    g_print ("Calling (wrapped) recursive1\n");
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_recursive1 (proxy,
array,
                                &arraylen, &error))
        lose_gerror ("Failed to complete (wrapped) recursive1 call",
error);
    if (arraylen != 5)

```

```

        lose ("(wrapped) recursive1 call returned invalid length %u",
arraylen);
    }

    {
        GArray *array = NULL;
        guint32 *arrayvals;

        g_print ("Calling (wrapped) recursive2\n");
        if (!org_freedesktop_DBus_GLib_Tests_MyObject_recursive2 (proxy,
2, &array, &error))
            lose_gerror ("Failed to complete (wrapped) Recursive2 call",
error);

        if (array == NULL)
            lose ("(wrapped) Recursive2 call returned NULL");
        if (array->len != 5)
            lose ("(wrapped) Recursive2 call returned unexpected array
length %u", array->len);

        arrayvals = (guint32*) array->data;
        if (arrayvals[0] != 42)
            lose ("(wrapped) Recursive2 call returned unexpected value %d in
position 0", arrayvals[0]);
        if (arrayvals[1] != 26)
            lose ("(wrapped) Recursive2 call returned unexpected value %d in
position 1", arrayvals[1]);
        if (arrayvals[4] != 2)
            lose ("(wrapped) Recursive2 call returned unexpected value %d in
position 4", arrayvals[4]);

        g_array_free (array, TRUE);
    }

    run_mainloop ();

    {
        const char *strs[] = { "hello", "Hello", "HELLO", NULL };
        char **strs_ret;

        strs_ret = NULL;
        g_print ("Calling (wrapped) many_uppercase\n");
        if (!org_freedesktop_DBus_GLib_Tests_MyObject_many_uppercase
(proxy, strs, &strs_ret, &error))
            lose_gerror ("Failed to complete (wrapped) ManyUppercase call",
error);
        g_assert (strs_ret != NULL);
        if (strcmp ("HELLO", strs_ret[0]) != 0)
            lose ("(wrapped) ManyUppercase call returned unexpected string
%s", strs_ret[0]);
        if (strcmp ("HELLO", strs_ret[1]) != 0)

```

```

    lose ("(wrapped) ManyUppercase call returned unexpected string
%s", strs_ret[1]);
    if (strcmp ("HELLO", strs_ret[2]) != 0)
        lose ("(wrapped) ManyUppercase call returned unexpected string
%s", strs_ret[2]);

    g_strfreev (strs_ret);
}

{
    GHashTable *table;
    quint len;

    table = g_hash_table_new (g_str_hash, g_str_equal);
    g_hash_table_insert (table, "moooo", "b");
    g_hash_table_insert (table, "xxx", "cow!");

    len = 0;
    g_print ("Calling (wrapped) str_hash_len\n");
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_str_hash_len (proxy,
table, &len, &error))
        lose_gerror ("(wrapped) StrHashLen call failed", error);
    if (len != 13)
        lose ("(wrapped) StrHashLen returned unexpected length %u",
len);
    g_hash_table_destroy (table);
}

{
    GHashTable *table;
    const char *val;

    g_print ("Calling (wrapped) get_hash\n");
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_get_hash (proxy,
&table, &error))
        lose_gerror ("(wrapped) GetHash call failed", error);
    val = g_hash_table_lookup (table, "foo");
    if (val == NULL || strcmp ("bar", val))
        lose ("(wrapped) StrHashLen returned invalid value %s for key
\"foo\"",
            val ? val : "(null)");
    val = g_hash_table_lookup (table, "baz");
    if (val == NULL || strcmp ("whee", val))
        lose ("(wrapped) StrHashLen returned invalid value %s for key
\"whee\"",
            val ? val : "(null)");
    val = g_hash_table_lookup (table, "cow");
    if (val == NULL || strcmp ("crack", val))
        lose ("(wrapped) StrHashLen returned invalid value %s for key
\"cow\"",
            val ? val : "(null)");
    if (g_hash_table_size (table) != 3)

```

```

        lose ("(wrapped) StrHashLen returned unexpected hash size %u",
            g_hash_table_size (table));

    g_hash_table_destroy (table);
}

run_mainloop ();

{
    GValueArray *vals;
    GValueArray *vals_ret;
    GValue *val;

    vals = g_value_array_new (3);

    g_value_array_append (vals, NULL);
    g_value_init (g_value_array_get_nth (vals, vals->n_values - 1),
G_TYPE_STRING);
    g_value_set_string (g_value_array_get_nth (vals, 0), "foo");

    g_value_array_append (vals, NULL);
    g_value_init (g_value_array_get_nth (vals, vals->n_values - 1),
G_TYPE_UINT);
    g_value_set_uint (g_value_array_get_nth (vals, vals->n_values -
1), 42);

    g_value_array_append (vals, NULL);
    g_value_init (g_value_array_get_nth (vals, vals->n_values - 1),
G_TYPE_VALUE);
    val = g_new0 (GValue, 1);
    g_value_init (val, G_TYPE_UCHAR);
    g_value_set_uchar (val, '!');
    g_value_set_boxed (g_value_array_get_nth (vals, vals->n_values -
1), val);

    vals_ret = NULL;
    g_print ("Calling SendCar\n");
    if (!dbus_g_proxy_call (proxy, "SendCar", &error,
        G_TYPE_VALUE_ARRAY, vals,
        G_TYPE_INVALID,
        G_TYPE_VALUE_ARRAY, &vals_ret,
        G_TYPE_INVALID))
        lose_gerror ("Failed to complete SendCar call", error);

    g_assert (vals_ret != NULL);
    g_assert (vals_ret->n_values == 2);

    g_assert (G_VALUE HOLDS_UINT (g_value_array_get_nth (vals_ret,
0)));
    g_assert (g_value_get_uint (g_value_array_get_nth (vals_ret, 0))
== 43);
}

```

```

    g_assert (G_VALUE_TYPE (g_value_array_get_nth (vals_ret, 1)) ==
DBUS_TYPE_G_OBJECT_PATH);
    g_assert (!strcmp
("/org/freedesktop/DBus/GLib/Tests/MyTestObject2",
    g_value_get_boxed (g_value_array_get_nth (vals_ret,
1))));

    g_free (val);
    g_value_array_free (vals);
    g_value_array_free (vals_ret);
}

{
    const gchar *in_sig = "a(iou)sq";
    gchar *out_sig = NULL;

    g_print ("Calling EchoSignature: %s\n", in_sig);
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_echo_signature
(proxy,
    in_sig, &out_sig, &error))
        lose_gerror ("Failed to complete EchoSignature call", error);

    if (out_sig == NULL)
        lose ("EchoSignature returned NULL");
    if (strcmp (in_sig, out_sig) != 0)
        lose ("EchoSignature changed the signature");

    g_print ("EchoSignature returned: %s\n", out_sig);

    g_free (out_sig);
}

{
    GValue *val;
    GHashTable *table;
    GHashTable *ret_table;

    table = g_hash_table_new_full (g_str_hash, g_str_equal,
    g_free, unset_and_free_gvalue);

    val = g_new0 (GValue, 1);
    g_value_init (val, G_TYPE_UINT);
    g_value_set_uint (val, 42);
    g_hash_table_insert (table, g_strdup ("foo"), val);

    val = g_new0 (GValue, 1);
    g_value_init (val, G_TYPE_STRING);
    g_value_set_string (val, "hello");
    g_hash_table_insert (table, g_strdup ("bar"), val);

    ret_table = NULL;
    g_print ("Calling ManyStringify\n");
}

```

```

    if (!dbus_g_proxy_call (proxy, "ManyStringify", &error,
        dbus_g_type_get_map ("GHashTable", G_TYPE_STRING,
G_TYPE_VALUE), table,
        G_TYPE_INVALID,
        dbus_g_type_get_map ("GHashTable", G_TYPE_STRING,
G_TYPE_VALUE), &ret_table,
        G_TYPE_INVALID))
        lose_gerror ("Failed to complete ManyStringify call", error);

g_assert (ret_table != NULL);
g_assert (g_hash_table_size (ret_table) == 2);

val = g_hash_table_lookup (ret_table, "foo");
g_assert (val != NULL);
g_assert (G_VALUE_HOLDS_STRING (val));
g_assert (!strcmp ("42", g_value_get_string (val)));

val = g_hash_table_lookup (ret_table, "bar");
g_assert (val != NULL);
g_assert (G_VALUE_HOLDS_STRING (val));
g_assert (!strcmp ("hello", g_value_get_string (val)));

g_hash_table_destroy (table);
g_hash_table_destroy (ret_table);
}

{
GPtrArray *in_array;
GPtrArray *out_array;
char **strs;
GArray *uints;

in_array = g_ptr_array_new ();

strs = g_new0 (char *, 3);
strs[0] = "foo";
strs[1] = "bar";
strs[2] = NULL;
g_ptr_array_add (in_array, strs);

strs = g_new0 (char *, 4);
strs[0] = "baz";
strs[1] = "whee";
strs[2] = "moo";
strs[3] = NULL;
g_ptr_array_add (in_array, strs);

out_array = NULL;
g_print ("Calling RecArrays\n");
if (!dbus_g_proxy_call (proxy, "RecArrays", &error,
    dbus_g_type_get_collection ("GPtrArray",
G_TYPE_STRV), in_array,

```



```

        G_TYPE_INVALID,
        dbus_g_type_get_collection ("GPtrArray",
                                    dbus_g_type_get_collection
("GPtrArray",
G_TYPE_UINT)), &out_array,
        G_TYPE_INVALID))
    lose_gerror ("Failed to complete RecArrays call", error);
    g_free (g_ptr_array_index (in_array, 0));
    g_free (g_ptr_array_index (in_array, 1));

    g_assert (out_array);
    g_assert (out_array->len == 2);
    uints = g_ptr_array_index (out_array, 0);
    g_assert (uints);
    g_assert (uints->len == 3);
    g_assert (g_array_index (uints, guint, 0) == 10);
    g_assert (g_array_index (uints, guint, 1) == 42);
    g_assert (g_array_index (uints, guint, 2) == 27);
    g_array_free (uints, TRUE);
    uints = g_ptr_array_index (out_array, 1);
    g_assert (uints);
    g_assert (uints->len == 1);
    g_assert (g_array_index (uints, guint, 0) == 30);
    g_array_free (uints, TRUE);
    g_ptr_array_free (out_array, TRUE);
}

{
    guint val;
    char *ret_path;
    DBusGProxy *ret_proxy;

    g_print ("Calling (wrapped) objpath\n");
    if (!dbus_g_proxy_call (proxy, "Objpath", &error,
                          DBUS_TYPE_G_PROXY, proxy, G_TYPE_INVALID,
                          DBUS_TYPE_G_PROXY, &ret_proxy, G_TYPE_INVALID))
        lose_gerror ("Failed to complete Objpath call", error);
    if (strcmp ("/org/freedesktop/DBus/GLib/Tests/MyTestObject2",
              dbus_g_proxy_get_path (ret_proxy)) != 0)
        lose ("(wrapped) objpath call returned unexpected proxy %s",
            dbus_g_proxy_get_path (ret_proxy));

    g_print ("Doing get/increment val tests\n");
    val = 1;
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_get_val (ret_proxy,
&val, &error))
        lose_gerror ("Failed to complete (wrapped) GetVal call", error);
    if (val != 0)
        lose ("(wrapped) GetVal returned invalid value %d", val);
}

```

```

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_increment_val
        (ret_proxy, &error))
        lose_gerror ("Failed to complete (wrapped) IncrementVal call",
            error);

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_increment_val
        (ret_proxy, &error))
        lose_gerror ("Failed to complete (wrapped) IncrementVal call",
            error);

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_increment_val
        (ret_proxy, &error))
        lose_gerror ("Failed to complete (wrapped) IncrementVal call",
            error);

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_get_val (ret_proxy,
        &val, &error))
        lose_gerror ("Failed to complete (wrapped) GetVal call", error);
    if (val != 3)
        lose ("(wrapped) GetVal returned invalid value %d", val);

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_get_val (proxy,
        &val, &error))
        lose_gerror ("Failed to complete (wrapped) GetVal call", error);
    if (val != 0)
        lose ("(wrapped) GetVal returned invalid value %d", val);

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_increment_val
        (proxy, &error))
        lose_gerror ("Failed to complete (wrapped) IncrementVal call",
            error);

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_get_val (proxy,
        &val, &error))
        lose_gerror ("Failed to complete (wrapped) GetVal call", error);
    if (val != 1)
        lose ("(wrapped) GetVal returned invalid value %d", val);

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_get_val (ret_proxy,
        &val, &error))
        lose_gerror ("Failed to complete (wrapped) GetVal call", error);
    if (val != 3)
        lose ("(wrapped) GetVal returned invalid value %d", val);

    g_object_unref (G_OBJECT (ret_proxy));

    g_print ("Calling objpath again\n");
    ret_proxy = NULL;

    if (!dbus_g_proxy_call (proxy, "Objpath", &error,
        DBUS_TYPE_G_OBJECT_PATH,
        dbus_g_proxy_get_path (proxy),

```

```

        G_TYPE_INVALID,
        DBUS_TYPE_G_OBJECT_PATH,
        &ret_path,
        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Objpath call 2", error);
    if (strcmp ("/org/freedesktop/DBus/GLib/Tests/MyTestObject2",
ret_path) != 0)
        lose ("Objpath call 2 returned unexpected path %s",
            ret_path);

    ret_proxy = dbus_g_proxy_new_for_name_owner (connection,
"org.freedesktop.DBus.GLib.TestService",
            ret_path,
"org.freedesktop.DBus.GLib.Tests.FooObject",
            &error);

    g_free (ret_path);

    val = 0;
    if (!org_freedesktop_DBus_GLib_Tests_FooObject_get_value
(ret_proxy, &val, &error))
        lose_gerror ("Failed to complete (wrapped) GetValue call",
error);
    if (val != 3)
        lose ("(wrapped) GetValue returned invalid value %d", val);
}

run_mainloop ();

{
    GPtrArray *objs;
    guint i;

    g_print ("Calling GetObjs\n");

    if (!dbus_g_proxy_call (proxy, "GetObjs", &error, G_TYPE_INVALID,
        dbus_g_type_get_collection ("GPtrArray",
DBUS_TYPE_G_OBJECT_PATH),
        &objs,
        G_TYPE_INVALID))
        lose_gerror ("Failed to complete GetObjs call", error);
    if (objs->len != 2)
        lose ("GetObjs call returned unexpected number of objects %d,
expected 2",
            objs->len);

    if (strcmp ("/org/freedesktop/DBus/GLib/Tests/MyTestObject",
        g_ptr_array_index (objs, 0)) != 0)
        lose ("GetObjs call returned unexpected path \"%s\" in position
0; expected /org/freedesktop/DBus/GLib/Tests/MyTestObject", (char*)
g_ptr_array_index (objs, 0));

```

```

    if (strcmp ("/org/freedesktop/DBus/GLib/Tests/MyTestObject2",
                g_ptr_array_index (objs, 1)) != 0)
        lose ("GetObjs call returned unexpected path \"%s\" in position
1; expected /org/freedesktop/DBus/GLib/Tests/MyTestObject2", (char*)
g_ptr_array_index (objs, 1));

    for (i = 0; i < objs->len; i++)
        g_free (g_ptr_array_index (objs, i));
    g_ptr_array_free (objs, TRUE);
}

{
    GValue *variant;
    GArray *array;
    gint i;

    g_print ("Calling ProcessVariantOfArrayOfInts123\n");

    array = g_array_sized_new (FALSE, FALSE, sizeof(gint), 3);
    i = 1;
    g_array_append_val (array, i);
    i++;
    g_array_append_val (array, i);
    i++;
    g_array_append_val (array, i);

    variant = g_new0 (GValue, 1);
    g_value_init (variant, dbus_g_type_get_collection ("GArray",
G_TYPE_INT));
    g_value_take_boxed (variant, array);

    if (!dbus_g_proxy_call (proxy, "ProcessVariantOfArrayOfInts123",
&error,
                            G_TYPE_VALUE, variant,
                            G_TYPE_INVALID,
                            G_TYPE_INVALID))
        lose_gerror ("Failed to send a vairant of array of ints 1, 2 and
3!", error);

    g_value_unset (variant);
    g_free (variant);
}

for (i=0; i<3; i++)
{
    gchar *val;
    GHashTable *table;
    GHashTable *subtable;
    GHashTable *ret_table;

    table = g_hash_table_new_full (g_str_hash, g_str_equal,

```

```

        (GDestroyNotify) (g_free),
        (GDestroyNotify) (g_free))
(g_hash_table_destroy));

    subtable = g_hash_table_new_full (g_str_hash, g_str_equal,
        (GDestroyNotify) (g_free),
        (GDestroyNotify) (g_free));
    g_hash_table_insert (subtable, g_strdup ("foo"), g_strdup("1"));
    g_hash_table_insert (subtable, g_strdup ("bar"), g_strdup("2"));
    g_hash_table_insert (subtable, g_strdup ("baz"), g_strdup("3"));

    g_hash_table_insert (table, g_strdup("dict1"), subtable);

    subtable = g_hash_table_new_full (g_str_hash, g_str_equal,
        (GDestroyNotify) (g_free),
        (GDestroyNotify) (g_free));
    g_hash_table_insert (subtable, g_strdup ("foo"), g_strdup("4"));
    g_hash_table_insert (subtable, g_strdup ("bar"), g_strdup("5"));
    g_hash_table_insert (subtable, g_strdup ("baz"), g_strdup("6"));

    g_hash_table_insert (table, g_strdup("dict2"), subtable);

    subtable = NULL;

    ret_table = NULL;

    g_print ("Calling DictOfDicts\n");
    if (!dbus_g_proxy_call (proxy, "DictOfDicts", &error,
        dbus_g_type_get_map ("GHashTable", G_TYPE_STRING,
        dbus_g_type_get_map ("GHashTable",
G_TYPE_STRING,
        G_TYPE_STRING)), table,
        G_TYPE_INVALID,
        dbus_g_type_get_map ("GHashTable", G_TYPE_STRING,
        dbus_g_type_get_map ("GHashTable",
G_TYPE_STRING,
        G_TYPE_STRING)), &ret_table,
        G_TYPE_INVALID)
        lose_gerror ("Failed to complete DictOfDicts call", error);

    g_assert (ret_table != NULL);
    g_assert (g_hash_table_size (ret_table) == 2);

    subtable = g_hash_table_lookup (ret_table, "dict1");
    g_assert(subtable);
    g_assert (g_hash_table_size (subtable) == 3);

    val = g_hash_table_lookup (subtable, "foo");
    g_assert (val != NULL);
    g_assert (!strcmp ("dict1 1", val));

    val = g_hash_table_lookup (subtable, "bar");

```

```

g_assert (val != NULL);
g_assert (!strcmp ("dict1 2", val));

val = g_hash_table_lookup (subtable, "baz");
g_assert (val != NULL);
g_assert (!strcmp ("dict1 3", val));

subtable = g_hash_table_lookup (ret_table, "dict2");
g_assert(subtable);
g_assert (g_hash_table_size (subtable) == 3);

val = g_hash_table_lookup (subtable, "foo");
g_assert (val != NULL);
g_assert (!strcmp ("dict2 4", val));

val = g_hash_table_lookup (subtable, "bar");
g_assert (val != NULL);
g_assert (!strcmp ("dict2 5", val));

val = g_hash_table_lookup (subtable, "baz");
g_assert (val != NULL);
g_assert (!strcmp ("dict2 6", val));

g_hash_table_destroy (table);
g_hash_table_destroy (ret_table);

g_mem_profile ();
}

for (i=0; i<3; i++)
{
GHashTable *table;
GHashTable *ret_table = NULL;
const gchar *foo[] = { "foo", NULL };
const gchar *bar[] = { "bar", "baz", NULL };
const gchar **ret_foo = NULL, **ret_bar = NULL;

table = g_hash_table_new (g_str_hash, g_str_equal);
g_hash_table_insert (table, "dub", foo);
g_hash_table_insert (table, "sox", bar);

g_print ("Calling DictOfSigs\n");

if (!org_freedesktop_DBus_GLib_Tests_MyObject_dict_of_sigs (proxy,
table,
&ret_table, &error))
lose_gerror ("Failed to complete DictOfSigs call", error);

if (ret_table == NULL)
lose ("DictOfSigs didn't return a hash table");

if (g_hash_table_size (ret_table) != 2)

```

```

    lose ("DictOfSigs has too many entries");

ret_foo = g_hash_table_lookup (ret_table, "dub");
ret_bar = g_hash_table_lookup (ret_table, "sox");

if (ret_foo == NULL || ret_bar == NULL)
    lose ("DictOfSigs is missing entries");

if (ret_foo[0] == NULL ||
    ret_foo[1] != NULL ||
    strcmp (ret_foo[0], "foo") != 0)
    lose ("DictOfSigs mangled foo");

if (ret_bar[0] == NULL ||
    ret_bar[1] == NULL ||
    ret_bar[2] != NULL ||
    strcmp (ret_bar[0], "bar") != 0 ||
    strcmp (ret_bar[1], "baz") != 0)
    lose ("DictOfSigs mangled bar");

g_hash_table_destroy (table);
g_hash_table_destroy (ret_table);

g_mem_profile ();
}

for (i=0; i<3; i++)
{
    GHashTable *table;
    GHashTable *ret_table = NULL;
    GPtrArray *foo, *bar;
    GPtrArray *ret_foo = NULL, *ret_bar = NULL;

    foo = g_ptr_array_new ();
    g_ptr_array_add (foo, "/foo");

    bar = g_ptr_array_new ();
    g_ptr_array_add (bar, "/bar");
    g_ptr_array_add (bar, "/baz");

    table = g_hash_table_new (g_str_hash, g_str_equal);
    g_hash_table_insert (table, "/foo", foo);
    g_hash_table_insert (table, "/bar", bar);

    g_print ("Calling DictOfObjs\n");

    if (!org_freedesktop_DBus_GLib_Tests_MyObject_dict_of_objs (proxy,
table,
        &ret_table, &error))
        lose_gerror ("Failed to complete DictOfObjs call", error);

    g_ptr_array_free (foo, TRUE);

```

```

g_ptr_array_free (bar, TRUE);
g_hash_table_destroy (table);

if (ret_table == NULL)
    lose ("DictOfObjs didn't return a hash table");

if (g_hash_table_size (ret_table) != 2)
    lose ("DictOfObjs has too many entries");

ret_foo = g_hash_table_lookup (ret_table, "/foo");
ret_bar = g_hash_table_lookup (ret_table, "/bar");

if (ret_foo == NULL || ret_bar == NULL)
    lose ("DictOfObjs is missing entries");

if (ret_foo->len != 1 ||
    strcmp (g_ptr_array_index (ret_foo, 0), "/foo") != 0)
    lose ("DictOfObjs mangled /foo");

if (ret_bar->len != 2 ||
    strcmp (g_ptr_array_index (ret_bar, 0), "/bar") != 0 ||
    strcmp (g_ptr_array_index (ret_bar, 1), "/baz") != 0)
    lose ("DictOfObjs mangled /bar");

g_boxed_free (dbus_g_type_get_map ("GHashTable",
DBUS_TYPE_G_OBJECT_PATH,
    dbus_g_type_get_collection ("GPtrArray",
DBUS_TYPE_G_OBJECT_PATH)), ret_table);

g_mem_profile ();
}

/* Signal handling tests */

g_print ("Testing signal handling\n");
dbus_g_proxy_add_signal (proxy, "Frobnicate", G_TYPE_INT,
G_TYPE_INVALID);

dbus_g_proxy_connect_signal (proxy, "Frobnicate",
    G_CALLBACK (frobnicate_signal_handler),
    NULL, NULL);

g_print ("Calling EmitFrobnicate\n");
if (!dbus_g_proxy_call (proxy, "EmitFrobnicate", &error,
    G_TYPE_INVALID, G_TYPE_INVALID))
    lose_gerror ("Failed to complete EmitFrobnicate call", error);

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);

```



```

g_main_loop_run (loop);

if (n_times_froblicate_received != 1)
    lose ("Froblicate signal received %d times, should have been 1",
n_times_froblicate_received);

g_print ("Calling EmitFroblicate again\n");
if (!dbus_g_proxy_call (proxy, "EmitFroblicate", &error,
                        G_TYPE_INVALID, G_TYPE_INVALID))
    lose_gerror ("Failed to complete EmitFroblicate call", error);

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (n_times_froblicate_received != 2)
    lose ("Froblicate signal received %d times, should have been 2",
n_times_froblicate_received);

g_object_unref (G_OBJECT (proxy));

run_mainloop ();

g_print ("Creating proxy for FooObject interface\n");
proxy = dbus_g_proxy_new_for_name_owner (connection,
"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
"org.freedesktop.DBus.GLib.Tests.FooObject",
&error);

if (proxy == NULL)
    lose_gerror ("Failed to create proxy for name owner", error);

my_object_register_marshallers ();

dbus_g_proxy_add_signal (proxy, "Sig0", G_TYPE_STRING, G_TYPE_INT,
G_TYPE_STRING, G_TYPE_INVALID);
dbus_g_proxy_add_signal (proxy, "Sig1", G_TYPE_STRING, G_TYPE_VALUE,
G_TYPE_INVALID);
dbus_g_proxy_add_signal (proxy, "Sig2",
DBUS_TYPE_G_STRING_STRING_HASHTABLE, G_TYPE_INVALID);

dbus_g_proxy_connect_signal (proxy, "Sig0",
                            G_CALLBACK (sig0_signal_handler),
                            NULL, NULL);
dbus_g_proxy_connect_signal (proxy, "Sig1",
                            G_CALLBACK (sig1_signal_handler),
                            NULL, NULL);
dbus_g_proxy_connect_signal (proxy, "Sig2",

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        G_CALLBACK (sig2_signal_handler),
        NULL, NULL);

g_print ("Calling FooObject EmitSignals\n");
dbus_g_proxy_call_no_reply (proxy, "EmitSignals", G_TYPE_INVALID);

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (n_times_sig0_received != 1)
    lose ("Sig0 signal received %d times, should have been 1",
n_times_sig0_received);
if (n_times_sig1_received != 1)
    lose ("Sig1 signal received %d times, should have been 1",
n_times_sig1_received);

g_print ("Calling FooObject EmitSignals and EmitSignal2\n");
dbus_g_proxy_call_no_reply (proxy, "EmitSignal2", G_TYPE_INVALID);
dbus_g_connection_flush (connection);

exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (n_times_sig2_received != 1)
    lose ("Sig2 signal received %d times, should have been 1",
n_times_sig2_received);

g_print ("Calling FooObject EmitSignals two more times\n");
dbus_g_proxy_call_no_reply (proxy, "EmitSignals", G_TYPE_INVALID);
dbus_g_proxy_call_no_reply (proxy, "EmitSignals", G_TYPE_INVALID);

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (n_times_sig0_received != 3)
    lose ("Sig0 signal received %d times, should have been 3",
n_times_sig0_received);
if (n_times_sig1_received != 3)
    lose ("Sig1 signal received %d times, should have been 3",
n_times_sig1_received);

/* Terminate again */

```

```

g_print ("Terminating service\n");
await_terminating_service = "org.freedesktop.DBus.GLib.TestService";
dbus_g_proxy_call_no_reply (proxy, "Terminate", G_TYPE_INVALID);

proxy_destroyed = FALSE;
proxy_destroy_and_nameowner = TRUE;
proxy_destroy_and_nameowner_complete = FALSE;

g_signal_connect (G_OBJECT (proxy),
                  "destroy",
                  G_CALLBACK (proxy_destroyed_cb),
                  NULL);

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (await_terminating_service != NULL)
    lose ("Didn't see name loss for
\"org.freedesktop.DBus.GLib.TestService\");
if (!proxy_destroyed)
    lose ("Didn't get proxy_destroyed");
g_print ("Proxy destroyed successfully\n");

/* Don't need to unref, proxy was destroyed */

run_mainloop ();

/* Create a new proxy for the name; should not be associated */
proxy = dbus_g_proxy_new_for_name (connection,
                                   "org.freedesktop.DBus.GLib.TestService",
                                   "/org/freedesktop/DBus/GLib/Tests/MyTestObject",
                                   "org.freedesktop.DBus.GLib.Tests.MyObject");
g_assert (proxy != NULL);

proxy_destroyed = FALSE;
proxy_destroy_and_nameowner = FALSE;
proxy_destroy_and_nameowner_complete = FALSE;

g_signal_connect (G_OBJECT (proxy),
                  "destroy",
                  G_CALLBACK (proxy_destroyed_cb),
                  NULL);

if (!dbus_g_proxy_call (driver, "GetNameOwner", &error,
                       G_TYPE_STRING,
                       "org.freedesktop.DBus.GLib.TestService",
                       G_TYPE_INVALID,
                       G_TYPE_STRING,
                       &v_STRING_2,
                       G_TYPE_INVALID)) {

```

```

    if (error->domain == DBUS_GERROR && error->code ==
        DBUS_GERROR_NAME_HAS_NO_OWNER)
        g_print ("Got expected error
\"org.freedesktop.DBus.Error.NameHasNoOwner\"\n");
    else
        lose_gerror ("Unexpected error from GetNameOwner", error);
} else
    lose ("GetNameOwner unexpectedly succeeded!");
g_clear_error (&error);

/* This will have the side-effect of activating the service, thus
 * causing a NameOwnerChanged, which should let our name proxy
 * get signals
 */
g_print ("Calling Uppercase for name proxy\n");
if (!dbus_g_proxy_call (proxy, "Uppercase", &error,
                        G_TYPE_STRING, "bazwhee",
                        G_TYPE_INVALID,
                        G_TYPE_STRING, &v_STRING_2,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Uppercase call", error);
g_free (v_STRING_2);

if (getenv ("DBUS_GLIB_TEST_SLEEP_AFTER_ACTIVATION1"))
    g_usleep (8 * G_USEC_PER_SEC);

dbus_g_proxy_add_signal (proxy, "Frobnicate", G_TYPE_INT,
G_TYPE_INVALID);

dbus_g_proxy_connect_signal (proxy, "Frobnicate",
                             G_CALLBACK (frobnicate_signal_handler),
                             NULL, NULL);

g_print ("Calling EmitFrobnicate\n");
if (!dbus_g_proxy_call (proxy, "EmitFrobnicate", &error,
                        G_TYPE_INVALID, G_TYPE_INVALID))
    lose_gerror ("Failed to complete EmitFrobnicate call", error);

n_times_frobnicate_received = 0;

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (n_times_frobnicate_received != 1)
    lose ("Frobnicate signal received %d times, should have been 1",
n_times_frobnicate_received);

/* Now terminate the service, then start it again (implicitly) and
wait for signals */
g_print ("Terminating service (2)\n");
await_terminating_service = "org.freedesktop.DBus.GLib.TestService";

```



```

lose_gerror ("Failed to complete EmitFrobenticate call", error);

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (n_times_frobenticate_received != 2)
    lose ("Frobenticate signal received %d times for 1st proxy, should
have been 2", n_times_frobenticate_received);
if (n_times_frobenticate_received_2 != 1)
    lose ("Frobenticate signal received %d times for 2nd proxy, should
have been 1", n_times_frobenticate_received_2);

g_object_unref (G_OBJECT (proxy));
g_object_unref (G_OBJECT (proxy2));

run_mainloop ();

/* Tests for a "compatibility" object path. This is the same object
as above, just
* at a different path.
*/
proxy = dbus_g_proxy_new_for_name_owner (connection,
"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/Compat/MyTestObjectCompat",
"org.freedesktop.DBus.GLib.Tests.MyObject",
&error);
dbus_g_proxy_add_signal (proxy, "Frobenticate", G_TYPE_INT,
G_TYPE_INVALID);
dbus_g_proxy_connect_signal (proxy, "Frobenticate",
G_CALLBACK
(frobenticate_signal_handler_compat),
NULL, NULL);

g_print ("Calling EmitFrobenticate (compat)\n");
if (!dbus_g_proxy_call (proxy, "EmitFrobenticate", &error,
G_TYPE_INVALID, G_TYPE_INVALID))
    lose_gerror ("Failed to complete EmitFrobenticate call on compat
proxy", error);

g_main_loop_run (loop);

if (n_times_compat_frobenticate_received != 1)
    lose ("Frobenticate signal received %d times for compat proxy,
should have been 1", n_times_compat_frobenticate_received);

g_object_unref (proxy);

```

```

/* Test introspection */
proxy = dbus_g_proxy_new_for_name_owner (connection,
"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
"org.freedesktop.DBus.Introspectable",
&error);
if (proxy == NULL)
    lose_gerror ("Failed to create proxy for name owner", error);

g_print ("Testing introspect\n");
if (!dbus_g_proxy_call (proxy, "Introspect", &error,
                        G_TYPE_INVALID,
                        G_TYPE_STRING, &v_STRING_2,
                        G_TYPE_INVALID))
    lose_gerror ("Failed to complete Introspect call", error);

/* Could just do strcmp(), but that seems more fragile */
{
    NodeInfo *node;
    GSList *elt;
    gboolean found_introspectable;
    gboolean found_properties;
    gboolean found_myobject;
    gboolean found_foobject;

    node = description_load_from_string (v_STRING_2, strlen
(v_STRING_2), &error);
    if (!node)
        lose_gerror ("Failed to parse introspection data: %s", error);

    found_introspectable = FALSE;
    found_properties = FALSE;
    found_myobject = FALSE;
    found_foobject = FALSE;
    for (elt = node_info_get_interfaces (node); elt ; elt = elt->next)
    {
        InterfaceInfo *iface = elt->data;

        if (!found_introspectable && strcmp (interface_info_get_name
(iface), "org.freedesktop.DBus.Introspectable") == 0)
            found_introspectable = TRUE;
        else if (!found_properties && strcmp (interface_info_get_name
(iface), "org.freedesktop.DBus.Properties") == 0)
            found_properties = TRUE;
        else if (!found_myobject && strcmp (interface_info_get_name
(iface), "org.freedesktop.DBus.GLib.Tests.MyObject") == 0)
        {
            GSList *elt;
            gboolean found_manyargs;

```

```

gboolean found_no_touching = FALSE;

found_myobject = TRUE;

found_manyargs = FALSE;
for (elt = interface_info_get_methods (iface); elt; elt =
elt->next)
    {
        MethodInfo *method;

        method = elt->data;
        if (strcmp (method_info_get_name (method), "ManyArgs") ==
0)
            {
                found_manyargs = TRUE;
                break;
            }
        }
    if (!found_manyargs)
        lose ("Missing method
org.freedesktop.DBus.GLib.Tests.MyObject.ManyArgs");
    for (elt = interface_info_get_properties (iface); elt; elt =
elt->next)
        {
            PropertyInfo *prop = elt->data;

            if (strcmp (property_info_get_name (prop), "no-touching")
== 0)
                {
                    if (property_info_get_access (prop) != PROPERTY_READ)
                        lose ("property no-touching had incorrect access
%d", property_info_get_access (prop));
                    else
                        {
                            found_no_touching = TRUE;
                            break;
                        }
                }
            }
        if (!found_no_touching)
            lose ("didn't find property \"no-touching\" in
org.freedesktop.DBus.GLib.Tests.MyObject");
        }
    else if (!found_foobject && strcmp (interface_info_get_name
(iface), "org.freedesktop.DBus.GLib.Tests.FooObject") == 0)
        found_foobject = TRUE;
    else
        lose ("Unexpected or duplicate interface %s",
interface_info_get_name (iface));
    }

    if (!(found_introspectable && found_myobject && found_properties))

```



```

        lose ("Missing interface");
        g_free (node);
    }
    g_free (v_STRING_2);

    /* Properties tests */
    property_proxy = dbus_g_proxy_new_from_proxy (proxy,
DBUS_INTERFACE_PROPERTIES, NULL);
    g_object_unref (proxy);
    proxy = NULL;

    g_print ("Calling GetProperty (1)\n");
    {
        GValue value = {0,};
        if (!dbus_g_proxy_call (property_proxy, "Get", &error,
                                G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                                G_TYPE_STRING, "this_is_a_string",
                                G_TYPE_INVALID,
                                G_TYPE_VALUE, &value, G_TYPE_INVALID))
            lose_gerror ("Failed to complete GetProperty call", error);
        g_assert (G_VALUE_HOLDS (&value, G_TYPE_STRING));
        g_assert (!strcmp (g_value_get_string (&value), ""));
        g_value_unset (&value);
    }

    g_print ("Calling SetProperty (1)\n");
    {
        GValue value = {0,};
        g_value_init (&value, G_TYPE_STRING);
        g_value_set_string (&value, "testing value");
        if (!dbus_g_proxy_call (property_proxy, "Set", &error,
                                G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                                G_TYPE_STRING, "this_is_a_string",
                                G_TYPE_VALUE, &value, G_TYPE_INVALID,
G_TYPE_INVALID))
            lose_gerror ("Failed to complete SetProperty call", error);
        g_value_unset (&value);
    }

    g_print ("Calling GetProperty of read-only property\n");
    {
        GValue value = {0,};
        if (!dbus_g_proxy_call (property_proxy, "Get", &error,
                                G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                                G_TYPE_STRING, "no-touching",
                                G_TYPE_INVALID,
                                G_TYPE_VALUE, &value, G_TYPE_INVALID))
            lose_gerror ("Failed to complete GetProperty no-touching call",
error);
    }

```

```

    g_assert (G_VALUE HOLDS (&value, G_TYPE_UINT));
    g_assert (g_value_get_uint (&value) == 42);
    g_value_unset (&value);
}

g_print ("Calling SetProperty (1)\n");
{
    GValue value = {0,};
    g_value_init (&value, G_TYPE_UINT);
    g_value_set_uint (&value, 40);
    if (dbus_g_proxy_call (property_proxy, "Set", &error,
                           G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                           G_TYPE_STRING, "no-touching",
                           G_TYPE_VALUE, &value, G_TYPE_INVALID,
G_TYPE_INVALID))
        lose ("Unexpected success from SetProperty call for read-only
value \"no-touching\"");
    g_clear_error (&error);
    g_value_unset (&value);
}

g_print ("Calling GetProperty of read-only property (again)\n");
{
    GValue value = {0,};
    if (!dbus_g_proxy_call (property_proxy, "Get", &error,
                           G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                           G_TYPE_STRING, "no-touching",
                           G_TYPE_INVALID,
                           G_TYPE_VALUE, &value, G_TYPE_INVALID))
        lose_gerror ("Failed to complete GetProperty call", error);
    g_assert (G_VALUE HOLDS (&value, G_TYPE_UINT));
    g_assert (g_value_get_uint (&value) == 42);
    g_value_unset (&value);
}

g_print ("Calling GetProperty (2)\n");
{
    GValue value = {0,};
    if (!dbus_g_proxy_call (property_proxy, "Get", &error,
                           G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                           G_TYPE_STRING, "this_is_a_string",
                           G_TYPE_INVALID,
                           G_TYPE_VALUE, &value, G_TYPE_INVALID))
        lose_gerror ("Failed to complete GetProperty call", error);
    g_assert (G_VALUE HOLDS (&value, G_TYPE_STRING));
    g_assert (!strcmp (g_value_get_string (&value), "testing value"));
    g_value_unset (&value);
}

```

```

g_print ("Calling GetProperty: SuperStudly\n");
{
    GValue value = {0,};
    if (!dbus_g_proxy_call (property_proxy, "Get", &error,
                            G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                            G_TYPE_STRING, "SuperStudly",
                            G_TYPE_INVALID,
                            G_TYPE_VALUE, &value, G_TYPE_INVALID))
        lose_gerror ("Failed to complete GetProperty call", error);
    g_assert (G_VALUE_HOLDS (&value, G_TYPE_DOUBLE));
    g_value_unset (&value);
}

g_print ("Calling GetProperty: super-studly\n");
{
    GValue value = {0,};
    if (!dbus_g_proxy_call (property_proxy, "Get", &error,
                            G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                            G_TYPE_STRING, "super-studly",
                            G_TYPE_INVALID,
                            G_TYPE_VALUE, &value, G_TYPE_INVALID))
        lose_gerror ("Failed to complete GetProperty call", error);
    g_assert (G_VALUE_HOLDS (&value, G_TYPE_DOUBLE));
    g_value_unset (&value);
}

g_print ("Calling GetProperty: super_studly\n");
{
    GValue value = {0,};
    if (!dbus_g_proxy_call (property_proxy, "Get", &error,
                            G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                            G_TYPE_STRING, "super_studly",
                            G_TYPE_INVALID,
                            G_TYPE_VALUE, &value, G_TYPE_INVALID))
        lose_gerror ("Failed to complete GetProperty call", error);
    g_assert (G_VALUE_HOLDS (&value, G_TYPE_DOUBLE));
    g_value_unset (&value);
}

g_print ("Calling GetProperty on unknown property\n");
{
    GValue value = {0,};
    if (dbus_g_proxy_call (property_proxy, "Get", &error,
                            G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                            G_TYPE_STRING, "SomeUnknownProperty",
                            G_TYPE_INVALID,
                            G_TYPE_VALUE, &value, G_TYPE_INVALID))

```

```

        lose ("Unexpected success for GetProperty call of unknown
property");

    g_clear_error (&error);
}

/* These two are expected to pass unless we call
disable_legacy_property_access */

g_print ("Calling GetProperty on not-exported property (legacy
enabled)\n");
{
    GValue value = {0,};
    if (!dbus_g_proxy_call (property_proxy, "Get", &error,
        G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
        G_TYPE_STRING, "should-be-hidden",
        G_TYPE_INVALID,
        G_TYPE_VALUE, &value, G_TYPE_INVALID))
        lose_gerror ("Failed GetProperty call of \"should-be-hidden\"
property", error);
    g_assert (G_VALUE_HOLDS_BOOLEAN (&value));
    g_assert (g_value_get_boolean (&value) == FALSE);
    g_value_unset (&value);
}

g_print ("Calling GetProperty on not-exported property (legacy
enabled)\n");
{
    GValue value = {0,};
    if (!dbus_g_proxy_call (property_proxy, "Get", &error,
        G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
        G_TYPE_STRING, "ShouldBeHidden",
        G_TYPE_INVALID,
        G_TYPE_VALUE, &value, G_TYPE_INVALID))
        lose_gerror ("Failed GetProperty call of \"ShouldBeHidden\"
property", error);

    g_value_unset (&value);
}

g_print ("Calling SetProperty on not-exported property (legacy
enabled)\n");
{
    GValue value = {0,};
    g_value_init (&value, G_TYPE_BOOLEAN);
    g_value_set_boolean (&value, TRUE);
    if (dbus_g_proxy_call (property_proxy, "Set", &error,
        G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
        G_TYPE_STRING, "should-be-hidden",

```

```

        G_TYPE_VALUE, &value,
        G_TYPE_INVALID, G_TYPE_INVALID))
    lose ("Unexpected success from SetProperty call of \"should-be-
hidden\" property");
    g_value_unset (&value);
    g_clear_error (&error);
}

g_print ("Calling GetProperty on not-exported property (legacy
enabled)\n");
{
    GValue value = {0,};
    if (!dbus_g_proxy_call (property_proxy, "Get", &error,
        G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
        G_TYPE_STRING, "should-be-hidden",
        G_TYPE_INVALID,
        G_TYPE_VALUE, &value, G_TYPE_INVALID))
        lose_gerror ("Failed GetProperty call of \"should-be-hidden\"
property", error);
    g_assert (G_VALUE_HOLDS_BOOLEAN (&value));
    g_assert (g_value_get_boolean (&value) == FALSE);
    g_value_unset (&value);
}

/* Test GetAll */
/* 'testing value' set earlier by the SetProperty tests */
test_base_class_get_all (connection,

"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
    "testing value");

/* "" is base class default for this_is_a_string property since the
* property isn't marked with G_PARAM_CONSTRUT.
*/
test_base_class_get_all (connection,

"/org/freedesktop/DBus/GLib/Tests/MyTestObjectSubclass",
    "");

/* Finally test GetAll of a subclass on a different interface to
ensure that
* the right properties are returned (fdo #19145)
*/
test_subclass_get_all (connection,
"/org/freedesktop/DBus/GLib/Tests/MyTestObjectSubclass");

/* Now, call disable_legacy_property_access */

g_assert (proxy == NULL);
proxy = dbus_g_proxy_new_for_name_owner (connection,

```

```

"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
"org.freedesktop.DBus.GLib.Tests.MyObject",
    &error);

    if (!dbus_g_proxy_call (proxy, "UnsafeDisableLegacyPropertyAccess",
&error,
                            G_TYPE_INVALID, G_TYPE_INVALID))
        lose_gerror ("Failed to invoke UnsafeDisableLegacyPropertyAccess",
error);

    g_object_unref (proxy);
    proxy = NULL;

    g_print ("Calling GetProperty on not-exported property (legacy
*disabled*)\n");
    {
        GValue value = {0,};
        if (dbus_g_proxy_call (property_proxy, "Get", &error,
                                G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                                G_TYPE_STRING, "should-be-hidden",
                                G_TYPE_INVALID,
                                G_TYPE_VALUE, &value, G_TYPE_INVALID))
            lose ("Unexpected success from GetProperty call of \"should-be-
hidden\" property");
        g_clear_error (&error);
    }

    g_print ("Calling GetProperty on not-exported property (legacy
*disabled*)\n");
    {
        GValue value = {0,};
        if (dbus_g_proxy_call (property_proxy, "Get", &error,
                                G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                                G_TYPE_STRING, "ShouldBeHidden",
                                G_TYPE_INVALID,
                                G_TYPE_VALUE, &value, G_TYPE_INVALID))
            lose ("Unexpected success from GetProperty call of
\"ShouldBeHidden\" property");
        g_clear_error (&error);
    }

    g_print ("Calling SetProperty on not-exported property (legacy
*disabled*)\n");
    {
        GValue value = {0,};
        g_value_init (&value, G_TYPE_BOOLEAN);

```

```

    g_value_set_boolean (&value, FALSE);
    if (dbus_g_proxy_call (property_proxy, "Set", &error,
                          G_TYPE_STRING,
"org.freedesktop.DBus.GLib.Tests.MyObject",
                          G_TYPE_STRING, "should-be-hidden",
                          G_TYPE_VALUE, &value,
                          G_TYPE_INVALID, G_TYPE_INVALID))
        lose ("Unexpected success from SetProperty call of \"should-be-
hidden\" property");
    g_value_unset (&value);
    g_clear_error (&error);
}

g_object_unref (property_proxy);
property_proxy = NULL;

test_terminate_proxy1 = dbus_g_proxy_new_for_name_owner (connection,
"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
"org.freedesktop.DBus.GLib.Tests.MyObject",
&error);

if (test_terminate_proxy1 == NULL)
    lose_gerror ("Failed to create proxy for name owner", error);

test_terminate_proxy2 = dbus_g_proxy_new_for_name_owner (connection,
"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
"org.freedesktop.DBus.GLib.Tests.MyObject",
&error);

if (test_terminate_proxy2 == NULL)
    lose_gerror ("Failed to create proxy for name owner", error);

g_print ("Testing duplicate proxy destruction\n");
await_terminating_service = "org.freedesktop.DBus.GLib.TestService";
dbus_g_proxy_call_no_reply (test_terminate_proxy1, "Terminate",
G_TYPE_INVALID);

proxy_destroyed = FALSE;
proxy_destroy_and_nameowner = TRUE;
proxy_destroy_and_nameowner_complete = FALSE;

g_signal_connect (G_OBJECT (test_terminate_proxy1),
"destroy",
G_CALLBACK (test_terminate_proxy1_destroyed_cb),
NULL);

```

```

dbus_g_connection_flush (connection);
exit_timeout = g_timeout_add (5000, timed_exit, loop);
g_main_loop_run (loop);

if (await_terminating_service != NULL)
    lose ("Didn't see name loss for
\"org.freedesktop.DBus.GLib.TestService\");
if (!proxy_destroyed)
    lose ("Didn't get proxy_destroyed");
if (test_terminate_proxy2)
    lose ("Duplicate proxy wasn'tdestroyed");

g_print ("Proxy and duplicate destroyed successfully\n");

g_print ("Beginning private connection tests\n");

{
    DBusGConnection *privconn = dbus_g_bus_get_private
(DBUS_BUS_SESSION, NULL, &error);

    if (privconn == NULL)
        lose_gerror ("Failed to open private connection to bus", error);
    g_assert (privconn != connection);

    proxy = dbus_g_proxy_new_for_name (privconn,
"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
"org.freedesktop.DBus.GLib.Tests.MyObject");

    g_print ("[private connection] Calling (wrapped) do_nothing\n");
    if (!org_freedesktop_DBus_GLib_Tests_MyObject_do_nothing (proxy,
&error))
        lose_gerror ("Failed to complete (wrapped) DoNothing call",
error);

    g_object_unref (G_OBJECT (proxy));
}

g_object_unref (G_OBJECT (driver));

g_print ("Successfully completed %s\n", argv[0]);

return 0;
}

```

File = test-dup-prop-a.xml


```
<?xml version="1.0"?><!-- ex:set et ts=2: -->
<node name="/org/freedesktop/DBus/GLib/Test/Interfaces">
  <interface name="org.freedesktop.DBus.GLib.Test.Interfaces.A">
    <property name="Foobar" type="u" access="readwrite"/>
  </interface>
</node>
```

File = test-dup-prop-b.xml

```
<?xml version="1.0"?><!-- ex:set et ts=2: -->
<node name="/org/freedesktop/DBus/GLib/Test/Interfaces">
  <interface name="org.freedesktop.DBus.GLib.Test.Interfaces.B">
    <property name="Foobar" type="u" access="readwrite"/>
  </interface>
</node>
```

File = test-dup-prop.c

```
#ifdef HAVE_CONFIG_H
#   include <config.h>
#endif
#include "test-dup-prop.h"

#include "test-dup-prop-a-glue.h"
#include "test-dup-prop-b-glue.h"

#define TEST_A_FOOBAR "a-foobar"
#define TEST_B_FOOBAR "b-foobar"

static void
test_a_class_init (gpointer g_iface)
{
    GType iface_type = G_TYPE_FROM_INTERFACE (g_iface);

    g_object_interface_install_property (g_iface,
        g_param_spec_uint (TEST_A_FOOBAR,
            "A Foobar",
            "A description of something",
            0, G_MAXUINT, 0,
            G_PARAM_READWRITE));

    dbus_g_object_type_install_info (iface_type,
        &dbus_glib_test_dup_prop_a_object_info);
    dbus_g_object_type_register_shadow_property (iface_type,
        "Foobar",
        TEST_A_FOOBAR);
}
```

```

GType
test_a_get_type (void)
{
    static GType the_type = 0;

    if (G_UNLIKELY (the_type == 0)) {
        static const GTypeInfo info = {
            sizeof (TestAiface),
            NULL, NULL,
            (GClassInitFunc) test_a_class_init,
            NULL, NULL, 0, 0, NULL
        };

        the_type = g_type_register_static (G_TYPE_INTERFACE,
                                           "TestA",
                                           &info, 0);
        g_type_interface_add_prerequisite (the_type,
                                           G_TYPE_OBJECT);
    }
    return the_type;
}

static void
test_b_class_init (gpointer g_iface)
{
    GType iface_type = G_TYPE_FROM_INTERFACE (g_iface);

    g_object_interface_install_property (g_iface,
                                         g_param_spec_uint (TEST_B_FOOBAR,
                                                             "B Foobar",
                                                             "A description of something",
                                                             0, G_MAXUINT, 0,
                                                             G_PARAM_READWRITE));

    dbus_g_object_type_install_info (iface_type,
                                     &dbus_glib_test_dup_prop_b_object_info);
    dbus_g_object_type_register_shadow_property (iface_type,
                                                 "Foobar",
                                                 TEST_B_FOOBAR);
}

GType
test_b_get_type (void)
{
    static GType the_type = 0;

    if (G_UNLIKELY (the_type == 0)) {
        static const GTypeInfo info = {
            sizeof (TestBiface),
            NULL, NULL,
            (GClassInitFunc) test_b_class_init,

```

```

        NULL, NULL, 0, 0, NULL
    };

    the_type = g_type_register_static (G_TYPE_INTERFACE,
                                       "TestB",
                                       &info, 0);
    g_type_interface_add_prerequisite (the_type,
G_TYPE_OBJECT);
    }
    return the_type;
}

static void test_a_init (TestAIface *a_class);
static void test_b_init (TestBIface *b_class);

G_DEFINE_TYPE_EXTENDED (TestDpObj, test_dp_obj, G_TYPE_OBJECT, 0,
                        G_IMPLEMENT_INTERFACE (TEST_TYPE_A,
test_a_init)
                        G_IMPLEMENT_INTERFACE (TEST_TYPE_B,
test_b_init))

#define TEST_DP_OBJ_GET_PRIVATE(o) (G_TYPE_INSTANCE_GET_PRIVATE ((o),
TEST_TYPE_DP_OBJ, TestDpObjPrivate))

enum {
    PROP_0,
    PROP_A_FOOBAR,
    PROP_B_FOOBAR
};

typedef struct {
    guint32 a_foobar;
    guint32 b_foobar;
} TestDpObjPrivate;

TestDpObj *
test_dp_obj_new (void)
{
    return TEST_DP_OBJ (g_object_new (TEST_TYPE_DP_OBJ, NULL));
}

static void
test_a_init (TestAIface *a_class)
{
}

static void
test_b_init (TestBIface *b_class)
{
}

```

```

static void
test_dp_obj_init (TestDpObj *self)
{
}

static void
set_property (GObject *object, guint prop_id,
              const GValue *value, GParamSpec *pspec)
{
    TestDpObjPrivate *priv = TEST_DP_OBJ_GET_PRIVATE (object);

    switch (prop_id) {
    case PROP_A_FOOBAR:
        priv->a_foobar = g_value_get_uint (value);
        break;
    case PROP_B_FOOBAR:
        priv->b_foobar = g_value_get_uint (value);
        break;
    default:
        G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
        break;
    }
}

static void
get_property (GObject *object, guint prop_id,
              GValue *value, GParamSpec *pspec)
{
    TestDpObjPrivate *priv = TEST_DP_OBJ_GET_PRIVATE (object);

    switch (prop_id) {
    case PROP_A_FOOBAR:
        g_value_set_uint (value, priv->a_foobar);
        break;
    case PROP_B_FOOBAR:
        g_value_set_uint (value, priv->b_foobar);
        break;
    default:
        G_OBJECT_WARN_INVALID_PROPERTY_ID (object, prop_id, pspec);
        break;
    }
}

static void
test_dp_obj_class_init (TestDpObjClass *klass)
{
    GObjectClass *object_class = G_OBJECT_CLASS (klass);

    g_type_class_add_private (object_class, sizeof
                              (TestDpObjPrivate));
}

```

```

object_class->get_property = get_property;
object_class->set_property = set_property;

/* Properties */
g_object_class_override_property (object_class,
                                  PROP_A_FOOBAR,
                                  TEST_A_FOOBAR);

g_object_class_override_property (object_class,
                                  PROP_B_FOOBAR,
                                  TEST_B_FOOBAR);
}

```

File = test-dup-prop.h

```

#ifndef __TEST_DUP_PROP_H__
#define __TEST_DUP_PROP_H__

#include <glib-object.h>

#define TEST_TYPE_A          (test_a_get_type ())
#define TEST_A(obj)         (G_TYPE_CHECK_INSTANCE_CAST ((obj),
TEST_TYPE_A, TestA))
#define TEST_A_IFACE(obj)   (G_TYPE_CHECK_CLASS_CAST ((obj),
TEST_TYPE_A, TestAiface))
#define TEST_IS_IFACE_A(obj) (G_TYPE_CHECK_INSTANCE_TYPE ((obj),
TEST_TYPE_A))
#define TEST_A_GET_IFACE(obj) (G_TYPE_INSTANCE_GET_INTERFACE ((obj),
TEST_TYPE_A, TestAiface))

#define TEST_TYPE_B          (test_b_get_type ())
#define TEST_B(obj)         (G_TYPE_CHECK_INSTANCE_CAST ((obj),
TEST_TYPE_B, TestB))
#define TEST_B_IFACE(obj)   (G_TYPE_CHECK_CLASS_CAST ((obj),
TEST_TYPE_B, TestBiface))
#define TEST_IS_B(obj)      (G_TYPE_CHECK_INSTANCE_TYPE ((obj),
TEST_TYPE_B))
#define TEST_B_GET_IFACE(obj) (G_TYPE_INSTANCE_GET_INTERFACE ((obj),
TEST_TYPE_B, TestBiface))

#define TEST_TYPE_DP_OBJ     (test_dp_obj_get_type ())
#define TEST_DP_OBJ(obj)     (G_TYPE_CHECK_INSTANCE_CAST
((obj), TEST_TYPE_DP_OBJ, TestDpObj))
#define TEST_DP_OBJ_CLASS(klass) (G_TYPE_CHECK_CLASS_CAST ((klass),
TEST_TYPE_DP_OBJ, TestDpObjClass))
#define TEST_IS_DP_OBJ(obj)   (G_TYPE_CHECK_INSTANCE_TYPE
((obj), TEST_TYPE_DP_OBJ))
#define TEST_IS_DP_OBJ_CLASS(klass) (G_TYPE_CHECK_CLASS_TYPE ((klass),
TEST_TYPE_DP_OBJ))

```

```
#define TEST_DP_OBJ_GET_CLASS(obj) (G_TYPE_INSTANCE_GET_CLASS ((obj),  
TEST_TYPE_DP_OBJ, TestDpObjClass))
```

```
typedef struct _TestA      TestA; /* dummy */  
typedef struct _TestAIface TestAIface;
```

```
typedef struct _TestB      TestB; /* dummy */  
typedef struct _TestBIface TestBIface;
```

```
typedef struct _TestDpObj  TestDpObj;  
typedef struct _TestDpObjClass TestDpObjClass;
```

```
struct _TestAIface {  
    GTypeInterface interface;  
};
```

```
struct _TestBIface {  
    GTypeInterface interface;  
};
```

```
struct _TestDpObj {  
    GObject parent;  
};
```

```
struct _TestDpObjClass {  
    GObjectClass parent;  
};
```

```
GType test_a_get_type (void) G_GNUC_CONST;
```

```
GType test_b_get_type (void) G_GNUC_CONST;
```

```
GType test_dp_obj_get_type (void) G_GNUC_CONST;
```

```
TestDpObj *test_dp_obj_new (void);
```

```
#endif
```

```
File = test-exit.c
```

```
/* This is a process that just exits with a failure code */
```

```
int  
main (int argc, char **argv)  
{  
  
    return 1;  
}
```

File = test-goodbye.xml

```
<?xml version="1.0"?><!-- ex:set et ts=2: -->
<node name="/org/freedesktop/DBus/GLib/Test/Interfaces">
  <interface name="org.freedesktop.DBus.GLib.Test.Interfaces.Goodbye">
    <annotation name="org.freedesktop.DBus.GLib.CSymbol"
value="test_goodbye_dbus"/>
    <method name="SayGoodbye">
      <arg name="message" type="s" direction="out" />
    </method>
  </interface>
</node>
```

File = test-gvariant.c

```
/* GVariant to dbus-glib escape hatch
 *
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 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 *
 */

#include <config.h>
```

```

#include <dbus/dbus-glib.h>
#include <gio/gio.h>

/**
 * test_g_variant_equivalent:
 *
 * The function g_variant_equal() cannot be used for dictionaries
 because it
 * cares about the ordering of dictionaries, which breaks our tests.
 */
static gboolean
test_g_variant_equivalent (GVariant *one,
                           GVariant *two)
{
    if (!g_variant_type_equal (
        g_variant_get_type (one),
        g_variant_get_type (two)))
    {
        return FALSE;
    }
    else if (g_variant_is_of_type (one, G_VARIANT_TYPE_DICTIONARY) &&
             g_variant_is_of_type (two, G_VARIANT_TYPE_DICTIONARY))
    {
        GHashTable *hash;
        GVariantIter iter;
        GVariant *child;
        gboolean equal = TRUE;

        if (g_variant_n_children (one) != g_variant_n_children (two))
            return FALSE;

        /* pack @one into a hash table */
        hash = g_hash_table_new_full (g_variant_hash, g_variant_equal,
                                     (GDestroyNotify) g_variant_unref, (GDestroyNotify)
g_variant_unref);

        g_variant_iter_init (&iter, one);
        while ((child = g_variant_iter_next_value (&iter)))
        {
            g_hash_table_insert (hash,
                                g_variant_get_child_value (child, 0),
                                g_variant_get_child_value (child, 1));
            g_variant_unref (child);
        }

        /* now iterate @two to check for the keys in @hash */
        g_variant_iter_init (&iter, two);
        while (equal && (child = g_variant_iter_next_value (&iter)))
        {
            GVariant *k, *v1, *v2;

            k = g_variant_get_child_value (child, 0);

```



```

    v1 = g_variant_get_child_value (child, 1);

    v2 = g_hash_table_lookup (hash, k);

    if (v2 == NULL || !test_g_variant_equivalent (v1, v2))
        equal = FALSE;
    else
        g_hash_table_remove (hash, k);

        g_variant_unref (k);
        g_variant_unref (v1);
        g_variant_unref (child);
    }

    if (g_hash_table_size (hash) > 0)
        equal = FALSE;

    g_hash_table_destroy (hash);

    return equal;
}
else if (g_variant_is_container (one) &&
        g_variant_is_container (two))
{
    guint i, size;
    gboolean equal = TRUE;

    if (g_variant_n_children (one) != g_variant_n_children (two))
        return FALSE;

    size = g_variant_n_children (one);
    for (i = 0; equal && i < size; i++)
    {
        GVariant *child1, *child2;

        child1 = g_variant_get_child_value (one, i);
        child2 = g_variant_get_child_value (two, i);

        equal = test_g_variant_equivalent (child1, child2);

        g_variant_unref (child1);
        g_variant_unref (child2);
    }

    return equal;
}
else
{
    return g_variant_equal (one, two);
}
}

```

```

#define assert_g_variant_equivalent(a,e) \
    assert_g_variant_equivalent_internal (__FILE__, __LINE__, \
        #a, a, #e, e)

static void
assert_g_variant_equivalent_internal (
    const gchar *file, gint line,
    const gchar *actual_name, GVariant *actual,
    const gchar *expected_name, GVariant *expected);

static void
assert_g_variant_equivalent_internal (const gchar *file,
    gint line,
    const gchar *actual_name,
    GVariant *actual,
    const gchar *expected_name,
    GVariant *expected)
{
    if (!test_g_variant_equivalent (actual, expected))
    {
        gchar *a = g_variant_print (actual, TRUE);
        gchar *e = g_variant_print (expected, TRUE);

        g_error ("%s:%d: Variants should have been equal:\n"
            "%s = %s\n"
            "%s = %s", file, line, actual_name, a, expected_name, e);
        /* no point in freeing the strings, we've just crashed anyway */
    }
}

/* test_g_variant_equivalent tests */
static void
test_simple_equiv (void)
{
    GVariant *v1, *v2;

    v1 = g_variant_new_int32 (1984);
    v2 = g_variant_new_int32 (1984);

    g_assert (test_g_variant_equivalent (v1, v2));

    g_variant_unref (v1);
    g_variant_unref (v2);
}

static void
test_simple_not_equiv (void)
{
    GVariant *v1, *v2;

    v1 = g_variant_new_int32 (1982);
    v2 = g_variant_new_int32 (1984);
}

```

```

    g_assert (!test_g_variant_equivalent (v1, v2));

    g_variant_unref (v1);
    g_variant_unref (v2);
}

static void
test_array_not_equiv (void)
{
    GVariantBuilder b;
    GVariant *v1, *v2;

    g_variant_builder_init (&b, G_VARIANT_TYPE ("av"));
    g_variant_builder_add (&b, "v", g_variant_new_int32 (1984));
    g_variant_builder_add (&b, "v", g_variant_new_string ("Orwell"));
    g_variant_builder_add (&b, "v", g_variant_new_object_path
("/cats/escher"));
    v1 = g_variant_builder_end (&b);

    g_variant_builder_init (&b, G_VARIANT_TYPE ("av"));
    /* note the order has changed */
    g_variant_builder_add (&b, "v", g_variant_new_string ("Orwell"));
    g_variant_builder_add (&b, "v", g_variant_new_int32 (1984));
    g_variant_builder_add (&b, "v", g_variant_new_object_path
("/cats/escher"));
    v2 = g_variant_builder_end (&b);

    g_assert (!test_g_variant_equivalent (v1, v2));

    g_variant_unref (v1);
    g_variant_unref (v2);
}

static void
test_map_equiv (void)
{
    GVariantBuilder b;
    GVariant *v1, *v2;

    g_variant_builder_init (&b, G_VARIANT_TYPE ("a{os}"));
    g_variant_builder_add (&b, "{os}", "/cats/escher", "Escher
Moonbeam");
    g_variant_builder_add (&b, "{os}", "/cats/harvey", "Harvey Nomcat");
    g_variant_builder_add (&b, "{os}", "/cats/josh", "Josh Smith");
    v1 = g_variant_builder_end (&b);

    g_variant_builder_init (&b, G_VARIANT_TYPE ("a{os}"));
    /* note the order has changed */
    g_variant_builder_add (&b, "{os}", "/cats/harvey", "Harvey Nomcat");
    g_variant_builder_add (&b, "{os}", "/cats/escher", "Escher
Moonbeam");

```

```

g_variant_builder_add (&b, "{os}", "/cats/josh", "Josh Smith");
v2 = g_variant_builder_end (&b);

g_assert (test_g_variant_equivalent (v1, v2));

g_variant_unref (v1);
g_variant_unref (v2);
}

static void
test_map_not_equiv1 (void)
{
    GVariantBuilder b;
    GVariant *v1, *v2;

    g_variant_builder_init (&b, G_VARIANT_TYPE ("a{os}"));
    g_variant_builder_add (&b, "{os}", "/cats/escher", "Escher
Moonbeam");
    g_variant_builder_add (&b, "{os}", "/cats/harvey", "Harvey Nomcat");
    g_variant_builder_add (&b, "{os}", "/cats/josh", "Josh Smith");
    v1 = g_variant_builder_end (&b);

    g_variant_builder_init (&b, G_VARIANT_TYPE ("a{os}"));
    g_variant_builder_add (&b, "{os}", "/cats/escher", "Escher
Moonbeam");
    g_variant_builder_add (&b, "{os}", "/cats/harvey", "Harvey Nomcat");
    g_variant_builder_add (&b, "{os}", "/cats/josh", "Josh Smith");
    g_variant_builder_add (&b, "{os}", "/cats/rory", "Rory Cat");
    v2 = g_variant_builder_end (&b);

    g_assert (!test_g_variant_equivalent (v1, v2));

    g_variant_unref (v1);
    g_variant_unref (v2);
}

static void
test_map_not_equiv2 (void)
{
    GVariantBuilder b;
    GVariant *v1, *v2;

    g_variant_builder_init (&b, G_VARIANT_TYPE ("a{os}"));
    g_variant_builder_add (&b, "{os}", "/cats/escher", "Escher
Moonbeam");
    g_variant_builder_add (&b, "{os}", "/cats/harvey", "Harvey Nomcat");
    g_variant_builder_add (&b, "{os}", "/cats/josh", "Josh Smith");
    v1 = g_variant_builder_end (&b);

    g_variant_builder_init (&b, G_VARIANT_TYPE ("a{os}"));
    g_variant_builder_add (&b, "{os}", "/cats/escher", "Escher
Moonbeam");

```

```

g_variant_builder_add (&b, "{os}", "/cats/harvey", "Harvey Nomcat");
g_variant_builder_add (&b, "{os}", "/cats/josh", "Josh Cat");
v2 = g_variant_builder_end (&b);

g_assert (!test_g_variant_equivalent (v1, v2));

g_variant_unref (v1);
g_variant_unref (v2);
}

/* dbus_g_value_build_g_variant tests */
static void
test_i (void)
{
  GValue v = { 0, };
  GVariant *var, *varc;

  g_value_init (&v, G_TYPE_INT);
  g_value_set_int (&v, 1984);

  var = dbus_g_value_build_g_variant (&v);
  g_value_unset (&v);

  varc = g_variant_new_int32 (1984);

  g_assert (test_g_variant_equivalent (var, varc));

  g_variant_unref (var);
  g_variant_unref (varc);
}

static void
test_s (void)
{
  GValue v = { 0, };
  GVariant *var, *varc;

  g_value_init (&v, G_TYPE_STRING);
  g_value_set_static_string (&v, "Orwell");

  var = dbus_g_value_build_g_variant (&v);
  g_value_unset (&v);

  varc = g_variant_new_string ("Orwell");

  g_assert (test_g_variant_equivalent (var, varc));

  g_variant_unref (var);
  g_variant_unref (varc);
}

static void

```

```

test_o (void)
{
    GValue v = { 0, };
    GVariant *var, *varc;

    g_value_init (&v, DBUS_TYPE_G_OBJECT_PATH);
    g_value_set_boxed (&v, "/cats/escher");

    var = dbus_g_value_build_g_variant (&v);
    g_value_unset (&v);

    varc = g_variant_new_object_path ("/cats/escher");

    g_assert (test_g_variant_equivalent (var, varc));

    g_variant_unref (var);
    g_variant_unref (varc);
}

static void
test_us (void)
{
    GValue v = { 0, };
    GVariant *var, *varc;
    GType us = dbus_g_type_get_struct ("GValueArray",
        G_TYPE_UINT,
        G_TYPE_STRING,
        G_TYPE_INVALID);

    g_value_init (&v, us);
    g_value_take_boxed (&v, dbus_g_type_specialized_construct (us));
    dbus_g_type_struct_set (&v,
        0, 1984,
        1, "Orwell",
        G_MAXUINT);

    var = dbus_g_value_build_g_variant (&v);
    g_value_unset (&v);

    varc = g_variant_new ("(us)", 1984, "Orwell");

    g_assert (test_g_variant_equivalent (var, varc));

    g_variant_unref (var);
    g_variant_unref (varc);
}

static void
test_a_os (void)
{
    GValue v = { 0, };
    GHashTable *map;

```

```

GVariantBuilder b;
GVariant *var, *varc;
GType a_os = dbus_g_type_get_map ("GHashTable",
    DBUS_TYPE_G_OBJECT_PATH,
    G_TYPE_STRING);

g_value_init (&v, a_os);
map = dbus_g_type_specialized_construct (a_os);

g_hash_table_insert (map,
    g_strdup ("/cats/escher"), g_strdup ("Escher Moonbeam"));
g_hash_table_insert (map,
    g_strdup ("/cats/harvey"), g_strdup ("Harvey Nomcat"));
g_hash_table_insert (map,
    g_strdup ("/cats/josh"), g_strdup ("Josh Smith"));
g_value_take_boxed (&v, map);

var = dbus_g_value_build_g_variant (&v);
g_value_unset (&v);

g_variant_builder_init (&b, G_VARIANT_TYPE ("a{os}"));
g_variant_builder_add (&b, "{os}", "/cats/escher", "Escher
Moonbeam");
g_variant_builder_add (&b, "{os}", "/cats/harvey", "Harvey Nomcat");
g_variant_builder_add (&b, "{os}", "/cats/josh", "Josh Smith");
varc = g_variant_builder_end (&b);

g_assert (test_g_variant_equivalent (var, varc));

g_variant_unref (var);
g_variant_unref (varc);
}

static void
test_av (void)
{
    GValue v = { 0, }, *v2;
    GVariantBuilder b;
    GVariant *var, *varc;
    GType av = dbus_g_type_get_collection ("GPtrArray", G_TYPE_VALUE);
    GPtrArray *array;

    g_value_init (&v, av);
    array = dbus_g_type_specialized_construct (av);

    v2 = g_new0 (GValue, 1);
    g_value_init (v2, G_TYPE_INT);
    g_value_set_int (v2, 1984);
    g_ptr_array_add (array, v2);

    v2 = g_new0 (GValue, 1);
    g_value_init (v2, G_TYPE_STRING);

```

```

g_value_set_static_string (v2, "Orwell");
g_ptr_array_add (array, v2);

v2 = g_new0 (GValue, 1);
g_value_init (v2, DBUS_TYPE_G_OBJECT_PATH);
g_value_set_boxed (v2, "/cats/escher");
g_ptr_array_add (array, v2);

g_value_take_boxed (&v, array);

var = dbus_g_value_build_g_variant (&v);
g_value_unset (&v);

g_variant_builder_init (&b, G_VARIANT_TYPE ("av"));
g_variant_builder_add (&b, "v", g_variant_new_int32 (1984));
g_variant_builder_add (&b, "v", g_variant_new_string ("Orwell"));
g_variant_builder_add (&b, "v", g_variant_new_object_path
("/cats/escher"));
varc = g_variant_builder_end (&b);

g_assert (test_g_variant_equivalent (var, varc));

g_variant_unref (var);
g_variant_unref (varc);
}

static void
test_ab (void)
{
  GValue v = { 0, };
  gboolean bools[] = { TRUE, FALSE };
  GVariantBuilder b;
  GVariant *var, *varc;
  GType ab = dbus_g_type_get_collection ("GArray", G_TYPE_BOOLEAN);
  GArray *array;

  g_value_init (&v, ab);
  array = dbus_g_type_specialized_construct (ab);

  g_array_append_vals (array, bools, 2);
  g_assert_cmpint (g_array_index (array, gboolean, 0), ==, TRUE);
  g_assert_cmpint (g_array_index (array, gboolean, 1), ==, FALSE);

  g_value_take_boxed (&v, array);

  var = dbus_g_value_build_g_variant (&v);
  g_value_unset (&v);

  g_variant_builder_init (&b, G_VARIANT_TYPE ("ab"));
  g_variant_builder_add (&b, "b", TRUE);
  g_variant_builder_add (&b, "b", FALSE);
  varc = g_variant_builder_end (&b);

```



```

    g_assert (test_g_variant_equivalent (var, varc));

    g_variant_unref (var);
    g_variant_unref (varc);
}

static void
test_ai (void)
{
    GValue v = { 0, };
    gint ints[] = { 1984, 1066 };
    GVariantBuilder b;
    GVariant *var, *varc;
    GType ai = dbus_g_type_get_collection ("GArray", G_TYPE_INT);
    GArray *array;

    g_value_init (&v, ai);
    array = dbus_g_type_specialized_construct (ai);

    g_array_append_vals (array, ints, 2);
    g_assert_cmpint (g_array_index (array, gint, 0), ==, 1984);
    g_assert_cmpint (g_array_index (array, gint, 1), ==, 1066);

    g_value_take_boxed (&v, array);

    var = dbus_g_value_build_g_variant (&v);
    g_value_unset (&v);

    g_variant_builder_init (&b, G_VARIANT_TYPE ("ai"));
    g_variant_builder_add (&b, "i", 1984);
    g_variant_builder_add (&b, "i", 1066);
    varc = g_variant_builder_end (&b);

    g_assert (test_g_variant_equivalent (var, varc));

    g_variant_unref (var);
    g_variant_unref (varc);
}

static void
test_au (void)
{
    GValue v = { 0, };
    guint uints[] = { 1984, 1066 };
    GVariantBuilder b;
    GVariant *var, *varc;
    GType au = dbus_g_type_get_collection ("GArray", G_TYPE_UINT);
    GArray *array;

    g_value_init (&v, au);
    array = dbus_g_type_specialized_construct (au);

```

```

g_array_append_vals (array, uints, 2);
g_assert_cmpuint (g_array_index (array, guint, 0), ==, 1984);
g_assert_cmpuint (g_array_index (array, guint, 1), ==, 1066);

g_value_take_boxed (&v, array);

var = dbus_g_value_build_g_variant (&v);
g_value_unset (&v);

g_variant_builder_init (&b, G_VARIANT_TYPE ("au"));
g_variant_builder_add (&b, "u", 1984);
g_variant_builder_add (&b, "u", 1066);
varc = g_variant_builder_end (&b);

g_assert (test_g_variant_equivalent (var, varc));

g_variant_unref (var);
g_variant_unref (varc);
}

static void
test_ax (void)
{
  GValue v = { 0, };
  gint64 ints[] = { G_GINT64_CONSTANT (-0xAAAABBBBCCCCDDDD), 1066 };
  GVariantBuilder b;
  GVariant *var, *varc;
  GType ax = dbus_g_type_get_collection ("GArray", G_TYPE_INT64);
  GArray *array;

  g_value_init (&v, ax);
  array = dbus_g_type_specialized_construct (ax);

  g_array_append_vals (array, ints, 2);
  g_assert_cmpint ((g_array_index (array, gint64, 0)
    / G_GINT64_CONSTANT (0x100000000)), ==,
    -0xAAAABBBB);
  g_assert_cmpuint ((-(g_array_index (array, gint64, 0))
    % G_GINT64_CONSTANT (0x100000000)), ==, 0xCCCCDDDDu);
  g_assert_cmpint ((g_array_index (array, gint64, 1)
    / G_GINT64_CONSTANT (0x100000000)), ==, 0);
  g_assert_cmpuint ((g_array_index (array, gint64, 1))
    % G_GINT64_CONSTANT (0x100000000)), ==, 1066);

  g_value_take_boxed (&v, array);

  var = dbus_g_value_build_g_variant (&v);
  g_value_unset (&v);

  g_variant_builder_init (&b, G_VARIANT_TYPE ("ax"));

```

```

    g_variant_builder_add (&b, "x", G_GINT64_CONSTANT (-
0xAAAABBBBCCCCDDDD));
    g_variant_builder_add (&b, "x", G_GINT64_CONSTANT (1066));
    varc = g_variant_builder_end (&b);

    g_assert (test_g_variant_equivalent (var, varc));

    g_variant_unref (var);
    g_variant_unref (varc);
}

static void
test_at (void)
{
    GValue v = { 0, };
    guint64 uints[] = { G_GUINT64_CONSTANT (0xAAAABBBBCCCCDDDD), 1066 };
    GVariantBuilder b;
    GVariant *var, *varc;
    GType at = dbus_g_type_get_collection ("GArray", G_TYPE_UINT64);
    GArray *array;

    g_value_init (&v, at);
    array = dbus_g_type_specialized_construct (at);

    g_array_append_vals (array, uints, 2);
    g_assert_cmpuint ((g_array_index (array, guint64, 0)
        / G_GUINT64_CONSTANT (0x100000000)), ==, 0xAAAABBBBu);
    g_assert_cmpuint ((g_array_index (array, guint64, 0)
        % G_GUINT64_CONSTANT (0x100000000)), ==, 0xCCCCDDDDu);
    g_assert_cmpuint ((g_array_index (array, guint64, 1)
        / G_GUINT64_CONSTANT (0x100000000)), ==, 0);
    g_assert_cmpuint ((g_array_index (array, guint64, 1)
        % G_GUINT64_CONSTANT (0x100000000)), ==, 1066);

    g_value_take_boxed (&v, array);

    var = dbus_g_value_build_g_variant (&v);
    g_value_unset (&v);

    g_variant_builder_init (&b, G_VARIANT_TYPE ("at"));
    g_variant_builder_add (&b, "t", G_GUINT64_CONSTANT
(0xAAAABBBBCCCCDDDD));
    g_variant_builder_add (&b, "t", G_GUINT64_CONSTANT (1066));
    varc = g_variant_builder_end (&b);

    g_assert (test_g_variant_equivalent (var, varc));

    g_variant_unref (var);
    g_variant_unref (varc);
}

static void

```

```

test_ay (void)
{
    GValue v = { 0, };
    gchar bytes[] = { 23, 42 };
    GVariantBuilder b;
    GVariant *var, *varc;
    GType ay = dbus_g_type_get_collection ("GArray", G_TYPE_UCHAR);
    GArray *array;

    g_value_init (&v, ay);
    array = dbus_g_type_specialized_construct (ay);

    g_array_append_vals (array, bytes, 2);
    g_assert_cmpint (g_array_index (array, gchar, 0), ==, 23);
    g_assert_cmpint (g_array_index (array, gchar, 1), ==, 42);

    g_value_take_boxed (&v, array);

    var = dbus_g_value_build_g_variant (&v);
    g_value_unset (&v);

    g_variant_builder_init (&b, G_VARIANT_TYPE ("ay"));
    g_variant_builder_add (&b, "y", 23);
    g_variant_builder_add (&b, "y", 42);
    varc = g_variant_builder_end (&b);

    g_assert (test_g_variant_equivalent (var, varc));

    g_variant_unref (var);
    g_variant_unref (varc);
}

static void
test_g (void)
{
    GValue v = { 0, };
    GVariant *var, *varc;

    g_value_init (&v, DBUS_TYPE_G_SIGNATURE);
    g_value_set_boxed (&v, "a{u(ua{sa{sv}})}");

    var = dbus_g_value_build_g_variant (&v);
    g_value_unset (&v);

    varc = g_variant_new_signature ("a{u(ua{sa{sv}})}");

    g_assert (test_g_variant_equivalent (var, varc));

    g_variant_unref (var);
    g_variant_unref (varc);
}

```

```

static void
test_roundtrip (gconstpointer user_data)
{
    const gchar *text = user_data;
    GVariant *before, *after;
    GValue v = { 0 };

    before = g_variant_new_parsed (text);
    dbus_g_value_parse_g_variant (before, &v);
    after = dbus_g_value_build_g_variant (&v);
    g_value_unset (&v);
    assert_g_variant_equivalent (before, after);
    g_variant_unref (before);
    g_variant_unref (after);
}

static void
test_parse_basic (void)
{
    GVariant *variant;
    GValue v = { 0 };

    variant = g_variant_new_parsed ("'o hai'");
    dbus_g_value_parse_g_variant (variant, &v);
    g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_STRING));
    g_assert_cmpstr (g_value_get_string (&v), ==, "o hai");
    g_value_unset (&v);
    g_variant_unref (variant);

    variant = g_variant_new_parsed ("objectpath '/hello/world'");
    dbus_g_value_parse_g_variant (variant, &v);
    g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==,
        g_type_name (DBUS_TYPE_G_OBJECT_PATH));
    g_assert_cmpstr ((gchar *) g_value_get_boxed (&v), ==,
"/hello/world");
    g_value_unset (&v);
    g_variant_unref (variant);

    variant = g_variant_new_parsed ("signature 'a{sv}'");
    dbus_g_value_parse_g_variant (variant, &v);
    g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==,
        g_type_name (DBUS_TYPE_G_SIGNATURE));
    g_assert_cmpstr ((gchar *) g_value_get_boxed (&v), ==, "a{sv}");
    g_value_unset (&v);
    g_variant_unref (variant);

    variant = g_variant_new_parsed ("23.5");
    dbus_g_value_parse_g_variant (variant, &v);
    g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_DOUBLE));

```

```

/* this is chosen to be exactly representable in binary; we use
inequalities
 * to work around -Wfloat-equal */
g_assert_cmpfloat (g_value_get_double (&v), >=, 23.5);
g_assert_cmpfloat (g_value_get_double (&v), <=, 23.5);
g_value_unset (&v);
g_variant_unref (variant);

variant = g_variant_new_parsed ("byte 42");
dbus_g_value_parse_g_variant (variant, &v);
g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_UCHAR));
g_assert_cmpuint (g_value_get_uchar (&v), ==, 42);
g_value_unset (&v);
g_variant_unref (variant);

variant = g_variant_new_parsed ("uint16 16");
dbus_g_value_parse_g_variant (variant, &v);
g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_UINT));
g_assert_cmpuint (g_value_get_uint (&v), ==, 16);
g_value_unset (&v);
g_variant_unref (variant);

variant = g_variant_new_parsed ("uint32 32");
dbus_g_value_parse_g_variant (variant, &v);
g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_UINT));
g_assert_cmpuint (g_value_get_uint (&v), ==, 32);
g_value_unset (&v);
g_variant_unref (variant);

variant = g_variant_new_parsed ("uint64 64");
dbus_g_value_parse_g_variant (variant, &v);
g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_UINT64));
g_assert_cmpuint ((guint) g_value_get_uint64 (&v), ==, 64);
g_value_unset (&v);
g_variant_unref (variant);

variant = g_variant_new_parsed ("int16 -16");
dbus_g_value_parse_g_variant (variant, &v);
g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_INT));
g_assert_cmpint (g_value_get_int (&v), ==, -16);
g_value_unset (&v);
g_variant_unref (variant);

variant = g_variant_new_parsed ("int32 -32");
dbus_g_value_parse_g_variant (variant, &v);
g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_INT));

```

```

g_assert_cmpint (g_value_get_int (&v), ==, -32);
g_value_unset (&v);
g_variant_unref (variant);

variant = g_variant_new_parsed ("int64 -64");
dbus_g_value_parse_g_variant (variant, &v);
g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==, g_type_name
(G_TYPE_INT64));
g_assert_cmpint ((gint) g_value_get_int64 (&v), ==, -64);
g_value_unset (&v);
g_variant_unref (variant);
}

static void
test_parse_array (void)
{
    GVariant *variant;
    GValue v = { 0 };
    GArray *a;

    /* We can't test the 16-bit cases via a round-trip, because
information is
    * lost. */

    variant = g_variant_new_parsed ("[uint16 16, uint16 1600]");
    dbus_g_value_parse_g_variant (variant, &v);
    g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==,
        g_type_name (DBUS_TYPE_G_UINT_ARRAY));
    a = g_value_get_boxed (&v);
    g_assert_cmpint (a->len, ==, 2);
    g_assert_cmpint (g_array_index (a, guint, 0), ==, 16);
    g_assert_cmpint (g_array_index (a, guint, 1), ==, 1600);
    g_value_unset (&v);
    g_variant_unref (variant);

    variant = g_variant_new_parsed ("[int16 -16, int16 -1600]");
    dbus_g_value_parse_g_variant (variant, &v);
    g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==,
        g_type_name (DBUS_TYPE_G_INT_ARRAY));
    a = g_value_get_boxed (&v);
    g_assert_cmpint (a->len, ==, 2);
    g_assert_cmpint (g_array_index (a, gint, 0), ==, -16);
    g_assert_cmpint (g_array_index (a, gint, 1), ==, -1600);
    g_value_unset (&v);
    g_variant_unref (variant);

    variant = g_variant_new_parsed ("@aq []");
    dbus_g_value_parse_g_variant (variant, &v);
    g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==,
        g_type_name (DBUS_TYPE_G_UINT_ARRAY));
    a = g_value_get_boxed (&v);
    g_assert_cmpint (a->len, ==, 0);

```

```

g_value_unset (&v);
g_variant_unref (variant);

variant = g_variant_new_parsed ("@an []");
dbus_g_value_parse_g_variant (variant, &v);
g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==,
    g_type_name (DBUS_TYPE_G_INT_ARRAY));
a = g_value_get_boxed (&v);
g_assert_cmpint (a->len, ==, 0);
g_value_unset (&v);
g_variant_unref (variant);
}

static void
test_parse_string_hash (void)
{
    GVariant *variant;
    GHashTable *h;
    GValue v = { 0 };

    variant = g_variant_new_parsed ("@a{ss} {'foo': 'bar'}");
    dbus_g_value_parse_g_variant (variant, &v);
    g_assert_cmpstr (G_VALUE_TYPE_NAME (&v), ==,
        g_type_name (DBUS_TYPE_G_STRING_STRING_HASHTABLE));
    h = g_value_get_boxed (&v);
    g_assert_cmpint (g_hash_table_size (h), ==, 1);
    g_assert_cmpstr (g_hash_table_lookup (h, "foo"), ==, "bar");
    g_value_unset (&v);
    g_variant_unref (variant);
}

int
main (int argc,
      char **argv)
{
    g_type_init ();
    dbus_g_type_specialized_init ();

    g_test_init (&argc, &argv, NULL);

    /* test_g_variant_equivalent tests */
    g_test_add_func ("/test_g_variant_equivalent/test_simple_equiv",
        test_simple_equiv);
    g_test_add_func ("/test_g_variant_equivalent/test_simple_not_equiv",
        test_simple_not_equiv);
    g_test_add_func ("/test_g_variant_equivalent/test_array_not_equiv",
        test_array_not_equiv);
    g_test_add_func ("/test_g_variant_equivalent/test_map_equiv",
        test_map_equiv);
    g_test_add_func ("/test_g_variant_equivalent/test_map_not_equiv1",
        test_map_not_equiv1);
    g_test_add_func ("/test_g_variant_equivalent/test_map_not_equiv2",

```



```

    test_map_not_equiv2);

/* dbus_g_value_build_g_variant tests */
g_test_add_func ("/gvalue-to-gvariant/i", test_i);
g_test_add_func ("/gvalue-to-gvariant/s", test_s);
g_test_add_func ("/gvalue-to-gvariant/o", test_o);
g_test_add_func ("/gvalue-to-gvariant/us", test_us);
g_test_add_func ("/gvalue-to-gvariant/a{os}", test_a_os);
g_test_add_func ("/gvalue-to-gvariant/av", test_av);
g_test_add_func ("/gvalue-to-gvariant/ab", test_ab);
g_test_add_func ("/gvalue-to-gvariant/ai", test_ai);
g_test_add_func ("/gvalue-to-gvariant/au", test_au);
g_test_add_func ("/gvalue-to-gvariant/ax", test_ax);
g_test_add_func ("/gvalue-to-gvariant/at", test_at);
g_test_add_func ("/gvalue-to-gvariant/ay", test_ay);
g_test_add_func ("/gvalue-to-gvariant/g", test_g);

/* dbus_g_value_parse_g_variant tests */
g_test_add_func ("/parse-gvariant/basic", test_parse_basic);
g_test_add_func ("/parse-gvariant/array", test_parse_array);
g_test_add_func ("/parse-gvariant/string_hash",
test_parse_string_hash);

/* round-trips */
g_test_add_data_func ("/parse-gvariant/roundtrip/u",
    "@u 42", test_roundtrip);
g_test_add_data_func ("/parse-gvariant/roundtrip/non_empty_array",
    "@ai [23, 42]", test_roundtrip);
g_test_add_data_func ("/roundtrip/empty_array", "@ai []",
test_roundtrip);
g_test_add_data_func ("/roundtrip/aav", "[[<'bees'>]]",
test_roundtrip);
g_test_add_data_func ("/roundtrip/aau", "[[uint32 666]]",
test_roundtrip);
g_test_add_data_func ("/roundtrip/aax", "[[int64 666]]",
test_roundtrip);
g_test_add_data_func ("/roundtrip/aat", "[[uint64 666]]",
test_roundtrip);
g_test_add_data_func ("/roundtrip/aas", "[['a', 'b']]",
test_roundtrip);
g_test_add_data_func ("/roundtrip/aao",
    "[[objectpath '/a', objectpath '/b']]", test_roundtrip);
g_test_add_data_func ("/roundtrip/aag", "[[signature 'ab', signature
'g']]",
    test_roundtrip);
g_test_add_data_func ("/roundtrip/aad", "[[5.25, 3.5]]",
test_roundtrip);
g_test_add_data_func ("/roundtrip/aay", "@aay [[1, 2]]",
test_roundtrip);
g_test_add_data_func ("/roundtrip/empty_aay", "@aay [[]]",
test_roundtrip);

```

```

    g_test_add_data_func ("/roundtrip/aab", "[[true, false]]",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aab", "@aab [[]]",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/aa_asv", "[[@a{sv} {'x':
<'y'>}}]",
        test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_av", "@av []",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_hash", "@a{uu} {}",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/easy_string_hash",
        "@a{ss} {'foo': 'bar'}", test_roundtrip);
    g_test_add_data_func ("/roundtrip/non_empty_asv",
        "@a{sv} {'badger': <42>, 'mushroom': <objectpath '/'>, 'snake':
<'>}",
        test_roundtrip);
    g_test_add_data_func ("/roundtrip/variant_nesting", "<<<42>>>",
        test_roundtrip);
    g_test_add_data_func ("/roundtrip/tuple", "(23, 42, true)",
        test_roundtrip);
    g_test_add_data_func ("/roundtrip/nested", "[[(1, 2)]]",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aaa", "@aaav [[]]",
        test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aa_asv", "@aaa{sv} [[]]",
        test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aa_struct", "@aa(us) [[]]",
        test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aaas", "@aaas [[]]",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aax", "@aax [[]]",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aat", "@aat [[]]",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aad", "@aad [[]]",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aao", "@aao [[]]",
test_roundtrip);
    g_test_add_data_func ("/roundtrip/empty_aag", "@aag [[]]",
test_roundtrip);

    return g_test_run ();
}

```

File = test-hello.xml

```

<?xml version="1.0"?><!-- ex:set et ts=2: -->
<node name="/org/freedesktop/DBus/GLib/Test/Interfaces">
  <interface name="org.freedesktop.DBus.GLib.Test.Interfaces.Hello">

```

```

        <annotation name="org.freedesktop.DBus.GLib.CSymbol"
value="test_hello_dbus"/>
        <method name="SayHello">
            <arg name="message" type="s" direction="out" />
        </method>
        <signal name="Greetings" />
    </interface>
</node>

```

File = test-ids.c

```

#include <config.h>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <dbus/dbus.h>
#include <dbus/dbus-connection-internal.h>
#ifdef HAVE_UNISTD_H
#include <unistd.h>
#endif

static void
die (const char *message)
{
    fprintf (stderr, "*** test-ids: %s", message);
    exit (1);
}

int
main (int    argc,
      char **argv)
{
    DBusError error;
    DBusConnection *connection;
    char *id;
    char *server_id;

    dbus_error_init (&error);
    connection = dbus_bus_get (DBUS_BUS_SESSION, &error);
    if (connection == NULL)
    {
        fprintf (stderr, "*** Failed to open connection to system bus:
%s\n",
                error.message);
        dbus_error_free (&error);
        return 1;
    }

    server_id = dbus_connection_get_server_id (connection);
    if (server_id == NULL)

```

```

    die ("No bus server ID retrieved\n");
/* printf("%s'\n", server_id); */
if (strlen (server_id) != 32)
    die ("Bus server id should have length 32\n");
dbus_free (server_id);

id = dbus_bus_get_id (connection, NULL);
if (id == NULL)
    die ("No bus ID retrieved\n");
/* printf("%s'\n", id); */
if (strlen (id) != 32)
    die ("Bus ID should have length 32\n");
dbus_free (id);

_dbus_verbose ("*** Test IDs exiting\n");

return 0;
}

```

File = test-interfaces.c

```

#ifdef HAVE_CONFIG_H
#    include <config.h>
#endif
#include "test-interfaces.h"

static gboolean
test_hello_dbus_say_hello (TestHello *hello,
                           gchar      **message,
                           GError     **error)
{
    *message = test_hello_say_hello (hello);
    return TRUE;
}

static gboolean
test_goodbye_dbus_say_goodbye (TestGoodbye *goodbye,
                               gchar        **message,
                               GError       **error)
{
    *message = test_goodbye_say_goodbye (goodbye);
    return TRUE;
}

#include "test-hello-glue.h"
#include "test-goodbye-glue.h"

enum {
    GREETINGS,
    LAST_SIGNAL
}

```

```

};

static guint signals[LAST_SIGNAL];

static void
test_hello_class_init (gpointer g_iface)
{
    GType iface_type = G_TYPE_FROM_INTERFACE (g_iface);

    signals[GREETINGS] =
        g_signal_new ("greetings",
                      iface_type,
                      G_SIGNAL_RUN_LAST,
                      G_STRUCT_OFFSET (TestHelloIface, greetings),
                      NULL, NULL,
                      g_cclosure_marshal_VOID__VOID,
                      G_TYPE_NONE,
                      0);

    dbus_g_object_type_install_info (iface_type,
                                     &dbus_glib_test_hello_object_info);
}

GType
test_hello_get_type (void)
{
    static GType the_type = 0;

    if (G_UNLIKELY (the_type == 0)) {
        static const GTypeInfo info = {
            sizeof (TestHelloIface),
            NULL, NULL,
            (GClassInitFunc) test_hello_class_init,
            NULL, NULL, 0, 0, NULL
        };

        the_type = g_type_register_static (G_TYPE_INTERFACE,
                                           "TestHello",
                                           &info, 0);

        g_type_interface_add_prerequisite (the_type,
                                           G_TYPE_OBJECT);
    }
    return the_type;
}

gchar *
test_hello_say_hello (TestHello *hello)
{
    g_return_val_if_fail (TEST_IS_HELLO (hello), NULL);

    return (* TEST_HELLO_GET_IFACE (hello)->say_hello) (hello);
}

```

```

void
test_hello_greetings (TestHello *hello)
{
    g_return_if_fail (TEST_IS_HELLO (hello));

    g_signal_emit (hello, signals[GREETINGS], 0);
}

static void
test_goodbye_class_init (gpointer g_iface)
{
    GType iface_type = G_TYPE_FROM_INTERFACE (g_iface);

    dbus_g_object_type_install_info (iface_type,
                                     &dbus_glib_test_goodbye_object_info);
}

GType
test_goodbye_get_type (void)
{
    static GType the_type = 0;

    if (G_UNLIKELY (the_type == 0)) {
        static const GTypeInfo info = {
            sizeof (TestGoodbyeIface),
            NULL, NULL,
            (GClassInitFunc) test_goodbye_class_init,
            NULL, NULL, 0, 0, NULL
        };

        the_type = g_type_register_static (G_TYPE_INTERFACE,
                                           "TestGoodbye",
                                           &info, 0);

        g_type_interface_add_prerequisite (the_type,
                                           G_TYPE_OBJECT);
    }
    return the_type;
}

gchar *
test_goodbye_say_goodbye (TestGoodbye *goodbye)
{
    g_return_val_if_fail (TEST_IS_GOODBYE (goodbye), NULL);

    return (* TEST_GOODBYE_GET_IFACE (goodbye)->say_goodbye)
(goodbye);
}

```

File = test-interfaces.h

```

#ifndef __TEST_INTERFACES_H__
#define __TEST_INTERFACES_H__

#include <glib-object.h>

#define TEST_TYPE_HELLO (test_hello_get_type ())
#define TEST_HELLO(obj) (G_TYPE_CHECK_INSTANCE_CAST ((obj), TEST_TYPE_HELLO, TestHello))
#define TEST_HELLO_IFACE(obj) (G_TYPE_CHECK_CLASS_CAST ((obj), TEST_TYPE_HELLO, TestHelloIface))
#define TEST_IS_HELLO(obj) (G_TYPE_CHECK_INSTANCE_TYPE ((obj), TEST_TYPE_HELLO))
#define TEST_HELLO_GET_IFACE(obj) (G_TYPE_INSTANCE_GET_INTERFACE ((obj), TEST_TYPE_HELLO, TestHelloIface))

#define TEST_TYPE_GOODBYE (test_goodbye_get_type ())
#define TEST_GOODBYE(obj) (G_TYPE_CHECK_INSTANCE_CAST ((obj), TEST_TYPE_GOODBYE, TestGoodbye))
#define TEST_GOODBYE_IFACE(obj) (G_TYPE_CHECK_CLASS_CAST ((obj), TEST_TYPE_GOODBYE, TestGoodbyeIface))
#define TEST_IS_GOODBYE(obj) (G_TYPE_CHECK_INSTANCE_TYPE ((obj), TEST_TYPE_GOODBYE))
#define TEST_GOODBYE_GET_IFACE(obj) (G_TYPE_INSTANCE_GET_INTERFACE ((obj), TEST_TYPE_GOODBYE, TestGoodbyeIface))

typedef struct _TestHello TestHello; /* dummy */
typedef struct _TestHelloIface TestHelloIface;

typedef struct _TestGoodbye TestGoodbye; /* dummy */
typedef struct _TestGoodbyeIface TestGoodbyeIface;

struct _TestHelloIface {
    GTypeInterface interface;

    /* VTable */
    gchar *(* say_hello) (TestHello *hello);

    /* Signals */
    void (* greetings) (TestHello *hello);
};

struct _TestGoodbyeIface {
    GTypeInterface interface;

    /* VTable */
    gchar *(* say_goodbye) (TestGoodbye *goodbye);
};

GType test_hello_get_type (void) G_GNUC_CONST;
gchar *test_hello_say_hello (TestHello *hello);
void test_hello_greetings (TestHello *hello);

```

```
GType    test_goodbye_get_type          (void) G_GNUC_CONST;
gchar *test_goodbye_say_goodbye      (TestGoodbye *goodbye);
```

```
#endif
```

```
File = test-launch-helper.c
```

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* test-main.c main() for the OOM check of the launch helper
 *
 * Copyright (C) 2007 Red Hat, Inc.
 *
 * Licensed under the Academic Free License version 2.1
 *
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 * it under the terms of the GNU General Public License as published
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 * the Free Software Foundation; either version 2 of the License, or
 * (at your option) any later version.
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 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
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 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
```

```
#include <config.h>
#include "test.h"
#include "activation-helper.h"
```

```
#include <stdio.h>
#include <stdlib.h>
#include <dbus/dbus-internals.h>
```

```
#ifdef DBUS_BUILD_TESTS
static void
die (const char *failure)
{
    fprintf (stderr, "Unit test failed: %s\n", failure);
    exit (1);
}
```



```

static void
check_memleaks (const char *name)
{
    dbus_shutdown ();

    printf ("%s: checking for memleaks\n", name);
    if (_dbus_get_malloc_blocks_outstanding () != 0)
    {
        _dbus_warn ("%d dbus_malloc blocks were not freed\n",
                    _dbus_get_malloc_blocks_outstanding ());
        die ("memleaks");
    }
}

static void
test_post_hook (const char *name)
{
    check_memleaks (name);
}
#endif /* DBUS_BUILD_TESTS */

#ifdef ACTIVATION_LAUNCHER_DO_OOM

/* returns true if good things happen, or if we get OOM */
static dbus_bool_t
bus_activation_helper_oom_test (void *data)
{
    const char *service;
    DBusError error;
    dbus_bool_t retval;

    service = (const char *) data;
    retval = TRUE;

    dbus_error_init (&error);
    if (!run_launch_helper (service, &error))
    {
        _DBUS_ASSERT_ERROR_IS_SET (&error);
        /* we failed, but a OOM is good */
        if (!dbus_error_has_name (&error, DBUS_ERROR_NO_MEMORY))
        {
            _dbus_warn ("FAILED SELF TEST: Error: %s\n", error.message);
            retval = FALSE;
        }
        dbus_error_free (&error);
    }
    else
    {
        /* we succeeded, yay! */
        _DBUS_ASSERT_ERROR_IS_CLEAR (&error);
    }
}

```

```

    return retval;
}

#endif

int
main (int argc, char **argv)
{
#ifdef DBUS_BUILD_TESTS
    const char *dir;
    DBusString config_file;

    if (argc > 1)
        dir = argv[1];
    else
        dir = _dbus_getenv ("DBUS_TEST_DATA");

    if (dir == NULL)
    {
        fprintf (stderr, "Must specify test data directory as argv[1] or
in DBUS_TEST_DATA env variable\n");
        return 1;
    }

    printf ("%s: Running launch helper OOM checks\n", argv[0]);

    if (!_dbus_string_init (&config_file))
        return 1;
    if (!_dbus_string_append (&config_file, dir))
        return 1;
    if (!_dbus_string_append (&config_file, "/valid-config-files-
system/debug-allow-all-pass.conf"))
        return 1;

    /* use a config file that will actually work... */
    _dbus_setenv ("TEST_LAUNCH_HELPER_CONFIG",
                 _dbus_string_get_const_data (&config_file));

    _dbus_string_free (&config_file);

    if (!_dbus_test_oom_handling ("dbus-daemon-launch-helper",
                                bus_activation_helper_oom_test,
"org.freedesktop.DBus.TestSuiteEchoService"))
        die ("OOM failed");

    test_post_hook (argv[0]);

    printf ("%s: Success\n", argv[0]);

    return 0;
#else /* DBUS_BUILD_TESTS */

```

```

    printf ("Not compiled with test support\n");

    return 0;
#endif
}

File = test-main.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* test-main.c  main() for make check
 *
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 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301  USA
 */

#include <config.h>
#include "test.h"
#include <stdio.h>
#include <stdlib.h>
#include <dbus/dbus-string.h>
#include <dbus/dbus-sysdeps.h>
#include <dbus/dbus-internals.h>
#include <dbus/dbus-message-internal.h>
#include "selinux.h"

#ifdef DBUS_BUILD_TESTS
static void
die (const char *failure)
{

```

```

    fprintf (stderr, "Unit test failed: %s\n", failure);
    exit (1);
}

static void
check_memleaks (const char *name)
{
    dbus_shutdown ();

    printf ("%s: checking for memleaks\n", name);
    if (_dbus_get_malloc_blocks_outstanding () != 0)
    {
        _dbus_warn ("%d dbus_malloc blocks were not freed\n",
                    _dbus_get_malloc_blocks_outstanding ());
        die ("memleaks");
    }
}
#endif /* DBUS_BUILD_TESTS */

static DBusInitialFDs *initial_fds = NULL;

static void
test_pre_hook (void)
{
    if (_dbus_getenv ("DBUS_TEST_SELINUX")
        && (!bus_selinux_pre_init ()
            || !bus_selinux_full_init ()))
        die ("could not init selinux support");

    initial_fds = _dbus_check_fdleaks_enter ();
}

static char *programe = "";

static void
test_post_hook (void)
{
    if (_dbus_getenv ("DBUS_TEST_SELINUX"))
        bus_selinux_shutdown ();
    check_memleaks (programe);

    _dbus_check_fdleaks_leave (initial_fds);
    initial_fds = NULL;
}

int
main (int argc, char **argv)
{
#ifdef DBUS_BUILD_TESTS
    const char *dir;
    const char *only;

```

```

DBusString test_data_dir;

progname = argv[0];

if (argc > 1)
    dir = argv[1];
else
    dir = _dbus_getenv ("DBUS_TEST_DATA");

if (argc > 2)
    only = argv[2];
else
    only = NULL;

if (dir == NULL)
{
    fprintf (stderr, "Must specify test data directory as argv[1] or
in DBUS_TEST_DATA env variable\n");
    return 1;
}

_dbus_string_init_const (&test_data_dir, dir);

if (!_dbus_threads_init_debug ())
    die ("initializing debug threads");

if (only == NULL || strcmp (only, "expire-list") == 0)
{
    test_pre_hook ();
    printf ("%s: Running expire list test\n", argv[0]);
    if (!bus_expire_list_test (&test_data_dir))
        die ("expire list");
    test_post_hook ();
}

if (only == NULL || strcmp (only, "config-parser") == 0)
{
    test_pre_hook ();
    printf ("%s: Running config file parser test\n", argv[0]);
    if (!bus_config_parser_test (&test_data_dir))
        die ("parser");
    test_post_hook ();
}

if (only == NULL || strcmp (only, "signals") == 0)
{
    test_pre_hook ();
    printf ("%s: Running signals test\n", argv[0]);
    if (!bus_signals_test (&test_data_dir))
        die ("signals");
    test_post_hook ();
}

```

```

if (only == NULL || strcmp (only, "dispatch-sha1") == 0)
{
    test_pre_hook ();
    printf ("%s: Running SHA1 connection test\n", argv[0]);
    if (!bus_dispatch_sha1_test (&test_data_dir))
        die ("sha1");
    test_post_hook ();
}

if (only == NULL || strcmp (only, "dispatch") == 0)
{
    test_pre_hook ();
    printf ("%s: Running message dispatch test\n", argv[0]);
    if (!bus_dispatch_test (&test_data_dir))
        die ("dispatch");
    test_post_hook ();
}

if (only == NULL || strcmp (only, "activation-service-reload") == 0)
{
    test_pre_hook ();
    printf ("%s: Running service files reloading test\n", argv[0]);
    if (!bus_activation_service_reload_test (&test_data_dir))
        die ("service reload");
    test_post_hook ();
}

#ifdef HAVE_UNIX_FD_PASSING
    if (only == NULL || strcmp (only, "unix-fds-passing") == 0)
    {
        test_pre_hook ();
        printf ("%s: Running unix fd passing test\n", argv[0]);
        if (!bus_unix_fds_passing_test (&test_data_dir))
            die ("unix fd passing");
        test_post_hook ();
    }
#endif

    printf ("%s: Success\n", argv[0]);

    return 0;
#else /* DBUS_BUILD_TESTS */

    printf ("Not compiled with test support\n");

    return 0;
#endif
}

```

```

File = test-names.c

#include <config.h>
#include "test-utils.h"

static DBusLoop *loop;

static void
die (const char *message)
{
    fprintf (stderr, "*** test-names: %s", message);
    exit (1);
}

static void
TestName(DBusConnection *connection, const char *name, int
expectedSuccess)
{
    DBusError error;
    dbus_error_init (&error);

    (void) dbus_bus_request_name (connection, name, 0, &error);
    if (dbus_error_is_set (&error))
    {
        if (expectedSuccess)
            fprintf (stderr, "Error acquiring name '%s': %s\n", name,
error.message);
        else
            fprintf (stdout, "Expected Error acquiring name '%s': %s\n",
name, error.message);
        _dbus_verbose ("*** Failed to acquire name '%s': %s\n", name,
error.message);
        dbus_error_free (&error);
        if (expectedSuccess)
            exit (1);
    }
    else
    {
        if (!expectedSuccess)
            fprintf (stderr, "Unexpected Success acquiring name '%s'\n",
name);
        else
            fprintf (stdout, "Successfully acquired name '%s'\n", name);
        _dbus_verbose ("*** Managed to acquire name '%s'\n", name);
        if (!expectedSuccess)
            exit (1);
    }
}

int
main (int argc,

```

```

        char **argv)
{
    DBusError error;
    DBusConnection *connection;

    dbus_error_init (&error);
    connection = dbus_bus_get (DBUS_BUS_SESSION, &error);
    if (connection == NULL)
    {
        fprintf (stderr, "*** Failed to open connection to system bus:
%s\n",
                error.message);
        dbus_error_free (&error);
        return 1;
    }

    loop = _dbus_loop_new ();
    if (loop == NULL)
        die ("No memory\n");

    if (!test_connection_setup (loop, connection))
        die ("No memory\n");

    TestName(connection, "org.freedesktop.DBus.Test", TRUE);
    TestName(connection, "org.freedesktop.DBus.Test-2", TRUE);
    TestName(connection, "org.freedesktop.DBus.Test_2", TRUE);
#ifdef 0
    TestName(connection, "Test_2", TRUE);
#endif

    _dbus_verbose ("*** Test service name exiting\n");

    return 0;
}

```

File = test-objects.c

```

#include <config.h>

#include "test-objects.h"
#include "test-interfaces.h"

static gboolean
test_song_dbus_get_title (TestSong *song,
                          gchar **title,
                          GError **error)
{
    *title = g_strdup ("Hello, Goodbye");
    return TRUE;
}

```



```

#include "test-song-glue.h"

static gchar *
test_song_say_hello (TestHello *hello)
{
    return g_strdup ("Hello, hello...");
}

static void
test_song_init (TestSong *song)
{
}

static void
test_song_hello_init (TestHelloIface *iface)
{
    iface->say_hello = test_song_say_hello;
}

static void
test_song_class_init (TestSongClass *klass)
{
    dbus_g_object_type_install_info (G_TYPE_FROM_CLASS (klass),
                                     &dbus_glib_test_song_object_info);
}

G_DEFINE_TYPE_WITH_CODE (TestSong, test_song, G_TYPE_OBJECT,
                        G_IMPLEMENT_INTERFACE (TEST_TYPE_HELLO,
test_song_hello_init))

static gchar *
test_beatles_song_say_goodbye (TestGoodbye *goodbye)
{
    return g_strdup ("I don't know why you say goodbye, I say
hello.");
}

static void
test_beatles_song_init (TestBeatlesSong *song)
{
}

static void
test_beatles_song_goodbye_init (TestGoodbyeIface *iface)
{
    iface->say_goodbye = test_beatles_song_say_goodbye;
}

static void
test_beatles_song_class_init (TestBeatlesSongClass *klass)

```

```

{
}

G_DEFINE_TYPE_WITH_CODE (TestBeatlesSong, test_beatles_song,
TEST_TYPE_SONG,
    G_IMPLEMENT_INTERFACE (TEST_TYPE_GOODBYE,
test_beatles_song_goodbye_init))

TestBeatlesSong *
test_beatles_song_new (void)
{
    return TEST_BEATLES_SONG (g_object_new (TEST_TYPE_BEATLES_SONG,
NULL));
}

File = test-objects.h

#ifndef __TEST_OBJECTS_H__
#define __TEST_OBJECTS_H__

#include <glib-object.h>

#define TEST_TYPE_SONG (test_song_get_type ())
#define TEST_SONG(o) (G_TYPE_CHECK_INSTANCE_CAST ((o),
TEST_TYPE_SONG, TestSong))
#define TEST_SONG_CLASS(k) (G_TYPE_CHECK_CLASS_CAST((k),
TEST_TYPE_SONG, TestSongClass))
#define TEST_IS_SONG(o) (G_TYPE_CHECK_INSTANCE_TYPE ((o),
TEST_TYPE_SONG))
#define TEST_IS_SONG_CLASS(k) (G_TYPE_CHECK_CLASS_TYPE ((k),
TEST_TYPE_SONG))
#define TEST_SONG_GET_CLASS(o) (G_TYPE_INSTANCE_GET_CLASS ((o),
TEST_TYPE_SONG, TestSongClass))

#define TEST_TYPE_BEATLES_SONG (test_beatles_song_get_type ())
#define TEST_BEATLES_SONG(o) (G_TYPE_CHECK_INSTANCE_CAST
((o), TEST_TYPE_BEATLES_SONG, TestBeatlesSong))
#define TEST_BEATLES_SONG_CLASS(k) (G_TYPE_CHECK_CLASS_CAST((k),
TEST_TYPE_BEATLES_SONG, TestBeatlesSongClass))
#define TEST_IS_BEATLES_SONG(o) (G_TYPE_CHECK_INSTANCE_TYPE
((o), TEST_TYPE_BEATLES_SONG))
#define TEST_IS_BEATLES_SONG_CLASS(k) (G_TYPE_CHECK_CLASS_TYPE ((k),
TEST_TYPE_BEATLES_SONG))
#define TEST_BEATLES_SONG_GET_CLASS(o) (G_TYPE_INSTANCE_GET_CLASS ((o),
TEST_TYPE_BEATLES_SONG, TestBeatlesSongClass))

typedef GObject TestSong;
typedef GObjectClass TestSongClass;

```



```

"org.freedesktop.Introspectable",
                                "Introspect");

dbus_connection_send_with_reply (conn, method, &dbus_pending, -1);
dbus_message_unref (method);

/* block on the second message (should return immediately) */
dbus_pending_call_block (dbus_pending);

/* block on the first message */
/* if it does not return immediately chances
   are we hit the block in poll bug */
dbus_pending_call_block (echo_pending);

/* check the reply only to make sure we
   are not getting errors unrelated
   to the block in poll bug */
reply = dbus_pending_call_steal_reply (echo_pending);

if (reply == NULL)
{
    printf ("Failed: Reply is NULL ***\n");
    exit (1);
}

if (dbus_message_get_type (reply) == DBUS_MESSAGE_TYPE_ERROR)
{
    printf ("Failed: Reply is error: %s ***\n",
dbus_message_get_error_name (reply));
    exit (1);
}

dbus_message_unref (reply);
dbus_pending_call_unref (dbus_pending);
dbus_pending_call_unref (echo_pending);
}

int
main (int argc, char *argv[])
{
    long start_tv_sec, start_tv_usec;
    long end_tv_sec, end_tv_usec;
    int i;
    DBusMessage *method;
    DBusConnection *conn;
    DBusError error;

    /* Time each iteration and make sure it doesn't take more than 5
seconds

```

```

    to complete. Outside influences may cause connections to take
longer
    but if it does and we are stuck in a poll call then we know the
    stuck in poll bug has come back to haunt us */

printf ("*** Testing stuck in poll\n");

dbus_error_init (&error);

conn = dbus_bus_get (DBUS_BUS_SESSION, &error);

/* run 100 times to make sure */
for (i = 0; i < 100; i++)
{
    long delta;

    _dbus_get_monotonic_time (&start_tv_sec, &start_tv_usec);
    _run_iteration (conn);
    _dbus_get_monotonic_time (&end_tv_sec, &end_tv_usec);

    /* we just care about seconds */
    delta = end_tv_sec - start_tv_sec;
    printf ("Iter %i: %lis\n", i, delta);
    if (delta >= 5)
    {
        printf ("Failed: looks like we might have been be stuck in poll
***\n");
        exit (1);
    }
}

method = dbus_message_new_method_call
("org.freedesktop.TestSuiteEchoService",
                                     "/org/freedesktop/TestSuite",
                                     "org.freedesktop.TestSuite",
                                     "Exit");

dbus_connection_send (conn, method, NULL);
dbus_message_unref (method);

printf ("Success ***\n");
exit (0);
}

```

File = test-pending-call-timeout.c

```

/**
 * Test to make sure that pending calls succeed when given a default,
 * specific and infinite timeout.
 **/

```

```

#include <config.h>
#include <dbus/dbus.h>
#include <dbus/dbus-sysdeps.h>
#include <stdio.h>
#include <limits.h>
#include <stdlib.h>

static void
_method_call (DBusConnection *conn,
             int             timeout_milliseconds)
{
    DBusPendingCall *pending;
    DBusMessage *method;
    DBusMessage *reply;
    char *echo = "echo";

    /* send the message */
    method = dbus_message_new_method_call
("org.freedesktop.DBus.TestSuiteEchoService",
                                     "/org/freedesktop/TestSuite",
                                     "org.freedesktop.TestSuite",
                                     "DelayEcho");

    dbus_message_append_args (method, DBUS_TYPE_STRING, &echo, NULL);
    dbus_connection_send_with_reply (conn, method, &pending,
timeout_milliseconds);
    dbus_message_unref (method);

    /* block on the message */
    dbus_pending_call_block (pending);

    /* check the reply only to make sure we
       are not getting errors unrelated
       to the block in poll bug */
    reply = dbus_pending_call_steal_reply (pending);

    if (reply == NULL)
    {
        printf ("Failed: Reply is NULL ***\n");
        exit (1);
    }

    if (dbus_message_get_type (reply) == DBUS_MESSAGE_TYPE_ERROR)
    {
        printf ("Failed: Reply is error: %s ***\n",
dbus_message_get_error_name (reply));
        exit (1);
    }

    dbus_message_unref (reply);
    dbus_pending_call_unref (pending);
}

```

```

static void
_run_iteration (DBusConnection *conn)
{
    _method_call (conn, -1);
    _method_call (conn, 10000);
    _method_call (conn, INT_MAX);
}

int
main (int argc, char *argv[])
{
    long start_tv_sec, start_tv_usec;
    long end_tv_sec, end_tv_usec;
    int i;
    DBusMessage *method;
    DBusConnection *conn;
    DBusError error;

    printf ("*** Testing pending call timeouts\n");

    dbus_error_init (&error);

    conn = dbus_bus_get (DBUS_BUS_SESSION, &error);

    /* run 100 times to make sure */
    for (i = 0; i < 100; i++)
    {
        long delta;

        _dbus_get_monotonic_time (&start_tv_sec, &start_tv_usec);
        _run_iteration (conn);
        _dbus_get_monotonic_time (&end_tv_sec, &end_tv_usec);

        /* we just care about seconds */
        delta = end_tv_sec - start_tv_sec;
        printf ("Iter %i: %lis\n", i, delta);
    }

    method = dbus_message_new_method_call
("org.freedesktop.TestSuiteEchoService",
                                     "/org/freedesktop/TestSuite",
                                     "org.freedesktop.TestSuite",
                                     "Exit");

    dbus_connection_send (conn, method, NULL);
    dbus_message_unref (method);

    printf ("Success ***\n");
    exit (0);
}

```

```

File = test-privserver-client.c

#include <config.h>
#include "../test-utils.h"

static void
die (const char *message, ...)
{
    va_list args;
    va_start (args, message);
    vfprintf (stderr, message, args);
    va_end (args);
    exit (1);
}

#define PRIVSERVER_SERVICE "org.freedesktop.DBus.TestSuite.PrivServer"
#define PRIVSERVER_INTERFACE PRIVSERVER_SERVICE
#define PRIVSERVER_DIED_RULE \
    "type='signal',sender='" DBUS_SERVICE_DBUS "' \
    "interface='" DBUS_INTERFACE_DBUS "',member='NameOwnerChanged'," \
    \
    "arg0='" PRIVSERVER_SERVICE "',arg2=''"

static DBusHandlerResult
filter_session_message (DBusConnection      *connection,
                        DBusMessage         *message,
                        void                *user_data)
{
    dbus_bool_t *service_died_p = user_data;
    const char *name, *old_owner, *new_owner;

    if (dbus_message_is_signal (message,
                                DBUS_INTERFACE_DBUS,
                                "NameOwnerChanged") &&
        dbus_message_has_sender (message, DBUS_SERVICE_DBUS) &&
        dbus_message_get_args (message, NULL,
                                DBUS_TYPE_STRING, &name,
                                DBUS_TYPE_STRING, &old_owner,
                                DBUS_TYPE_STRING, &new_owner,
                                DBUS_TYPE_INVALID) &&
        strcmp (name, PRIVSERVER_SERVICE) == 0 &&
        old_owner[0] != '\0' &&
        new_owner[0] == '\0')
    {
        *service_died_p = TRUE;
    }

    return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static DBusHandlerResult

```



```

filter_private_message (DBusConnection      *connection,
                       DBusMessage        *message,
                       void                *user_data)
{
    dbus_bool_t *private_conn_lost_p = user_data;

    if (dbus_message_is_signal (message,
                                DBUS_INTERFACE_LOCAL,
                                "Disconnected"))
    {
        *private_conn_lost_p = TRUE;
    }
    return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static void
open_shutdown_private_connection (dbus_bool_t use_guid)
{
    DBusError error;
    DBusLoop *loop;
    DBusConnection *session;
    DBusMessage *msg;
    DBusMessage *reply;
    DBusConnection *privconn;
    char *addr;
    dbus_bool_t service_died;
    dbus_bool_t private_conn_lost;

    dbus_error_init (&error);
    service_died = FALSE;
    private_conn_lost = FALSE;

    loop = _dbus_loop_new ();

    session = dbus_bus_get (DBUS_BUS_SESSION, &error);
    if (!session)
        die ("couldn't access session bus\n");
    dbus_connection_set_exit_on_disconnect (session, FALSE);
    test_connection_setup (loop, session);

    dbus_bus_add_match (session, PRIVSERVER_DIED_RULE, &error);
    if (dbus_error_is_set (&error))
        die ("couldn't add match rule \"%s\": %s: %s",
            PRIVSERVER_DIED_RULE,
            error.name, error.message);

    if (!dbus_connection_add_filter (session, filter_session_message,
                                    &service_died, NULL))
        die ("couldn't add filter to session bus\n");

    msg = dbus_message_new_method_call (PRIVSERVER_SERVICE, "/",

```

```

                                PRIVSERVER_INTERFACE,
"GetPrivateAddress");
    if (!(reply = dbus_connection_send_with_reply_and_block (session,
msg, -1, &error)))
        die ("couldn't send message: %s\n", error.message);
    dbus_message_unref (msg);
    if (!dbus_message_get_args (reply, &error, DBUS_TYPE_STRING, &addr,
DBUS_TYPE_INVALID))
        die ("couldn't parse message reply\n");
    printf ("got private temp address %s\n", addr);
    addr = strdup (addr);
    if (!use_guid)
    {
        char *comma = strrchr (addr, ',');
        if (comma)
            *comma = '\\0';
    }
    privconn = dbus_connection_open (addr, &error);
    free (addr);
    if (!privconn)
        die ("couldn't connect to server direct connection: %s\n",
error.message);
    dbus_message_unref (reply);

    dbus_connection_set_exit_on_disconnect (privconn, FALSE);
    if (!dbus_connection_add_filter (privconn, filter_private_message,
&private_conn_lost, NULL))
        die ("couldn't add filter to private connection\n");
    test_connection_setup (loop, privconn);

    msg = dbus_message_new_method_call (PRIVSERVER_SERVICE, "/",
                                PRIVSERVER_INTERFACE, "Quit");
    if (!dbus_connection_send (session, msg, NULL))
        die ("couldn't send Quit message\n");
    dbus_message_unref (msg);

    while (!service_died || !private_conn_lost)
        _dbus_loop_iterate (loop, TRUE);

    dbus_connection_remove_filter (session, filter_session_message,
&service_died);
    dbus_bus_remove_match (session, PRIVSERVER_DIED_RULE, NULL);
    test_connection_shutdown (loop, session);
    dbus_connection_unref (session);

    test_connection_shutdown (loop, privconn);
    dbus_connection_remove_filter (privconn, filter_private_message,
&private_conn_lost);
    dbus_connection_unref (privconn);

    _dbus_loop_unref (loop);
}

```

```

int
main (int argc, char *argv[])
{
    open_shutdown_private_connection (TRUE);

    dbus_shutdown ();

    open_shutdown_private_connection (TRUE);

    dbus_shutdown ();

    open_shutdown_private_connection (FALSE);

    dbus_shutdown ();

    open_shutdown_private_connection (FALSE);

    dbus_shutdown ();

    return 0;
}

```

File = test-privserver.c

```

#include <config.h>
#include "../test-utils.h"

static void
die (const char *message, ...)
{
    va_list args;
    va_start (args, message);
    vfprintf (stderr, message, args);
    va_end (args);
    exit (1);
}

typedef struct TestServiceData TestServiceData;

struct TestServiceData
{
    DBusLoop *loop;
    char *private_addr;
};

static void
new_connection_callback (DBusServer *server,
                        DBusConnection *new_connection,
                        void *data)

```

```

{
    TestServiceData *testdata = data;

    if (!test_connection_setup (testdata->loop, new_connection))
        dbus_connection_close (new_connection);
}

static DBusHandlerResult
filter_session_message (DBusConnection      *connection,
                        DBusMessage         *message,
                        void                 *user_data)
{
    TestServiceData *testdata = user_data;

    if (dbus_message_is_method_call (message,
"org.freedesktop.DBus.TestSuite.PrivServer",
                                     "GetPrivateAddress"))
    {
        DBusMessage *reply;
        reply = dbus_message_new_method_return (message);
        dbus_message_append_args (reply, DBUS_TYPE_STRING,
                                  &(testdata->private_addr),
DBUS_TYPE_INVALID);
        dbus_connection_send (connection, reply, NULL);
        dbus_message_unref (reply);
        return DBUS_HANDLER_RESULT_HANDLED;
    }
    else if (dbus_message_is_method_call (message,
"org.freedesktop.DBus.TestSuite.PrivServer",
                                     "Quit"))
    {
        fprintf (stderr, "server exiting loop\n");
        _dbus_loop_quit (testdata->loop);
        return DBUS_HANDLER_RESULT_HANDLED;
    }
    return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

int
main (int argc, char *argv[])
{
    DBusServer *server;
    DBusError error;
    DBusLoop *loop;
    DBusConnection *session;
    TestServiceData *testdata;

    dbus_error_init (&error);

    loop = _dbus_loop_new ();

```

```

testdata = dbus_new (TestServiceData, 1);
testdata->loop = loop;

session = dbus_bus_get (DBUS_BUS_SESSION, &error);
if (!session)
    die ("couldn't access session bus");

test_connection_setup (loop, session);

dbus_bus_request_name (session,
"org.freedesktop.DBus.TestSuite.PrivServer", 0, &error);
if (dbus_error_is_set (&error))
    die ("couldn't request name: %s", error.message);

if (!dbus_connection_add_filter (session, filter_session_message,
testdata, NULL))
    die ("couldn't add filter");

#ifdef DBUS_CMAKE
    server = dbus_server_listen (TEST_LISTEN, &error);
#else
    server = dbus_server_listen ("unix:tmpdir=/tmp", &error);
#endif
if (!server)
    die (error.message);
testdata->private_addr = dbus_server_get_address (server);
printf ("test server listening on %s\n", testdata->private_addr);

dbus_server_set_new_connection_function (server,
new_connection_callback,
                                     testdata, NULL);

if (!test_server_setup (loop, server))
    die ("server setup failed");

fprintf (stderr, "server running mainloop\n");
dbus_loop_run (loop);
fprintf (stderr, "server mainloop quit\n");

test_server_shutdown (loop, server);

test_connection_shutdown (loop, session);

dbus_connection_unref (session);

dbus_loop_unref (loop);

dbus_free (testdata);

return 0;
}

```

File = test-profile.c

```
/* -*- mode: C; c-file-style: "gnu" -*- */
/* test-profile.c Program that does basic message-response for timing;
doesn't really use glib bindings
*
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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>
#include <glib.h>

/* This test uses Unix-specific facilities */
#ifdef G_OS_WIN32
#define TEST_PROFILE_DISABLED
#endif

#ifndef TEST_PROFILE_DISABLED

#include <dbus/dbus-glib-lowlevel.h>
#include <stdlib.h>
#include <unistd.h>

#include <errno.h>
#include <fcntl.h>
#include <sys/socket.h>
#include <sys/un.h>
#include <netinet/in.h>
#include <string.h>
```

```

#include <sys/time.h>
#include <sys/stat.h>
#ifdef HAVE_SOCKLEN_T
#define socklen_t int
#endif

#define _DBUS_ZERO(object) (memset (&(object), '\0', sizeof
((object))))
#define _DBUS_MAX_SUN_PATH_LENGTH 99

/* Note that if you set threads > 1 you get a bogus profile since the
 * clients start blocking on the server, so the client write() will go
 * higher in the profile the larger the number of threads.
 */
#define N_CLIENT_THREADS 1
/* It seems like at least 750000 or so iterations reduces the
variability to sane levels */
#define N_ITERATIONS 2000
#define N_PROGRESS_UPDATES 20
/* Don't make PAYLOAD_SIZE too huge because it gets used as a static
buffer size */
#define PAYLOAD_SIZE 0

#define ECHO_SERVICE "org.freedesktop.DBus.GLib.EchoTestServer"
#define ECHO_PATH "/org/freedesktop/DBus/GLib/EchoTest"
#define ECHO_INTERFACE "org.freedesktop.DBus.GLib.EchoTest"
#define ECHO_PING_METHOD "Ping"

static const char *messages_address;
static const char *plain_sockets_address;
static unsigned char *payload;
static int echo_call_size;
static int echo_return_size;

typedef struct ProfileRunVTable ProfileRunVTable;

typedef struct
{
    const ProfileRunVTable *vtable;
    int iterations;
    GMainLoop *loop;
} ClientData;

typedef struct
{
    const ProfileRunVTable *vtable;
    int handled;
    GMainLoop *loop;
    int n_clients;
} ServerData;

struct ProfileRunVTable

```

```

{
    const char *name;
    gboolean fake_malloc_overhead;
    void* (* init_server)      (ServerData *sd);
    void (* stop_server)      (ServerData *sd,
                              void *server);
    void* (* client_thread_func) (void *data); /* Data has to be the
vtable */

    /* this is so different runs show up in the profiler with
    * different backtrace
    */
    void (* main_loop_run_func) (GMainLoop *loop);
};

/* Note, this is all crack-a-rific; it isn't using DBusGProxy and thus
is
* a major pain
*/
static void
send_echo_method_call (DBusConnection *connection)
{
    DBusMessage *message;
    const char *hello = "Hello World!";
    dbus_int32_t i32 = 123456;

    message = dbus_message_new_method_call (ECHO_SERVICE,
                                           ECHO_PATH,
                                           ECHO_INTERFACE,
                                           ECHO_PING_METHOD);

    dbus_message_append_args (message,
                              DBUS_TYPE_STRING, &hello,
                              DBUS_TYPE_INT32, &i32,
                              DBUS_TYPE_ARRAY, DBUS_TYPE_BYTE,
                              &payload, PAYLOAD_SIZE,
                              DBUS_TYPE_INVALID);

    dbus_connection_send (connection, message, NULL);
    dbus_message_unref (message);
    dbus_connection_flush (connection);
}

static void
send_echo_method_return (DBusConnection *connection,
                        DBusMessage *call_message)
{
    DBusMessage *message;

    message = dbus_message_new_method_return (call_message);
}

```



```

    dbus_connection_send (connection, message, NULL);
    dbus_message_unref (message);
    dbus_connection_flush (connection);
}

static DBusHandlerResult
with_or_without_bus_client_filter (DBusConnection      *connection,
                                   DBusMessage         *message,
                                   ClientData          *cd)
{
    if (dbus_message_is_signal (message,
                                DBUS_INTERFACE_LOCAL,
                                "Disconnected"))
    {
        {
            g_printerr ("Client thread disconnected\n");
            exit (1);
        }
    }
    else if (dbus_message_get_type (message) ==
             DBUS_MESSAGE_TYPE_METHOD_RETURN)
    {
        {
            cd->iterations += 1;
            if (cd->iterations >= N_ITERATIONS)
            {
                g_printerr ("\nCompleted %d iterations\n", N_ITERATIONS);
                g_main_loop_quit (cd->loop);
            }
            else if (cd->iterations % (N_ITERATIONS/N_PROGRESS_UPDATES) ==
0)
            {
                {
                    g_printerr ("%d%% ", (int) (cd-
>iterations/(double)N_ITERATIONS * 100.0));
                }

                send_echo_method_call (connection);
                return DBUS_HANDLER_RESULT_HANDLED;
            }
        }

        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
    }
}

static DBusHandlerResult
no_bus_client_filter (DBusConnection      *connection,
                     DBusMessage         *message,
                     void                 *user_data)
{
    ClientData *cd = user_data;

    return with_or_without_bus_client_filter (connection, message, cd);
}

static void*
no_bus_thread_func (void *data)

```



```

ServerData *sd = user_data;

if (dbus_message_is_signal (message,
                            DBUS_INTERFACE_LOCAL,
                            "Disconnected"))
{
    g_printerr ("Client disconnected from server\n");
    sd->n_clients -= 1;
    if (sd->n_clients == 0)
        g_main_loop_quit (sd->loop);
}
else if (dbus_message_is_method_call (message,
                                      ECHO_INTERFACE,
                                      ECHO_PING_METHOD))
{
    sd->handled += 1;
    send_echo_method_return (connection, message);
    return DBUS_HANDLER_RESULT_HANDLED;
}

return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static void
no_bus_new_connection_callback (DBusServer      *server,
                               DBusConnection *new_connection,
                               void            *user_data)
{
    ServerData *sd = user_data;

    dbus_connection_ref (new_connection);
    dbus_connection_setup_with_g_main (new_connection, NULL);

    if (!dbus_connection_add_filter (new_connection,
                                    no_bus_server_filter, sd, NULL))
        g_error ("no memory");

    sd->n_clients += 1;

    /* FIXME we leak the handler */
}

static void*
no_bus_init_server (ServerData      *sd)
{
    DBusServer *server;
    DBusError error;

    dbus_error_init (&error);
    server = dbus_server_listen ("unix:tmpdir="DBUS_TEST_SOCKET_DIR,
                                &error);

    if (server == NULL)

```

```

    {
        g_printerr ("Could not start server: %s\n",
                    error.message);
        exit (1);
    }

    messages_address = dbus_server_get_address (server);

    dbus_server_set_new_connection_function (server,
    no_bus_new_connection_callback,
                                                sd, NULL);

    dbus_server_setup_with_g_main (server, NULL);

    return server;
}

static void
no_bus_stop_server (ServerData *sd,
                    void *server)
{
    dbus_server_disconnect (server);
    dbus_server_unref (server);
}

static void
no_bus_main_loop_run (GMainLoop *loop)
{
    g_main_loop_run (loop);
}

static const ProfileRunVTable no_bus_vtable = {
    "dbus direct without bus",
    FALSE,
    no_bus_init_server,
    no_bus_stop_server,
    no_bus_thread_func,
    no_bus_main_loop_run
};

typedef struct
{
    const ProfileRunVTable *vtable;
    ServerData *sd;
    GHashTable *client_names;
    DBusConnection *connection;
} WithBusServer;

static DBusHandlerResult
with_bus_client_filter (DBusConnection *connection,
                       DBusMessage *message,

```

```

                                void                *user_data)
{
    ClientData *cd = user_data;

    return with_or_without_bus_client_filter (connection, message, cd);
}

static void*
with_bus_thread_func (void *data)
{
    DBusError error;
    DBusConnection *connection;
    ClientData cd;
    const char *address;
    GMainContext *context;

    g_printerr ("Starting client thread %p\n", g_thread_self());

    address = g_getenv ("DBUS_SESSION_BUS_ADDRESS");
    if (address == NULL)
    {
        g_printerr ("DBUS_SESSION_BUS_ADDRESS not set\n");
        exit (1);
    }

    dbus_error_init (&error);
    connection = dbus_connection_open_private (address, &error);
    if (connection == NULL)
    {
        g_printerr ("could not open connection to bus: %s\n",
error.message);
        dbus_error_free (&error);
        exit (1);
    }

    if (!dbus_bus_register (connection, &error))
    {
        g_printerr ("could not register with bus: %s\n", error.message);
        dbus_error_free (&error);
        exit (1);
    }

    context = g_main_context_new ();

    cd.iterations = 1;
    cd.loop = g_main_loop_new (context, FALSE);

    if (!dbus_connection_add_filter (connection,
                                    with_bus_client_filter, &cd, NULL))
        g_error ("no memory");

    dbus_connection_setup_with_g_main (connection, context);
}

```



```

    {
        g_printerr ("dbus_message_get_args(): %s\n", error.message);
        exit (1);
    }

    if (g_hash_table_lookup (server->client_names,
                            name) &&
        *old_owner != '\0' &&
        *new_owner == '\0')
    {
        g_hash_table_remove (server->client_names,
                              name);
        server->sd->n_clients -= 1;
        if (server->sd->n_clients == 0)
            g_main_loop_quit (server->sd->loop);
    }
}
else if (dbus_message_is_method_call (message,
                                       ECHO_INTERFACE,
                                       ECHO_PING_METHOD))
{
    const char *sender;

    sender = dbus_message_get_sender (message);

    if (!g_hash_table_lookup (server->client_names,
                              sender))
    {
        g_printerr ("First message from new client %s on bus\n",
sender);

        g_hash_table_replace (server->client_names,
                              g_strdup (sender),
                              GINT_TO_POINTER (1));
        server->sd->n_clients += 1;
    }

    server->sd->handled += 1;
    send_echo_method_return (connection, message);
    return DBUS_HANDLER_RESULT_HANDLED;
}

return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static void*
with_bus_init_server (ServerData      *sd)
{
    DBusGConnection *gconnection;
    DBusConnection *connection;
    GError *gerror;
    const char *s;

```

```

WithBusServer *server;
char *rule;

server = g_new0 (WithBusServer, 1);

server->vtable = sd->vtable;
server->sd = sd;

s = g_getenv ("DBUS_TEST_GLIB_RUN_TEST_SCRIPT");
if (s == NULL ||
    *s != '1')
{
    g_printerr ("You have to run with_bus mode with the run-test.sh
script\n");
    exit (1);
}

/* Note that we use the standard global bus connection for the
 * server, and the clients open their own connections so they can
 * have their own main loops and because I'm not sure "talking to
 * yourself" really works yet
 */
gerror = NULL;
gconnection = dbus_g_bus_get (DBUS_BUS_SESSION, &gerror);
if (gconnection == NULL)
{
    g_printerr ("could not open connection to bus: %s\n", gerror-
>message);
    g_error_free (gerror);
    exit (1);
}

server->client_names = g_hash_table_new_full (g_str_hash,
g_str_equal,
                                             g_free, NULL);

connection = dbus_g_connection_get_connection (gconnection);

dbus_bus_request_name (connection,
                      ECHO_SERVICE,
                      0, NULL); /* ignore errors because we suck */

rule = g_strdup_printf ("type='signal',sender='%s',member='%s'",
                      DBUS_SERVICE_DBUS,
                      "NameOwnerChanged");

/* ignore errors because we suck */
dbus_bus_add_match (connection, rule, NULL);

g_free (rule);

if (!dbus_connection_add_filter (connection,

```



```

                                with_bus_server_filter, server,
NULL))
    g_error ("no memory");

    server->connection = connection;
    server->client_names = g_hash_table_new_full (g_str_hash,
g_str_equal,
                                                g_free, NULL);

    return server;
}

static void
with_bus_stop_server (ServerData *sd,
                     void *serverv)
{
    WithBusServer *server = serverv;

    dbus_connection_remove_filter (server->connection,
                                with_bus_server_filter, server);

    g_hash_table_destroy (server->client_names);
    dbus_connection_unref (server->connection);

    g_free (server);
}

static void
with_bus_main_loop_run (GMainLoop *loop)
{
    g_main_loop_run (loop);
}

static const ProfileRunVTable with_bus_vtable = {
    "routing via a bus",
    FALSE,
    with_bus_init_server,
    with_bus_stop_server,
    with_bus_thread_func,
    with_bus_main_loop_run
};

typedef struct
{
    const ProfileRunVTable *vtable;
    int listen_fd;
    ServerData *sd;
    unsigned int source_id;
} PlainSocketServer;

static void

```

```

read_and_drop_on_floor (int fd,
                        int count,
                        gboolean fake_malloc_overhead)
{
    int bytes_read;
    int val;
    char *buf;
    char *allocated;
    char not_allocated[512+PAYLOAD_SIZE];

    g_assert (count < (int) sizeof(not_allocated));

    if (fake_malloc_overhead)
    {
        allocated = g_malloc (count);
        buf = allocated;
    }
    else
    {
        allocated = NULL;
        buf = not_allocated;
    }

    bytes_read = 0;

    while (bytes_read < count)
    {
        again:

        val = read (fd, buf + bytes_read, count - bytes_read);

        if (val < 0)
        {
            if (errno == EINTR)
                goto again;
            else
            {
                g_printerr ("read() failed thread %p: %s\n",
                            g_thread_self(), strerror (errno));
                exit (1);
            }
        }
        else
        {
            bytes_read += val;
        }
    }

    if (fake_malloc_overhead)
        g_free (allocated);
}
#endif

```

```

    g_printerr ("%p read %d bytes from fd %d\n",
                g_thread_self(), bytes_read, fd);
#endif
}

static void
write_junk (int fd,
            int count,
            gboolean fake_malloc_overhead)
{
    int bytes_written;
    int val;
    char *buf;
    char *allocated;
    char not_allocated[512+PAYLOAD_SIZE] = { '\0', };

    g_assert (count < (int) sizeof(not_allocated));

    if (fake_malloc_overhead)
    {
        int i;

        allocated = g_malloc (count);
        buf = allocated;

        /* Write some stuff into the allocated buffer to simulate
         * creating some sort of data
         */
        i = 0;
        while (i < count)
        {
            allocated[i] = (char) i;
            ++i;
        }
    }
    else
    {
        allocated = NULL;
        buf = not_allocated;
    }

    bytes_written = 0;

    while (bytes_written < count)
    {
        again:

        val = write (fd, buf + bytes_written, count - bytes_written);

        if (val < 0)
        {
            if (errno == EINTR)

```

```

        goto again;
    else
    {
        g_printerr ("write() failed thread %p: %s\n",
                    g_thread_self(), strerror (errno));
        exit (1);
    }
}
else
{
    bytes_written += val;
}
}

if (fake_malloc_overhead)
    g_free (allocated);

#if 0
    g_printerr ("%p wrote %d bytes to fd %d\n",
                g_thread_self(), bytes_written, fd);
#endif
}

static gboolean
plain_sockets_talk_to_client_watch (GIOChannel *source,
                                    GIOCondition condition,
                                    gpointer data)
{
    PlainSocketServer *server = data;
    int client_fd = g_io_channel_unix_get_fd (source);

    if (condition & G_IO_HUP)
    {
        g_printerr ("Client disconnected from server\n");
        server->sd->n_clients -= 1;
        if (server->sd->n_clients == 0)
            g_main_loop_quit (server->sd->loop);

        return FALSE; /* remove watch */
    }
    else if (condition & G_IO_IN)
    {
        server->sd->handled += 1;

        read_and_drop_on_floor (client_fd, echo_call_size, server->vtable->fake_malloc_overhead);
        write_junk (client_fd, echo_return_size, server->vtable->fake_malloc_overhead);
    }
    else
    {
        g_printerr ("Unexpected IO condition in server thread\n");
    }
}

```

```

        exit (1);
    }

    return TRUE;
}

static gboolean
plain_sockets_new_client_watch (GIOChannel *source,
                                GIOCondition condition,
                                gpointer data)
{
    int client_fd;
    struct sockaddr addr;
    socklen_t addrlen;
    GIOChannel *channel;
    PlainSocketServer *server = data;

    if (!(condition & G_IO_IN))
    {
        g_printerr ("Unexpected IO condition on server socket\n");
        exit (1);
    }

    addrlen = sizeof (addr);

retry:
    client_fd = accept (server->listen_fd, &addr, &addrlen);

    if (client_fd < 0)
    {
        if (errno == EINTR)
            goto retry;
        else
        {
            g_printerr ("Failed to accept() connection from client:
%s\n",
                        strerror (errno));
            exit (1);
        }
    }

    channel = g_io_channel_unix_new (client_fd);
    g_io_add_watch (channel,
                    G_IO_IN | G_IO_ERR | G_IO_HUP | G_IO_NVAL |
G_IO_PRI,
                    plain_sockets_talk_to_client_watch,
                    server);
    g_io_channel_unref (channel);

    server->sd->n_clients += 1;

    return TRUE;
}

```

```

}

static void*
plain_sockets_init_server (ServerData *sd)
{
    PlainSocketServer *server;
    struct sockaddr_un addr;
    static char path[] = "/tmp/dbus-test-profile-XXXXXX";
    char *p;
    GIOChannel *channel;

    server = g_new0 (PlainSocketServer, 1);
    server->sd = sd;
    server->vtable = sd->vtable; /* for convenience */

    p = path;
    while (*p)
    {
        if (*p == 'X')
            *p = 'a' + (int) (26.0*rand()/(RAND_MAX+1.0));
        ++p;
    }

    g_printerr ("Socket is %s\n", path);

    server->listen_fd = socket (PF_UNIX, SOCK_STREAM, 0);

    if (server->listen_fd < 0)
    {
        g_printerr ("Failed to create socket: %s",
                    strerror (errno));
        exit (1);
    }

    _DBUS_ZERO (addr);
    addr.sun_family = AF_UNIX;

#ifdef HAVE_ABSTRACT_SOCKETS
    /* remember that abstract names aren't nul-terminated so we rely
     * on sun_path being filled in with zeroes above.
     */
    addr.sun_path[0] = '\\0'; /* this is what says "use abstract" */
    strncpy (&addr.sun_path[1], path, _DBUS_MAX_SUN_PATH_LENGTH - 2);
    /* _dbus_verbose_bytes (addr.sun_path, sizeof (addr.sun_path)); */
#else /* HAVE_ABSTRACT_SOCKETS */
    {
        struct stat sb;

        if (stat (path, &sb) == 0 &&
            S_ISSOCK (sb.st_mode))
            unlink (path);
    }
}

```

```

    strncpy (addr.sun_path, path, _DBUS_MAX_SUN_PATH_LENGTH - 1);
#endif /* ! HAVE_ABSTRACT_SOCKETS */

    if (bind (server->listen_fd, (struct sockaddr*) &addr, sizeof
(addr)) < 0)
    {
        g_printerr ("Failed to bind socket \"%s\": %s",
                    path, strerror (errno));
        exit (1);
    }

    if (listen (server->listen_fd, 30 /* backlog */) < 0)
    {
        g_printerr ("Failed to listen on socket \"%s\": %s",
                    path, strerror (errno));
        exit (1);
    }

    plain_sockets_address = path;

    channel = g_io_channel_unix_new (server->listen_fd);
    server->source_id =
        g_io_add_watch (channel,
                        G_IO_IN | G_IO_ERR | G_IO_HUP | G_IO_NVAL |
G_IO_PRI,
                        plain_sockets_new_client_watch,
                        server);
    g_io_channel_unref (channel);

    return server;
}

static void
plain_sockets_stop_server (ServerData *sd,
                           void *server_v)
{
    PlainSocketServer *server = server_v;

    g_source_remove (server->source_id);

    close (server->listen_fd);
    g_free (server);

    {
        struct stat sb;

        if (stat (plain_sockets_address, &sb) == 0 &&
            S_ISSOCK (sb.st_mode))
            unlink (plain_sockets_address);
    }
}

```

```

static gboolean
plain_sockets_client_side_watch (GIOChannel   *source,
                                 GIOCondition condition,
                                 gpointer      data)
{
    ClientData *cd = data;
    int fd = g_io_channel_unix_get_fd (source);

    if (condition & G_IO_IN)
    {
        read_and_drop_on_floor (fd, echo_return_size, cd->vtable-
>fake_malloc_overhead);
    }
    else if (condition & G_IO_OUT)
    {
        cd->iterations += 1;
        if (cd->iterations >= N_ITERATIONS)
        {
            g_printerr ("\nCompleted %d iterations\n", N_ITERATIONS);
            g_main_loop_quit (cd->loop);
        }
        else if (cd->iterations % (N_ITERATIONS/N_PROGRESS_UPDATES) ==
0)
        {
            g_printerr ("%d%% ", (int) (cd-
>iterations/(double)N_ITERATIONS * 100.0));
        }

        write_junk (fd, echo_call_size, cd->vtable-
>fake_malloc_overhead);
    }
    else
    {
        g_printerr ("Unexpected IO condition in client thread\n");
        exit (1);
    }

    return TRUE;
}

static void*
plain_sockets_thread_func (void *data)
{
    GMainContext *context;
    ClientData cd;
    int fd;
    struct sockaddr_un addr;
    GIOChannel *channel;
    GSource *gsource;

    g_printerr ("Starting client thread %p\n",

```



```

        g_thread_self());

fd = socket (PF_UNIX, SOCK_STREAM, 0);

if (fd < 0)
{
    g_printerr ("Failed to create socket: %s",
                strerror (errno));
    exit (1);
}

_DBUS_ZERO (addr);
addr.sun_family = AF_UNIX;

#ifdef HAVE_ABSTRACT_SOCKETS
/* remember that abstract names aren't nul-terminated so we rely
 * on sun_path being filled in with zeroes above.
 */
addr.sun_path[0] = '\\0'; /* this is what says "use abstract" */
strncpy (&addr.sun_path[1], plain_sockets_address,
        _DBUS_MAX_SUN_PATH_LENGTH - 2);
/* _dbus_verbose_bytes (addr.sun_path, sizeof (addr.sun_path)); */
#else /* HAVE_ABSTRACT_SOCKETS */
strncpy (addr.sun_path, plain_sockets_address,
        _DBUS_MAX_SUN_PATH_LENGTH - 1);
#endif /* ! HAVE_ABSTRACT_SOCKETS */

if (connect (fd, (struct sockaddr*) &addr, sizeof (addr)) < 0)
{
    g_printerr ("Failed to connect to socket %s: %s",
                plain_sockets_address, strerror (errno));
    exit (1);
}

context = g_main_context_new ();

cd.iterations = 1;
cd.loop = g_main_loop_new (context, FALSE);
cd.vtable = data;

channel = g_io_channel_unix_new (fd);

gsource = g_io_create_watch (channel,
                             G_IO_IN | G_IO_OUT |
                             G_IO_ERR | G_IO_HUP | G_IO_NVAL |
G_IO_PRI);

g_source_set_callback (gsource,
                       (GSourceFunc)plain_sockets_client_side_watch,
                       &cd, NULL);

g_source_attach (gsource, context);

```

```

g_io_channel_unref (channel);

g_printerr ("Client thread writing to prime pingpong\n");
write_junk (fd, echo_call_size, cd.vtable->fake_malloc_overhead);
g_printerr ("Client thread done writing primer\n");

g_printerr ("Client thread entering main loop\n");
g_main_loop_run (cd.loop);
g_printerr ("Client thread %p exiting main loop\n",
            g_thread_self());

g_source_destroy (gsource);

close (fd);

g_main_loop_unref (cd.loop);
g_main_context_unref (context);

return NULL;
}

static void
plain_sockets_main_loop_run (GMainLoop *loop)
{
    g_main_loop_run (loop);
}

static const ProfileRunVTable plain_sockets_vtable = {
    "plain sockets",
    FALSE,
    plain_sockets_init_server,
    plain_sockets_stop_server,
    plain_sockets_thread_func,
    plain_sockets_main_loop_run
};

static const ProfileRunVTable plain_sockets_with_malloc_vtable = {
    "plain sockets with malloc overhead",
    TRUE,
    plain_sockets_init_server,
    plain_sockets_stop_server,
    plain_sockets_thread_func,
    plain_sockets_main_loop_run
};

static double
do_profile_run (const ProfileRunVTable *vtable)
{
    GTimer *timer;
    int i;
    double secs;

```

```

ServerData sd;
void *server;

g_printerr ("Profiling %s\n", vtable->name);

sd.handled = 0;
sd.n_clients = 0;
sd.loop = g_main_loop_new (NULL, FALSE);
sd.vtable = vtable;

server = (* vtable->init_server) (&sd);

for (i = 0; i < N_CLIENT_THREADS; i++)
{
    g_thread_create (vtable->client_thread_func, (void*) vtable,
FALSE, NULL);
}

timer = g_timer_new ();

g_printerr ("Server thread %p entering main loop\n",
            g_thread_self());
(* vtable->main_loop_run_func) (sd.loop);
g_printerr ("Server thread %p exiting main loop\n",
            g_thread_self());

secs = g_timer_elapsed (timer, NULL);
g_timer_destroy (timer);

g_printerr ("%s: %g seconds, %d round trips, %f seconds per
pingpong\n",
            vtable->name, secs, sd.handled, secs/sd.handled);

(* vtable->stop_server) (&sd, server);

g_main_loop_unref (sd.loop);

return secs;
}

static void
print_result (const ProfileRunVTable *vtable,
             double                seconds,
             double                baseline)
{
    g_printerr (" %g times slower for %s (%g seconds, %f per
iteration)\n",
                seconds/baseline, vtable->name,
                seconds, seconds / N_ITERATIONS);
}
#endif

```

```

int
main (int argc, char *argv[])
{
#ifdef TEST_PROFILE_DISABLED
    g_thread_init (NULL);
    dbus_g_thread_init ();

#ifdef DBUS_DISABLE_ASSERT
    g_printerr ("You should probably --disable-asserts before you
profile as they have noticeable overhead\n");
#endif

#ifdef DBUS_ENABLE_VERBOSE_MODE
    g_printerr ("You should probably --disable-verbose-mode before you
profile as verbose has noticeable overhead\n");
#endif

    payload = g_malloc (PAYLOAD_SIZE);

    /* The actual size of the DBusMessage on the wire, as of Nov 23
2004,
    * without the payload
    */
    echo_call_size = 140 + PAYLOAD_SIZE;
    echo_return_size = 32;

    if (argc > 1 && strcmp (argv[1], "plain_sockets") == 0)
        do_profile_run (&plain_sockets_vtable);
    else if (argc > 1 && strcmp (argv[1], "plain_sockets_with_malloc")
== 0)
        do_profile_run (&plain_sockets_with_malloc_vtable);
    else if (argc > 1 && strcmp (argv[1], "no_bus") == 0)
        do_profile_run (&no_bus_vtable);
    else if (argc > 1 && strcmp (argv[1], "with_bus") == 0)
        do_profile_run (&with_bus_vtable);
    else if (argc > 1 && strcmp (argv[1], "all") == 0)
    {
        double e1, e2, e3, e4;

        e1 = do_profile_run (&plain_sockets_vtable);
        e2 = do_profile_run (&plain_sockets_with_malloc_vtable);
        e3 = do_profile_run (&no_bus_vtable);
        e4 = do_profile_run (&with_bus_vtable);

        g_printerr ("Baseline plain sockets time %g seconds for %d
iterations\n",
                    e1, N_ITERATIONS);
        print_result (&plain_sockets_vtable, e1, e1);
        print_result (&plain_sockets_with_malloc_vtable, e2, e1);
        print_result (&no_bus_vtable, e3, e1);
        print_result (&with_bus_vtable, e4, e1);
    }
}

```

```

else
{
    g_printerr ("Specify profile type plain_sockets,
plain_sockets_with_malloc, no_bus, with_bus, all\n");
    exit (1);
}

/* Make valgrind happy */
dbus_shutdown ();
#endif /* TEST_PROFILE_DISABLED */
return 0;
}

```

File = test-segfault.c

```

/* This is simply a process that segfaults */
#include <config.h>
#include <stdlib.h>
#ifdef HAVE_SIGNAL_H
#include <signal.h>
#endif

#ifdef HAVE_SETRLIMIT
#include <sys/resource.h>
#endif

int
main (int argc, char **argv)
{
    char *p;

#ifdef HAVE_SETRLIMIT
    struct rlimit r = { 0, };

    getrlimit (RLIMIT_CORE, &r);
    r.rlim_cur = 0;
    setrlimit (RLIMIT_CORE, &r);

    raise (SIGSEGV);
#endif
    p = NULL;
    *p = 'a';

    return 0;
}

```

File = test-server.c

```

#include <config.h>

#include <stdlib.h>
#include "dbus/dbus-glib.h"
#include "tools/dbus-glib-bindings.h"
#include "test-objects.h"
#include "test-dup-prop.h"

#define TEST_NAMESPACE "org.freedesktop.DBus.GLib.Test.Interfaces"
#define TEST_OBJECT_PATH "/org/freedesktop/DBus/GLib/Test/Interfaces"
#define TEST_DP_OBJECT_PATH
"/org/freedesktop/DBus/GLib/Test/DupPropInterfaces"

static GMainLoop *loop = NULL;

int
main (int   argc,
      char **argv)
{
    DBusGConnection *connection;
    DBusGProxy *proxy;
    GError *error = NULL;
    guint32 ret;
    TestBeatlesSong *song;
    TestDpObj *dp_obj;

    g_type_init ();

    /* Get the connection and ensure the name is not used yet */
    connection = dbus_g_bus_get (DBUS_BUS_SESSION, &error);
    if (connection == NULL) {
        g_warning ("Failed to make connection to session bus: %s",
                  error->message);
        g_error_free (error);
        exit(1);
    }

    proxy = dbus_g_proxy_new_for_name (connection, DBUS_SERVICE_DBUS,
                                       DBUS_PATH_DBUS, DBUS_INTERFACE_DBUS);
    if (!org_freedesktop_DBus_request_name (proxy, TEST_NAMESPACE,
                                           0, &ret, &error)) {
        g_warning ("There was an error requesting the name: %s",
                  error->message);
        g_error_free (error);
        exit(1);
    }

    if (ret != DBUS_REQUEST_NAME_REPLY_PRIMARY_OWNER) {
        /* Someone else registered the name before us */
        exit(1);
    }
}

```

```

    song = test_beatles_song_new ();

    /* Register the app on the bus */
    dbus_g_connection_register_g_object (connection,
                                         TEST_OBJECT_PATH,
                                         G_OBJECT (song));

    dp_obj = test_dp_obj_new ();
    dbus_g_connection_register_g_object (connection,
                                         TEST_DP_OBJECT_PATH,
                                         G_OBJECT (dp_obj));

    loop = g_main_loop_new (NULL, FALSE);
    g_main_loop_run (loop);

    return 0;
}

```

File = test-service-glib-subclass.xml

```

<?xml version="1.0" encoding="UTF-8" ?>

<node name="/org/freedesktop/DBus/GLib/Tests/MyTestObjectSubclass">
  <interface name="org.freedesktop.DBus.GLib.Tests.MyObjectSubclass">
    <property name="this_is_a_subclass_string" type="s"
access="readwrite"/>
    <property name="this_is_a_subclass_uint" type="u"
access="readwrite"/>
  </interface>
</node>

```

File = test-service-glib.c

```

#include <config.h>

/* -*- mode: C; c-file-style: "gnu" -*- */
#include <dbus/dbus-glib.h>
/* NOTE - outside of D-BUS core this would be
 * include <dbus/dbus-glib-bindings.h>
 */
#include "tools/dbus-glib-bindings.h"
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <glib/gi18n.h>
#include <glib-object.h>

#include "my-object.h"

```

```

#include "my-object-subclass.h"

static GObject *obj;
static GObject *obj2;
static GObject *subobj;
GMainLoop *loop;

#define TEST_SERVICE_NAME "org.freedesktop.DBus.GLib.TestService"

int
main (int argc, char **argv)
{
    DBusGConnection *connection;
    GError *error;
    DBusGProxy *driver_proxy;
    guint32 request_name_ret;

    g_type_init ();
    g_thread_init (NULL); dbus_g_thread_init ();

    dbus_g_error_domain_register (MY_OBJECT_ERROR,
                                  NULL,
                                  MY_TYPE_ERROR);

    g_printerr ("Launching test-service-glib\n");

    loop = g_main_loop_new (NULL, FALSE);

    {
        GLogLevelFlags fatal_mask;

        fatal_mask = g_log_set_always_fatal (G_LOG_FATAL_MASK);
        fatal_mask |= G_LOG_LEVEL_WARNING | G_LOG_LEVEL_CRITICAL;
        g_log_set_always_fatal (fatal_mask);
    }

    error = NULL;
    connection = dbus_g_bus_get (DBUS_BUS_STARTER,
                                &error);

    if (connection == NULL)
    {
        g_printerr ("Failed to open connection to bus: %s\n",
                    error->message);
        g_error_free (error);
        exit (1);
    }

    obj = g_object_new (MY_TYPE_OBJECT, NULL);
    obj2 = g_object_new (MY_TYPE_OBJECT, NULL);
    subobj = g_object_new (MY_TYPE_OBJECT_SUBCLASS, NULL);

    dbus_g_connection_register_g_object (connection,

```



```

"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
    obj);
/* Register a second time; we want the object to also be reachable
through this interface */
dbus_g_connection_register_g_object (connection,

"/org/freedesktop/DBus/GLib/Tests/Compat/MyTestObjectCompat",
    obj);
dbus_g_connection_register_g_object (connection,

"/org/freedesktop/DBus/GLib/Tests/MyTestObject2",
    obj2);

dbus_g_connection_register_g_object (connection,

"/org/freedesktop/DBus/GLib/Tests/MyTestObjectSubclass",
    subobj);

driver_proxy = dbus_g_proxy_new_for_name (connection,
    DBUS_SERVICE_DBUS,
    DBUS_PATH_DBUS,
    DBUS_INTERFACE_DBUS);

if (!org_freedesktop_DBus_request_name (driver_proxy,
    TEST_SERVICE_NAME,
    0, &request_name_ret, &error))
{
    g_assert (error != NULL);
    g_printerr ("Failed to get name: %s\n",
        error->message);
    g_clear_error (&error);
    exit (1);
}

if (!(request_name_ret == DBUS_REQUEST_NAME_REPLY_PRIMARY_OWNER))
{
    g_printerr ("Got result code %u from requesting name\n",
request_name_ret);
    exit (1);
}

g_printerr ("GLib test service has name '%s'\n", TEST_SERVICE_NAME);
g_printerr ("GLib test service entering main loop\n");

g_main_loop_run (loop);

g_printerr ("Successfully completed %s\n", argv[0]);

return 0;
}

```

File = test-service-glib.xml

```
<?xml version="1.0" encoding="UTF-8" ?>

<node name="/org/freedesktop/DBus/GLib/Tests/MyTestObject">
  <interface name="org.freedesktop.DBus.GLib.Tests.MyObject">
    <property name="this_is_a_string" type="s" access="readwrite"/>
    <property name="no-touching" type="u" access="read"/>
    <property name="SuperStudly" type="d" access="readwrite"/>

    <method name="DoNothing">
    </method>

    <method name="Increment">
      <arg type="u" name="x" />
      <arg type="u" direction="out" />
    </method>

    <method name="IncrementRetVal">
      <arg type="u" name="x" />
      <arg type="u" direction="out">
        <annotation name="org.freedesktop.DBus.GLib.ReturnVal" value=""/>
      </arg>
    </method>

    <method name="IncrementRetValError">
      <arg type="u" name="x" />
      <arg type="u" direction="out">
        <annotation name="org.freedesktop.DBus.GLib.ReturnVal"
value="error"/>
      </arg>
    </method>

    <method name="ThrowError">
    </method>

    <method name="ThrowUnregisteredError">
    </method>

    <method name="Uppercase">
      <arg type="s" direction="in" />
      <arg type="s" direction="out" />
    </method>

    <method name="ManyArgs">
      <arg type="u" name="x" direction="in" />
      <arg type="s" name="str" direction="in" />
      <arg type="d" name="trouble" direction="in" />
      <arg type="d" name="d_ret" direction="out" />
      <arg type="s" name="str_ret" direction="out" />
    </method>
  </interface>
</node>
```

```
</method>

<method name="ManyReturn">
  <arg type="u" direction="out" />
  <arg type="s" direction="out" />
  <arg type="i" direction="out" />
  <arg type="u" direction="out" />
  <arg type="u" direction="out" />
  <arg type="s" direction="out">
    <annotation name="org.freedesktop.DBus.GLib.Const" value="" />
  </arg>
</method>

<method name="Stringify">
  <arg type="v" name="val" direction="in"/>
  <arg type="s" direction="out"/>
</method>

<method name="Unstringify">
  <arg type="s" name="val" direction="in"/>
  <arg type="v" direction="out"/>
</method>

<method name="Recursive1">
  <arg type="au" direction="in"/>
  <arg type="u" direction="out"/>
</method>

<method name="Recursive2">
  <arg type="u" direction="in"/>
  <arg type="au" direction="out"/>
</method>

<method name="ManyUppercase">
  <arg type="as" direction="in"/>
  <arg type="as" direction="out"/>
</method>

<method name="StrHashLen">
  <arg type="a{ss}" direction="in"/>
  <arg type="u" direction="out"/>
</method>

<method name="SendCar">
  <arg type="(suv)" direction="in"/>
  <arg type="(uo)" direction="out"/>
</method>

<method name="GetHash">
  <arg type="a{ss}" direction="out"/>
</method>
```

```
<method name="RecArrays">
  <arg type="aas" name="val" direction="in"/>
  <arg type="aau" direction="out"/>
</method>

<method name="Objpath">
  <arg type="o" direction="in"/>
  <arg type="o" direction="out">
    <annotation name="org.freedesktop.DBus.GLib.Const" value=""/>
  </arg>
</method>

<method name="GetObjs">
  <arg type="ao" direction="out"/>
</method>

<method name="IncrementVal">
</method>

<method name="AsyncIncrement">
  <annotation name="org.freedesktop.DBus.GLib.Async" value=""/>
  <arg type="u" name="x" />
  <arg type="u" direction="out" />
</method>

<method name="AsyncThrowError">
  <annotation name="org.freedesktop.DBus.GLib.Async" value=""/>
</method>

<method name="GetVal">
  <arg type="u" direction="out" />
</method>

<method name="ManyStringify">
  <arg type="a{sv}" direction="in"/>
  <arg type="a{sv}" direction="out"/>
</method>

<method name="EchoVariant">
  <arg type="v" direction="in" />
  <arg type="v" direction="out" />
</method>

<method name="EchoSignature">
  <arg type="g" direction="in" />
  <arg type="g" direction="out" />
</method>

<method name="ProcessVariantOfArrayOfInts123">
  <arg type="v" direction="in" />
</method>
```

```

<method name="DictOfDicts">
  <arg type="a{sa{ss}}" direction="in"/>
  <arg type="a{sa{ss}}" direction="out"/>
</method>

<method name="DictOfSigs">
  <annotation name="org.freedesktop.DBus.GLib.Async" value=""/>
  <arg type="a{gas}" direction="in" />
  <arg type="a{gas}" direction="out" />
</method>

<method name="DictOfObjs">
  <annotation name="org.freedesktop.DBus.GLib.Async" value=""/>
  <arg type="a{oao}" direction="in" />
  <arg type="a{oao}" direction="out" />
</method>

<method name="EmitFroblicate">
</method>

<method name="UnsafeDisableLegacyPropertyAccess">
</method>

<!-- Export signals -->
<signal name="Froblicate"/>

<signal name="Objectified">
  <arg type="o"/>
</signal>

<method name="Terminate">
</method>
</interface>

<!-- Test multiple interfaces on the same object -->

<interface name="org.freedesktop.DBus.GLib.Tests.FooObject">
  <method name="GetValue">
    <arg type="u" direction="out" />
  </method>

  <method name="EmitSignals">
</method>

  <signal name="Sig0"/>

  <signal name="Sig1"/>

  <method name="EmitSignal2">
</method>

  <signal name="Sig2"/>

```

```
    <method name="Terminate">
    </method>

</interface>

</node>
```

File = test-service.c

```
#include <config.h>

#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <dbus/dbus.h>

static dbus_bool_t already_quit = FALSE;
static dbus_bool_t hello_from_self_reply_received = FALSE;

static void
quit (void)
{
    if (!already_quit)
        already_quit = TRUE;
}

static void
die (const char *message)
{
    fprintf (stderr, "*** test-service: %s", message);
    exit (1);
}

static void
check_hello_from_self_reply (DBusPendingCall *pcall,
                             void *user_data)
{
    DBusMessage *reply;
    DBusMessage *echo_message, *echo_reply;
    DBusError error;
    DBusConnection *connection;

    int type;

    dbus_error_init (&error);

    connection = dbus_bus_get (DBUS_BUS_STARTER, &error);
    if (connection == NULL)
    {
```

```

    fprintf (stderr, "*** Failed to open connection to activating
message bus: %s\n",
            error.message);
    dbus_error_free (&error);
    die("no memory");
}

echo_message = (DBusMessage *)user_data;

reply = dbus_pending_call_steal_reply (pcall);

type = dbus_message_get_type (reply);

if (type == DBUS_MESSAGE_TYPE_METHOD_RETURN)
{
    const char *s;
    printf ("Reply from HelloFromSelf recived\n");

    if (!dbus_message_get_args (echo_message,
                                &error,
                                DBUS_TYPE_STRING, &s,
                                DBUS_TYPE_INVALID))
    {
        echo_reply = dbus_message_new_error (echo_message,
                                              error.name,
                                              error.message);

        if (echo_reply == NULL)
            die ("No memory\n");
    }
}
else
{
    echo_reply = dbus_message_new_method_return (echo_message);
    if (echo_reply == NULL)
        die ("No memory\n");

    if (!dbus_message_append_args (echo_reply,
                                    DBUS_TYPE_STRING, &s,
                                    DBUS_TYPE_INVALID))
        die ("No memory");
}

if (!dbus_connection_send (connection, echo_reply, NULL))
    die ("No memory\n");

dbus_message_unref (echo_reply);
}
else if (type == DBUS_MESSAGE_TYPE_ERROR)
{
    dbus_set_error_from_message (&error, reply);
}

```

```

printf ("Error type in reply: %s\n", error.message);

if (strcmp (error.name, DBUS_ERROR_NO_MEMORY) != 0)
{
    echo_reply = dbus_message_new_error (echo_message,
                                        error.name,
                                        error.message);

    if (echo_reply == NULL)
        die ("No memory\n");

    if (!dbus_connection_send (connection, echo_reply, NULL))
        die ("No memory\n");

    dbus_message_unref (echo_reply);
}
dbus_error_free (&error);
}

hello_from_self_reply_recived = TRUE;

dbus_message_unref (reply);
dbus_message_unref (echo_message);
dbus_pending_call_unref (pcall);
}

static DBusHandlerResult
handle_run_hello_from_self (DBusConnection      *connection,
                            DBusMessage
                            *message)
{
    DBusError error;
    DBusMessage *reply, *self_message;
    DBusPendingCall *pcall;
    char *s;

    dbus_error_init (&error);

    if (!dbus_message_get_args (message,
                                &error,
                                DBUS_TYPE_STRING, &s,
                                DBUS_TYPE_INVALID))
    {
        reply = dbus_message_new_error (message,
                                        error.name,
                                        error.message);

        if (reply == NULL)
            die ("No memory\n");

        if (!dbus_connection_send (connection, reply, NULL))
            die ("No memory\n");
    }
}

```



```

        dbus_message_unref (reply);

        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
    }
    printf ("Sending HelloFromSelf\n");

    self_message = dbus_message_new_method_call
("org.freedesktop.DBus.GLib.TestEchoService",

"/org/freedesktop/DBus/GLib/TestSuite",

"org.freedesktop.DBus.GLib.TestSuite",

                                "HelloFromSelf");

    if (self_message == NULL)
        die ("No memory");

    if (!dbus_connection_send_with_reply (connection, self_message,
&pcall, -1))
        die("No memory");

    dbus_message_ref (message);
    if (!dbus_pending_call_set_notify (pcall,
check_hello_from_self_reply, (void *)message, NULL))
        die("No memory");

    printf ("Sent HelloFromSelf\n");
    return DBUS_HANDLER_RESULT_HANDLED;
}

static DBusHandlerResult
handle_echo (DBusConnection      *connection,
             DBusMessage         *message)
{
    DBusError error;
    DBusMessage *reply;
    char *s;

    dbus_error_init (&error);

    if (!dbus_message_get_args (message,
                                &error,
                                DBUS_TYPE_STRING, &s,
                                DBUS_TYPE_INVALID))
    {
        reply = dbus_message_new_error (message,
                                        error.name,
                                        error.message);

        if (reply == NULL)
            die ("No memory\n");
    }
}

```

```

    if (!dbus_connection_send (connection, reply, NULL))
        die ("No memory\n");

    dbus_message_unref (reply);

    return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    die ("No memory\n");

if (!dbus_message_append_args (reply,
                               DBUS_TYPE_STRING, &s,
                               DBUS_TYPE_INVALID))
    die ("No memory");

if (!dbus_connection_send (connection, reply, NULL))
    die ("No memory\n");

fprintf (stderr, "Echo service echoed string: \"%s\"\n", s);

dbus_message_unref (reply);

return DBUS_HANDLER_RESULT_HANDLED;
}

static void
path_unregistered_func (DBusConnection *connection,
                       void *user_data)
{
    /* connection was finalized */
}

static DBusHandlerResult
path_message_func (DBusConnection *connection,
                  DBusMessage *message,
                  void *user_data)
{
    if (dbus_message_is_method_call (message,
                                     "org.freedesktop.DBus.GLib.TestSuite",
                                     "Echo"))
        return handle_echo (connection, message);
    else if (dbus_message_is_method_call (message,
                                     "org.freedesktop.DBus.GLib.TestSuite",
                                     "Exit"))
    {
        dbus_connection_close (connection);
        quit ();
    }
}

```

```

        return DBUS_HANDLER_RESULT_HANDLED;
    }
    else if (dbus_message_is_method_call (message,
"org.freedesktop.DBus.GLib.TestSuite",
                                                "EmitFoo"))
    {
        /* Emit the Foo signal */
        DBusMessage *signal;
        double v_DOUBLE;

        signal = dbus_message_new_signal
("/org/freedesktop/DBus/GLib/TestSuite",
"org.freedesktop.DBus.GLib.TestSuite",
                                                "Foo");

        if (signal == NULL)
            die ("No memory\n");

        v_DOUBLE = 42.6;
        if (!dbus_message_append_args (signal,
                                        DBUS_TYPE_DOUBLE, &v_DOUBLE,
                                        DBUS_TYPE_INVALID))

            die ("No memory");

        if (!dbus_connection_send (connection, signal, NULL))
            die ("No memory\n");

        return DBUS_HANDLER_RESULT_HANDLED;
    }

    else if (dbus_message_is_method_call (message,
"org.freedesktop.DBus.GLib.TestSuite",
                                                "RunHelloFromSelf"))
    {
        return handle_run_hello_from_self (connection, message);
    }
    else if (dbus_message_is_method_call (message,
"org.freedesktop.DBus.GLib.TestSuite",
                                                "HelloFromSelf"))
    {
        DBusMessage *reply;
        printf ("Recived the HelloFromSelf message\n");

        reply = dbus_message_new_method_return (message);
        if (reply == NULL)
            die ("No memory");

        if (!dbus_connection_send (connection, reply, NULL))
            die ("No memory");
    }

```

```

    }

    return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static DBusObjectPathVTable
echo_vtable = {
    path_unregistered_func,
    path_message_func,
    NULL,
};

static const char* echo_path = "/org/freedesktop/DBus/GLib/TestSuite"
;

static DBusHandlerResult
filter_func (DBusConnection      *connection,
            DBusMessage          *message,
            void                  *user_data)
{
    if (dbus_message_is_signal (message,
                                DBUS_INTERFACE_LOCAL,
                                "Disconnected"))
    {
        dbus_connection_close (connection);
        quit ();
        return DBUS_HANDLER_RESULT_HANDLED;
    }
    else
    {
        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
    }
}

int
main (int    argc,
      char **argv)
{
    DBusError error;
    DBusConnection *connection;

    dbus_error_init (&error);
    connection = dbus_bus_get (DBUS_BUS_STARTER, &error);
    if (connection == NULL)
    {
        fprintf (stderr, "*** Failed to open connection to activating
message bus: %s\n",
                error.message);
        dbus_error_free (&error);
        return 1;
    }
}

```

```

if (!dbus_connection_add_filter (connection,
                                filter_func, NULL, NULL))
    die ("No memory");

if (!dbus_connection_register_object_path (connection,
                                           echo_path,
                                           &echo_vtable,
                                           (void*) 0xdeadbeef))
    die ("No memory");

{
    void *d;
    if (!dbus_connection_get_object_path_data (connection, echo_path,
&d))
        die ("No memory");
    if (d != (void*) 0xdeadbeef)
        die ("dbus_connection_get_object_path_data() doesn't seem to
work right\n");
}

dbus_bus_request_name (connection,
"org.freedesktop.DBus.GLib.TestEchoService",
                      0, &error);
if (dbus_error_is_set (&error))
{
    fprintf (stderr, "Error %s\n", error.message);
    dbus_error_free (&error);
    exit (1);
}

while (dbus_connection_read_write_dispatch (connection, -1) &&
!already_quit)
    ;

dbus_connection_remove_filter (connection, filter_func, NULL);

dbus_connection_unref (connection);

dbus_shutdown ();

return 0;
}

```

File = test-service.c.~1~

```
#include <config.h>
```

```
#include "test-utils.h"
```

```
#ifdef HAVE_UNISTD_H
```

```

#include <unistd.h>
#endif

static DBusLoop *loop;
static dbus_bool_t already_quit = FALSE;
static dbus_bool_t hello_from_self_reply_received = FALSE;

static void
quit (void)
{
    if (!already_quit)
    {
        _dbus_loop_quit (loop);
        already_quit = TRUE;
    }
}

static void
die (const char *message)
{
    fprintf (stderr, "*** test-service: %s", message);
    exit (1);
}

static void
check_hello_from_self_reply (DBusPendingCall *pcall,
                             void *user_data)
{
    DBusMessage *reply;
    DBusMessage *echo_message, *echo_reply = NULL;
    DBusError error;
    DBusConnection *connection;

    int type;

    dbus_error_init (&error);

    connection = dbus_bus_get (DBUS_BUS_STARTER, &error);
    if (connection == NULL)
    {
        fprintf (stderr, "*** Failed to open connection to activating
message bus: %s\n",
                error.message);
        dbus_error_free (&error);
        die("no memory");
    }

    echo_message = (DBusMessage *)user_data;

    reply = dbus_pending_call_steal_reply (pcall);

```

```

type = dbus_message_get_type (reply);

if (type == DBUS_MESSAGE_TYPE_METHOD_RETURN)
{
    const char *s;
    printf ("Reply from HelloFromSelf received\n");

    if (!dbus_message_get_args (echo_message,
                                &error,
                                DBUS_TYPE_STRING, &s,
                                DBUS_TYPE_INVALID))
    {
        echo_reply = dbus_message_new_error (echo_message,
                                              error.name,
                                              error.message);

        if (echo_reply == NULL)
            die ("No memory\n");
    }
}
else
{
    echo_reply = dbus_message_new_method_return (echo_message);
    if (echo_reply == NULL)
        die ("No memory\n");

    if (!dbus_message_append_args (echo_reply,
                                    DBUS_TYPE_STRING, &s,
                                    DBUS_TYPE_INVALID))
        die ("No memory");
}

if (!dbus_connection_send (connection, echo_reply, NULL))
    die ("No memory\n");

dbus_message_unref (echo_reply);
}
else if (type == DBUS_MESSAGE_TYPE_ERROR)
{
    dbus_set_error_from_message (&error, reply);
    printf ("Error type in reply: %s\n", error.message);

    if (strcmp (error.name, DBUS_ERROR_NO_MEMORY) != 0)
    {
        echo_reply = dbus_message_new_error (echo_reply,
                                              error.name,
                                              error.message);

        if (echo_reply == NULL)
            die ("No memory\n");

        if (!dbus_connection_send (connection, echo_reply, NULL))

```

```

        die ("No memory\n");

        dbus_message_unref (echo_reply);
    }
    dbus_error_free (&error);
}
else
    _dbus_assert_not_reached ("Unexpected message received\n");

hello_from_self_reply_received = TRUE;

dbus_message_unref (reply);
dbus_message_unref (echo_message);
dbus_pending_call_unref (pcall);
dbus_connection_unref (connection);
}

static DBusHandlerResult
handle_run_hello_from_self (DBusConnection      *connection,
                             DBusMessage
*message)
{
    DBusError error;
    DBusMessage *reply, *self_message;
    DBusPendingCall *pcall;
    char *s;

    _dbus_verbose ("sending reply to Echo method\n");

    dbus_error_init (&error);

    if (!dbus_message_get_args (message,
                                &error,
                                DBUS_TYPE_STRING, &s,
                                DBUS_TYPE_INVALID))
    {
        reply = dbus_message_new_error (message,
                                        error.name,
                                        error.message);

        if (reply == NULL)
            die ("No memory\n");

        if (!dbus_connection_send (connection, reply, NULL))
            die ("No memory\n");

        dbus_message_unref (reply);

        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
    }
    printf ("Sending HelloFromSelf\n");
}

```



```

_dbus_verbose ("*** Sending message to self\n");
self_message = dbus_message_new_method_call
("org.freedesktop.DBus.TestSuiteEchoService",

"/org/freedesktop/TestSuite",

                                "org.freedesktop.TestSuite",
                                "HelloFromSelf");

if (self_message == NULL)
    die ("No memory");

if (!dbus_connection_send_with_reply (connection, self_message,
&pcall, -1))
    die("No memory");

dbus_message_ref (message);
if (!dbus_pending_call_set_notify (pcall,
check_hello_from_self_reply, (void *)message, NULL))
    die("No memory");

printf ("Sent HelloFromSelf\n");
return DBUS_HANDLER_RESULT_HANDLED;
}

static DBusHandlerResult
handle_echo (DBusConnection      *connection,
             DBusMessage         *message)
{
    DBusError error;
    DBusMessage *reply;
    char *s;

    _dbus_verbose ("sending reply to Echo method\n");

    dbus_error_init (&error);

    if (!dbus_message_get_args (message,
                                &error,
                                DBUS_TYPE_STRING, &s,
                                DBUS_TYPE_INVALID))
    {
        reply = dbus_message_new_error (message,
                                        error.name,
                                        error.message);

        if (reply == NULL)
            die ("No memory\n");

        if (!dbus_connection_send (connection, reply, NULL))
            die ("No memory\n");

        dbus_message_unref (reply);
    }
}

```

```

    return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

reply = dbus_message_new_method_return (message);
if (reply == NULL)
    die ("No memory\n");

if (!dbus_message_append_args (reply,
                               DBUS_TYPE_STRING, &s,
                               DBUS_TYPE_INVALID))

    die ("No memory");

if (!dbus_connection_send (connection, reply, NULL))
    die ("No memory\n");

fprintf (stderr, "Echo service echoed string: \"%s\"\n", s);

dbus_message_unref (reply);

return DBUS_HANDLER_RESULT_HANDLED;
}

static DBusHandlerResult
handle_delay_echo (DBusConnection      *connection,
                  DBusMessage         *message)
{
    DBusError error;
    DBusMessage *reply;
    char *s;

    _dbus_verbose ("sleeping for a short time\n");

    _dbus_sleep_milliseconds (50);

    _dbus_verbose ("sending reply to DelayEcho method\n");

    dbus_error_init (&error);

    if (!dbus_message_get_args (message,
                                &error,
                                DBUS_TYPE_STRING, &s,
                                DBUS_TYPE_INVALID))
    {
        reply = dbus_message_new_error (message,
                                        error.name,
                                        error.message);

        if (reply == NULL)
            die ("No memory\n");

        if (!dbus_connection_send (connection, reply, NULL))

```

```

        die ("No memory\n");

        dbus_message_unref (reply);

        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
    }

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)
        die ("No memory\n");

    if (!dbus_message_append_args (reply,
                                   DBUS_TYPE_STRING, &s,
                                   DBUS_TYPE_INVALID))

        die ("No memory");

    if (!dbus_connection_send (connection, reply, NULL))
        die ("No memory\n");

    fprintf (stderr, "DelayEcho service echoed string: \"%s\"\n", s);

    dbus_message_unref (reply);

    return DBUS_HANDLER_RESULT_HANDLED;
}

static void
path_unregistered_func (DBusConnection *connection,
                       void *user_data)
{
    /* connection was finalized */
}

static DBusHandlerResult
path_message_func (DBusConnection *connection,
                  DBusMessage *message,
                  void *user_data)
{
    if (dbus_message_is_method_call (message,
                                     "org.freedesktop.TestSuite",
                                     "Echo"))
        return handle_echo (connection, message);
    else if (dbus_message_is_method_call (message,
                                          "org.freedesktop.TestSuite",
                                          "DelayEcho"))
        return handle_delay_echo (connection, message);
    else if (dbus_message_is_method_call (message,
                                          "org.freedesktop.TestSuite",
                                          "Exit"))
    {
        quit ();
    }
}

```

```

    return DBUS_HANDLER_RESULT_HANDLED;
}
else if (dbus_message_is_method_call (message,
                                     "org.freedesktop.TestSuite",
                                     "EmitFoo"))
{
    /* Emit the Foo signal */
    DBusMessage *signal;
    double v_DOUBLE;

    _dbus_verbose ("emitting signal Foo\n");

    signal = dbus_message_new_signal ("/org/freedesktop/TestSuite",
                                     "org.freedesktop.TestSuite",
                                     "Foo");

    if (signal == NULL)
        die ("No memory\n");

    v_DOUBLE = 42.6;
    if (!dbus_message_append_args (signal,
                                   DBUS_TYPE_DOUBLE, &v_DOUBLE,
                                   DBUS_TYPE_INVALID))

        die ("No memory");

    if (!dbus_connection_send (connection, signal, NULL))
        die ("No memory\n");

    return DBUS_HANDLER_RESULT_HANDLED;
}

else if (dbus_message_is_method_call (message,
                                     "org.freedesktop.TestSuite",
                                     "RunHelloFromSelf"))
{
    return handle_run_hello_from_self (connection, message);
}
else if (dbus_message_is_method_call (message,
                                     "org.freedesktop.TestSuite",
                                     "HelloFromSelf"))
{
    DBusMessage *reply;
    printf ("Received the HelloFromSelf message\n");

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)
        die ("No memory");

    if (!dbus_connection_send (connection, reply, NULL))
        die ("No memory");

    return DBUS_HANDLER_RESULT_HANDLED;
}

```

```

    else
        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static DBusObjectPathVTable
echo_vtable = {
    path_unregistered_func,
    path_message_func,
    NULL,
};

static const char* echo_path = "/org/freedesktop/TestSuite" ;

static DBusHandlerResult
filter_func (DBusConnection      *connection,
            DBusMessage          *message,
            void                  *user_data)
{
    if (dbus_message_is_signal (message,
                                DBUS_INTERFACE_LOCAL,
                                "Disconnected"))
    {
        quit ();
        return DBUS_HANDLER_RESULT_HANDLED;
    }
    else
    {
        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
    }
}

int
main (int    argc,
      char **argv)
{
    DBusError error;
    int result;
    DBusConnection *connection;
    const char *name;
    dbus_bool_t do_fork;

    if (argc != 3)
    {
        name = "org.freedesktop.DBus.TestSuiteEchoService";
        do_fork = FALSE;
    }
    else
    {
        name = argv[1];
#ifdef DBUS_WIN
        do_fork = strcmp (argv[2], "fork") == 0;
#endif

```

```

#else
    do_fork = FALSE;
#endif
}

/* The bare minimum for simulating a program "daemonizing"; the
intent
* is to test services which move from being legacy init scripts to
* activated services.
* https://bugzilla.redhat.com/show_bug.cgi?id=545267
*/
#ifdef DBUS_WIN
if (do_fork)
{
    pid_t pid = fork ();
    if (pid != 0)
        exit (0);
    sleep (1);
}
#endif

dbus_error_init (&error);
connection = dbus_bus_get (DBUS_BUS_STARTER, &error);
if (connection == NULL)
{
    fprintf (stderr, "*** Failed to open connection to activating
message bus: %s\n",
            error.message);
    dbus_error_free (&error);
    return 1;
}

loop = _dbus_loop_new ();
if (loop == NULL)
    die ("No memory\n");

if (!test_connection_setup (loop, connection))
    die ("No memory\n");

if (!dbus_connection_add_filter (connection,
                                filter_func, NULL, NULL))
    die ("No memory");

if (!dbus_connection_register_object_path (connection,
                                           echo_path,
                                           &echo_vtable,
                                           (void*) 0xdeadbeef))
    die ("No memory");

{
    void *d;

```

```

    if (!dbus_connection_get_object_path_data (connection, echo_path,
&d))
        die ("No memory");
    if (d != (void*) 0xdeadbeef)
        die ("dbus_connection_get_object_path_data() doesn't seem to
work right\n");
    }

    result = dbus_bus_request_name (connection, name,
                                0, &error);
    if (dbus_error_is_set (&error))
    {
        fprintf (stderr, "Error %s\n", error.message);
        _dbus_verbose ("*** Failed to acquire service: %s\n",
                    error.message);
        dbus_error_free (&error);
        exit (1);
    }

    if (result != DBUS_REQUEST_NAME_REPLY_PRIMARY_OWNER)
    {
        fprintf (stderr, "Unable to acquire service: code %d\n",
result);
        _dbus_verbose ("*** Failed to acquire service: %d\n", result);
        exit (1);
    }

    _dbus_verbose ("*** Test service entering main loop\n");
    _dbus_loop_run (loop);

    test_connection_shutdown (loop, connection);

    dbus_connection_remove_filter (connection, filter_func, NULL);

    dbus_connection_unref (connection);

    _dbus_loop_unref (loop);
    loop = NULL;

    dbus_shutdown ();

    _dbus_verbose ("*** Test service exiting\n");

    return 0;
}

```

File = test-shell-service.c

```
#include <config.h>
```

```

#include "test-utils.h"

static DBusLoop *loop;
static dbus_bool_t already_quit = FALSE;
static const char* echo_path = "/org/freedesktop/TestSuite";

typedef struct
{
    int argc;
    char **argv;
} EchoData;

static void
quit (void)
{
    if (!already_quit)
    {
        _dbus_loop_quit (loop);
        already_quit = TRUE;
    }
}

static void
die (const char *message)
{
    fprintf (stderr, "*** test-service: %s", message);
    exit (1);
}

static DBusHandlerResult
handle_echo (DBusConnection      *connection,
             DBusMessage         *message)
{
    DBusError error;
    DBusMessage *reply;
    DBusMessageIter iter;
    int i;
    EchoData *d;

    _dbus_verbose ("sending reply to Echo method\n");

    if (!dbus_connection_get_object_path_data (connection, echo_path,
        (void **) &d))
        die ("No memory");

    dbus_error_init (&error);

    reply = dbus_message_new_method_return (message);
    if (reply == NULL)
        die ("No memory\n");
}

```



```

dbus_message_iter_init_append (reply, &iter);
for (i = 0; i < d->argc; ++i)
    if (!dbus_message_iter_append_basic (&iter, DBUS_TYPE_STRING, &(d-
>argv[i])))
        die ("No memory\n");

if (!dbus_connection_send (connection, reply, NULL))
    die ("No memory\n");

fprintf (stderr, "Shell echo service echoed the command line\n");

dbus_message_unref (reply);

return DBUS_HANDLER_RESULT_HANDLED;
}

static void
path_unregistered_func (DBusConnection *connection,
                        void *user_data)
{
    /* connection was finalized */
}

static DBusHandlerResult
path_message_func (DBusConnection *connection,
                  DBusMessage *message,
                  void *user_data)
{
    if (dbus_message_is_method_call (message,
                                     "org.freedesktop.TestSuite",
                                     "Echo"))
        return handle_echo (connection, message);
    else if (dbus_message_is_method_call (message,
                                          "org.freedesktop.TestSuite",
                                          "Exit"))
        {
            quit ();
            return DBUS_HANDLER_RESULT_HANDLED;
        }
    else
        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;
}

static DBusObjectPathVTable
echo_vtable = {
    path_unregistered_func,
    path_message_func,
    NULL,
};

static DBusHandlerResult
filter_func (DBusConnection *connection,

```



```

                                                                 &echo_vtable,
                                                                 (void*) &echo_data))
    die ("No memory");

    {
        void *d;
        if (!dbus_connection_get_object_path_data (connection, echo_path,
&d))
            die ("No memory");
        if (d != (void*) &echo_data)
            die ("dbus_connection_get_object_path_data() doesn't seem to
work right\n");
    }

    result = dbus_bus_request_name (connection,
"org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess",
                                0, &error);
    if (dbus_error_is_set (&error))
    {
        fprintf (stderr, "Error %s\n", error.message);
        _dbus_verbose ("*** Failed to acquire service: %s\n",
error.message);
        dbus_error_free (&error);
        exit (1);
    }

    if (result != DBUS_REQUEST_NAME_REPLY_PRIMARY_OWNER)
    {
        fprintf (stderr, "Unable to acquire service: code %d\n",
result);
        _dbus_verbose ("*** Failed to acquire service: %d\n", result);
        exit (1);
    }

    _dbus_verbose ("*** Test service entering main loop\n");
    _dbus_loop_run (loop);

    test_connection_shutdown (loop, connection);

    dbus_connection_remove_filter (connection, filter_func, NULL);

    dbus_connection_unref (connection);

    _dbus_loop_unref (loop);
    loop = NULL;

    dbus_shutdown ();

    _dbus_verbose ("*** Test service exiting\n");

    return 0;
}

```

File = test-shutdown.c

```
#include <config.h>
#include "../test-utils.h"

static DBusLoop *loop;

static void
die (const char *message)
{
    fprintf (stderr, "*** test-shutdown: %s", message);
    exit (1);
}

static void
open_destroy_shared_session_bus_connection (void)
{
    DBusError error;
    DBusConnection *connection;
    char *session_addr_no_guid;
    char *comma;

    dbus_error_init (&error);

    session_addr_no_guid = strdup (getenv ("DBUS_SESSION_BUS_ADDRESS"));
    comma = strchr (session_addr_no_guid, ',');
    if (comma == NULL)
        die ("Couldn't find GUID in session bus address");
    *comma = '\\0';

    connection = dbus_connection_open (session_addr_no_guid, &error);
    free (session_addr_no_guid);
    if (connection == NULL)
        die ("Failed to open connection to temp session bus\n");

    loop = _dbus_loop_new ();
    if (loop == NULL)
        die ("No memory\n");

    if (!test_connection_setup (loop, connection))
        die ("No memory\n");

    test_connection_shutdown (loop, connection);

    _dbus_loop_unref (loop);

    dbus_connection_unref (connection);
}
```

```

int
main (int    argc,
      char **argv)
{
    open_destroy_shared_session_bus_connection ();

    dbus_shutdown ();

    open_destroy_shared_session_bus_connection ();

    dbus_shutdown ();

    open_destroy_shared_session_bus_connection ();

    dbus_shutdown ();

    _dbus_verbose ("*** Test shutdown exiting\n");

    return 0;
}

```

File = test-sleep-forever.c

```

/* This is a process that just sleeps infinitely. */

```

```

#include <config.h>
#include <stdlib.h>
#ifdef HAVE_UNISTD_H
#include <unistd.h>
#endif

#ifdef DBUS_WIN
# include <windows.h>
# define sleep Sleep
#endif

```

```

int
main (int argc, char **argv)
{
    while (1)
        sleep (10000000);

    return 1;
}

```

File = test-song.xml

```
<?xml version="1.0"?><!-- ex:set et ts=2: -->
<node name="/org/freedesktop/DBus/GLib/Test/Interfaces">
  <interface name="org.freedesktop.DBus.GLib.Test.Interfaces.Song">
    <annotation name="org.freedesktop.DBus.GLib.CSymbol"
value="test_song_dbus"/>
    <method name="GetTitle">
      <arg name="title" type="s" direction="out" />
    </method>
  </interface>
</node>
```

File = test-system.c

```
/* -*- mode: C; c-file-style: "gnu" -*- */
/* test-main.c main() for make check
 *
 * Copyright (C) 2003 Red Hat, Inc.
 *
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 * it under the terms of the GNU General Public License as published
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 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
 */
```

```
#include <config.h>
#include "test.h"
#include <stdio.h>
#include <stdlib.h>
#include <dbus/dbus-string.h>
#include <dbus/dbus-sysdeps.h>
#include <dbus/dbus-internals.h>
```

```
#ifdef DBUS_BUILD_TESTS
static void
```

```

die (const char *failure)
{
    fprintf (stderr, "Unit test failed: %s\n", failure);
    exit (1);
}

static void
check_memleaks (const char *name)
{
    dbus_shutdown ();

    printf ("%s: checking for memleaks\n", name);
    if (_dbus_get_malloc_blocks_outstanding () != 0)
    {
        _dbus_warn ("%d dbus_malloc blocks were not freed\n",
                    _dbus_get_malloc_blocks_outstanding ());
        die ("memleaks");
    }
}
#endif /* DBUS_BUILD_TESTS */

static void
test_pre_hook (void)
{
}

static char *progrname = "";
static void
test_post_hook (void)
{
    check_memleaks (progrname);
}

int
main (int argc, char **argv)
{
#ifdef DBUS_BUILD_TESTS
    const char *dir;
    DBusString test_data_dir;

    progrname = argv[0];

    if (argc > 1)
        dir = argv[1];
    else
        dir = _dbus_getenv ("DBUS_TEST_DATA");

    if (dir == NULL)
    {
        fprintf (stderr, "Must specify test data directory as argv[1] or
in DBUS_TEST_DATA env variable\n");
        return 1;
    }

```

```

    }

    _dbus_string_init_const (&test_data_dir, dir);

    if (!_dbus_threads_init_debug ())
        die ("initializing debug threads");

    test_pre_hook ();
    printf ("%s: Running config file parser (trivial) test\n", argv[0]);
    if (!bus_config_parser_trivial_test (&test_data_dir))
        die ("parser");
    test_post_hook ();

    printf ("%s: Success\n", argv[0]);

    return 0;
#else /* DBUS_BUILD_TESTS */

    printf ("Not compiled with test support\n");

    return 0;
#endif
}

```

File = test-thread-client.c

```

#include <config.h>

#include <glib.h>
#include <dbus/dbus-glib-lowlevel.h>
#include <stdio.h>
#include <string.h>
#include <unistd.h>

#include "test-thread.h"

DBusConnection *connection;

static gpointer
thread_func (gpointer data)
{
    gint32 threadnr = GPOINTER_TO_INT (data);
    guint32 counter = 0;
    DBusMessageIter iter;
    DBusMessage *message;
    char *str;

    while (1)
    {
        message = dbus_message_new_method_call (NULL,

```



```

"/org/freedesktop/DBus/GLib/ThreadTest",
"org.freedesktop.DBus.GLib.ThreadTest",
    "TestMethod");

    dbus_message_iter_init_append (message, &iter);

    if (!dbus_message_iter_append_basic (&iter, DBUS_TYPE_INT32,
&threadnr))
    {
        g_print ("thread %d: append threadnr failed\n", threadnr);
    }

    if (!dbus_message_iter_append_basic (&iter, DBUS_TYPE_INT32,
&counter))
    {
        g_print ("thread %d: append counter (%d) failed\n", threadnr,
counter);
    }

    str = g_strdup_printf ("Thread %d-%d\n", threadnr, counter);
    if (!dbus_message_iter_append_basic (&iter, DBUS_TYPE_STRING,
&str))
    {
        g_print ("thread %d: append string (%s) failed\n", threadnr,
str);
    }
    g_free (str);

    if (!dbus_connection_send (connection,
        message,
        NULL))
    {
        g_print ("thread %d: send message failed\n", threadnr);
    }

    dbus_message_unref (message);

    counter ++;
}

return NULL;
}

int
main (int argc, char *argv[])
{
    GMainLoop *loop;
    DBusError error;
    int i;

```

```

g_thread_init (NULL);
dbus_g_thread_init ();

if(argc < 2)
{
    g_error("Need an address as argv[1]\n");
    return 1;
}

dbus_error_init (&error);
connection = dbus_connection_open (argv[1], &error);
if (connection == NULL)
{
    g_printerr ("could not open connection: %s\n", error.message);
    dbus_error_free (&error);
    return 1;
}

dbus_connection_setup_with_g_main (connection, NULL);

for (i = 0; i < N_TEST_THREADS; i++)
{
    g_thread_create (thread_func, GINT_TO_POINTER (i), FALSE, NULL);
}

loop = g_main_loop_new (NULL, FALSE);
g_main_loop_run (loop);

return 0;
}

```

File = test-thread-server.c

```

#include <config.h>

#include <glib.h>
#include <dbus/dbus-glib-lowlevel.h>
#include <stdio.h>
#include <string.h>

#include "test-thread.h"

typedef struct {
    guint32 counters[N_TEST_THREADS];
} ThreadTestData;

static ThreadTestData *
thread_test_data_new (void)
{

```

```

ThreadTestData *data;

data = g_new0 (ThreadTestData, 1);

return data;
}

static void
thread_test_data_free (ThreadTestData *data)
{
    g_free (data);
}

static DBusHandlerResult
filter_test_message (DBusConnection      *connection,
                    DBusMessage          *message,
                    void                  *user_data)
{
    ThreadTestData *data = user_data;
    DBusMessageIter iter;
    gint32 threadnr;
    guint32 counter;
    const char *str;
    char *expected_str;
    GString *counter_str;
    int i;

    if (!dbus_message_is_method_call (message,
"org.freedesktop.DBus.GLib.ThreadTest",
                                     "TestMethod"))
        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;

    dbus_message_iter_init (message, &iter);

    if (dbus_message_iter_get_arg_type (&iter) != DBUS_TYPE_INT32)
    {
        g_print ("First arg not right type\n");
        goto out;
    }
    dbus_message_iter_get_basic (&iter, &threadnr);
    if (threadnr < 0 || threadnr >= N_TEST_THREADS)
    {
        g_print ("Invalid thread nr\n");
        goto out;
    }

    if (! dbus_message_iter_next (&iter))
    {
        g_print ("Couldn't get second arg\n");
        goto out;
    }

```

```

if (dbus_message_iter_get_arg_type (&iter) != DBUS_TYPE_INT32)
{
    g_print ("Second arg not right type\n");
    goto out;
}

dbus_message_iter_get_basic (&iter, &counter);

if (counter != data->counters[threadnr])
{
    g_print ("Thread %d, counter %d, expected %d\n", threadnr,
counter, data->counters[threadnr]);
    goto out;
}
data->counters[threadnr]++;

if (! dbus_message_iter_next (&iter))
{
    g_print ("Couldn't get third arg\n");
    goto out;
}

if (dbus_message_iter_get_arg_type (&iter) != DBUS_TYPE_STRING)
{
    g_print ("Third arg not right type\n");
    goto out;
}

dbus_message_iter_get_basic (&iter, &str);

if (str == NULL)
{
    g_print ("No third arg\n");
    goto out;
}

expected_str = g_strdup_printf ("Thread %d-%d\n", threadnr,
counter);
if (strcmp (expected_str, str) != 0)
{
    g_print ("Wrong string '%s', expected '%s'\n", str,
expected_str);
    g_free (expected_str);
    goto out;
}
g_free (expected_str);

if (dbus_message_iter_next (&iter))
{
    g_print ("Extra args on end of message\n");
    goto out;
}

```



```

        goto nomem;

    return;

nomem:
    g_error ("no memory to setup new connection");
}

int
main (int argc, char *argv[])
{
    GMainLoop *loop;
    DBusServer *server;
    DBusError error;

    g_thread_init (NULL);
    dbus_g_thread_init ();

    if (argc < 2)
    {
        fprintf (stderr, "Give the server address as an argument\n");
        return 1;
    }

    dbus_error_init (&error);
    server = dbus_server_listen (argv[1], &error);
    if (server == NULL)
    {
        fprintf (stderr, "Failed to start server on %s: %s\n",
                argv[1], error.message);
        dbus_error_free (&error);
        return 1;
    }

    dbus_server_set_new_connection_function (server,
                                           new_connection_callback,
                                           NULL, NULL);

    dbus_server_setup_with_g_main (server, NULL);

    loop = g_main_loop_new (NULL, FALSE);
    g_main_loop_run (loop);

    return 0;
}

```

File = test-thread.h

```
#define N_TEST_THREADS 5
```

```

File = test-threads-init.c

/**
 * Test to make sure late thread initialization works
 */

#include <config.h>
#include <dbus/dbus.h>
#include <dbus/dbus-sysdeps.h>
#include <stdio.h>
#include <stdlib.h>

#include <dbus/dbus-internals.h>
#include <dbus/dbus-connection-internal.h>

static void
_run_iteration (DBusConnection *conn)
{
    DBusPendingCall *echo_pending;
    DBusPendingCall *dbus_pending;
    DBusMessage *method;
    DBusMessage *reply;
    char *echo = "echo";

    /* send the first message */
    method = dbus_message_new_method_call
("org.freedesktop.DBus.TestSuiteEchoService",
                                     "/org/freedesktop/TestSuite",
                                     "org.freedesktop.TestSuite",
                                     "Echo");

    dbus_message_append_args (method, DBUS_TYPE_STRING, &echo, NULL);
    dbus_connection_send_with_reply (conn, method, &echo_pending, -1);
    dbus_message_unref (method);

    /* send the second message */
    method = dbus_message_new_method_call (DBUS_SERVICE_DBUS,
                                           DBUS_PATH_DBUS,
                                           "org.freedesktop.Introspectable",
                                           "Introspect");

    dbus_connection_send_with_reply (conn, method, &dbus_pending, -1);
    dbus_message_unref (method);

    /* block on the second message (should return immediately) */
    dbus_pending_call_block (dbus_pending);

    /* block on the first message */
    /* if it does not return immediately chances

```

```

    are we hit the block in poll bug */
    dbus_pending_call_block (echo_pending);

/* check the reply only to make sure we
   are not getting errors unrelated
   to the block in poll bug */
reply = dbus_pending_call_steal_reply (echo_pending);

if (reply == NULL)
{
    printf ("Failed: Reply is NULL ***\n");
    exit (1);
}

if (dbus_message_get_type (reply) == DBUS_MESSAGE_TYPE_ERROR)
{
    printf ("Failed: Reply is error: %s ***\n",
dbus_message_get_error_name (reply));
    exit (1);
}

dbus_message_unref (reply);
dbus_pending_call_unref (dbus_pending);
dbus_pending_call_unref (echo_pending);

}

static void
check_mutex_lock (DBusMutex *mutex1,
                 DBusMutex *mutex2,
                 dbus_bool_t is_same)
{
    _dbus_assert (mutex1 != NULL);
    _dbus_assert (mutex2 != NULL);

    if (is_same)
    {
        _dbus_assert (mutex1 == mutex2);
    }
    else
    {
        _dbus_assert (mutex1 != mutex2);
    }
}

static void
check_condvar_lock (DBusCondVar *condvar1,
                  DBusCondVar *condvar2,
                  dbus_bool_t is_same)
{
    _dbus_assert (condvar1 != NULL);
    _dbus_assert (condvar2 != NULL);
}

```



```

        &io_path_cond1);

check_mutex_lock (mutex1, mutex2, FALSE);
check_mutex_lock (dispatch_mutex1, dispatch_mutex2, FALSE);
check_mutex_lock (io_path_mutex1, io_path_mutex2, FALSE);
check_condvar_lock (dispatch_cond1, dispatch_cond2, FALSE);
check_condvar_lock (io_path_cond1, io_path_cond2, FALSE);

_run_iteration (conn);
_dbus_connection_test_get_locks (conn, &mutex2,
                                  &dispatch_mutex2,
                                  &io_path_mutex2,
                                  &dispatch_cond2,
                                  &io_path_cond2);

check_mutex_lock (mutex1, mutex2, TRUE);
check_mutex_lock (dispatch_mutex1, dispatch_mutex2, TRUE);
check_mutex_lock (io_path_mutex1, io_path_mutex2, TRUE);
check_condvar_lock (dispatch_cond1, dispatch_cond2, TRUE);
check_condvar_lock (io_path_cond1, io_path_cond2, TRUE);

method = dbus_message_new_method_call
("org.freedesktop.TestSuiteEchoService",
                                  "/org/freedesktop/TestSuite",
                                  "org.freedesktop.TestSuite",
                                  "Exit");

dbus_connection_send (conn, method, NULL);
dbus_message_unref (method);

printf ("Success ***\n");
exit (0);
}

```

File = test-types.c

```

#include <config.h>

#include <stdio.h>
#include <stdlib.h>
#include <dbus-glib.h>
#include <dbus-glib-lowlevel.h>

static void
lose (const char *str, ...)
{
    va_list args;

    va_start (args, str);

    vfprintf (stderr, str, args);
}

```

```

    fputc ('\n', stderr);

    va_end (args);

    exit (1);
}

int
main (int argc, char **argv)
{
    DBusError derror;
    GError *gerror = NULL;
    DBusGConnection *gconn, *gconn2;
    DBusConnection *conn;

    g_type_init ();
    dbus_error_init (&derror);

    /* Check DBusGConnection -> DBusConnection -> DBusGConnection */
    gconn = dbus_g_bus_get (DBUS_BUS_SESSION, &gerror);
    if (!gconn)
        lose ("Cannot get connection: %s", gerror->message);

    conn = dbus_g_connection_get_connection (gconn);
    if (!conn)
        lose ("Cannot get DBusConnection from DBusGConnection");

    gconn2 = dbus_connection_get_g_connection (conn);
    if (gconn != gconn2)
        lose ("Retrieved DBusGConnection != original DBusGConnection");

    dbus_g_connection_unref (gconn);

    return 0;
}

```

File = test-utils.c

```

#include <config.h>
#include "test-utils.h"

typedef struct
{
    DBusLoop *loop;
    DBusConnection *connection;
} CData;

static dbus_bool_t
add_watch (DBusWatch *watch,

```

```

        void      *data)
{
    CData *cd = data;

    return _dbus_loop_add_watch (cd->loop, watch);
}

static void
remove_watch (DBusWatch *watch,
              void      *data)
{
    CData *cd = data;

    _dbus_loop_remove_watch (cd->loop, watch);
}

static void
toggle_watch (DBusWatch *watch,
              void      *data)
{
    CData *cd = data;

    _dbus_loop_toggle_watch (cd->loop, watch);
}

static dbus_bool_t
add_timeout (DBusTimeout *timeout,
            void      *data)
{
    CData *cd = data;

    return _dbus_loop_add_timeout (cd->loop, timeout);
}

static void
remove_timeout (DBusTimeout *timeout,
               void      *data)
{
    CData *cd = data;

    _dbus_loop_remove_timeout (cd->loop, timeout);
}

static void
dispatch_status_function (DBusConnection *connection,
                         DBusDispatchStatus new_status,
                         void      *data)
{
    DBusLoop *loop = data;

    if (new_status != DBUS_DISPATCH_COMPLETE)
    {

```

```

        while (!_dbus_loop_queue_dispatch (loop, connection))
            _dbus_wait_for_memory ();
    }
}

static void
cdata_free (void *data)
{
    CData *cd = data;

    dbus_connection_unref (cd->connection);
    _dbus_loop_unref (cd->loop);

    dbus_free (cd);
}

static CData*
cdata_new (DBusLoop      *loop,
           DBusConnection *connection)
{
    CData *cd;

    cd = dbus_new0 (CData, 1);
    if (cd == NULL)
        return NULL;

    cd->loop = loop;
    cd->connection = connection;

    dbus_connection_ref (cd->connection);
    _dbus_loop_ref (cd->loop);

    return cd;
}

dbus_bool_t
test_connection_setup (DBusLoop      *loop,
                      DBusConnection *connection)
{
    CData *cd;

    cd = NULL;

    dbus_connection_set_dispatch_status_function (connection,
                                                dispatch_status_function,
                                                loop, NULL);

    cd = cdata_new (loop, connection);
    if (cd == NULL)
        goto nomem;

    if (!dbus_connection_set_watch_functions (connection,

```

```

        add_watch,
        remove_watch,
        toggle_watch,
        cd, cdata_free))

    goto nomem;

cd = cdata_new (loop, connection);
if (cd == NULL)
    goto nomem;

if (!dbus_connection_set_timeout_functions (connection,
        add_timeout,
        remove_timeout,
        NULL,
        cd, cdata_free))

    goto nomem;

if (dbus_connection_get_dispatch_status (connection) !=
    DBUS_DISPATCH_COMPLETE)
    {
        if (!_dbus_loop_queue_dispatch (loop, connection))
            goto nomem;
    }

return TRUE;

nomem:
if (cd)
    cdata_free (cd);

dbus_connection_set_dispatch_status_function (connection, NULL,
NULL, NULL);
dbus_connection_set_watch_functions (connection, NULL, NULL, NULL,
NULL, NULL);
dbus_connection_set_timeout_functions (connection, NULL, NULL, NULL,
NULL, NULL);

return FALSE;
}

void
test_connection_shutdown (DBusLoop *loop,
                          DBusConnection *connection)
{
    if (!dbus_connection_set_watch_functions (connection,
        NULL,
        NULL,
        NULL,
        NULL, NULL))
        _dbus_assert_not_reached ("setting watch functions to NULL
failed");
}

```

```

    if (!dbus_connection_set_timeout_functions (connection,
                                                NULL,
                                                NULL,
                                                NULL,
                                                NULL, NULL))
        _dbus_assert_not_reached ("setting timeout functions to NULL
failed");

    dbus_connection_set_dispatch_status_function (connection, NULL,
NULL, NULL);
}

typedef struct
{
    DBusLoop *loop;
    DBusServer *server;
} ServerData;

static void
serverdata_free (void *data)
{
    ServerData *sd = data;

    dbus_server_unref (sd->server);
    _dbus_loop_unref (sd->loop);

    dbus_free (sd);
}

static ServerData*
serverdata_new (DBusLoop      *loop,
                DBusServer    *server)
{
    ServerData *sd;

    sd = dbus_new0 (ServerData, 1);
    if (sd == NULL)
        return NULL;

    sd->loop = loop;
    sd->server = server;

    dbus_server_ref (sd->server);
    _dbus_loop_ref (sd->loop);

    return sd;
}

static dbus_bool_t
add_server_watch (DBusWatch *watch,
                 void *data)

```

```

{
    ServerData *context = data;

    return _dbus_loop_add_watch (context->loop, watch);
}

static void
toggle_server_watch (DBusWatch *watch,
                    void *data)
{
    ServerData *context = data;

    _dbus_loop_toggle_watch (context->loop, watch);
}

static void
remove_server_watch (DBusWatch *watch,
                   void *data)
{
    ServerData *context = data;

    _dbus_loop_remove_watch (context->loop, watch);
}

static dbus_bool_t
add_server_timeout (DBusTimeout *timeout,
                  void *data)
{
    ServerData *context = data;

    return _dbus_loop_add_timeout (context->loop, timeout);
}

static void
remove_server_timeout (DBusTimeout *timeout,
                    void *data)
{
    ServerData *context = data;

    _dbus_loop_remove_timeout (context->loop, timeout);
}

dbus_bool_t
test_server_setup (DBusLoop *loop,
                 DBusServer *server)
{
    ServerData *sd;

    sd = serverdata_new (loop, server);
    if (sd == NULL)
        goto nomem;
}

```



```

if (!dbus_server_set_watch_functions (server,
                                     add_server_watch,
                                     remove_server_watch,
                                     toggle_server_watch,
                                     sd,
                                     serverdata_free))
{
    goto nomem;
}

sd = serverdata_new (loop, server);
if (sd == NULL)
    goto nomem;

if (!dbus_server_set_timeout_functions (server,
                                       add_server_timeout,
                                       remove_server_timeout,
                                       NULL,
                                       sd, serverdata_free))
{
    goto nomem;
}
return TRUE;

nomem:
if (sd)
    serverdata_free (sd);

test_server_shutdown (loop, server);

return FALSE;
}

void
test_server_shutdown (DBusLoop      *loop,
                     DBusServer    *server)
{
    dbus_server_disconnect (server);

    if (!dbus_server_set_watch_functions (server,
                                         NULL, NULL, NULL,
                                         NULL,
                                         NULL))
        _dbus_assert_not_reached ("setting watch functions to NULL
failed");

    if (!dbus_server_set_timeout_functions (server,
                                           NULL, NULL, NULL,
                                           NULL,
                                           NULL))
        _dbus_assert_not_reached ("setting timeout functions to NULL
failed");
}

```

```
}
```

```
File = test-utils.h
```

```
#ifndef TEST_UTILS_H
#define TEST_UTILS_H
#ifdef DBUS_COMPILATION
#define DBUS_COMPILATION /* Cheat and use private stuff */
#endif
#include <dbus/dbus.h>
#include <stdio.h>
#include <stdlib.h>
#include <dbus/dbus-mainloop.h>
#include <dbus/dbus-internals.h>
#undef DBUS_COMPILATION

dbus_bool_t test_connection_setup          (DBusLoop
*loop,
                                           DBusConnection
*connection);
void        test_connection_shutdown      (DBusLoop
*loop,
                                           DBusConnection
*connection);
void        test_connection_dispatch_all_messages (DBusConnection
*connection);
dbus_bool_t test_connection_dispatch_one_message (DBusConnection
*connection);

dbus_bool_t test_server_setup             (DBusLoop
*loop,
                                           DBusServer
*server);
void        test_server_shutdown          (DBusLoop
*loop,
                                           DBusServer
*server);

#endif
```

```
File = test-variant-recursion.c
```

```
#include <config.h>

/* -*- mode: C; c-file-style: "gnu" -*- */
#include <dbus/dbus-glib.h>
#include <stdio.h>
#include <stdlib.h>
```

```

#include <string.h>
#include <glib.h>
#include <glib-object.h>

static gboolean
make_recursive_stringify_call (int recursion_depth,
                              DBusGProxy *proxy,
                              GError **error)
{
    char *out_str;

    int i;
    GValue *vals = g_new0 (GValue, recursion_depth+1);

    for (i = recursion_depth-1; i >= 0; i--)
    {
        GValue *curval = &(vals[i]);
        g_value_init (curval, G_TYPE_VALUE);
    }
    for (i = 0; i < recursion_depth; i++)
    {
        GValue *curval = &(vals[i]);
        GValue *nextval = &(vals[i+1]);
        g_value_take_boxed (curval, nextval);
    }
    g_value_init (&(vals[recursion_depth]), G_TYPE_STRING);
    g_value_set_string (&(vals[recursion_depth]), "end of the line");
    return dbus_g_proxy_call (proxy, "Stringify", error,
                              G_TYPE_VALUE, &(vals[0]),
                              G_TYPE_INVALID,
                              G_TYPE_STRING, &out_str,
                              G_TYPE_INVALID);
}

int
main (int argc, char **argv)
{
    DBusGConnection *connection;
    GError *error = NULL;
    DBusGProxy *proxy;
    GMainLoop *loop;

    g_type_init ();

    g_log_set_always_fatal (G_LOG_LEVEL_WARNING | G_LOG_LEVEL_CRITICAL);

    loop = g_main_loop_new (NULL, FALSE);

    connection = dbus_g_bus_get (DBUS_BUS_SESSION, &error);
    if (connection == NULL)
        g_error ("Failed to open connection to bus: %s", error->message);
}

```

```

    proxy = dbus_g_proxy_new_for_name (connection,
"org.freedesktop.DBus.GLib.TestService",
"/org/freedesktop/DBus/GLib/Tests/MyTestObject",
"org.freedesktop.DBus.GLib.Tests.MyObject");

    if (proxy == NULL)
        g_error ("Failed to create proxy for name owner: %s", error-
>message);

    /* Do an echo to be sure it started */
    if (!dbus_g_proxy_call (proxy, "DoNothing", &error,
        G_TYPE_INVALID,
        G_TYPE_INVALID))
        g_error ("Failed to complete DoNothing call: %s", error->message);

    /* Fewer than the current internal limit (16) */
    if (make_recursive_stringify_call (10, proxy, &error))
        g_error ("Unexpected success code from 10 recursive variant call:
%s", error->message);
    if (error->code != DBUS_GERROR_REMOTE_EXCEPTION)
        g_error ("Error code was not remote exception: %s", error-
>message);
    g_printerr ("Got expected error %d: \"%s\" from recursive variant
call\n", error->code, error->message);
    g_clear_error (&error);
    /* More than the current internal limit (16) */
    if (make_recursive_stringify_call (50, proxy, &error))
        g_error ("Unexpected success code from 50 recursive variant call:
%s", error->message);
    if (error->code != DBUS_GERROR_REMOTE_EXCEPTION)
        g_error ("Error code was not remote exception: %s", error-
>message);
    g_printerr ("Got expected error %d: \"%s\" from recursive variant
call\n", error->code, error->message);
    g_clear_error (&error);

    g_object_unref (G_OBJECT (proxy));

    g_main_loop_unref (loop);

    return 0;
}

```

File = test-wait-for-echo.py

```
#!/usr/bin/env python
```

```

import os,sys

try:
    import gobject
    import dbus
    import dbus.mainloop.glib
except:
    print "Failed import, aborting test"
    sys.exit(0)

dbus.mainloop.glib.DBusGMainLoop(set_as_default=True)
loop = gobject.MainLoop()

exitcode = 0

def handle_noreceipt():
    print "Failed to get signal"
    global exitcode
    exitcode = 1
    loop.quit()

gobject.timeout_add(7000, handle_noreceipt)

bus = dbus.SessionBus()

def sighandler(*args, **kwargs):
    print "got signal"
    loop.quit()

bus.add_signal_receiver(sighandler,
dbus_interface='org.freedesktop.TestSuite', signal_name='Foo')

o = bus.get_object('org.freedesktop.DBus.TestSuiteEchoService',
'/org/freedesktop/TestSuite')
i = dbus.Interface(o, 'org.freedesktop.TestSuite')
def nullhandler(*args, **kwargs):
    pass
i.EmitFoo(reply_handler=nullhandler, error_handler=nullhandler)

loop.run()
sys.exit(exitcode)

File = test.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* test.c unit test routines
 *
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```

```

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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

#include <config.h>

#ifdef DBUS_BUILD_TESTS
#include "test.h"
#include <dbus/dbus-internals.h>
#include <dbus/dbus-list.h>
#include <dbus/dbus-sysdeps.h>

/* The "debug client" watch/timeout handlers don't dispatch messages,
 * as we manually pull them in order to verify them. This is why they
 * are different from the real handlers in connection.c
 */
static DBusList *clients = NULL;
static DBusLoop *client_loop = NULL;

static dbus_bool_t
add_client_watch (DBusWatch      *watch,
                 void            *data)
{
    return _dbus_loop_add_watch (client_loop, watch);
}

static void
remove_client_watch (DBusWatch      *watch,
                   void            *data)
{
    _dbus_loop_remove_watch (client_loop, watch);
}

static void
toggle_client_watch (DBusWatch      *watch,
                   void            *data)

```

```

{
    _dbus_loop_toggle_watch (client_loop, watch);
}

static dbus_bool_t
add_client_timeout (DBusTimeout    *timeout,
                   void            *data)
{
    return _dbus_loop_add_timeout (client_loop, timeout);
}

static void
remove_client_timeout (DBusTimeout    *timeout,
                      void            *data)
{
    _dbus_loop_remove_timeout (client_loop, timeout);
}

static DBusHandlerResult
client_disconnect_filter (DBusConnection    *connection,
                         DBusMessage       *message,
                         void              *user_data)
{
    if (!dbus_message_is_signal (message,
                                DBUS_INTERFACE_LOCAL,
                                "Disconnected"))
        return DBUS_HANDLER_RESULT_NOT_YET_HANDLED;

    _dbus_verbose ("Removing client %p in disconnect handler\n",
                  connection);

    _dbus_list_remove (&clients, connection);

    dbus_connection_unref (connection);

    if (clients == NULL)
    {
        _dbus_loop_unref (client_loop);
        client_loop = NULL;
    }

    return DBUS_HANDLER_RESULT_HANDLED;
}

dbus_bool_t
bus_setup_debug_client (DBusConnection *connection)
{
    dbus_bool_t retval;

    if (!dbus_connection_add_filter (connection,
                                    client_disconnect_filter,
                                    NULL, NULL))

```

```

    return FALSE;

retval = FALSE;

if (client_loop == NULL)
{
    client_loop = _dbus_loop_new ();
    if (client_loop == NULL)
        goto out;
}

if (!dbus_connection_set_watch_functions (connection,
                                         add_client_watch,
                                         remove_client_watch,
                                         toggle_client_watch,
                                         connection,
                                         NULL))

    goto out;

if (!dbus_connection_set_timeout_functions (connection,
                                           add_client_timeout,
                                           remove_client_timeout,
                                           NULL,
                                           connection, NULL))

    goto out;

if (!_dbus_list_append (&clients, connection))
    goto out;

retval = TRUE;

out:
if (!retval)
{
    dbus_connection_remove_filter (connection,
                                  client_disconnect_filter,
                                  NULL);

    dbus_connection_set_watch_functions (connection,
                                         NULL, NULL, NULL, NULL,
NULL);
    dbus_connection_set_timeout_functions (connection,
                                           NULL, NULL, NULL, NULL,
NULL);

    _dbus_list_remove_last (&clients, connection);

    if (clients == NULL)
    {
        _dbus_loop_unref (client_loop);
        client_loop = NULL;
    }
}

```



```

    }

    return retval;
}

void
bus_test_clients_foreach (BusConnectionForeachFunction function,
                          void *data)
{
    DBusList *link;

    link = _dbus_list_get_first_link (&clients);
    while (link != NULL)
    {
        DBusConnection *connection = link->data;
        DBusList *next = _dbus_list_get_next_link (&clients, link);

        if (!(* function) (connection, data))
            break;

        link = next;
    }
}

dbus_bool_t
bus_test_client_listed (DBusConnection *connection)
{
    DBusList *link;

    link = _dbus_list_get_first_link (&clients);
    while (link != NULL)
    {
        DBusConnection *c = link->data;
        DBusList *next = _dbus_list_get_next_link (&clients, link);

        if (c == connection)
            return TRUE;

        link = next;
    }

    return FALSE;
}

void
bus_test_run_clients_loop (dbus_bool_t block_once)
{
    if (client_loop == NULL)
        return;

    _dbus_verbose ("---> Dispatching on \"client side\"\n");
}

```

```

/* dispatch before we block so pending dispatches
 * won't make our block return early
 */
_dbus_loop_dispatch (client_loop);

/* Do one blocking wait, since we're expecting data */
if (block_once)
{
    _dbus_verbose ("---> blocking on \"client side\"\n");
    _dbus_loop_iterate (client_loop, TRUE);
}

/* Then mop everything up */
while (_dbus_loop_iterate (client_loop, FALSE))
;

_dbus_verbose ("---> Done dispatching on \"client side\"\n");
}

void
bus_test_run_bus_loop (BusContext *context,
                      dbus_bool_t block_once)
{
    _dbus_verbose ("---> Dispatching on \"server side\"\n");

    /* dispatch before we block so pending dispatches
     * won't make our block return early
     */
    _dbus_loop_dispatch (bus_context_get_loop (context));

    /* Do one blocking wait, since we're expecting data */
    if (block_once)
    {
        _dbus_verbose ("---> blocking on \"server side\"\n");
        _dbus_loop_iterate (bus_context_get_loop (context), TRUE);
    }

    /* Then mop everything up */
    while (_dbus_loop_iterate (bus_context_get_loop (context), FALSE))
    ;

    _dbus_verbose ("---> Done dispatching on \"server side\"\n");
}

void
bus_test_run_everything (BusContext *context)
{
    while (_dbus_loop_iterate (bus_context_get_loop (context), FALSE) ||
           (client_loop == NULL || _dbus_loop_iterate (client_loop,
FALSE)))
    ;
}

```

```

BusContext*
bus_context_new_test (const DBusString *test_data_dir,
                     const char      *filename)
{
    DBusError error;
    DBusString config_file;
    DBusString relative;
    BusContext *context;

    if (!_dbus_string_init (&config_file))
    {
        _dbus_warn ("No memory\n");
        return NULL;
    }

    if (!_dbus_string_copy (test_data_dir, 0,
                          &config_file, 0))
    {
        _dbus_warn ("No memory\n");
        _dbus_string_free (&config_file);
        return NULL;
    }

    _dbus_string_init_const (&relative, filename);

    if (!_dbus_concat_dir_and_file (&config_file, &relative))
    {
        _dbus_warn ("No memory\n");
        _dbus_string_free (&config_file);
        return NULL;
    }

    dbus_error_init (&error);
    context = bus_context_new (&config_file, BUS_CONTEXT_FLAG_NONE,
                              NULL, NULL, NULL, &error);
    if (context == NULL)
    {
        _DBUS_ASSERT_ERROR_IS_SET (&error);

        _dbus_warn ("Failed to create debug bus context from
configuration file %s: %s\n",
                  filename, error.message);

        dbus_error_free (&error);

        _dbus_string_free (&config_file);

        return NULL;
    }

    _dbus_string_free (&config_file);

```

```
    return context;
}

#endif
```

File = test.conf

```
<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <!-- The following demonstrates how to punch holes in a default
deny-all
      policy so that a particular user can own a service, and other
connections can get messages from it -->

  <!-- Only root can own the FooService service, and
      this user can only send the one kind of message -->
  <policy user="root">
    <allow own="org.foo.FooService"/>
    <allow send_interface="org.foo.FooBroadcastInterface"/>
  </policy>

  <!-- Allow any connection to receive the message, but
      only if the message is sent by the owner of FooService -->
  <policy context="default">
    <allow receive_interface="org.foo.FooBroadcastInterface"
receive_sender="org.foo.FooService"/>
  </policy>
</busconfig>
```

File = test.h

```
/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* test.h  unit test routines
 *
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 * (at your option) any later version.
 *
 */
```

```

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* Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
02110-1301 USA
*
*/

```

```

#ifndef BUS_TEST_H
#define BUS_TEST_H

```

```

#ifdef DBUS_BUILD_TESTS

```

```

#include <dbus/dbus.h>
#include <dbus/dbus-string.h>
#include "connection.h"

```

```

dbus_bool_t bus_dispatch_test      (const DBusString
*test_data_dir);
dbus_bool_t bus_dispatch_shal_test (const DBusString
*test_data_dir);
dbus_bool_t bus_config_parser_test (const DBusString
*test_data_dir);
dbus_bool_t bus_config_parser_trivial_test (const DBusString
*test_data_dir);
dbus_bool_t bus_signals_test      (const DBusString
*test_data_dir);
dbus_bool_t bus_expire_list_test  (const DBusString
*test_data_dir);
dbus_bool_t bus_activation_service_reload_test (const DBusString
*test_data_dir);
dbus_bool_t bus_setup_debug_client (DBusConnection
*connection);
void bus_test_clients_foreach (BusConnectionForeachFunction
function,
                                void
*data);
dbus_bool_t bus_test_client_listed (DBusConnection
*connection);
void bus_test_run_bus_loop (BusContext
*context,
                                dbus_bool_t
block);
void bus_test_run_clients_loop (dbus_bool_t
block);
void bus_test_run_everything (BusContext
*context);

```

```

BusContext* bus_context_new_test      (const DBusString
*test_data_dir,
                                     const char
*filename);

#ifdef HAVE_UNIX_FD_PASSING
dbus_bool_t bus_unix_fds_passing_test (const DBusString
*test_data_dir);
#endif

#endif

#endif /* BUS_TEST_H */

File = tmp-session-like-system.conf

<!-- This configuration file controls the per-user-login-session
message bus.
      Add a session-local.conf and edit that rather than changing this
      file directly. -->

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-Bus Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <!-- Our well-known bus type, don't change this -->
  <type>session</type>

  <!-- If we fork, keep the user's original umask to avoid affecting
       the behavior of child processes. -->
  <keep_umask/>

  <syslog/>

  <listen>unix:tmpdir=/tmp</listen>

  <standard_session_servicedirs />

  <!-- intended to match system bus -->
  <policy context="default">
    <!-- All users can connect to system bus -->
    <allow user="*" />

    <!-- Holes must be punched in service configuration files for
         name ownership and sending method calls -->
    <deny own="*" />
    <deny send_type="method_call" />

    <!-- Signals and reply messages (method returns, errors) are
         allowed

```

```

    by default -->
<allow send_type="signal"/>
<allow send_requested_reply="true" send_type="method_return"/>
<allow send_requested_reply="true" send_type="error"/>

<!-- All messages may be received by default -->
<allow receive_type="method_call"/>
<allow receive_type="method_return"/>
<allow receive_type="error"/>
<allow receive_type="signal"/>

<!-- Allow anyone to talk to the message bus -->
<allow send_destination="org.freedesktop.DBus"/>
<!-- But disallow some specific bus services -->
<deny send_destination="org.freedesktop.DBus"
      send_interface="org.freedesktop.DBus"
      send_member="UpdateActivationEnvironment"/>

<!-- Specific to the test suite -->
<allow own="org.freedesktop.DBus.TestSuiteEchoService"/>
<allow
send_destination="org.freedesktop.DBus.TestSuiteEchoService"
      send_interface="org.freedesktop.DBus.Introspectable"/>
<allow
send_destination="org.freedesktop.DBus.TestSuiteEchoService"
      send_interface="org.freedesktop.TestSuite"
      send_member="EmitFoo"/>
</policy>

<policy context="default">
  <allow own="org.freedesktop.DBus.TestSuiteEchoService"/>
  <allow
send_destination="org.freedesktop.DBus.TestSuiteEchoService"
      send_interface="org.freedesktop.DBus.Introspectable"/>
  <allow
send_destination="org.freedesktop.DBus.TestSuiteEchoService"
      send_interface="org.freedesktop.TestSuite"
      send_member="EmitFoo"/>
</policy>

<!-- For the session bus, override the default relatively-low limits
with essentially infinite limits, since the bus is just running
as the user anyway, using up bus resources is not something we
need
to worry about. In some cases, we do set the limits lower than
"all available memory" if exceeding the limit is almost
certainly a bug,
having the bus enforce a limit is nicer than a huge memory
leak. But the
intent is that these limits should never be hit. -->

```

```
<!-- the memory limits are 1G instead of say 4G because they can't
exceed 32-bit signed int max -->
<limit name="max_incoming_bytes">1000000000</limit>
<limit name="max_outgoing_bytes">1000000000</limit>
<limit name="max_message_size">1000000000</limit>
<limit name="service_start_timeout">120000</limit>
<limit name="auth_timeout">240000</limit>
<limit name="max_completed_connections">100000</limit>
<limit name="max_incomplete_connections">10000</limit>
<limit name="max_connections_per_user">100000</limit>
<limit name="max_pending_service_starts">10000</limit>
<limit name="max_names_per_connection">50000</limit>
<limit name="max_match_rules_per_connection">50000</limit>
<limit name="max_replies_per_connection">50000</limit>
<limit name="reply_timeout">300000</limit>

</busconfig>
```

File = TODO

Important for 1.2
===

- System bus activation
- Windows port

Important for 1.0 GLib Bindings
===

- Test point-to-point mode
- Add support for getting sender
- format_version in the object info doesn't look like it's handled correctly. The creator of the object info should specify some fixed number per struct version; the library should handle only specific numbers it knows about. There's no assumption that all numbers \geq the given one are compatible. The idea is that new versions of the lib can offer totally different object info structs, but old versions keep working.

Important for 1.0 Python bindings
===

- Hammer down API

- Fix removing of signals from the match tree
- Fix refcounting and userdata lifecycles
- Write a generic mainloop

Might as Well for 1.0

===

- protocol version in each message is pretty silly

Can Be Post 1.0

===

- revamp dbus-launch a bit,
see <http://lists.freedesktop.org/archives/dbus/2006-October/005906.html>
for some thoughts.
- clean up the creds issue on *BSD's in dbus/dbus-sysdeps-unix.c.
They should work as is but we need to rearrange it to make it clearer which method is being used. configure.in should be fixed up to make that decision.
- `_dbus_connection_unref_unlocked()` is essentially always broken because
the connection finalizer calls non-unlocked functions. One fix is to make
the finalizer run with the lock held, but since it calls out to the app that may
be pretty broken. More likely all the uses of `unref_unlocked` are just wrong.
- if the GUID is obtained only during authentication, not in the address,
we could still share the connection
- Allow a `dbus_g_proxy_to_string()/g_object_to_string()` that would convert the proxy to an "IOR" and `dbus_g_proxy_from_string()` that would decode; using these, dbus-glib users could avoid `DBusConnection` entirely. Of course the same applies to other kinds of binding. This would use `dbus_connection_open()`'s connection-sharing
feature to avoid massive proliferation of connections.
- `DBusWatchList/TimeoutList` duplicate a lot of code, as do `protected_change_watch/protected_change_timeout` in `dbus-connection.c`
and `dbus-server.c`. This could all be mopped up, cut-and-paste fixed, code size reduced.

- change .service files to allow Names=list in addition to Name=string
 - The message bus internal code still says "service" for "name", "base service" for "unique name", "activate" for "start"; would be nice to clean up.
 - Property list feature on message bus (list of properties associated with a connection). May also include message matching rules that involve the properties of the source or destination connection.
 - Disconnecting the remote end on invalid UTF-8 is probably not a good idea. The definition of "valid" is slightly fuzzy. I think it might be better to just silently "fix" the UTF-8, or perhaps return an error.
 - build and install the Doxygen manual in Makefile when --enable-docs
 - if you send the same message to multiple connections, the serial number will only be right for one of them. Probably need to just write() the serial number, rather than putting it in the DBusMessage, or something.
 - perhaps the bus driver should have properties that reflect attributes of the session, such as hostname, architecture, operating system, etc. Could be useful for code that wants to special-case behavior for a particular host or class of hosts, for example.
 - currently the security policy stuff for messages to/from the bus driver is kind of strange; basically it's hardcoded that you can always talk to the driver, but the default config file has rules for it anyway, or something. it's conceptually screwy at the moment.
 - when making a method call, if the call serial were globally unique, we could forward the call serial along with any method calls made as a result of the first method call, and allow reentrancy that was strictly part of the call stack of said method call. But I don't really see how to do this without making the user pass around the call serial to all method calls all the time, or disallowing async calls.
- If done post 1.0 will probably be an optional/ugly-API type of thing.
- I don't want to introduce DBusObject, but refcounting and object data could still be factored out into an internal "base class" perhaps.

- Keep convenience wrappers in sync with bus methods
- document the auth protocol as a set of states and transitions, and then reimplement it in those terms
- recursive dispatch, see `dbus_connection_dispatch()`
- do we need per-display activation; if so I'd like to do this by setting a "display ID" property on screen 0, with a GUID, and keying activation by said GUID. Otherwise you get all kinds of unrobust string/hostname-based mess. per-screen is then done by appending screen number to the display. If displays have a deterministic ID like this, you can do per-display by simply including GUID in the service name.
- optimization and profiling!
- Match rules aren't in the spec (probably a lot of methods on the bus are not)
- the "break loader" and valid/invalid message tests are all disabled; they need to be fixed and re-enabled with the new message args stuff. I think I want to drop the .message files thing and just have code that generates messages, more like the tests for `dbus-marshal-recursive.c` (this is mostly done now, just needs some cleanup)
- just before 1.0, try a `HAVE_INT64=0` build and be sure it runs
- Windows port needs recursive mutexes

Should Be Post 1.0

===

- look into supporting the concept of a "connection" generically (what does this TODO item mean?)
- test/name-test should be named test/with-bus or something like that

File = too-little-header-padding.message

```
## has one byte missing from header padding

## VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call

HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.Foo'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'Bar'
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/foo'

HEADER_FIELD UNKNOWN
TYPE STRING
STRING 'a'
ALIGN 8
## kill a padding byte
CHOP 1
END_LENGTH Header
START_LENGTH Body
END_LENGTH Body
```

File = too-much-header-padding-by-far.message

```
## has one byte extra header padding

## VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call

HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.Foo'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'Bar'
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/foo'

HEADER_FIELD UNKNOWN
TYPE STRING
STRING 'a'
ALIGN 8
BYTE 0
ALIGN 8
BYTE 0
ALIGN 8
```

```
END_LENGTH Header
START_LENGTH Body
END_LENGTH Body
```

```
File = too-much-header-padding.message
```

```
## has one byte extra header padding
```

```
## VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call
```

```
HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.Foo'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'Bar'
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/foo'
```

```
HEADER_FIELD UNKNOWN
TYPE STRING
STRING 'a'
ALIGN 8
BYTE 0
END_LENGTH Header
START_LENGTH Body
END_LENGTH Body
```

```
File = too-short-dict.message
```

```
# Message with lots of different argument types
```

```
VALID_HEADER method_call
```

```
HEADER_FIELD INTERFACE
TYPE STRING
STRING 'org.freedesktop.Foo'
HEADER_FIELD MEMBER
TYPE STRING
STRING 'Bar'
HEADER_FIELD PATH
TYPE OBJECT_PATH
OBJECT_PATH '/foo'
```

```
ALIGN 8
```

END_LENGTH Header

START_LENGTH Body
TYPE DICT
LENGTH Dict
START_LENGTH Dict
STRING 'uint32'
TYPE UINT32
UINT32 0x8765432
STRING 'uint32'
END_LENGTH Dict
END_LENGTH Body

File = tp-compiler-flag.m4

dnl A version of AS_COMPILER_FLAG that supports both C and C+.
dnl Based on:

dnl as-compiler-flag.m4 0.1.0
dnl autostars m4 macro for detection of compiler flags
dnl David Schleef <ds@schleef.org>
dnl \$Id: as-compiler-flag.m4,v 1.1 2005/06/18 18:02:46 burgerman Exp \$

dnl TP_COMPILER_FLAG(CFLAGS, ACTION-IF-ACCEPTED, [ACTION-IF-NOT-ACCEPTED])
dnl Tries to compile with the given CFLAGS and CXXFLAGS.
dnl
dnl Runs ACTION-IF-ACCEPTED if the compiler for the currently selected
dnl AC_LANG can compile with the flags, and ACTION-IF-NOT-ACCEPTED
dnl otherwise.

```
AC_DEFUN([TP_COMPILER_FLAG],
[
  AC_MSG_CHECKING([to see if compiler understands $1])

  save_CFLAGS="$CFLAGS"
  save_CXXFLAGS="$CXXFLAGS"
  CFLAGS="$CFLAGS $1"
  CXXFLAGS="$CXXFLAGS $1"

  AC_TRY_COMPILE([ ], [ ], [flag_ok=yes], [flag_ok=no])
  CFLAGS="$save_CFLAGS"
  CXXFLAGS="$save_CXXFLAGS"

  if test "X$flag_ok" = Xyes ; then
    $2
    true
  else
    $3
    true
  fi
])
```

```

    fi
    AC_MSG_RESULT([$flag_ok])
  ])

```

```

dnl TP_ADD_COMPILER_FLAG(VARIABLE, CFLAGS)
dnl Append CFLAGS to VARIABLE if the compiler supports them.
AC_DEFUN([TP_ADD_COMPILER_FLAG],
[
    TP_COMPILER_FLAG([$2], [$1="[$]$1 $2"])
])

```

File = tp-compiler-warnings.m4

```

dnl TP_COMPILER_WARNINGS(VARIABLE, WERROR_BY_DEFAULT, DESIRABLE,
UNDESIRABLE)
dnl $1 (VARIABLE): the variable to put flags into
dnl $2 (WERROR_BY_DEFAULT): a command returning true if -Werror should
be the
dnl     default
dnl $3 (DESIRABLE): warning flags we want (e.g. all extra shadow)
dnl $4 (UNDESIRABLE): warning flags we don't want (e.g.
dnl     missing-field-initializers unused-parameter)
AC_DEFUN([TP_COMPILER_WARNINGS],
[
    AC_REQUIRE([AC_ARG_ENABLE])dnl
    AC_REQUIRE([AC_HELP_STRING])dnl
    AC_REQUIRE([TP_COMPILER_FLAG])dnl

    tp_warnings=""
    for tp_flag in $3; do
        TP_COMPILER_FLAG([-W$tp_flag], [tp_warnings="$tp_warnings -
W$tp_flag"])
    done

    tp_error_flags="-Werror"
    TP_COMPILER_FLAG([-Werror], [tp_werror=yes], [tp_werror=no])

    for tp_flag in $4; do
        TP_COMPILER_FLAG([-Wno-$tp_flag],
            [tp_warnings="$tp_warnings -Wno-$tp_flag"])
    done
dnl Yes, we do need to use both -Wno-foo and -Wno-error=foo. Simon
says:
dnl     some warnings we explicitly don't want, like unused-parameter,
but
dnl     they're in -Wall. when a distro using cdb's compiles us, we
have:
dnl     -Werror -Wno-unused-parameter           -Wall
dnl         ^ from us                           ^ from cdb's
dnl     which turns -Wunused-parameter back on, in effect
    TP_COMPILER_FLAG([-Wno-error=$tp_flag],

```

```

        [tp_error_flags="$tp_error_flags -Wno-error=$tp_flag"],
[tp_werror=no))
done

AC_ARG_ENABLE([Werror],
AC_HELP_STRING([--disable-Werror],
[compile without -Werror (normally enabled in development
builds)]),
tp_werror=$enableval, :)

if test "x$tp_werror" = xyes && $2; then
dnl We put -Wno-error=foo before -Wno-foo because clang interprets -
Wall
dnl -Werror -Wno-foo -Wno-error=foo as "make foo a non-fatal
warning", but does
dnl what we want if you reverse them.
    $1="$tp_error_flags $tp_warnings"
else
    $1="$tp_warnings"
fi
])

```

File = traces.0

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/argz.m4:12: -1-
AC_DEFUN([gl_FUNC_ARGZ], [gl_PREREQ_ARGZ

AC_CHECK_HEADERS([argz.h], [], [], [AC_INCLUDES_DEFAULT])

AC_CHECK_TYPES([error_t],
[],
[AC_DEFINE([error_t], [int],
[Define to a type to use for `error_t' if it is not otherwise
available.])
AC_DEFINE([__error_t_defined], [1], [Define so that glibc/gnulib
argp.h
does not typedef error_t.])],
[#if defined(HAVE_ARGZ_H)
# include <argz.h>
#endif])

ARGZ_H=
AC_CHECK_FUNCS([argz_add argz_append argz_count argz_create_sep
argz_insert \
argz_next argz_stringify], [], [ARGZ_H=argz.h;
AC_LIBOBJ([argz])])

```



```

dnl if have system argz functions, allow forced use of
dnl libltdl-supplied implementation (and default to do so
dnl on "known bad" systems). Could use a runtime check, but
dnl (a) detecting malloc issues is notoriously unreliable
dnl (b) only known system that declares argz functions,
dnl     provides them, yet they are broken, is cygwin
dnl     releases prior to 16-Mar-2007 (1.5.24 and earlier)
dnl So, it's more straightforward simply to special case
dnl this for known bad systems.
AS_IF([test -z "$ARGZ_H"],
  [AC_CACHE_CHECK(
    [if argz actually works],
    [lt_cv_sys_argz_works],
    [[case $host_os in #(
      *cygwin*)
        lt_cv_sys_argz_works=no
        if test "$cross_compiling" != no; then
          lt_cv_sys_argz_works="guessing no"
        else
          lt_sed_extract_leading_digits='s/^\([0-9\.]*\).*\/\1/'
          save_IFS=$IFS
          IFS=-.
          set x `uname -r | sed -e "$lt_sed_extract_leading_digits"`
          IFS=$save_IFS
          lt_os_major=${2-0}
          lt_os_minor=${3-0}
          lt_os_micro=${4-0}
          if test "$lt_os_major" -gt 1 \
            || { test "$lt_os_major" -eq 1 \
              && { test "$lt_os_minor" -gt 5 \
                || { test "$lt_os_minor" -eq 5 \
                  && test "$lt_os_micro" -gt 24; }; }; }; then
            lt_cv_sys_argz_works=yes
          fi
        fi
      ;; #(
      *) lt_cv_sys_argz_works=yes ;;
    esac]])
  AS_IF([test "$lt_cv_sys_argz_works" = yes],
    [AC_DEFINE([HAVE_WORKING_ARGZ], 1,
      [This value is set to 1 to indicate that the system
      argz facility works])],
    [ARGZ_H=argz.h
    AC_LIBOBJ([argz])])])

AC_SUBST([ARGZ_H])
])
m4trace:/home/gangadhar/newyoctobuild/tisdtk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/argz.m4:79: -1-
AC_DEFUN([gl_PREREQ_ARGZ], [:])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:16: -1-
AC_DEFUN([LT_CONFIG_LTDL_DIR], [AC_BEFORE([$0], [LTDL_INIT])
_$0($*)
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:68: -1-
AC_DEFUN([LTDL_CONVENIENCE], [AC_BEFORE([$0], [LTDL_INIT])dnl
dnl Although the argument is deprecated and no longer documented,
dnl LTDL_CONVENIENCE used to take a DIRECTORY argument, if we have one
dnl here make sure it is the same as any other declaration of
libltdl's
dnl location! This also ensures lt_ltdl_dir is set when configure.ac
is
dnl not yet using an explicit LT_CONFIG_LTDL_DIR.
m4_ifval([$1], [LT_CONFIG_LTDL_DIR([$1]])dnl
_$0()
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:81: -1-
AU_DEFUN([AC_LIBLTDL_CONVENIENCE],
[LT_CONFIG_LTDL_DIR([m4_default([$1], [libltdl])])
LTDL_CONVENIENCE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:81: -1-
AC_DEFUN([AC_LIBLTDL_CONVENIENCE], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBLTDL_CONVENIENCE' is obsolete.
You should run autoupdate.])dnl
LT_CONFIG_LTDL_DIR([m4_default([$1], [libltdl])])
LTDL_CONVENIENCE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:124: -1-
AC_DEFUN([LTDL_INSTALLABLE], [AC_BEFORE([$0], [LTDL_INIT])dnl
dnl Although the argument is deprecated and no longer documented,
dnl LTDL_INSTALLABLE used to take a DIRECTORY argument, if we have one
dnl here make sure it is the same as any other declaration of
libltdl's
dnl location! This also ensures lt_ltdl_dir is set when configure.ac
is
dnl not yet using an explicit LT_CONFIG_LTDL_DIR.
m4_ifval([$1], [LT_CONFIG_LTDL_DIR([$1]])dnl
_$0()
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:137: -1-

```

```

AU_DEFUN([AC_LIBLTDL_INSTALLABLE],
[ _LT_CONFIG_LTDL_DIR([m4_default([$1], [libltdl]])]
_LTDL_INSTALLABLE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:137: -1-
AC_DEFUN([AC_LIBLTDL_INSTALLABLE], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBLTDL_INSTALLABLE' is obsolete.
You should run autoupdate.])dnl
_LT_CONFIG_LTDL_DIR([m4_default([$1], [libltdl]])]
_LTDL_INSTALLABLE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:213: -1-
AC_DEFUN([_LT_LIBOBJ], [
  m4_pattern_allow([^_LT_LIBOBJ$])
  _LT_LIBOBJ="$_LT_LIBOBJ $1.$ac_objext"
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:226: -1-
AC_DEFUN([LTDL_INIT], [dnl Parse OPTIONS
_LT_SET_OPTIONS([$0], [$1])

dnl We need to keep our own list of libobjs separate from our parent
project,
dnl and the easiest way to do that is redefine the AC_LIBOBJs macro
while
dnl we look for our own LIBOBJs.
m4_pushdef([AC_LIBOBJ], m4_defn([_LT_LIBOBJ]))
m4_pushdef([AC_LIBSOURCES])

dnl If not otherwise defined, default to the 1.5.x compatible
subproject mode:
m4_if(_LTDL_MODE, [],
      [m4_define([_LTDL_MODE], m4_default([$2], [subproject]))]
      m4_if([-1], [m4_bregexp(_LTDL_MODE,
[\(subproject\|\(non\)?)recursive\])]),
          [m4_fatal([unknown libltdl mode: ]_LTDL_MODE)]))])

AC_ARG_WITH([included_ltdl],
  [AS_HELP_STRING([--with-included-ltdl],
    [use the GNU ltdl sources included here])])

if test "x$with_included_ltdl" != yes; then
  # We are not being forced to use the included libltdl sources, so
  # decide whether there is a useful installed version we can use.
  AC_CHECK_HEADER([ltdl.h],
    [AC_CHECK_DECL([lt_dlinterface_register],
      [AC_CHECK_LIB([ltdl], [lt_dladvice_preload],
        [with_included_ltdl=no],
        [with_included_ltdl=yes])],

```

```

        [with_included_ltdl=yes],
        [AC_INCLUDES_DEFAULT
         #include <ltdl.h>]],
        [with_included_ltdl=yes],
        [AC_INCLUDES_DEFAULT
    )
fi

dnl If neither LT_CONFIG_LTDL_DIR, LTDL_CONVENIENCE nor
LTDL_INSTALLABLE
dnl was called yet, then for old times' sake, we assume libltdl is in
an
dnl eponymous directory:
AC_PROVIDE_IFELSE([LT_CONFIG_LTDL_DIR], [],
[_LT_CONFIG_LTDL_DIR([libltdl]))

AC_ARG_WITH([ltdl_include],
            [AS_HELP_STRING([--with-ltdl-include=DIR],
                            [use the ltdl headers installed in DIR])])

if test -n "$with_ltdl_include"; then
    if test -f "$with_ltdl_include/ltdl.h"; then :
    else
        AC_MSG_ERROR([invalid ltdl include directory:
`$with_ltdl_include'])
    fi
else
    with_ltdl_include=no
fi

AC_ARG_WITH([ltdl_lib],
            [AS_HELP_STRING([--with-ltdl-lib=DIR],
                            [use the libltdl.la installed in DIR])])

if test -n "$with_ltdl_lib"; then
    if test -f "$with_ltdl_lib/libltdl.la"; then :
    else
        AC_MSG_ERROR([invalid ltdl library directory: `$with_ltdl_lib'])
    fi
else
    with_ltdl_lib=no
fi

case , $with_included_ltdl, $with_ltdl_include, $with_ltdl_lib, in
, yes, no, no, )
    m4_case(m4_default(_LTDL_TYPE, [convenience]),
            [convenience], [_LTDL_CONVENIENCE],
            [installable], [_LTDL_INSTALLABLE],
            [m4_fatal([unknown libltdl build type: ]_LTDL_TYPE)])
    ;;
, no, no, no, )
    # If the included ltdl is not to be used, then use the

```

```

# preinstalled libltdl we found.
AC_DEFINE([HAVE_LTDL], [1],
  [Define this if a modern libltdl is already installed])
LIBLTDL=-lltdl
LTDLDEPS=
LTDLINCL=
;;
,no*,no,*)
  AC_MSG_ERROR(['--with-ltdl-include' and '--with-ltdl-lib' options
must be used together])
;;
*) with_included_ltdl=no
  LIBLTDL="-L$with_ltdl_lib -lltdl"
  LTDLDEPS=
  LTDLINCL="-I$with_ltdl_include"
;;
esac
INCLTDL="$LTDLINCL"

# Report our decision...
AC_MSG_CHECKING([where to find libltdl headers])
AC_MSG_RESULT([$LTDLINCL])
AC_MSG_CHECKING([where to find libltdl library])
AC_MSG_RESULT([$LIBLTDL])

_LTDL_SETUP

dnl restore autoconf definition.
m4_popdef([AC_LIBOBJ])
m4_popdef([AC_LIBSOURCES])

AC_CONFIG_COMMANDS_PRE([
  _ltdl_libobjs=
  _ltdl_ltlibobjs=
  if test -n "$_LT_LIBOBS"; then
    # Remove the extension.
    _lt_sed_drop_objext='s/\.$//;s/\.obj$//'
    for i in `for i in $_LT_LIBOBS; do echo "$i"; done | sed
"$_lt_sed_drop_objext" | sort -u`; do
      _ltdl_libobjs="$_ltdl_libobjs $_lt_libobj_prefix$i.$_ac_objext"
      _ltdl_ltlibobjs="$_ltdl_ltlibobjs $_lt_libobj_prefix$i.lo"
    done
  fi
  AC_SUBST([ltdl_LIBOBS], [$_ltdl_libobjs])
  AC_SUBST([ltdl_LTLIBOBS], [$_ltdl_ltlibobjs])
])

# Only expand once:
m4_define([LTDL_INIT])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-

```

```

glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:352: -1-
AU_DEFUN([AC_LIB_LTDL], [LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:352: -1-
AC_DEFUN([AC_LIB_LTDL], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIB_LTDL' is obsolete.
You should run autoupdate.])dnl
LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:353: -1-
AU_DEFUN([AC_WITH_LTDL], [LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:353: -1-
AC_DEFUN([AC_WITH_LTDL], [AC_DIAGNOSE([obsolete], [The macro
`AC_WITH_LTDL' is obsolete.
You should run autoupdate.])dnl
LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:354: -1-
AU_DEFUN([LT_WITH_LTDL], [LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:354: -1-
AC_DEFUN([LT_WITH_LTDL], [AC_DIAGNOSE([obsolete], [The macro
`LT_WITH_LTDL' is obsolete.
You should run autoupdate.])dnl
LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:367: -1-
AC_DEFUN([_LTDL_SETUP], [AC_REQUIRE([AC_PROG_CC])dnl
AC_REQUIRE([LT_SYS_MODULE_EXT])dnl
AC_REQUIRE([LT_SYS_MODULE_PATH])dnl
AC_REQUIRE([LT_SYS_DLSEARCH_PATH])dnl
AC_REQUIRE([LT_LIB_DLLOAD])dnl
AC_REQUIRE([LT_SYS_SYMBOL_USCORE])dnl
AC_REQUIRE([LT_FUNC_DLSYM_USCORE])dnl
AC_REQUIRE([LT_SYS_DLOPEN_DEPLIBS])dnl
AC_REQUIRE([gl_FUNC_ARGZ])dnl

m4_require([_LT_CHECK_OBJDIR])dnl
m4_require([_LT_HEADER_DLFCN])dnl
m4_require([_LT_CHECK_DLPREOPEN])dnl
m4_require([_LT_DECL_SED])dnl

dnl Don't require this, or it will be expanded earlier than the code
dnl that sets the variables it relies on:
_LT_ENABLE_INSTALL

```

```

dnl _LTDL_MODE specific code must be called at least once:
_LTDL_MODE_DISPATCH

# In order that ltdl.c can compile, find out the first
AC_CONFIG_HEADERS
# the user used. This is so that ltdl.h can pick up the parent
projects
# config.h file, The first file in AC_CONFIG_HEADERS must contain the
# definitions required by ltdl.c.
# FIXME: Remove use of undocumented AC_LIST_HEADERS (2.59
compatibility).
AC_CONFIG_COMMANDS_PRE([dnl
m4_pattern_allow([^LT_CONFIG_H$])dnl
m4_ifset([AH_HEADER],
        [LT_CONFIG_H=AH_HEADER],
        [m4_ifset([AC_LIST_HEADERS],
                [LT_CONFIG_H=`echo "AC_LIST_HEADERS" | $SED 's,^[[
]]*,,,s,[[:]].*$,,'\`],
                [)])])])
AC_SUBST([LT_CONFIG_H])

AC_CHECK_HEADERS([unistd.h dl.h sys/dl.h dld.h mach-o/dyld.h
dirent.h],
        [], [], [AC_INCLUDES_DEFAULT])

AC_CHECK_FUNCS([closedir opendir readdir], [],
[AC_LIBOBJ([lt_dirent])])
AC_CHECK_FUNCS([strlcat strlcpy], [], [AC_LIBOBJ([lt_strl])])

m4_pattern_allow([LT_LIBEXT])dnl
AC_DEFINE_UNQUOTED([LT_LIBEXT],["$libext"],[The archive extension])

name=
eval "lt_libprefix=\"\$libname_spec\""
m4_pattern_allow([LT_LIBPREFIX])dnl
AC_DEFINE_UNQUOTED([LT_LIBPREFIX],["$lt_libprefix"],[The archive
prefix])

name=ltdl
eval "LTDLOPEN=\"\$libname_spec\""
AC_SUBST([LTDLOPEN])
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:443: -1-
AC_DEFUN([LT_SYS_DLOPEN_DEPLIBS], [AC_REQUIRE([AC_CANONICAL_HOST])dnl
AC_CACHE_CHECK([whether deplibs are loaded by dlopen],
        [lt_cv_sys_dlopen_deplibs],
        [# PORTME does your system automatically load deplibs for dlopen?
# or its logical equivalent (e.g. shl_load for HP-UX < 11)
# For now, we just catch OSes we know something about -- in the

```

```

# future, we'll try test this programmatically.
lt_cv_sys_dlopen_deplibs=unknown
case $host_os in
aix3*|aix4.1.*|aix4.2.*)
    # Unknown whether this is true for these versions of AIX, but
    # we want this `case' here to explicitly catch those versions.
    lt_cv_sys_dlopen_deplibs=unknown
    ;;
aix[[4-9]]*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
amigaos*)
    case $host_cpu in
powerpc)
    lt_cv_sys_dlopen_deplibs=no
    ;;
esac
    ;;
darwin*)
    # Assuming the user has installed a libdl from somewhere, this is
true
    # If you are looking for one
http://www.opendarwin.org/projects/dlcompat
    lt_cv_sys_dlopen_deplibs=yes
    ;;
freebsd* | dragonfly*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
gnu* | linux* | k*bsd*-gnu | kopensolaris*-gnu)
    # GNU and its variants, using gnu ld.so (Glibc)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
hpux10*|hpux11*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
interix*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
irix[[12345]]*|irix6.01*)
    # Catch all versions of IRIX before 6.2, and indicate that we
don't
    # know how it worked for any of those versions.
    lt_cv_sys_dlopen_deplibs=unknown
    ;;
irix*)
    # The case above catches anything before 6.2, and it's known that
    # at 6.2 and later dlopen does load deplibs.
    lt_cv_sys_dlopen_deplibs=yes
    ;;
netbsd*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;

```



```

openbsd*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
osf[[1234]]*)
    # dlopen did load deplibs (at least at 4.x), but until the 5.x
series,
    # it did *not* use an RPATH in a shared library to find objects
the
    # library depends on, so we explicitly say `no'.
    lt_cv_sys_dlopen_deplibs=no
    ;;
osf5.0|osf5.0a|osf5.1)
    # dlopen *does* load deplibs and with the right loader patch
applied
    # it even uses RPATH in a shared library to search for shared
objects
    # that the library depends on, but there's no easy way to know if
that
    # patch is installed. Since this is the case, all we can really
    # say is unknown -- it depends on the patch being installed. If
    # it is, this changes to `yes'. Without it, it would be `no'.
    lt_cv_sys_dlopen_deplibs=unknown
    ;;
osf*)
    # the two cases above should catch all versions of osf <= 5.1.
Read
    # the comments above for what we know about them.
    # At > 5.1, deplibs are loaded *and* any RPATH in a shared library
    # is used to find them so we can finally say `yes'.
    lt_cv_sys_dlopen_deplibs=yes
    ;;
qnx*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
solaris*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    libltdl_cv_sys_dlopen_deplibs=yes
    ;;
esac
])
if test "$lt_cv_sys_dlopen_deplibs" != yes; then
    AC_DEFINE([LTDL_DLOPEN_DEPLIBS], [1],
        [Define if the OS needs help to load dependent libraries for
dlopen().])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdtk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:542: -1-

```

```

AU_DEFUN([AC_LTDL_SYS_DLOPEN_DEPLIBS], [m4_if($#, 0,
[LT_SYS_DLOPEN_DEPLIBS], [LT_SYS_DLOPEN_DEPLIBS($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:542: -1-
AC_DEFUN([AC_LTDL_SYS_DLOPEN_DEPLIBS], [AC_DIAGNOSE([obsolete], [The
macro `AC_LTDL_SYS_DLOPEN_DEPLIBS' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_DLOPEN_DEPLIBS], [LT_SYS_DLOPEN_DEPLIBS($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:549: -1-
AC_DEFUN([LT_SYS_MODULE_EXT], [m4_require([_LT_SYS_DYNAMIC_LINKER])dnl
AC_CACHE_CHECK([which extension is used for runtime loadable modules],
[libltdl_cv_shlibext],
[
module=yes
eval libltdl_cv_shlibext=$shrext_cmds
module=no
eval libltdl_cv_shrext=$shrext_cmds
])
if test -n "$libltdl_cv_shlibext"; then
m4_pattern_allow([LT_MODULE_EXT])dnl
AC_DEFINE_UNQUOTED([LT_MODULE_EXT], ["$libltdl_cv_shlibext"],
[Define to the extension used for runtime loadable modules, say,
".so".])
fi
if test "$libltdl_cv_shrext" != "$libltdl_cv_shlibext"; then
m4_pattern_allow([LT_SHARED_EXT])dnl
AC_DEFINE_UNQUOTED([LT_SHARED_EXT], ["$libltdl_cv_shrext"],
[Define to the shared library suffix, say, ".dylib".])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:572: -1-
AU_DEFUN([AC_LTDL_SHLIBEXT], [m4_if($#, 0, [LT_SYS_MODULE_EXT],
[LT_SYS_MODULE_EXT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:572: -1-
AC_DEFUN([AC_LTDL_SHLIBEXT], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_SHLIBEXT' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_MODULE_EXT], [LT_SYS_MODULE_EXT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:579: -1-
AC_DEFUN([LT_SYS_MODULE_PATH],
[m4_require([_LT_SYS_DYNAMIC_LINKER])dnl
AC_CACHE_CHECK([which variable specifies run-time module search path],
[lt_cv_module_path_var], [lt_cv_module_path_var="$shlibpath_var"])

```

```

if test -n "$lt_cv_module_path_var"; then
  m4_pattern_allow([LT_MODULE_PATH_VAR])dnl
  AC_DEFINE_UNQUOTED([LT_MODULE_PATH_VAR], ["$lt_cv_module_path_var"],
    [Define to the name of the environment variable that determines
the run-time module search path.])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:591: -1-
AU_DEFUN([AC_LTDL_SHLIBPATH], [m4_if($#, 0, [LT_SYS_MODULE_PATH],
[LT_SYS_MODULE_PATH($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:591: -1-
AC_DEFUN([AC_LTDL_SHLIBPATH], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_SHLIBPATH' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_MODULE_PATH], [LT_SYS_MODULE_PATH($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:598: -1-
AC_DEFUN([LT_SYS_DLSEARCH_PATH],
[m4_require([_LT_SYS_DYNAMIC_LINKER])dnl
AC_CACHE_CHECK([for the default library search path],
[lt_cv_sys_dlsearch_path],
[lt_cv_sys_dlsearch_path="$sys_lib_dlsearch_path_spec"])
if test -n "$lt_cv_sys_dlsearch_path"; then
  sys_dlsearch_path=
  for dir in $lt_cv_sys_dlsearch_path; do
    if test -z "$sys_dlsearch_path"; then
      sys_dlsearch_path="$dir"
    else
      sys_dlsearch_path="$sys_dlsearch_path$PATH_SEPARATOR$dir"
    fi
  done
  m4_pattern_allow([LT_DLSEARCH_PATH])dnl
  AC_DEFINE_UNQUOTED([LT_DLSEARCH_PATH], ["$sys_dlsearch_path"],
    [Define to the system default library search path.])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:619: -1-
AU_DEFUN([AC_LTDL_SYSSEARCHPATH], [m4_if($#, 0,
[LT_SYS_DLSEARCH_PATH], [LT_SYS_DLSEARCH_PATH($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:619: -1-
AC_DEFUN([AC_LTDL_SYSSEARCHPATH], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_SYSSEARCHPATH' is obsolete.
You should run autoupdate.])dnl

```

```

m4_if($#, 0, [LT_SYS_DLSEARCH_PATH], [LT_SYS_DLSEARCH_PATH($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:645: -1-
AC_DEFUN([LT_LIB_DLLOAD], [m4_pattern_allow([LT_DLLOADERS$])
LT_DLLOADERS=
AC_SUBST([LT_DLLOADERS])

AC_LANG_PUSH([C])

LIBADD_DLOPEN=
AC_SEARCH_LIBS([dlopen], [dl],
  [AC_DEFINE([HAVE_LIBDL], [1],
    [Define if you have the libdl library or equivalent.])
  if test "$ac_cv_search_dlopen" != "none required" ; then
    LIBADD_DLOPEN="-ldl"
  fi
  libltdl_cv_lib_dl_dlopen="yes"
  LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir}/}dlopen.la"],
  [AC_LINK_IFELSE([AC_LANG_PROGRAM([[#if HAVE_DLFCN_H
# include <dlfcn.h>
#endif
  ]], [[dlopen(0, 0);]]),
    [AC_DEFINE([HAVE_LIBDL], [1],
      [Define if you have the libdl library or
equivalent.])
    libltdl_cv_func_dlopen="yes"
    LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir}/}dlopen.la"],
    [AC_CHECK_LIB([svld], [dlopen],
      [AC_DEFINE([HAVE_LIBDL], [1],
        [Define if you have the libdl library or
equivalent.])
      LIBADD_DLOPEN="-lsvld" libltdl_cv_func_dlopen="yes"
      LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir}/}dlopen.la"])]))
if test x"$libltdl_cv_func_dlopen" = xyes || test
x"$libltdl_cv_lib_dl_dlopen" = xyes
then
  lt_save_LIBS="$LIBS"
  LIBS="$LIBS $LIBADD_DLOPEN"
  AC_CHECK_FUNCS([dlerror])
  LIBS="$lt_save_LIBS"
fi
AC_SUBST([LIBADD_DLOPEN])

LIBADD_SHL_LOAD=
AC_CHECK_FUNC([shl_load],
  [AC_DEFINE([HAVE_SHL_LOAD], [1],
    [Define if you have the shl_load function.]

```

```

    LT_DLLOADERS="$LT_DLLOADERS
    ${lt_dlopen_dir+${lt_dlopen_dir/}shl_load.la"},
    [AC_CHECK_LIB([dld], [shl_load],
    [AC_DEFINE([HAVE_SHL_LOAD], [1],
    [Define if you have the shl_load function.])
    LT_DLLOADERS="$LT_DLLOADERS
    ${lt_dlopen_dir+${lt_dlopen_dir/}shl_load.la"
    LIBADD_SHL_LOAD="-ldld"])]])
AC_SUBST([LIBADD_SHL_LOAD])

case $host_os in
darwin[[1567]].*)
# We only want this for pre-Mac OS X 10.4.
AC_CHECK_FUNC([_dyld_func_lookup],
[AC_DEFINE([HAVE_DYLD], [1],
[Define if you have the _dyld_func_lookup function.])
LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir/}dyld.la"])
;;
beos*)
LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir/}load_add_on.la"
;;
cygwin* | mingw* | os2* | pw32*)
AC_CHECK_DECLS([cygwin_conv_path], [], [], [#include
<sys/cygwin.h>])
LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir/}loadlibrary.la"
;;
esac

AC_CHECK_LIB([dld], [dld_link],
[AC_DEFINE([HAVE_DLD], [1],
[Define if you have the GNU dld library.])
LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir/}dld_link.la"])
AC_SUBST([LIBADD_DLD_LINK])

m4_pattern_allow([^LT_DLPREOPEN$])
LT_DLPREOPEN=
if test -n "$LT_DLLOADERS"
then
for lt_loader in $LT_DLLOADERS; do
LT_DLPREOPEN="$LT_DLPREOPEN-dlpreopen $lt_loader "
done
AC_DEFINE([HAVE_LIBDLOADER], [1],
[Define if libdloader will be built on this platform])
fi
AC_SUBST([LT_DLPREOPEN])

dnl This isn't used anymore, but set it for backwards compatibility
LIBADD_DL="$LIBADD_DLOPEN $LIBADD_SHL_LOAD"

```

```

AC_SUBST([LIBADD_DL])

AC_LANG_POP
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:738: -1-
AU_DEFUN([AC_LTDL_DLLIB], [m4_if($#, 0, [LT_LIB_DLLOAD],
[LT_LIB_DLLOAD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:738: -1-
AC_DEFUN([AC_LTDL_DLLIB], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_DLLIB' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_LIB_DLLOAD], [LT_LIB_DLLOAD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:746: -1-
AC_DEFUN([LT_SYS_SYMBOL_USCORE],
[m4_require([_LT_CMD_GLOBAL_SYMBOLS])dnl
AC_CACHE_CHECK([for _ prefix in compiled symbols],
[lt_cv_sys_symbol_underscore],
[lt_cv_sys_symbol_underscore=no
cat > confptest.$ac_ext <<_LT_EOF
void nm_test_func(){}
int main(){nm_test_func;return 0;}
_LT_EOF
if AC_TRY_EVAL(ac_compile); then
# Now try to grab the symbols.
ac_nlist=confptest.nm
if AC_TRY_EVAL(NM confptest.$ac_objext \
$lt_cv_sys_global_symbol_pipe \> $ac_nlist) && test -s "$ac_nlist";
then
# See whether the symbols have a leading underscore.
if grep '^._nm_test_func' "$ac_nlist" >/dev/null; then
lt_cv_sys_symbol_underscore=yes
else
if grep '^. nm_test_func ' "$ac_nlist" >/dev/null; then
:
else
echo "configure: cannot find nm_test_func in $ac_nlist"
>&AS_MESSAGE_LOG_FD
fi
fi
else
echo "configure: cannot run $lt_cv_sys_global_symbol_pipe"
>&AS_MESSAGE_LOG_FD
fi
else
echo "configure: failed program was:" >&AS_MESSAGE_LOG_FD
cat confptest.c >&AS_MESSAGE_LOG_FD

```

```

fi
rm -rf conftest*
])
sys_symbol_underscore=$lt_cv_sys_symbol_underscore
AC_SUBST([sys_symbol_underscore])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:783: -1-
AU_DEFUN([AC_LTDL_SYMBOL_USCORE], [m4_if($#, 0,
[LT_SYS_SYMBOL_USCORE], [LT_SYS_SYMBOL_USCORE($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:783: -1-
AC_DEFUN([AC_LTDL_SYMBOL_USCORE], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_SYMBOL_USCORE' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_SYMBOL_USCORE], [LT_SYS_SYMBOL_USCORE($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:790: -1-
AC_DEFUN([LT_FUNC_DLSYM_USCORE],
[AC_REQUIRE([LT_SYS_SYMBOL_USCORE])dnl
if test x"$lt_cv_sys_symbol_underscore" = xyes; then
  if test x"$libltdl_cv_func_dlopen" = xyes ||
    test x"$libltdl_cv_lib_dl_dlopen" = xyes ; then
    AC_CACHE_CHECK([whether we have to add an underscore for dlsym],
      [libltdl_cv_need_uscore],
      [libltdl_cv_need_uscore=unknown
        save_LIBS="$LIBS"
        LIBS="$LIBS $LIBADD_DLOPEN"
        _LT_TRY_DLOPEN_SELF(
          [libltdl_cv_need_uscore=no], [libltdl_cv_need_uscore=yes],
          [], [libltdl_cv_need_uscore=cross])
        LIBS="$save_LIBS"
      ])
  fi
fi
fi

if test x"$libltdl_cv_need_uscore" = xyes; then
  AC_DEFINE([NEED_USCORE], [1],
    [Define if dlsym() requires a leading underscore in symbol
names.])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:815: -1-
AU_DEFUN([AC_LTDL_DLSYM_USCORE], [m4_if($#, 0, [LT_FUNC_DLSYM_USCORE],
[LT_FUNC_DLSYM_USCORE($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-

```

```

glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/ltdl.m4:815: -1-
AC_DEFUN([AC_LTDL_DLSYM_USCORE], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_DLSYM_USCORE' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_FUNC_DLSYM_USCORE], [LT_FUNC_DLSYM_USCORE($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/pkg.m4:27: -1-
AC_DEFUN([PKG_PROG_PKG_CONFIG], [m4_pattern_forbid([^?PKG_[A-Z_]+$])
m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
AC_ARG_VAR([PKG_CONFIG], [path to pkg-config utility])
AC_ARG_VAR([PKG_CONFIG_PATH], [directories to add to pkg-config's
search path])
AC_ARG_VAR([PKG_CONFIG_LIBDIR], [path overriding pkg-config's built-in
search path])

if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
    AC_PATH_TOOL([PKG_CONFIG], [pkg-config])
fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=m4_default([$1], [0.9.0])
    AC_MSG_CHECKING([pkg-config is at least version
$_pkg_min_version])
    if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
        AC_MSG_RESULT([yes])
    else
        AC_MSG_RESULT([no])
        PKG_CONFIG=""
    fi
fi[]dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/pkg.m4:59: -1-
AC_DEFUN([PKG_CHECK_EXISTS], [AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
if test -n "$PKG_CONFIG" && \
    AC_RUN_LOG([$PKG_CONFIG --exists --print-errors "$1"]); then
    m4_default([$2], [:])
m4_ifvaln([$3], [else
    $3])dnl
fi])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/pkg.m4:84: -1-
AC_DEFUN([_PKG_SHORT_ERRORS_SUPPORTED],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])
if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi[]dnl

```



```

])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/aclocal-copy/pkg.m4:104: -1-
AC_DEFUN([PKG_CHECK_MODULES], [AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
AC_ARG_VAR([$1][_CFLAGS], [C compiler flags for $1, overriding pkg-
config])dnl
AC_ARG_VAR([$1][_LIBS], [linker flags for $1, overriding pkg-
config])dnl

pkg_failed=no
AC_MSG_CHECKING([for $1])

_PKG_CONFIG([$1][_CFLAGS], [cflags], [$2])
_PKG_CONFIG([$1][_LIBS], [libs], [$2])

m4_define([_PKG_TEXT], [Alternatively, you may set the environment
variables $1[_CFLAGS]
and $1[_LIBS] to avoid the need to call pkg-config.
See the pkg-config man page for more details.])

if test $pkg_failed = yes; then
    AC_MSG_RESULT([no])
    _PKG_SHORT_ERRORS_SUPPORTED
    if test $pkg_short_errors_supported = yes; then
        $1[_PKG_ERRORS]=`$PKG_CONFIG --short-errors --print-
errors "$2" 2>&1`
    else
        $1[_PKG_ERRORS]=`$PKG_CONFIG --print-errors "$2" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$$1[_PKG_ERRORS]" >&AS_MESSAGE_LOG_FD

    m4_default([$4], [AC_MSG_ERROR(
[Package requirements ($2) were not met:

$1[_PKG_ERRORS]

Consider adjusting the PKG_CONFIG_PATH environment variable if you
installed software in a non-standard prefix.

_PKG_TEXT])dnl
    ])
elif test $pkg_failed = untried; then
    AC_MSG_RESULT([no])
    m4_default([$4], [AC_MSG_FAILURE(
[The pkg-config script could not be found or is too old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

_PKG_TEXT

```

```

To get pkg-config, see <http://pkg-config.freedesktop.org/>.)dnl
    ])
else
    $1[_CFLAGS]=$pkg_cv_[$1[_CFLAGS]
    $1[_LIBS]=$pkg_cv_[$1[_LIBS]
    AC_MSG_RESULT([yes])
    $3
fi[]dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/amversion.m4:14: -1- AC_DEFUN([AM_AUTOMAKE_VERSION],
[am__api_version='1.12'
dnl Some users find AM_AUTOMAKE_VERSION and mistake it for a way to
dnl require some minimum version. Point them to the right macro.
m4_if([$1], [1.12.6], [],
      [AC_FATAL([Do not call $0, use AM_INIT_AUTOMAKE([$1]).])])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/amversion.m4:33: -1- AC_DEFUN([AM_SET_CURRENT_AUTOMAKE_VERSION],
[AM_AUTOMAKE_VERSION([1.12.6])dnl
m4_ifndef([AC_AUTOCONF_VERSION],
  [m4_copy([m4_PACKAGE_VERSION], [AC_AUTOCONF_VERSION])])dnl
_AM_AUTOCONF_VERSION(m4_defn([AC_AUTOCONF_VERSION]))])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/auxdir.m4:47: -1- AC_DEFUN([AM_AUX_DIR_EXPAND], [dnl Rely on
autoconf to set up CDPATH properly.
AC_PREREQ([2.50])dnl
# expand $ac_aux_dir to an absolute path
am_aux_dir=`cd $ac_aux_dir && pwd`
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/cond.m4:12: -1- AC_DEFUN([AM_CONDITIONAL], [AC_PREREQ([2.52])dnl
m4_if([$1], [TRUE], [AC_FATAL([$0: invalid condition: $1]),
      [$1], [FALSE], [AC_FATAL([$0: invalid condition: $1])])dnl
AC_SUBST([$1_TRUE])dnl
AC_SUBST([$1_FALSE])dnl
_AM_SUBST_NOTMAKE([$1_TRUE])dnl
_AM_SUBST_NOTMAKE([$1_FALSE])dnl
m4_define([_AM_COND_VALUE_$1], [$2])dnl
if $2; then
  $1_TRUE=
  $1_FALSE='#'
else
  $1_TRUE='#'
  $1_FALSE=
fi
AC_CONFIG_COMMANDS_PRE(
[if test -z "${$1_TRUE}" && test -z "${$1_FALSE}"; then

```

```

AC_MSG_ERROR([[conditional "$1" was never defined.
Usually this means the macro was only invoked conditionally.]]
fi]))
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depend.m4:26: -1- AC_DEFUN([_AM_DEPENDENCIES],
[AC_REQUIRE([AM_SET_DEPDIR])dn1
AC_REQUIRE([AM_OUTPUT_DEPENDENCY_COMMANDS])dn1
AC_REQUIRE([AM_MAKE_INCLUDE])dn1
AC_REQUIRE([AM_DEP_TRACK])dn1

m4_if([$1], [CC], [depcc="$CC" am_compiler_list=],
      [$1], [CXX], [depcc="$CXX" am_compiler_list=],
      [$1], [OBJC], [depcc="$OBJC" am_compiler_list='gcc3 gcc'],
      [$1], [OBJCXX], [depcc="$OBJCXX" am_compiler_list='gcc3 gcc'],
      [$1], [UPC], [depcc="$UPC" am_compiler_list=],
      [$1], [GCJ], [depcc="$GCJ" am_compiler_list='gcc3 gcc'],
              [depcc="$1" am_compiler_list=])

AC_CACHE_CHECK([dependency style of $depcc],
                [am_cv_$1_dependencies_compiler_type],
[if test -z "$AMDEP_TRUE" && test -f "$am_depcomp"; then
  # We make a subdir and do the tests there.  Otherwise we can end up
  # making bogus files that we don't know about and never remove.  For
  # instance it was reported that on HP-UX the gcc test will end up
  # making a dummy file named 'D' -- because '-MD' means "put the
output
  # in D".
  rm -rf conftest.dir
  mkdir conftest.dir
  # Copy depcomp to subdir because otherwise we won't find it if we're
  # using a relative directory.
  cp "$am_depcomp" conftest.dir
  cd conftest.dir
  # We will build objects and dependencies in a subdirectory because
  # it helps to detect inapplicable dependency modes.  For instance
  # both Tru64's cc and ICC support -MD to output dependencies as a
  # side effect of compilation, but ICC will put the dependencies in
  # the current directory while Tru64 will put them in the object
  # directory.
  mkdir sub

  am_cv_$1_dependencies_compiler_type=none
  if test "$am_compiler_list" = ""; then
    am_compiler_list=`sed -n ['s/^#\*\([a-zA-Z0-9]*\)$/\1/p'] <
./depcomp`
  fi
  am__universal=false
  m4_case([$1], [CC],
        [case " $depcc " in #(
          *\ -arch\ *\ -arch\ *) am__universal=true ;;
        esac],

```

```

[CXX],
[case " $depcc " in #(
  *\ -arch\ *\ -arch\ *) am__universal=true ;;
esac])

for depmode in $am_compiler_list; do
# Setup a source with many dependencies, because some compilers
# like to wrap large dependency lists on column 80 (with \), and
# we should not choose a depcomp mode which is confused by this.
#
# We need to recreate these files for each test, as the compiler
may
# overwrite some of them when testing with obscure command lines.
# This happens at least with the AIX C compiler.
: > sub/confctest.c
for i in 1 2 3 4 5 6; do
  echo '#include "conftst'$i'.h"' >> sub/confctest.c
  # Using ": > sub/conftst$i.h" creates only sub/conftst1.h with
  # Solaris 10 /bin/sh.
  echo '/* dummy */' > sub/conftst$i.h
done
echo "${am__include} ${am__quote}sub/confctest.Po${am__quote}" >
confmf

# We check with '-c' and '-o' for the sake of the "dashmstdout"
# mode. It turns out that the SunPro C++ compiler does not
properly
# handle '-M -o', and we need to detect this. Also, some Intel
# versions had trouble with output in subdirs.
am__obj=sub/confctest.${OBJEXT-o}
am__minus_obj="-o $am__obj"
case $depmode in
gcc)
  # This depmode causes a compiler race in universal mode.
  test "$am__universal" = false || continue
  ;;
nosideeffect)
  # After this tag, mechanisms are not by side-effect, so they'll
  # only be used when explicitly requested.
  if test "x$enable_dependency_tracking" = xyes; then
    continue
  else
    break
  fi
  ;;
msvc7 | msvc7msys | msvisualcpp | msvcmsys)
  # This compiler won't grok '-c -o', but also, the minuso test
has
  # not run yet. These depmodes are late enough in the game, and
  # so weak that their functioning should not be impacted.
  am__obj=confctest.${OBJEXT-o}
  am__minus_obj=

```

```

;;
none) break ;;
esac
if depmode=$depmode \
    source=sub/confptest.c object=$am__obj \
    depfile=sub/confptest.Po tmpdepfile=sub/confptest.TPo \
    $SHELL ./depcomp $depcc -c $am__minus_obj sub/confptest.c \
        >/dev/null 2>confptest.err &&
    grep sub/confstst1.h sub/confptest.Po > /dev/null 2>&1 &&
    grep sub/confstst6.h sub/confptest.Po > /dev/null 2>&1 &&
    grep $am__obj sub/confptest.Po > /dev/null 2>&1 &&
    ${MAKE-make} -s -f confmf > /dev/null 2>&1; then
    # icc doesn't choke on unknown options, it will just issue
warnings
    # or remarks (even with -Werror). So we grep stderr for any
message
    # that says an option was ignored or not supported.
    # When given -MP, icc 7.0 and 7.1 complain thusly:
    #   icc: Command line warning: ignoring option '-M'; no argument
required
    # The diagnosis changed in icc 8.0:
    #   icc: Command line remark: option '-MP' not supported
    if (grep 'ignoring option' confptest.err ||
        grep 'not supported' confptest.err) >/dev/null 2>&1; then ;;
else
    am_cv_$1_dependencies_compiler_type=$depmode
    break
    fi
    fi
done

cd ..
rm -rf confptest.dir
else
    am_cv_$1_dependencies_compiler_type=none
fi
])
AC_SUBST([$1DEPMODE], [depmode=$am_cv_$1_dependencies_compiler_type])
AM_CONDITIONAL([am__fastdep$1], [
    test "x$enable_dependency_tracking" != xno \
    && test "$am_cv_$1_dependencies_compiler_type" = gcc3])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depend.m4:163: -1- AC_DEFUN([AM_SET_DEPDIR],
[AC_REQUIRE([AM_SET_LEADING_DOT])dnl
AC_SUBST([DEPDIR], ["${am__leading_dot}deps"])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depend.m4:171: -1- AC_DEFUN([AM_DEP_TRACK],
[AC_ARG_ENABLE([dependency-tracking], [dnl

```

```

AS_HELP_STRING(
  [--enable-dependency-tracking],
  [do not reject slow dependency extractors])
AS_HELP_STRING(
  [--disable-dependency-tracking],
  [speeds up one-time build]))
if test "x$enable_dependency_tracking" != xno; then
  am_depcomp="$ac_aux_dir/depcomp"
  AMDEPBACKSLASH='\'
  am__nodep='_no'
fi
AM_CONDITIONAL([AMDEP], [test "x$enable_dependency_tracking" != xno])
AC_SUBST([AMDEPBACKSLASH])dnl
_AM_SUBST_NOTMAKE([AMDEPBACKSLASH])dnl
AC_SUBST([am__nodep])dnl
_AM_SUBST_NOTMAKE([am__nodep])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depout.m4:12: -1- AC_DEFUN([_AM_OUTPUT_DEPENDENCY_COMMANDS], [{
  # Autoconf 2.62 quotes --file arguments for eval, but not when files
  # are listed without --file.  Let's play safe and only enable the
eval
  # if we detect the quoting.
  case $CONFIG_FILES in
  *\'*) eval set x "$CONFIG_FILES" ;;
  *)   set x $CONFIG_FILES ;;
  esac
  shift
  for mf
  do
    # Strip MF so we end up with the name of the file.
    mf=`echo "$mf" | sed -e 's/:.*$//'\`
    # Check whether this is an Automake generated Makefile or not.
    # We used to match only the files named 'Makefile.in', but
    # some people rename them; so instead we look at the file content.
    # Grep'ing the first line is not enough: some people post-process
    # each Makefile.in and add a new line on top of each file to say
so.
    # Grep'ing the whole file is not good either: AIX grep has a line
    # limit of 2048, but all sed's we know have understand at least
4000.
    if sed -n 's,^#.*generated by automake.*,X,p' "$mf" | grep X
>/dev/null 2>&1; then
      dirpart=`AS_DIRNAME("$mf")`
    else
      continue
    fi
    # Extract the definition of DEPDIR, am__include, and am__quote
    # from the Makefile without running 'make'.
    DEPDIR=`sed -n 's/^DEPDIR = //p' < "$mf"`
    test -z "$DEPDIR" && continue

```

```

am__include=`sed -n 's/^am__include = //p' < "$mf"`
test -z "am__include" && continue
am__quote=`sed -n 's/^am__quote = //p' < "$mf"`
# Find all dependency output files, they are included files with
# $(DEPDIR) in their names. We invoke sed twice because it is the
# simplest approach to changing $(DEPDIR) to its actual value in
the
# expansion.
for file in `sed -n "
s/^\$am__include \$am__quote\(.*(DEPDIR).*\) \$am__quote"'\$/\1/p'
<"$mf" | \
sed -e 's/\$(DEPDIR)/'"$DEPDIR"'/g`; do
# Make sure the directory exists.
test -f "$dirpart/$file" && continue
fdirdir=`AS_DIRNAME(["$file"])`
AS_MKDIR_P([$dirpart/$fdirdir])
# echo "creating $dirpart/$file"
echo '# dummy' > "$dirpart/$file"
done
done
}
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depout.m4:71: -1- AC_DEFUN([AM_OUTPUT_DEPENDENCY_COMMANDS],
[AC_CONFIG_COMMANDS([depfiles],
[test x"$AMDEP_TRUE" != x"" || _AM_OUTPUT_DEPENDENCY_COMMANDS],
[AMDEP_TRUE="$AMDEP_TRUE" ac_aux_dir="$ac_aux_dir"])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/init.m4:23: -1- AC_DEFUN([AM_INIT_AUTOMAKE],
[AC_PREREQ([2.62])dnl
dnl Autoconf wants to disallow AM_ names. We explicitly allow
dnl the ones we care about.
m4_pattern_allow([^AM_[A-Z]+FLAGS$])dnl
AC_REQUIRE([AM_SET_CURRENT_AUTOMAKE_VERSION])dnl
AC_REQUIRE([AC_PROG_INSTALL])dnl
if test "`cd $srcdir && pwd`" != "`pwd`"; then
# Use -I$(srcdir) only when $(srcdir) != ., so that make's output
# is not polluted with repeated "-I."
AC_SUBST([am__isrc], [' -
I$(srcdir)'])_AM_SUBST_NOTMAKE([am__isrc])dnl
# test to see if srcdir already configured
if test -f $srcdir/config.status; then
AC_MSG_ERROR([source directory already configured; run "make
distclean" there first])
fi
fi
fi

# test whether we have cygpath
if test -z "$CYGPATH_W"; then

```

```

if (cygpath --version) >/dev/null 2>/dev/null; then
  CYGPATH_W='cygpath -w'
else
  CYGPATH_W=echo
fi
fi
AC_SUBST([CYGPATH_W])

# Define the identity of the package.
dnl Distinguish between old-style and new-style calls.
m4_ifval([$2],
[AC_DIAGNOSE([obsolete],
[$0: two- and three-arguments forms are deprecated.  For more info,
see:
http://www.gnu.org/software/automake/manual/automake.html#Modernize-AM\_INIT\_AUTOMAKE-invocation])dnl
m4_ifval([$3], [_AM_SET_OPTION([no-define]))]dnl
AC_SUBST([PACKAGE], [$1])dnl
AC_SUBST([VERSION], [$2]),
[_AM_SET_OPTIONS([$1])dnl
dnl Diagnose old-style AC_INIT with new-style AM_AUTOMAKE_INIT.
m4_if(
  m4_ifdef([AC_PACKAGE_NAME], [ok]):m4_ifdef([AC_PACKAGE_VERSION],
[ok]),
  [ok:ok],,
  [m4_fatal([AC_INIT should be called with package and version
arguments])])dnl
AC_SUBST([PACKAGE], ['AC_PACKAGE_TARNAME'])dnl
AC_SUBST([VERSION], ['AC_PACKAGE_VERSION'])])dnl

_AM_IF_OPTION([no-define],,
[AC_DEFINE_UNQUOTED([PACKAGE], ["$PACKAGE"], [Name of package])
AC_DEFINE_UNQUOTED([VERSION], ["$VERSION"], [Version number of
package])])dnl

# Some tools Automake needs.
AC_REQUIRE([AM_SANITY_CHECK])dnl
AC_REQUIRE([AC_ARG_PROGRAM])dnl
AM_MISSING_PROG([ACLOCAL], [aclocal-${am__api_version}])
AM_MISSING_PROG([AUTOCONF], [autoconf])
AM_MISSING_PROG([AUTOMAKE], [automake-${am__api_version}])
AM_MISSING_PROG([AUTOHEADER], [autoheader])
AM_MISSING_PROG([MAKEINFO], [makeinfo])
AC_REQUIRE([AM_PROG_INSTALL_SH])dnl
AC_REQUIRE([AM_PROG_INSTALL_STRIP])dnl
AC_REQUIRE([AC_PROG_MKDIR_P])dnl
# For better backward compatibility.  To be removed once Automake
1.9.x
# dies out for good.  For more background, see:
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00001.html>
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00014.html>
AC_SUBST([mkdir_p], ['$(MKDIR_P)'])

```



```

# We need awk for the "check" target.  The system "awk" is bad on
# some platforms.
AC_REQUIRE([AC_PROG_AWK])dn1
AC_REQUIRE([AC_PROG_MAKE_SET])dn1
AC_REQUIRE([AM_SET_LEADING_DOT])dn1
_AM_IF_OPTION([tar-ustar], [_AM_PROG_TAR([ustar])],
              [_AM_IF_OPTION([tar-pax], [_AM_PROG_TAR([pax])],
                             [_AM_PROG_TAR([v7])])])
_AM_IF_OPTION([no-dependencies],,
[AC_PROVIDE_IFELSE([AC_PROG_CC],
                  [_AM_DEPENDENCIES([CC])],
                  [m4_define([AC_PROG_CC],
m4_defn([AC_PROG_CC])[_AM_DEPENDENCIES([CC])])])dn1
AC_PROVIDE_IFELSE([AC_PROG_CXX],
                  [_AM_DEPENDENCIES([CXX])],
                  [m4_define([AC_PROG_CXX],
m4_defn([AC_PROG_CXX])[_AM_DEPENDENCIES([CXX])])])dn1
AC_PROVIDE_IFELSE([AC_PROG_OBJC],
                  [_AM_DEPENDENCIES([OBJC])],
                  [m4_define([AC_PROG_OBJC],
m4_defn([AC_PROG_OBJC])[_AM_DEPENDENCIES([OBJC])])])dn1
dn1 Support for Objective C++ was only introduced in Autoconf 2.65,
dn1 but we still cater to Autoconf 2.62.
m4_ifdef([AC_PROG_OBJCXX],
[AC_PROVIDE_IFELSE([AC_PROG_OBJCXX],
                  [_AM_DEPENDENCIES([OBJCXX])],
                  [m4_define([AC_PROG_OBJCXX],
m4_defn([AC_PROG_OBJCXX])[_AM_DEPENDENCIES([OBJCXX])])])])dn1
])
_AM_IF_OPTION([silent-rules], [AC_REQUIRE([AM_SILENT_RULES])])dn1
dn1 The 'parallel-tests' driver may need to know about EXEEXT, so add
the
dn1 'am__EXEEXT' conditional if _AM_COMPILER_EXEEXT was seen.  This
macro
dn1 is hooked onto _AC_COMPILER_EXEEXT early, see below.
AC_CONFIG_COMMANDS_PRE(dn1
[m4_provide_if([_AM_COMPILER_EXEEXT],
              [AM_CONDITIONAL([am__EXEEXT], [test -n "$EXEEXT"])])dn1
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/init.m4:140: -1- AC_DEFUN([_AC_AM_CONFIG_HEADER_HOOK], [# Compute
$1's index in $config_headers.
_am_arg=$1
_am_stamp_count=1
for _am_header in $config_headers ;; do
  case $_am_header in
    $_am_arg | $_am_arg:* )

```

```

        break ;;
    * )
        _am_stamp_count=`expr $_am_stamp_count + 1` ;;
    esac
done
echo "timestamp for $_am_arg" >`AS_DIRNAME(["$_am_arg"])`/stamp-
h[]$_am_stamp_count])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/install-
sh.m4:11: -1- AC_DEFUN([AM_PROG_INSTALL_SH],
[AC_REQUIRE([AM_AUX_DIR_EXPAND])dnl
if test x"${install_sh}" != xset; then
    case $am_aux_dir in
    *\ * | *\ * )
        install_sh="\${SHELL} '$am_aux_dir/install-sh'" ;;
    *)
        install_sh="\${SHELL} $am_aux_dir/install-sh"
    esac
fi
AC_SUBST([install_sh])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/lead-
dot.m4:10: -1- AC_DEFUN([AM_SET_LEADING_DOT], [rm -rf .tst 2>/dev/null
mkdir .tst 2>/dev/null
if test -d .tst; then
    am__leading_dot=.
else
    am__leading_dot=_
fi
rmdir .tst 2>/dev/null
AC_SUBST([am__leading_dot])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/maintainer.m4:16: -1- AC_DEFUN([AM_MAINTAINER_MODE],
[m4_case(m4_default([$1], [disable]),
    [enable], [m4_define([am_maintainer_other], [disable])],
    [disable], [m4_define([am_maintainer_other], [enable])],
    [m4_define([am_maintainer_other], [enable])
    m4_warn([syntax], [unexpected argument to
AM@&t@_MAINTAINER_MODE: $1])])
AC_MSG_CHECKING([whether to enable maintainer-specific portions of
Makefiles])
    dnl maintainer-mode's default is 'disable' unless 'enable' is passed
    AC_ARG_ENABLE([maintainer-mode],
        [AS_HELP_STRING([--]am_maintainer_other[-maintainer-mode],
            am_maintainer_other[ make rules and dependencies not useful
            (and sometimes confusing) to the casual installer]),
        [USE_MAINTAINER_MODE=$enableval],
        [USE_MAINTAINER_MODE=]m4_if(am_maintainer_other, [enable], [no],
[yes]))
    AC_MSG_RESULT([$USE_MAINTAINER_MODE])
    AM_CONDITIONAL([MAINTAINER_MODE], [test $USE_MAINTAINER_MODE = yes])

```

```

MAINT=$MAINTAINER_MODE_TRUE
AC_SUBST([MAINT])dnl

])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/maintainer.m4:37: -1- AU_DEFUN([jm_MAINTAINER_MODE],
[AM_MAINTAINER_MODE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/maintainer.m4:37: -1- AC_DEFUN([jm_MAINTAINER_MODE],
[AC_DIAGNOSE([obsolete], [The macro `jm_MAINTAINER_MODE' is obsolete.
You should run autoupdate.])dnl
AM_MAINTAINER_MODE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/make.m4:12: -1- AC_DEFUN([AM_MAKE_INCLUDE], [am_make=${MAKE-make}
cat > confinc << 'END'
am__doit:
    @echo this is the am__doit target
.PHONY: am__doit
END
# If we don't find an include directive, just comment out the code.
AC_MSG_CHECKING([for style of include used by $am_make])
am__include="#"
am__quote=
__am_result=none
# First try GNU make style include.
echo "include confinc" > confmf
# Ignore all kinds of additional output from 'make'.
case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
    am__include=include
    am__quote=
    __am_result=GNU
    ;;
esac
# Now try BSD make style include.
if test "$am__include" = "#"; then
    echo '.include "confinc"' > confmf
    case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
        am__include=.include
        am__quote="\\"
        __am_result=BSD
        ;;
    esac
fi
AC_SUBST([am__include])
AC_SUBST([am__quote])
AC_MSG_RESULT([$_am_result])
rm -f confinc confmf

```

```

])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/missing.m4:11: -1- AC_DEFUN([AM_MISSING_PROG],
[AC_REQUIRE([AM_MISSING_HAS_RUN])
$1=${$1-"${am_missing_run}$2"}
AC_SUBST($1)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/missing.m4:20: -1- AC_DEFUN([AM_MISSING_HAS_RUN],
[AC_REQUIRE([AM_AUX_DIR_EXPAND])dnl
AC_REQUIRE_AUX_FILE([missing])dnl
if test x"${MISSING+set}" != xset; then
  case $am_aux_dir in
    *\ * | *\ *)
      MISSING="\${SHELL} \"$am_aux_dir/missing\" " ;
    *)
      MISSING="\${SHELL} $am_aux_dir/missing" ;;
  esac
fi
# Use eval to expand $SHELL
if eval "$MISSING --run true"; then
  am_missing_run="$MISSING --run "
else
  am_missing_run=
  AC_MSG_WARN(['missing' script is too old or missing])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/options.m4:11: -1- AC_DEFUN([_AM_MANGLE_OPTION],
[[_AM_OPTION_]m4_bpatsubst($1, [[^a-zA-Z0-9_]], [_])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/options.m4:17: -1- AC_DEFUN([_AM_SET_OPTION],
[m4_define(_AM_MANGLE_OPTION([$1]), [1])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/options.m4:23: -1- AC_DEFUN([_AM_SET_OPTIONS],
[m4_foreach_w([_AM_Option], [$1], [_AM_SET_OPTION(_AM_Option)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/options.m4:29: -1- AC_DEFUN([_AM_IF_OPTION],
[m4_ifset(_AM_MANGLE_OPTION([$1]), [$2], [$3])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/runlog.m4:12: -1- AC_DEFUN([AM_RUN_LOG], [{ echo "$as_me:$LINENO:
$1" >&AS_MESSAGE_LOG_FD
($1) >&AS_MESSAGE_LOG_FD 2>&AS_MESSAGE_LOG_FD
ac_status=$?
echo "$as_me:$LINENO: \$? = $ac_status" >&AS_MESSAGE_LOG_FD
(exit $ac_status); }])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/sanity.m4:11: -1- AC_DEFUN([AM_SANITY_CHECK],
[AC_MSG_CHECKING([whether build environment is sane])
# Reject unsafe characters in $srcdir or the absolute working
directory
# name.  Accept space and tab only in the latter.
am_lf='
'
case `pwd` in
  *[[\\\"#\$\&\'`$am_lf]]*)
    AC_MSG_ERROR([unsafe absolute working directory name]);;
esac
case $srcdir in
  *[[\\\"#\$\&\'`$am_lf\ \ ]])
    AC_MSG_ERROR([unsafe srcdir value: '$srcdir']);;
esac

# Do 'set' in a subshell so we don't clobber the current shell's
# arguments.  Must try -L first in case configure is actually a
# symlink; some systems play weird games with the mod time of symlinks
# (eg FreeBSD returns the mod time of the symlink's containing
# directory).
if (
  am_has_slept=no
  for am_try in 1 2; do
    echo "timestamp, slept: $am_has_slept" > conftest.file
    set X `ls -Lt "$srcdir/configure" conftest.file 2> /dev/null`
    if test "$[*]" = "X"; then
      # -L didn't work.
      set X `ls -t "$srcdir/configure" conftest.file`
    fi
    if test "$[*]" != "X $srcdir/configure conftest.file" \
      && test "$[*]" != "X conftest.file $srcdir/configure"; then

      # If neither matched, then we have a broken ls.  This can happen
      # if, for instance, CONFIG_SHELL is bash and it inherits a
      # broken ls alias from the environment.  This has actually
      # happened.  Such a system could not be considered "sane".
      AC_MSG_ERROR([ls -t appears to fail.  Make sure there is not a
broken
alias in your environment])
    fi
    if test "$[2]" = conftest.file || test $am_try -eq 2; then
      break
    fi
    # Just in case.
    sleep 1
    am_has_slept=yes
  done
  test "$[2]" = conftest.file
)

```

```

then
  # Ok.
  :
else
  AC_MSG_ERROR([newly created file is older than distributed files!
Check your system clock])
fi
AC_MSG_RESULT([yes])
# If we didn't sleep, we still need to ensure time stamps of
config.status and
# generated files are strictly newer.
am_sleep_pid=
if grep 'slept: no' conftest.file >/dev/null 2>&1; then
  ( sleep 1 ) &
  am_sleep_pid=$!
fi
AC_CONFIG_COMMANDS_PRE(
[AC_MSG_CHECKING([that generated files are newer than configure])
  if test -n "$am_sleep_pid"; then
    # Hide warnings about reused PIDs.
    wait $am_sleep_pid 2>/dev/null
  fi
  AC_MSG_RESULT([done])])
rm -f conftest.file
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/silent.m4:12: -1- AC_DEFUN([AM_SILENT_RULES],
[AC_ARG_ENABLE([silent-rules], [dnl
AS_HELP_STRING(
  [--enable-silent-rules],
  [less verbose build output (undo: "make V=1")])
AS_HELP_STRING(
  [--disable-silent-rules],
  [verbose build output (undo: "make V=0")])dnl
])
case $enable_silent_rules in @%:@ (((
  yes) AM_DEFAULT_VERBOSITY=0;;
  no) AM_DEFAULT_VERBOSITY=1;;
  *) AM_DEFAULT_VERBOSITY=m4_if([$1], [yes], [0], [1]);;
esac
dnl
dnl A few 'make' implementations (e.g., NonStop OS and NextStep)
dnl do not support nested variable expansions.
dnl See automake bug#9928 and bug#10237.
am_make=${MAKE-make}
AC_CACHE_CHECK([whether $am_make supports nested variables],
  [am_cv_make_support_nested_variables],
  [if AS_ECHO([['TRUE=$(BAR$(V))
BAR0=false
BAR1=true
V=1
]]

```

```

am__doit:
    @$(TRUE)
.PHONY: am__doit']) | $am__make -f - >/dev/null 2>&1; then
    am_cv_make_support_nested_variables=yes
else
    am_cv_make_support_nested_variables=no
fi])
if test $am_cv_make_support_nested_variables = yes; then
    dnl Using '$V' instead of '$(V)' breaks IRIX make.
    AM_V='$(V)'
    AM_DEFAULT_V='$(AM_DEFAULT_VERBOSITY)'
else
    AM_V=$AM_DEFAULT_VERBOSITY
    AM_DEFAULT_V=$AM_DEFAULT_VERBOSITY
fi
AC_SUBST([AM_V])dnl
AM_SUBST_NOTMAKE([AM_V])dnl
AC_SUBST([AM_DEFAULT_V])dnl
AM_SUBST_NOTMAKE([AM_DEFAULT_V])dnl
AC_SUBST([AM_DEFAULT_VERBOSITY])dnl
AM_BACKSLASH='\ '
AC_SUBST([AM_BACKSLASH])dnl
_AM_SUBST_NOTMAKE([AM_BACKSLASH])dnl
])
m4trace:/home/gangadhar/newyocbuild/tisd/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/strip.m4:17: -1- AC_DEFUN([AM_PROG_INSTALL_STRIP],
[AC_REQUIRE([AM_PROG_INSTALL_SH])dnl
# Installed binaries are usually stripped using 'strip' when the user
# run "make install-strip". However 'strip' might not be the right
# tool to use in cross-compilation environments, therefore Automake
# will honor the 'STRIP' environment variable to overrule this
program.
dnl Don't test for $cross_compiling = yes, because it might be
'maybe'.
if test "$cross_compiling" != no; then
    AC_CHECK_TOOL([STRIP], [strip], :)
fi
INSTALL_STRIP_PROGRAM="\$(install_sh) -c -s"
AC_SUBST([INSTALL_STRIP_PROGRAM])])
m4trace:/home/gangadhar/newyocbuild/tisd/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/substnot.m4:12: -1- AC_DEFUN([_AM_SUBST_NOTMAKE])
m4trace:/home/gangadhar/newyocbuild/tisd/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/substnot.m4:17: -1- AC_DEFUN([AM_SUBST_NOTMAKE],
[_AM_SUBST_NOTMAKE($@)])
m4trace:/home/gangadhar/newyocbuild/tisd/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/tar.m4:22:
-1- AC_DEFUN([_AM_PROG_TAR], [# Always define AMTAR for backward
compatibility. Yes, it's still used
# in the wild :-( We should find a proper way to deprecate it ...

```

```

AC_SUBST([AMTAR], ['${TAR-tar}'])
m4_if([$1], [v7],
    [am__tar='${TAR-tar} chof - "$stardir"' am__untar='${TAR-tar}
xf -'],
    [m4_case([$1], [ustar],, [pax],,
        [m4_fatal([Unknown tar format]])])
AC_MSG_CHECKING([how to create a $1 tar archive])
# Loop over all known methods to create a tar archive until one works.
_am_tools='gnutar m4_if([$1], [ustar], [plaintar]) cpio pax none'
_am_tools=${am_cv_prog_tar_$1-$_am_tools}
# Do not fold the above two line into one, because Tru64 sh and
# Solaris sh will not grok spaces in the rhs of '-'.
for _am_tool in $_am_tools
do
    case $_am_tool in
        gnutar)
            for _am_tar in tar gnutar gtar;
            do
                AM_RUN_LOG([$_am_tar --version]) && break
            done
            am__tar="$_am_tar --format=m4_if([$1], [pax], [posix], [$1]) -chf
- "$stardir"'
            am__tar_="$_am_tar --format=m4_if([$1], [pax], [posix], [$1]) -chf
- "$stardir"'
            am__untar="$_am_tar -xf -"
            ;;
        plaintar)
            # Must skip GNU tar: if it does not support --format= it doesn't
            create
            # ustar tarball either.
            (tar --version) >/dev/null 2>&1 && continue
            am__tar='tar chf - "$stardir"'
            am__tar_='tar chf - $stardir"'
            am__untar='tar xf -'
            ;;
        pax)
            am__tar='pax -L -x $1 -w "$stardir"'
            am__tar_='pax -L -x $1 -w $stardir"'
            am__untar='pax -r'
            ;;
        cpio)
            am__tar='find "$stardir" -print | cpio -o -H $1 -L'
            am__tar_='find $stardir" -print | cpio -o -H $1 -L'
            am__untar='cpio -i -H $1 -d'
            ;;
        none)
            am__tar=false
            am__tar_=false
            am__untar=false
            ;;
    esac

```



```

# If the value was cached, stop now. We just wanted to have am__tar
# and am__untar set.
test -n "${am_cv_prog_tar_$1}" && break

# tar/untar a dummy directory, and stop if the command works
rm -rf confptest.dir
mkdir confptest.dir
echo GrepMe > confptest.dir/file
AM_RUN_LOG([tardir=confptest.dir && eval $am__tar_ >confptest.tar])
rm -rf confptest.dir
if test -s confptest.tar; then
  AM_RUN_LOG([$am__untar <confptest.tar])
  grep GrepMe confptest.dir/file >/dev/null 2>&1 && break
fi
done
rm -rf confptest.dir

AC_CACHE_VAL([am_cv_prog_tar_$1], [am_cv_prog_tar_$1=$_am_tool])
AC_MSG_RESULT([$am_cv_prog_tar_$1])
AC_SUBST([am__tar])
AC_SUBST([am__untar])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/gtk-doc.m4:7: -1-
AC_DEFUN([GTK_DOC_CHECK], [
  AC_REQUIRE([PKG_PROG_PKG_CONFIG])
  AC_BEFORE([AC_PROG_LIBTOOL],[$0])dnl setup libtool first
  AC_BEFORE([AM_PROG_LIBTOOL],[$0])dnl setup libtool first

  dnl check for tools we added during development
  AC_PATH_PROG([GTKDOC_CHECK],[gtkdoc-check])
  AC_PATH_PROGS([GTKDOC_REBASE],[gtkdoc-rebase],[true])
  AC_PATH_PROG([GTKDOC_MKPDF],[gtkdoc-mkpdf])

  dnl for overriding the documentation installation directory
  AC_ARG_WITH([html-dir],
    AS_HELP_STRING([--with-html-dir=PATH], [path to installed docs]),,
    [with_html_dir='${datadir}/gtk-doc/html'])
  HTML_DIR="$with_html_dir"
  AC_SUBST([HTML_DIR])

  dnl enable/disable documentation building
  AC_ARG_ENABLE([gtk-doc],
    AS_HELP_STRING([--enable-gtk-doc],
      [use gtk-doc to build documentation
[[default=no]]]),,
    [enable_gtk_doc=no])

  if test x$enable_gtk_doc = xyes; then
    ifelse([$1],[],,
      [PKG_CHECK_EXISTS([gtk-doc],,

```

```

        AC_MSG_ERROR([gtk-doc not installed and --
enable-gtk-doc requested]))],
    [PKG_CHECK_EXISTS([gtk-doc >= $1],,
        AC_MSG_ERROR([You need to have gtk-doc >= $1
installed to build $PACKAGE_NAME]))])
    dnl don't check for glib if we build glib
    if test "x$PACKAGE_NAME" != "xglib"; then
        dnl don't fail if someone does not have glib
        PKG_CHECK_MODULES(GTKDOC_DEPS, glib-2.0 >= 2.10.0 gobject-2.0
>= 2.10.0,,)
        fi
    fi

AC_MSG_CHECKING([whether to build gtk-doc documentation])
AC_MSG_RESULT($enable_gtk_doc)

dnl enable/disable output formats
AC_ARG_ENABLE([gtk-doc-html],
    AS_HELP_STRING([--enable-gtk-doc-html],
        [build documentation in html format
[[default=yes]]]),,
    [enable_gtk_doc_html=yes])
AC_ARG_ENABLE([gtk-doc-pdf],
    AS_HELP_STRING([--enable-gtk-doc-pdf],
        [build documentation in pdf format
[[default=no]]]),,
    [enable_gtk_doc_pdf=no])

if test -z "$GTKDOC_MKPDF"; then
    enable_gtk_doc_pdf=no
fi

AM_CONDITIONAL([ENABLE_GTK_DOC], [test x$enable_gtk_doc = xyes])
AM_CONDITIONAL([GTK_DOC_BUILD_HTML], [test x$enable_gtk_doc_html =
xyes])
AM_CONDITIONAL([GTK_DOC_BUILD_PDF], [test x$enable_gtk_doc_pdf =
xyes])
AM_CONDITIONAL([GTK_DOC_USE_LIBTOOL], [test -n "$LIBTOOL"])
AM_CONDITIONAL([GTK_DOC_USE_REBASE], [test -n "$GTKDOC_REBASE"])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:69: -1-
AC_DEFUN([LT_INIT], [AC_PREREQ([2.58])dnl We use AC_INCLUDES_DEFAULT
AC_REQUIRE([AC_CONFIG_AUX_DIR_DEFAULT])dnl
AC_BEFORE([$0], [LT_LANG])dnl
AC_BEFORE([$0], [LT_OUTPUT])dnl
AC_BEFORE([$0], [LTDL_INIT])dnl
m4_require([_LT_CHECK_BUILDDIR])dnl

dnl Autoconf doesn't catch unexpanded LT_ macros by default:

```

```

m4_pattern_forbid([^_?LT_[A-Z_]+$])dnl
m4_pattern_allow([^( _LT_EOF|LT_DLGLOBAL|LT_DLLAZY_OR_NOW|LT_MULTI_MODU
LE)$])dnl
dnl aclocal doesn't pull ltoptions.m4, ltsugar.m4, or ltversion.m4
dnl unless we require an AC_DEFUNed macro:
AC_REQUIRE([LTOPTIONS_VERSION])dnl
AC_REQUIRE([LTSUGAR_VERSION])dnl
AC_REQUIRE([LTVERSION_VERSION])dnl
AC_REQUIRE([LTOBSOLETE_VERSION])dnl
m4_require([_LT_PROG_LTMAIN])dnl

_LT_SHELL_INIT([SHELL=${CONFIG_SHELL-/bin/sh}])

dnl Parse OPTIONS
_LT_SET_OPTIONS([$0], [$1])

# This can be used to rebuild libtool when needed
LIBTOOL_DEPS="$ltmain"

# Always use our own libtool.
LIBTOOL='$(top_builddir)'
LIBTOOL="$LIBTOOL/${host_alias}-libtool"
AC_SUBST(LIBTOOL)dnl

_LT_SETUP

# Only expand once:
m4_define([LT_INIT])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:108: -1-
AU_DEFUN([AC_PROG_LIBTOOL], [m4_if($#, 0, [LT_INIT], [LT_INIT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:108: -1-
AC_DEFUN([AC_PROG_LIBTOOL], [AC_DIAGNOSE([obsolete], [The macro
`AC_PROG_LIBTOOL' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_INIT], [LT_INIT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:109: -1-
AU_DEFUN([AM_PROG_LIBTOOL], [m4_if($#, 0, [LT_INIT], [LT_INIT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:109: -1-
AC_DEFUN([AM_PROG_LIBTOOL], [AC_DIAGNOSE([obsolete], [The macro
`AM_PROG_LIBTOOL' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_INIT], [LT_INIT($@)])])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:610: -l-
AC_DEFUN([LT_OUTPUT], [: ${CONFIG_LT=./config.lt}
AC_MSG_NOTICE([creating $CONFIG_LT])
_LT_GENERATED_FILE_INIT(["$CONFIG_LT"],
[# Run this file to recreate a libtool stub with the current
configuration.])

cat >>"$CONFIG_LT" <<\_LTEOF
lt_cl_silent=false
exec AS_MESSAGE_LOG_FD>>config.log
{
    echo
    AS_BOX([Running $as_me.])
} >&AS_MESSAGE_LOG_FD

lt_cl_help="\
`$as_me' creates a local libtool stub from the current configuration,
for use in further configure time tests before the real libtool is
generated.

Usage: $[0] [[OPTIONS]]

    -h, --help          print this help, then exit
    -V, --version      print version number, then exit
    -q, --quiet        do not print progress messages
    -d, --debug        don't remove temporary files

Report bugs to <bug-libtool@gnu.org>."

lt_cl_version="\
m4_ifset([AC_PACKAGE_NAME], [AC_PACKAGE_NAME ])config.lt[[]dnl
m4_ifset([AC_PACKAGE_VERSION], [ AC_PACKAGE_VERSION])
configured by $[0], generated by m4_PACKAGE_STRING.

Copyright (C) 2011 Free Software Foundation, Inc.
This config.lt script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it."

while test $# != 0
do
  case $[1] in
    --version | --v* | -V )
      echo "$lt_cl_version"; exit 0 ;;
    --help | --h* | -h )
      echo "$lt_cl_help"; exit 0 ;;
    --debug | --d* | -d )
      debug=: ;;
    --quiet | --q* | --silent | --s* | -q )
      lt_cl_silent=: ;;
  esac
done

```

```

    -*) AC_MSG_ERROR([unrecognized option: ${1}
Try \`${0} --help' for more information.]) ;;

    *) AC_MSG_ERROR([unrecognized argument: ${1}
Try \`${0} --help' for more information.]) ;;
  esac
  shift
done

if $lt_cl_silent; then
  exec AS_MESSAGE_FD>/dev/null
fi
_LTEOF

cat >>"$CONFIG_LT" <<_LTEOF
_LT_OUTPUT_LIBTOOL_COMMANDS_INIT
_LTEOF

cat >>"$CONFIG_LT" <<\_LTEOF
AC_MSG_NOTICE([creating $ofile])
_LT_OUTPUT_LIBTOOL_COMMANDS
AS_EXIT(0)
_LTEOF
chmod +x "$CONFIG_LT"

# configure is writing to config.log, but config.lt does its own
redirection,
# appending to config.log, which fails on DOS, as config.log is still
kept
# open by configure.  Here we exec the FD to /dev/null, effectively
closing
# config.log, so it can be properly (re)opened and appended to by
config.lt.
lt_cl_success=:
test "$silent" = yes &&
  lt_config_lt_args="$lt_config_lt_args --quiet"
exec AS_MESSAGE_LOG_FD>/dev/null
$SHELL "$CONFIG_LT" $lt_config_lt_args || lt_cl_success=false
exec AS_MESSAGE_LOG_FD>>config.log
$lt_cl_success || AS_EXIT(1)
])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:791: -1-
AC_DEFUN([LT_SUPPORTED_TAG], [])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:802: -1-
AC_DEFUN([LT_LANG], [AC_BEFORE([$0], [LT_OUTPUT])dnl
m4_case([$1],
  [C],                [_LT_LANG(C)],
  [C++],              [_LT_LANG(CXX)],

```

```

[Go],          [_LT_LANG(GO)],
[Java],        [_LT_LANG(GCJ)],
[Fortran 77],  [_LT_LANG(F77)],
[Fortran],     [_LT_LANG(FC)],
[Windows Resource], [_LT_LANG(RC)],
[m4_ifdef([_LT_LANG_]$1[_CONFIG],
[_LT_LANG($1)],
[m4_fatal([$0: unsupported language: "$1"])]))]dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:894: -1-
AU_DEFUN([AC_LIBTOOL_CXX], [LT_LANG(C++)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:894: -1-
AC_DEFUN([AC_LIBTOOL_CXX], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_CXX' is obsolete.
You should run autoupdate.])]dnl
LT_LANG(C++)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:895: -1-
AU_DEFUN([AC_LIBTOOL_F77], [LT_LANG(Fortran 77)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:895: -1-
AC_DEFUN([AC_LIBTOOL_F77], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_F77' is obsolete.
You should run autoupdate.])]dnl
LT_LANG(Fortran 77)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:896: -1-
AU_DEFUN([AC_LIBTOOL_FC], [LT_LANG(Fortran)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:896: -1-
AC_DEFUN([AC_LIBTOOL_FC], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_FC' is obsolete.
You should run autoupdate.])]dnl
LT_LANG(Fortran)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:897: -1-
AU_DEFUN([AC_LIBTOOL_GCJ], [LT_LANG(Java)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:897: -1-
AC_DEFUN([AC_LIBTOOL_GCJ], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_GCJ' is obsolete.
You should run autoupdate.])]dnl

```

```

LT_LANG(Java)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:898: -1-
AU_DEFUN([AC_LIBTOOL_RC], [LT_LANG(Windows Resource)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:898: -1-
AC_DEFUN([AC_LIBTOOL_RC], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_RC' is obsolete.
You should run autoupdate.])dnl
LT_LANG(Windows Resource)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1226: -1-
AC_DEFUN([_LT_WITH_SYSROOT], [AC_MSG_CHECKING([for sysroot])
AC_ARG_WITH([libtool-sysroot],
[ --with-libtool-sysroot[=DIR] Search for dependent libraries within
DIR
(or the compiler's sysroot if not
specified).],
[, [with_libtool_sysroot=no])

dnl lt_sysroot will always be passed unquoted. We quote it here
dnl in case the user passed a directory name.
lt_sysroot=
case ${with_libtool_sysroot} in #(
yes)
if test "$GCC" = yes; then
lt_sysroot=`$CC --print-sysroot 2>/dev/null`
fi
;; #(
/*)
lt_sysroot=`echo "$with_libtool_sysroot" | sed -e
"$sed_quote_subst"`
;; #(
no|'')
;; #(
*)
AC_MSG_RESULT([${with_libtool_sysroot}])
AC_MSG_ERROR([The sysroot must be an absolute path.])
;;
esac

AC_MSG_RESULT([${lt_sysroot:-no}])
_LT_DECL([], [lt_sysroot], [0], [The root where to search for ]dnl
[dependent libraries, and in which our libraries should be
installed.]])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1503: -1-

```

```

AC_DEFUN([_LT_COMPILER_OPTION],
[m4_require([_LT_FILEUTILS_DEFAULTS])dnl
m4_require([_LT_DECL_SED])dnl
AC_CACHE_CHECK([$1], [$2],
[$2=no
m4_if([$4], , [ac_outfile=conftest.$ac_objext], [ac_outfile=$4])
echo "$lt_simple_compile_test_code" > conftest.$ac_ext
lt_compiler_flag="$3"
# Insert the option either (1) after the last *FLAGS variable, or
# (2) before a word containing "conftest.", or (3) at the end.
# Note that $ac_compile itself does not contain backslashes and
begins
# with a dollar sign (not a hyphen), so the echo should work
correctly.
# The option is referenced via a variable to avoid confusing sed.
lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag :; t' \
-e 's: [[^ ]]*conftest\. : $lt_compiler_flag&; t' \
-e 's:$: $lt_compiler_flag:'`
(eval echo "\\"$as_me:$LINENO: $lt_compile\"" >&AS_MESSAGE_LOG_FD)
(eval "$lt_compile" 2>conftest.err)
ac_status=$?
cat conftest.err >&AS_MESSAGE_LOG_FD
echo "$as_me:$LINENO: \">$? = $ac_status" >&AS_MESSAGE_LOG_FD
if (exit $ac_status) && test -s "$ac_outfile"; then
# The compiler can only warn and ignore the option if not
recognized
# So say no if there are warnings other than the usual output.
$ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >conftest.exp
$SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
if test ! -s conftest.er2 || diff conftest.exp conftest.er2
>/dev/null; then
$2=yes
fi
fi
$RM conftest*
])

if test x"$[$]2" = xyes; then
m4_if([$5], , :, [$5])
else
m4_if([$6], , :, [$6])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1545: -1-
AU_DEFUN([AC_LIBTOOL_COMPILER_OPTION], [m4_if($#, 0,
[_LT_COMPILER_OPTION], [_LT_COMPILER_OPTION($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1545: -1-

```



```

AC_DEFUN([AC_LIBTOOL_COMPILER_OPTION], [AC_DIAGNOSE([obsolete], [The
macro `AC_LIBTOOL_COMPILER_OPTION' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [_LT_COMPILER_OPTION], [_LT_COMPILER_OPTION($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1554: -1-
AC_DEFUN([_LT_LINKER_OPTION], [m4_require([_LT_FILEUTILS_DEFAULTS])dnl
m4_require([_LT_DECL_SED])dnl
AC_CACHE_CHECK([$1], [$2],
  [$2=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $3"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest.$ac_exeext;
then
  # The linker can only warn and ignore the option if not
recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&AS_MESSAGE_LOG_FD
    $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      $2=yes
    fi
  else
    $2=yes
  fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"
])

if test x"$[$2]" = xyes; then
  m4_if([$4], , :, [$4])
else
  m4_if([$5], , :, [$5])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1589: -1-
AU_DEFUN([AC_LIBTOOL_LINKER_OPTION], [m4_if($#, 0,
[_LT_LINKER_OPTION], [_LT_LINKER_OPTION($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1589: -1-
AC_DEFUN([AC_LIBTOOL_LINKER_OPTION], [AC_DIAGNOSE([obsolete], [The
macro `AC_LIBTOOL_LINKER_OPTION' is obsolete.
You should run autoupdate.])dnl

```

```

m4_if($#, 0, [_LT_LINKER_OPTION], [_LT_LINKER_OPTION($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1596: -1-
AC_DEFUN([LT_CMD_MAX_LEN], [AC_REQUIRE([AC_CANONICAL_HOST])dnl
# find the maximum length of command line arguments
AC_MSG_CHECKING([the maximum length of command line arguments])
AC_CACHE_VAL([lt_cv_sys_max_cmd_len], [dnl
  i=0
  teststring="ABCD"

  case $build_os in
    msdosdjgpp*)
      # On DJGPP, this test can blow up pretty badly due to problems in
      libc
      # (any single argument exceeding 2000 bytes causes a buffer
      overrun
      # during glob expansion). Even if it were fixed, the result of
      this
      # check would be larger than it should be.
      lt_cv_sys_max_cmd_len=12288;    # 12K is about right
      ;;

    gnu*)
      # Under GNU Hurd, this test is not required because there is
      # no limit to the length of command line arguments.
      # Libtool will interpret -1 as no limit whatsoever
      lt_cv_sys_max_cmd_len=-1;
      ;;

    cygwin* | mingw* | cegcc*)
      # On Win9x/ME, this test blows up -- it succeeds, but takes
      # about 5 minutes as the teststring grows exponentially.
      # Worse, since 9x/ME are not pre-emptively multitasking,
      # you end up with a "frozen" computer, even though with patience
      # the test eventually succeeds (with a max line length of 256k).
      # Instead, let's just punt: use the minimum linelength reported by
      # all of the supported platforms: 8192 (on NT/2K/XP).
      lt_cv_sys_max_cmd_len=8192;
      ;;

    mint*)
      # On MiNT this can take a long time and run out of memory.
      lt_cv_sys_max_cmd_len=8192;
      ;;

    amigaos*)
      # On AmigaOS with pdksh, this test takes hours, literally.
      # So we just punt and use a minimum line length of 8192.
      lt_cv_sys_max_cmd_len=8192;
      ;;

```

```

netbsd* | freebsd* | openbsd* | darwin* | dragonfly*)
# This has been around since 386BSD, at least. Likely further.
if test -x /sbin/sysctl; then
    lt_cv_sys_max_cmd_len=`/sbin/sysctl -n kern.argmax`
elif test -x /usr/sbin/sysctl; then
    lt_cv_sys_max_cmd_len=`/usr/sbin/sysctl -n kern.argmax`
else
    lt_cv_sys_max_cmd_len=65536      # usable default for all BSDs
fi
# And add a safety zone
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
;;

interix*)
# We know the value 262144 and hardcode it with a safety zone
(like BSD)
    lt_cv_sys_max_cmd_len=196608
    ;;

os2*)
# The test takes a long time on OS/2.
    lt_cv_sys_max_cmd_len=8192
    ;;

osf*)
# Dr. Hans Ekkehard Plesser reports seeing a kernel panic running
configure
# due to this test when exec_disable_arg_limit is 1 on Tru64. It
is not
# nice to cause kernel panics so lets avoid the loop below.
# First set a reasonable default.
    lt_cv_sys_max_cmd_len=16384
#
if test -x /sbin/sysconfig; then
    case ` /sbin/sysconfig -q proc exec_disable_arg_limit` in
        *1*) lt_cv_sys_max_cmd_len=-1 ;;
    esac
fi
    ;;

sco3.2v5*)
    lt_cv_sys_max_cmd_len=102400
    ;;

sysv5* | sco5v6* | sysv4.2uw2*)
    kargmax=`grep ARG_MAX /etc/conf/cf.d/stune 2>/dev/null`
if test -n "$kargmax"; then
    lt_cv_sys_max_cmd_len=`echo $kargmax | sed 's/.*[[      ]]'//`
else
    lt_cv_sys_max_cmd_len=32768
fi
    ;;

*)

```

```

lt_cv_sys_max_cmd_len=`(getconf ARG_MAX) 2> /dev/null`
if test -n "$lt_cv_sys_max_cmd_len"; then
  lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
  lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
else
  # Make teststring a little bigger before we do anything with it.
  # a 1K string should be a reasonable start.
  for i in 1 2 3 4 5 6 7 8 ; do
    teststring=$teststring$teststring
  done
  SHELL=${SHELL-${CONFIG_SHELL-/bin/sh}}
  # If test is not a shell built-in, we'll probably end up
computing a
  # maximum length that is only half of the actual maximum length,
but
  # we can't tell.
  while { test "X"`env echo "$teststring$teststring" 2>/dev/null`
\
    = "X$teststring$teststring"; } >/dev/null 2>&1 &&
    test $i != 17 # 1/2 MB should be enough
  do
    i=`expr $i + 1`
    teststring=$teststring$teststring
  done
  # Only check the string length outside the loop.
  lt_cv_sys_max_cmd_len=`expr "X$teststring" : ".*" 2>&1`
  teststring=
  # Add a significant safety factor because C++ compilers can tack
on
  # massive amounts of additional arguments before passing them to
the
  # linker. It appears as though 1/2 is a usable value.
  lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 2`
fi
;;
esac
])
if test -n $lt_cv_sys_max_cmd_len ; then
  AC_MSG_RESULT($lt_cv_sys_max_cmd_len)
else
  AC_MSG_RESULT(none)
fi
max_cmd_len=$lt_cv_sys_max_cmd_len
_LT_DECL([], [max_cmd_len], [0],
  [What is the maximum length of a command?])
])
m4trace:/home/gangadhar/newyoctobuild/tisd/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1734: -1-
AU_DEFUN([AC_LIBTOOL_SYS_MAX_CMD_LEN], [m4_if($#, 0, [LT_CMD_MAX_LEN],
[LT_CMD_MAX_LEN($@)])])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1734: -1-
AC_DEFUN([AC_LIBTOOL_SYS_MAX_CMD_LEN], [AC_DIAGNOSE([obsolete], [The
macro `AC_LIBTOOL_SYS_MAX_CMD_LEN' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_CMD_MAX_LEN], [LT_CMD_MAX_LEN($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1845: -1-
AC_DEFUN([LT_SYS_DLOPEN_SELF], [m4_require([_LT_HEADER_DLFCN])dnl
if test "x$enable_dlopen" != xyes; then
  enable_dlopen=unknown
  enable_dlopen_self=unknown
  enable_dlopen_self_static=unknown
else
  lt_cv_dlopen=no
  lt_cv_dlopen_libs=

  case $host_os in
beos*)
  lt_cv_dlopen="load_add_on"
  lt_cv_dlopen_libs=
  lt_cv_dlopen_self=yes
  ;;

mingw* | pw32* | cegcc*)
  lt_cv_dlopen="LoadLibrary"
  lt_cv_dlopen_libs=
  ;;

cygwin*)
  lt_cv_dlopen="dlopen"
  lt_cv_dlopen_libs=
  ;;

darwin*)
# if libdl is installed we need to link against it
AC_CHECK_LIB([dl], [dlopen],
  [lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"], [
  lt_cv_dlopen="dyld"
  lt_cv_dlopen_libs=
  lt_cv_dlopen_self=yes
  ])
  ;;

*)
AC_CHECK_FUNC([shl_load],
  [lt_cv_dlopen="shl_load"],
  [AC_CHECK_LIB([dld], [shl_load],
    [lt_cv_dlopen="shl_load" lt_cv_dlopen_libs="-ldld"],
    [AC_CHECK_FUNC([dlopen],

```

```

        [lt_cv_dlopen="dlopen"],
    [AC_CHECK_LIB([dl], [dlopen],
        [lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"],
        [AC_CHECK_LIB([svld], [dlopen],
            [lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-lsvld"],
            [AC_CHECK_LIB([dld], [dld_link],
                [lt_cv_dlopen="dld_link" lt_cv_dlopen_libs="-ldld"])
            ])
        ])
    ])
])
])
)
)
;;
esac

if test "x$lt_cv_dlopen" != xno; then
    enable_dlopen=yes
else
    enable_dlopen=no
fi

case $lt_cv_dlopen in
dlopen)
    save_CPPFLAGS="$CPPFLAGS"
    test "x$ac_cv_header_dlfcn_h" = xyes && CPPFLAGS="$CPPFLAGS -
DHAVE_DLFCN_H"

    save_LDFLAGS="$LDFLAGS"
    wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$export_dynamic_flag_spec\`"

    save_LIBS="$LIBS"
    LIBS="$lt_cv_dlopen_libs $LIBS"

    AC_CACHE_CHECK([whether a program can dlopen itself],
        lt_cv_dlopen_self, [dnl
        _LT_TRY_DLOPEN_SELF(
            lt_cv_dlopen_self=yes, lt_cv_dlopen_self=yes,
            lt_cv_dlopen_self=no, lt_cv_dlopen_self=cross)
        ])

    if test "x$lt_cv_dlopen_self" = xyes; then
        wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$lt_prog_compiler_static\`"
        AC_CACHE_CHECK([whether a statically linked program can dlopen
itself],
            lt_cv_dlopen_self_static, [dnl
            _LT_TRY_DLOPEN_SELF(
                lt_cv_dlopen_self_static=yes, lt_cv_dlopen_self_static=yes,
                lt_cv_dlopen_self_static=no, lt_cv_dlopen_self_static=cross)
            ])
    fi

```

```

    CPPFLAGS="$save_CPPFLAGS"
    LDFLAGS="$save_LDFLAGS"
    LIBS="$save_LIBS"
    ;;
esac

case $lt_cv_dlopen_self in
yes|no) enable_dlopen_self=$lt_cv_dlopen_self ;;
*) enable_dlopen_self=unknown ;;
esac

case $lt_cv_dlopen_self_static in
yes|no) enable_dlopen_self_static=$lt_cv_dlopen_self_static ;;
*) enable_dlopen_self_static=unknown ;;
esac
fi
_LT_DECL([dlopen_support], [enable_dlopen], [0],
  [Whether dlopen is supported])
_LT_DECL([dlopen_self], [enable_dlopen_self], [0],
  [Whether dlopen of programs is supported])
_LT_DECL([dlopen_self_static], [enable_dlopen_self_static], [0],
  [Whether dlopen of statically linked programs is supported])
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1962: -1-
AU_DEFUN([AC_LIBTOOL_DLOPEN_SELF], [m4_if($#, 0, [LT_SYS_DLOPEN_SELF],
[LT_SYS_DLOPEN_SELF($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:1962: -1-
AC_DEFUN([AC_LIBTOOL_DLOPEN_SELF], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_DLOPEN_SELF' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_DLOPEN_SELF], [LT_SYS_DLOPEN_SELF($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:2931: -1-
AC_DEFUN([_LT_PATH_TOOL_PREFIX], [m4_require([_LT_DECL_EGREP])dnl
AC_MSG_CHECKING([for $1])
AC_CACHE_VAL([lt_cv_path_MAGIC_CMD],
[case $MAGIC_CMD in
[[\\/*] | ?:[\\/*]*)
  lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
  ;;
*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  dnl $ac_dummy forces splitting on constant user-supplied paths.

```

```

dnl POSIX.2 word splitting is done only on the output of word
expansions,
dnl not every word.  This closes a longstanding sh security hole.
ac_dummy="m4_if([$2], , $PATH, [$2])"
for ac_dir in $ac_dummy; do
  IFS="$lt_save_ifs"
  test -z "$ac_dir" && ac_dir=.
  if test -f $ac_dir/$1; then
    lt_cv_path_MAGIC_CMD="$ac_dir/$1"
    if test -n "$file_magic_test_file"; then
      case $deplibs_check_method in
        "file_magic *"
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such.  This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem.  Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

_LT_EOF
          fi ;;
        esac
      esac
    fi
    break
  fi
done
IFS="$lt_save_ifs"
MAGIC_CMD="$lt_save_MAGIC_CMD"
;;
esac])
MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  AC_MSG_RESULT($MAGIC_CMD)
else
  AC_MSG_RESULT(no)
fi
_LT_DECL([], [MAGIC_CMD], [0],
  [Used to examine libraries when file_magic_cmd begins with
"file"])dnl
])

```



```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:2993: -1-
AU_DEFUN([AC_PATH_TOOL_PREFIX], [m4_if($#, 0, [_LT_PATH_TOOL_PREFIX],
[_LT_PATH_TOOL_PREFIX($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:2993: -1-
AC_DEFUN([AC_PATH_TOOL_PREFIX], [AC_DIAGNOSE([obsolete], [The macro
`AC_PATH_TOOL_PREFIX' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [_LT_PATH_TOOL_PREFIX], [_LT_PATH_TOOL_PREFIX($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3016: -1-
AC_DEFUN([LT_PATH_LD], [AC_REQUIRE([AC_PROG_CC])dnl
AC_REQUIRE([AC_CANONICAL_HOST])dnl
AC_REQUIRE([AC_CANONICAL_BUILD])dnl
m4_require([_LT_DECL_SED])dnl
m4_require([_LT_DECL_EGREP])dnl
m4_require([_LT_PROG_ECHO_BACKSLASH])dnl

AC_ARG_WITH([gnu-ld],
  [AS_HELP_STRING([--with-gnu-ld],
    [assume the C compiler uses GNU ld @<:@default=no@:>@]),
  [test "$withval" = no || with_gnu_ld=yes],
  [with_gnu_ld=no])dnl

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  AC_MSG_CHECKING([for ld used by $CC])
  case $host in
  *-*-mingw*)
    # gcc leaves a trailing carriage return which upsets mingw
    ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
  *)
    ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
  esac
  case $ac_prog in
  # Accept absolute paths.
  [[\\\/]]* | ?:[[\\\/]]*)
    re_direlt='/[^[^/]]*/\.\./'
    # Canonicalize the pathname of ld
    ac_prog=`$ECHO "$ac_prog" | $SED 's%\\\\\%/g'`
    while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
      ac_prog=`$ECHO $ac_prog | $SED "s%$re_direlt%/"`
    done
    test -z "$LD" && LD="$ac_prog"
  ;;
  "")
    # If it fails, then pretend we aren't using GCC.

```

```

    ac_prog=ld
    ;;
*)
    # If it is relative, then search for the first ld in PATH.
    with_gnu_ld=unknown
    ;;
esac
elif test "$with_gnu_ld" = yes; then
    AC_MSG_CHECKING([for GNU ld])
else
    AC_MSG_CHECKING([for non-GNU ld])
fi
AC_CACHE_VAL([lt_cv_path_LD],
[if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
        IFS="$lt_save_ifs"
        test -z "$ac_dir" && ac_dir=.
        if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
            lt_cv_path_LD="$ac_dir/$ac_prog"
            # Check to see if the program is GNU ld.  I'd rather use --
version,
            # but apparently some variants of GNU ld only accept -v.
            # Break only if it was the GNU/non-GNU ld that we prefer.
            case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
                *GNU* | *'with BFD'*)
                    test "$with_gnu_ld" != no && break
                    ;;
                *)
                    test "$with_gnu_ld" != yes && break
                    ;;
            esac
        fi
    done
    IFS="$lt_save_ifs"
else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
fi])
LD="$lt_cv_path_LD"
if test -n "$LD"; then
    AC_MSG_RESULT($LD)
else
    AC_MSG_RESULT(no)
fi
test -z "$LD" && AC_MSG_ERROR([no acceptable ld found in \${PATH}])
_LT_PATH_LD_GNU
AC_SUBST([LD])

_LT_TAGDECL([], [LD], [1], [The linker used to build libraries])
])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3105: -1-
AU_DEFUN([AM_PROG_LD], [m4_if($#, 0, [LT_PATH_LD], [LT_PATH_LD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3105: -1-
AC_DEFUN([AM_PROG_LD], [AC_DIAGNOSE([obsolete], [The macro
`AM_PROG_LD' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PATH_LD], [LT_PATH_LD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3106: -1-
AU_DEFUN([AC_PROG_LD], [m4_if($#, 0, [LT_PATH_LD], [LT_PATH_LD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3106: -1-
AC_DEFUN([AC_PROG_LD], [AC_DIAGNOSE([obsolete], [The macro
`AC_PROG_LD' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PATH_LD], [LT_PATH_LD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3400: -1-
AC_DEFUN([LT_PATH_NM], [AC_REQUIRE([AC_PROG_CC])dnl
AC_CACHE_CHECK([for BSD- or MS-compatible name lister (nm)],
lt_cv_path_NM,
[if test -n "$NM"; then
  # Let the user override the test.
  lt_cv_path_NM="$NM"
else
  lt_nm_to_check="{ac_tool_prefix}nm"
  if test -n "$ac_tool_prefix" && test "$build" = "$host"; then
    lt_nm_to_check="$lt_nm_to_check nm"
  fi
  for lt_tmp_nm in $lt_nm_to_check; do
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH /usr/ccs/bin/elf /usr/ccs/bin /usr/ucb /bin;
do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      tmp_nm="$ac_dir/$lt_tmp_nm"
      if test -f "$tmp_nm" || test -f "$tmp_nm$ac_exeext" ; then
        # Check to see if the nm accepts a BSD-compat flag.
        # Adding the `sed 1q' prevents false positives on HP-UX, which
says:
        # nm: unknown option "B" ignored
        # Tru64's nm complains that /dev/null is an invalid object file
case "$tmp_nm" -B /dev/null 2>&1 | sed '1q'` in
*/dev/null* | *'Invalid file or object type'*)
          lt_cv_path_NM="$tmp_nm -B"

```

```

        break
        ;;
    *)
        case `"$tmp_nm" -p /dev/null 2>&1 | sed '1q'` in
        */dev/null*)
            lt_cv_path_NM="$tmp_nm -p"
            break
            ;;
        *)
            lt_cv_path_NM=${lt_cv_path_NM="$tmp_nm"} # keep the first
match, but
            continue # so that we can try to find one that supports BSD
flags
            ;;
        esac
        ;;
    esac
    fi
done
IFS="$lt_save_ifs"
done
: ${lt_cv_path_NM=no}
fi])
if test "$lt_cv_path_NM" != "no"; then
    NM="$lt_cv_path_NM"
else
    # Didn't find any BSD compatible name lister, look for dumpbin.
    if test -n "$DUMPBIN"; then :
        # Let the user override the test.
    else
        AC_CHECK_TOOLS(DUMPBIN, [dumpbin "link -dump"], :)
        case `"$DUMPBIN" -symbols /dev/null 2>&1 | sed '1q'` in
        *COFF*)
            DUMPBIN="$DUMPBIN -symbols"
            ;;
        *)
            DUMPBIN=:
            ;;
        esac
    fi
    AC_SUBST([DUMPBIN])
    if test "$DUMPBIN" != ":"; then
        NM="$DUMPBIN"
    fi
fi
test -z "$NM" && NM=nm
AC_SUBST([NM])
_LT_DECL([], [NM], [1], [A BSD- or MS-compatible name lister])dnl

AC_CACHE_CHECK([the name lister ($NM) interface],
[lt_cv_nm_interface],
[lt_cv_nm_interface="BSD nm"

```

```

echo "int some_variable = 0;" > confptest.$sac_ext
(eval echo "\"\`$as_me:$LINENO: $sac_compile\`\"" >&AS_MESSAGE_LOG_FD)
(eval "$sac_compile" 2>confptest.err)
cat confptest.err >&AS_MESSAGE_LOG_FD
(eval echo "\"\`$as_me:$LINENO: $NM \\\`"confptest.$sac_objext\\\`\""
>&AS_MESSAGE_LOG_FD)
(eval "$NM \`"confptest.$sac_objext\`" 2>confptest.err > confptest.out)
cat confptest.err >&AS_MESSAGE_LOG_FD
(eval echo "\"\`$as_me:$LINENO: output\`\"" >&AS_MESSAGE_LOG_FD)
cat confptest.out >&AS_MESSAGE_LOG_FD
if $GREP 'External.*some_variable' confptest.out > /dev/null; then
  lt_cv_nm_interface="MS dumpbin"
fi
rm -f confptest*)
])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3490: -1-
AU_DEFUN([AM_PROG_NM], [m4_if($#, 0, [LT_PATH_NM], [LT_PATH_NM($@)])])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3490: -1-
AC_DEFUN([AM_PROG_NM], [AC_DIAGNOSE([obsolete], [The macro
`AM_PROG_NM' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PATH_NM], [LT_PATH_NM($@)])])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3491: -1-
AU_DEFUN([AC_PROG_NM], [m4_if($#, 0, [LT_PATH_NM], [LT_PATH_NM($@)])])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3491: -1-
AC_DEFUN([AC_PROG_NM], [AC_DIAGNOSE([obsolete], [The macro
`AC_PROG_NM' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PATH_NM], [LT_PATH_NM($@)])])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3561: -1-
AC_DEFUN([LT_LIB_M], [AC_REQUIRE([AC_CANONICAL_HOST])dnl
LIBM=
case $host in
*-*-beos* | *-*-cegcc* | *-*-cygwin* | *-*-haiku* | *-*-pw32* | *-*-
darwin*)
  # These system don't have libm, or don't need it
  ;;
*-*-ncr-sysv4.3*)
  AC_CHECK_LIB(mw, _mwvalidcheck1, LIBM="-lmw")
  AC_CHECK_LIB(m, cos, LIBM="$LIBM -lm")
  ;;
*)

```

```

AC_CHECK_LIB(m, cos, LIBM="-lm")
;;
esac
AC_SUBST([LIBM])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3580: -1-
AU_DEFUN([AC_CHECK_LIBM], [m4_if($#, 0, [LT_LIB_M], [LT_LIB_M($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:3580: -1-
AC_DEFUN([AC_CHECK_LIBM], [AC_DIAGNOSE([obsolete], [The macro
`AC_CHECK_LIBM' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_LIB_M], [LT_LIB_M($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7623: -1-
AC_DEFUN([LT_PROG_GCJ], [m4_ifdef([AC_PROG_GCJ], [AC_PROG_GCJ],
[m4_ifdef([A][M_PROG_GCJ], [A][M_PROG_GCJ],
[AC_CHECK_TOOL(GCJ, gcj,
test "x${GCJFLAGS+set}" = xset || GCJFLAGS="-g -O2"
AC_SUBST(GCJFLAGS)])])])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7632: -1-
AU_DEFUN([LT_AC_PROG_GCJ], [m4_if($#, 0, [LT_PROG_GCJ],
[LT_PROG_GCJ($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7632: -1-
AC_DEFUN([LT_AC_PROG_GCJ], [AC_DIAGNOSE([obsolete], [The macro
`LT_AC_PROG_GCJ' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PROG_GCJ], [LT_PROG_GCJ($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7639: -1-
AC_DEFUN([LT_PROG_GO], [AC_CHECK_TOOL(GOC, gccgo,
)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7646: -1-
AC_DEFUN([LT_PROG_RC], [AC_CHECK_TOOL(RC, windres,
)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7651: -1-
AU_DEFUN([LT_AC_PROG_RC], [m4_if($#, 0, [LT_PROG_RC],
[LT_PROG_RC($@)])])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7651: -1-
AC_DEFUN([LT_AC_PROG_RC], [AC_DIAGNOSE([obsolete], [The macro
`LT_AC_PROG_RC' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PROG_RC], [LT_PROG_RC($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7771: -1-
AU_DEFUN([LT_AC_PROG_SED], [m4_if($#, 0, [AC_PROG_SED],
[AC_PROG_SED($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:7771: -1-
AC_DEFUN([LT_AC_PROG_SED], [AC_DIAGNOSE([obsolete], [The macro
`LT_AC_PROG_SED' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [AC_PROG_SED], [AC_PROG_SED($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:14: -1-
AC_DEFUN([LTOPTIONS_VERSION], [m4_if([1])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:111: -1-
AU_DEFUN([AC_LIBTOOL_DLOPEN], [_LT_SET_OPTION([LT_INIT], [dlopen])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `dlopen' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:111: -1-
AC_DEFUN([AC_LIBTOOL_DLOPEN], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_DLOPEN' is obsolete.
You should run autoupdate.])dnl
_LT_SET_OPTION([LT_INIT], [dlopen])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `dlopen' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:146: -1-
AU_DEFUN([AC_LIBTOOL_WIN32_DLL], [AC_REQUIRE([AC_CANONICAL_HOST])dnl
_LT_SET_OPTION([LT_INIT], [win32-dll])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `win32-dll' option into LT_INIT's first parameter.])
])

```

```
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:146: -1-
AC_DEFUN([AC_LIBTOOL_WIN32_DLL], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_WIN32_DLL' is obsolete.
You should run autoupdate.])dnl
AC_REQUIRE([AC_CANONICAL_HOST])dnl
_LT_SET_OPTION([LT_INIT], [win32-dll])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `win32-dll' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:195: -1-
AC_DEFUN([AC_ENABLE_SHARED], [_LT_SET_OPTION([LT_INIT], m4_if([$1],
[no], [disable-])[shared])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:199: -1-
AC_DEFUN([AC_DISABLE_SHARED], [_LT_SET_OPTION([LT_INIT], [disable-
shared])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:203: -1-
AU_DEFUN([AM_ENABLE_SHARED], [AC_ENABLE_SHARED($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:203: -1-
AC_DEFUN([AM_ENABLE_SHARED], [AC_DIAGNOSE([obsolete], [The macro
`AM_ENABLE_SHARED' is obsolete.
You should run autoupdate.])dnl
AC_ENABLE_SHARED($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:204: -1-
AU_DEFUN([AM_DISABLE_SHARED], [AC_DISABLE_SHARED($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:204: -1-
AC_DEFUN([AM_DISABLE_SHARED], [AC_DIAGNOSE([obsolete], [The macro
`AM_DISABLE_SHARED' is obsolete.
You should run autoupdate.])dnl
AC_DISABLE_SHARED($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:249: -1-
AC_DEFUN([AC_ENABLE_STATIC], [_LT_SET_OPTION([LT_INIT], m4_if([$1],
[no], [disable-])[static])
])
```



```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:253: -1-
AC_DEFUN([AC_DISABLE_STATIC], [_LT_SET_OPTION([LT_INIT], [disable-
static])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:257: -1-
AU_DEFUN([AM_ENABLE_STATIC], [AC_ENABLE_STATIC($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:257: -1-
AC_DEFUN([AM_ENABLE_STATIC], [AC_DIAGNOSE([obsolete], [The macro
`AM_ENABLE_STATIC' is obsolete.
You should run autoupdate.])dnl
AC_ENABLE_STATIC($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:258: -1-
AU_DEFUN([AM_DISABLE_STATIC], [AC_DISABLE_STATIC($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:258: -1-
AC_DEFUN([AM_DISABLE_STATIC], [AC_DIAGNOSE([obsolete], [The macro
`AM_DISABLE_STATIC' is obsolete.
You should run autoupdate.])dnl
AC_DISABLE_STATIC($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:303: -1-
AU_DEFUN([AC_ENABLE_FAST_INSTALL], [_LT_SET_OPTION([LT_INIT],
m4_if([$1], [no], [disable-])[fast-install])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you put
the `fast-install' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:303: -1-
AC_DEFUN([AC_ENABLE_FAST_INSTALL], [AC_DIAGNOSE([obsolete], [The macro
`AC_ENABLE_FAST_INSTALL' is obsolete.
You should run autoupdate.])dnl
_LT_SET_OPTION([LT_INIT], m4_if([$1], [no], [disable-])[fast-install])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you put
the `fast-install' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:310: -1-

```

```

AU_DEFUN([AC_DISABLE_FAST_INSTALL], [_LT_SET_OPTION([LT_INIT],
[disable-fast-install])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you put
the `disable-fast-install' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:310: -1-
AC_DEFUN([AC_DISABLE_FAST_INSTALL], [AC_DIAGNOSE([obsolete], [The
macro `AC_DISABLE_FAST_INSTALL' is obsolete.
You should run autoupdate.])dnl
_LT_SET_OPTION([LT_INIT], [disable-fast-install])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you put
the `disable-fast-install' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:358: -1-
AU_DEFUN([AC_LIBTOOL_PICMODE], [_LT_SET_OPTION([LT_INIT], [pic-only])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `pic-only' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltoptions.m4:358: -1-
AC_DEFUN([AC_LIBTOOL_PICMODE], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_PICMODE' is obsolete.
You should run autoupdate.])dnl
_LT_SET_OPTION([LT_INIT], [pic-only])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `pic-only' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltsugar.m4:13: -1-
AC_DEFUN([LTSUGAR_VERSION], [m4_if([0.1])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/ltversion.m4:18: -1-
AC_DEFUN([LTVERSION_VERSION], [macro_version='2.4.2'
macro_revision='1.3337'
_LT_DECL(, macro_version, 0, [Which release of libtool.m4 was used?])
_LT_DECL(, macro_revision, 0)
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:36: -1-
AC_DEFUN([LTOBSOLETE_VERSION], [m4_if([1])])

```

```
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:40: -1-
AC_DEFUN([_LT_AC_PROG_ECHO_BACKSLASH])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:41: -1-
AC_DEFUN([_LT_AC_SHELL_INIT])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:42: -1-
AC_DEFUN([_LT_AC_SYS_LIBPATH_AIX])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:44: -1-
AC_DEFUN([_LT_AC_TAGVAR])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:45: -1-
AC_DEFUN([AC_LTDL_ENABLE_INSTALL])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:46: -1-
AC_DEFUN([AC_LTDL_PREOPEN])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:47: -1-
AC_DEFUN([_LT_AC_SYS_COMPILER])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:48: -1-
AC_DEFUN([_LT_AC_LOCK])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:49: -1-
AC_DEFUN([AC_LIBTOOL_SYS_OLD_ARCHIVE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:50: -1-
AC_DEFUN([_LT_AC_TRY_DLOPEN_SELF])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:51: -1-
AC_DEFUN([AC_LIBTOOL_PROG_CC_C_O])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:52: -1-
AC_DEFUN([AC_LIBTOOL_SYS_HARD_LINK_LOCKS])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:53: -1-
AC_DEFUN([AC_LIBTOOL_OBJDIR])
```

```
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:54: -1-
AC_DEFUN([AC_LTDL_OBJDIR])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:55: -1-
AC_DEFUN([AC_LIBTOOL_PROG_LD_HARDCODE_LIBPATH])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:56: -1-
AC_DEFUN([AC_LIBTOOL_SYS_LIB_STRIP])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:57: -1-
AC_DEFUN([AC_PATH_MAGIC])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:58: -1-
AC_DEFUN([AC_PROG_LD_GNU])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:59: -1-
AC_DEFUN([AC_PROG_LD_RELOAD_FLAG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:60: -1-
AC_DEFUN([AC_DEPLIBS_CHECK_METHOD])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:61: -1-
AC_DEFUN([AC_LIBTOOL_PROG_COMPILER_NO_RTTI])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:62: -1-
AC_DEFUN([AC_LIBTOOL_SYS_GLOBAL_SYMBOL_PIPE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:63: -1-
AC_DEFUN([AC_LIBTOOL_PROG_COMPILER_PIC])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:64: -1-
AC_DEFUN([AC_LIBTOOL_PROG_LD_SHLIBS])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:65: -1-
AC_DEFUN([AC_LIBTOOL_POSTDEP_PREDEP])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:66: -1-
AC_DEFUN([LT_AC_PROG_EGREP])
```

```
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:71: -1-
AC_DEFUN([_AC_PROG_LIBTOOL])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:72: -1-
AC_DEFUN([AC_LIBTOOL_SETUP])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:73: -1-
AC_DEFUN([_LT_AC_CHECK_DLFCN])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:74: -1-
AC_DEFUN([AC_LIBTOOL_SYS_DYNAMIC_LINKER])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:75: -1-
AC_DEFUN([_LT_AC_TAGCONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:77: -1-
AC_DEFUN([_LT_AC_LANG_CXX])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:78: -1-
AC_DEFUN([_LT_AC_LANG_F77])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:79: -1-
AC_DEFUN([_LT_AC_LANG_GCJ])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:80: -1-
AC_DEFUN([AC_LIBTOOL_LANG_C_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:81: -1-
AC_DEFUN([_LT_AC_LANG_C_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:82: -1-
AC_DEFUN([AC_LIBTOOL_LANG_CXX_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:83: -1-
AC_DEFUN([_LT_AC_LANG_CXX_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:84: -1-
AC_DEFUN([AC_LIBTOOL_LANG_F77_CONFIG])
```

```
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:85: -1-
AC_DEFUN([_LT_AC_LANG_F77_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:86: -1-
AC_DEFUN([AC_LIBTOOL_LANG_GCJ_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:87: -1-
AC_DEFUN([_LT_AC_LANG_GCJ_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:88: -1-
AC_DEFUN([AC_LIBTOOL_LANG_RC_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:89: -1-
AC_DEFUN([_LT_AC_LANG_RC_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:90: -1-
AC_DEFUN([AC_LIBTOOL_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:91: -1-
AC_DEFUN([_LT_AC_FILE_LTDLL_C])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:93: -1-
AC_DEFUN([_LT_AC_PROG_CXXCPP])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:96: -1-
AC_DEFUN([_LT_PROG_F77])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:97: -1-
AC_DEFUN([_LT_PROG_FC])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/lt~obsolete.m4:98: -1-
AC_DEFUN([_LT_PROG_CXX])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^?A[CHUM]_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([_AC_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^LIBOBJ$], [do not use
LIBOBJ directly, use AC_LIBOBJ (see section `AC_LIBOBJ vs LIBOBJ')]
m4trace:configure.ac:4: -1- m4_pattern_allow([^AS_FLAGS$])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^?m4_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^?dn1$])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^?AS_])
```

```
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^SHELL$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PATH_SEPARATOR$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_NAME$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_TARNAME$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_VERSION$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_STRING$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_BUGREPORT$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_URL$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^exec_prefix$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^prefix$])
m4trace:configure.ac:4: -1-
m4_pattern_allow([ ^program_transform_name$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^bindir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^sbindir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^libexecdir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^datarootdir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^datadir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^sysconfdir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^sharedstatedir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^localstatedir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^includedir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^oldincludedir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^docdir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^infodir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^htmldir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^dvidir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^pdfdir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^psdir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^libdir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^localedir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^mandir$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_NAME$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_TARNAME$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_VERSION$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_STRING$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_BUGREPORT$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^PACKAGE_URL$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^DEFS$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^ECHO_C$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^ECHO_N$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^ECHO_T$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^LIBS$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^build_alias$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^host_alias$])
m4trace:configure.ac:4: -1- m4_pattern_allow([ ^target_alias$])
m4trace:configure.ac:7: -1- m4_pattern_allow([ ^build$])
m4trace:configure.ac:7: -1- m4_pattern_allow([ ^build_cpu$])
m4trace:configure.ac:7: -1- m4_pattern_allow([ ^build_vendor$])
m4trace:configure.ac:7: -1- m4_pattern_allow([ ^build_os$])
m4trace:configure.ac:7: -1- m4_pattern_allow([ ^host$])
m4trace:configure.ac:7: -1- m4_pattern_allow([ ^host_cpu$])
m4trace:configure.ac:7: -1- m4_pattern_allow([ ^host_vendor$])
```

```

m4trace:configure.ac:7: -1- m4_pattern_allow([^host_os$])
m4trace:configure.ac:9: -1- AM_INIT_AUTOMAKE([1.9])
m4trace:configure.ac:9: -1- m4_pattern_allow([^AM_[A-Z]+FLAGS$])
m4trace:configure.ac:9: -1- AM_SET_CURRENT_AUTOMAKE_VERSION
m4trace:configure.ac:9: -1- AM_AUTOMAKE_VERSION([1.12.6])
m4trace:configure.ac:9: -1- _AM_AUTOCONF_VERSION([2.69])
m4trace:configure.ac:9: -1- m4_pattern_allow([^INSTALL_PROGRAM$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^INSTALL_SCRIPT$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^INSTALL_DATA$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^am__isrc$])
m4trace:configure.ac:9: -1- _AM_SUBST_NOTMAKE([am__isrc])
m4trace:configure.ac:9: -1- m4_pattern_allow([^CYGPATH_W$])
m4trace:configure.ac:9: -1- _AM_SET_OPTIONS([1.9])
m4trace:configure.ac:9: -1- _AM_SET_OPTION([1.9])
m4trace:configure.ac:9: -2- _AM_MANGLE_OPTION([1.9])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^VERSION$])
m4trace:configure.ac:9: -1- _AM_IF_OPTION([no-define], [],
[AC_DEFINE_UNQUOTED([PACKAGE], ["$PACKAGE"], [Name of package])
AC_DEFINE_UNQUOTED([VERSION], ["$VERSION"], [Version number of
package])])
m4trace:configure.ac:9: -2- _AM_MANGLE_OPTION([no-define])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^VERSION$])
m4trace:configure.ac:9: -1- AM_SANITY_CHECK
m4trace:configure.ac:9: -1- AM_MISSING_PROG([ACLOCAL], [aclocal-
${am__api_version}])
m4trace:configure.ac:9: -1- AM_MISSING_HAS_RUN
m4trace:configure.ac:9: -1- AM_AUX_DIR_EXPAND
m4trace:configure.ac:9: -1- m4_pattern_allow([^ACLOCAL$])
m4trace:configure.ac:9: -1- AM_MISSING_PROG([AUTOCONF], [autoconf])
m4trace:configure.ac:9: -1- m4_pattern_allow([^AUTOCONF$])
m4trace:configure.ac:9: -1- AM_MISSING_PROG([AUTOMAKE], [automake-
${am__api_version}])
m4trace:configure.ac:9: -1- m4_pattern_allow([^AUTOMAKE$])
m4trace:configure.ac:9: -1- AM_MISSING_PROG([AUTOHEADER],
[autoheader])
m4trace:configure.ac:9: -1- m4_pattern_allow([^AUTOHEADER$])
m4trace:configure.ac:9: -1- AM_MISSING_PROG([MAKEINFO], [makeinfo])
m4trace:configure.ac:9: -1- m4_pattern_allow([^MAKEINFO$])
m4trace:configure.ac:9: -1- AM_PROG_INSTALL_SH
m4trace:configure.ac:9: -1- m4_pattern_allow([^install_sh$])
m4trace:configure.ac:9: -1- AM_PROG_INSTALL_STRIP
m4trace:configure.ac:9: -1- m4_pattern_allow([^STRIP$])
m4trace:configure.ac:9: -1-
m4_pattern_allow([^INSTALL_STRIP_PROGRAM$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^MKDIR_P$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^mkdir_p$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^AWK$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^SET_MAKE$])
m4trace:configure.ac:9: -1- AM_SET_LEADING_DOT
m4trace:configure.ac:9: -1- m4_pattern_allow([^am__leading_dot$])

```



```

m4trace:configure.ac:9: -1- _AM_IF_OPTION([tar-ustar],
[_AM_PROG_TAR([ustar])], [_AM_IF_OPTION([tar-pax],
[_AM_PROG_TAR([pax])],
[_AM_PROG_TAR([v7])])])
m4trace:configure.ac:9: -2- _AM_MANGLE_OPTION([tar-ustar])
m4trace:configure.ac:9: -1- _AM_IF_OPTION([tar-pax],
[_AM_PROG_TAR([pax])], [_AM_PROG_TAR([v7])])
m4trace:configure.ac:9: -2- _AM_MANGLE_OPTION([tar-pax])
m4trace:configure.ac:9: -1- _AM_PROG_TAR([v7])
m4trace:configure.ac:9: -1- m4_pattern_allow([^AMTAR$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^am__tar$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^am__untar$])
m4trace:configure.ac:9: -1- _AM_IF_OPTION([no-dependencies], [],
[AC_PROVIDE_IFELSE([AC_PROG_CC],
[_AM_DEPENDENCIES([CC])],
[m4_define([AC_PROG_CC],

m4_defn([AC_PROG_CC])[_AM_DEPENDENCIES([CC])])])])dn1
AC_PROVIDE_IFELSE([AC_PROG_CXX],
[_AM_DEPENDENCIES([CXX])],
[m4_define([AC_PROG_CXX],

m4_defn([AC_PROG_CXX])[_AM_DEPENDENCIES([CXX])])])dn1
AC_PROVIDE_IFELSE([AC_PROG_OBJC],
[_AM_DEPENDENCIES([OBJC])],
[m4_define([AC_PROG_OBJC],

m4_defn([AC_PROG_OBJC])[_AM_DEPENDENCIES([OBJC])])])dn1
dn1 Support for Objective C++ was only introduced in Autoconf 2.65,
dn1 but we still cater to Autoconf 2.62.
m4_ifdef([AC_PROG_OBJCXX],
[AC_PROVIDE_IFELSE([AC_PROG_OBJCXX],
[_AM_DEPENDENCIES([OBJCXX])],
[m4_define([AC_PROG_OBJCXX],

m4_defn([AC_PROG_OBJCXX])[_AM_DEPENDENCIES([OBJCXX])])])])dn1
])
m4trace:configure.ac:9: -2- _AM_MANGLE_OPTION([no-dependencies])
m4trace:configure.ac:9: -1- _AM_IF_OPTION([silent-rules],
[AC_REQUIRE([AM_SILENT_RULES])])
m4trace:configure.ac:9: -2- _AM_MANGLE_OPTION([silent-rules])
m4trace:configure.ac:18: -1- AM_MAINTAINER_MODE
m4trace:configure.ac:18: -1- AM_CONDITIONAL([MAINTAINER_MODE], [test
$USE_MAINTAINER_MODE = yes])
m4trace:configure.ac:18: -1-
m4_pattern_allow([^MAINTAINER_MODE_TRUE$])
m4trace:configure.ac:18: -1-
m4_pattern_allow([^MAINTAINER_MODE_FALSE$])
m4trace:configure.ac:18: -1- _AM_SUBST_NOTMAKE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:18: -1-
_AM_SUBST_NOTMAKE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:18: -1- m4_pattern_allow([^MAINT$])

```

```

m4trace:configure.ac:20: -1- AM_SILENT_RULES([yes])
m4trace:configure.ac:20: -1- m4_pattern_allow([^AM_V$])
m4trace:configure.ac:20: -1- AM_SUBST_NOTMAKE([AM_V])
m4trace:configure.ac:20: -1- AM_SUBST_NOTMAKE([AM_V])
m4trace:configure.ac:20: -1- m4_pattern_allow([^AM_DEFAULT_V$])
m4trace:configure.ac:20: -1- AM_SUBST_NOTMAKE([AM_DEFAULT_V])
m4trace:configure.ac:20: -1- AM_SUBST_NOTMAKE([AM_DEFAULT_V])
m4trace:configure.ac:20: -1-
m4trace:configure.ac:20: -1- m4_pattern_allow([^AM_DEFAULT_VERBOSITY$])
m4trace:configure.ac:20: -1- m4_pattern_allow([^AM_BACKSLASH$])
m4trace:configure.ac:20: -1- AM_SUBST_NOTMAKE([AM_BACKSLASH])
m4trace:configure.ac:39: -1- m4_pattern_allow([^LT_CURRENT$])
m4trace:configure.ac:40: -1- m4_pattern_allow([^LT_REVISION$])
m4trace:configure.ac:41: -1- m4_pattern_allow([^LT_AGE$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CFLAGS$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^LDFLAGS$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^ac_ct_CC$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^EXEEXT$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^OBJEXT$])
m4trace:configure.ac:44: -1- AM_DEPENDENCIES([CC])
m4trace:configure.ac:44: -1- AM_SET_DEPDIR
m4trace:configure.ac:44: -1- m4_pattern_allow([^DEPDIR$])
m4trace:configure.ac:44: -1- AM_OUTPUT_DEPENDENCY_COMMANDS
m4trace:configure.ac:44: -1- AM_MAKE_INCLUDE
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__include$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__quote$])
m4trace:configure.ac:44: -1- AM_DEP_TRACK
m4trace:configure.ac:44: -1- AM_CONDITIONAL([AMDEP], [test
"x$enable_dependency_tracking" != xno])
m4trace:configure.ac:44: -1- m4_pattern_allow([^AMDEP_TRUE$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^AMDEP_FALSE$])
m4trace:configure.ac:44: -1- AM_SUBST_NOTMAKE([AMDEP_TRUE])
m4trace:configure.ac:44: -1- AM_SUBST_NOTMAKE([AMDEP_FALSE])
m4trace:configure.ac:44: -1- m4_pattern_allow([^AMDEPBACKSLASH$])
m4trace:configure.ac:44: -1- AM_SUBST_NOTMAKE([AMDEPBACKSLASH])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__nodep$])
m4trace:configure.ac:44: -1- AM_SUBST_NOTMAKE([am__nodep])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CCDEPMODE$])
m4trace:configure.ac:44: -1- AM_CONDITIONAL([am__fastdepCC], [
test "x$enable_dependency_tracking" != xno \
&& test "$am_cv_CC_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__fastdepCC_TRUE$])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__fastdepCC_FALSE$])
m4trace:configure.ac:44: -1- AM_SUBST_NOTMAKE([am__fastdepCC_TRUE])
m4trace:configure.ac:44: -1- AM_SUBST_NOTMAKE([am__fastdepCC_FALSE])

```

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m4trace:configure.ac:45: -1- _m4_warn([obsolete], [The macro
`AC_ISC_POSIX' is obsolete.
You should run autoupdate.], [../../lib/autoconf/specific.m4:446:
AC_ISC_POSIX is expanded from...
configure.ac:45: the top level])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:46: -1- AC_PROG_EGREP
m4trace:configure.ac:46: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:46: -1- m4_pattern_allow([^EGREP$])
m4trace:configure.ac:46: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:61: -1- AM_CONDITIONAL([DBUS_BASH_COMPLETION],
[test x$enable_bash_completion = xyes])
m4trace:configure.ac:61: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION_TRUE$])
m4trace:configure.ac:61: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION_FALSE$])
m4trace:configure.ac:61: -1-
_AM_SUBST_NOTMAKE([DBUS_BASH_COMPLETION_TRUE])
m4trace:configure.ac:61: -1-
_AM_SUBST_NOTMAKE([DBUS_BASH_COMPLETION_FALSE])
m4trace:configure.ac:63: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION$])
m4trace:configure.ac:67: -1-
m4_pattern_allow([^DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:73: -1- m4_pattern_allow([^DBUS_BINDING_TOOL$])
m4trace:configure.ac:78: -1- AM_CONDITIONAL([DBUS_BUILD_TESTS], [test
x$enable_tests = xyes])
m4trace:configure.ac:78: -1-
m4_pattern_allow([^DBUS_BUILD_TESTS_TRUE$])
m4trace:configure.ac:78: -1-
m4_pattern_allow([^DBUS_BUILD_TESTS_FALSE$])
m4trace:configure.ac:78: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:78: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:80: -1- m4_pattern_allow([^DBUS_BUILD_TESTS$])
m4trace:configure.ac:84: -1-
m4_pattern_allow([^DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:87: -1- m4_pattern_allow([^DBUS_DISABLE_ASSERT$])
m4trace:configure.ac:88: -1- m4_pattern_allow([^G_DISABLE_ASSERT$])
m4trace:configure.ac:91: -1- m4_pattern_allow([^DBUS_DISABLE_CHECKS$])
m4trace:configure.ac:92: -1- m4_pattern_allow([^G_DISABLE_CHECKS$])
m4trace:configure.ac:97: -1- AC_DEFUN([AC_CC_TRY_FLAG], [
  AC_MSG_CHECKING([whether gcc understands $1])

  ac_save_CFLAGS="$CFLAGS"
  CFLAGS="$CFLAGS $1"

  AC_COMPILE_IFELSE([ ], [ac_cc_flag=yes], [ac_cc_flag=no])
  CFLAGS="$ac_save_CFLAGS"

```

```

if test "x$ac_cc_flag" = "xyes"; then
  ifelse([$2], , :, [$2])
else
  ifelse([$3], , :, [$3])
fi
AC_MSG_RESULT([$ac_cc_flag])
])
m4trace:configure.ac:115: -1- AC_CC_TRY_FLAG([-Wfloat-equal],
[ac_flag_float_equal=yes], [ac_flag_float_equal=no])
m4trace:configure.ac:115: -1- _m4_warn([syntax], [AC_LANG_CONFTEST: no
AC_LANG_SOURCE call detected in body],
[../lib/autoconf/lang.m4:193: AC_LANG_CONFTEST is expanded from...
../lib/autoconf/general.m4:2584: _AC_COMPILE_IFELSE is expanded
from...
../lib/autoconf/general.m4:2600: AC_COMPILE_IFELSE is expanded
from...
configure.ac:97: AC_CC_TRY_FLAG is expanded from...
configure.ac:115: the top level])
m4trace:configure.ac:216: -1- AM_PROG_LIBTOOL
m4trace:configure.ac:216: -1- _m4_warn([obsolete], [The macro
`AM_PROG_LIBTOOL' is obsolete.
You should run autoupdate.],
[/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus-
glib/0.100.2-r0/dbus-glib-0.100.2/m4/libtool.m4:109: AM_PROG_LIBTOOL
is expanded from...
configure.ac:216: the top level])
m4trace:configure.ac:216: -1- LT_INIT
m4trace:configure.ac:216: -1- m4_pattern_forbid([^?LT_[A-Z_]+$])
m4trace:configure.ac:216: -1-
m4_pattern_allow([^(LT_EOF|LT_DLGLOBAL|LT_DLLAZY_OR_NOW|LT_MULTI_MODU
LE)$])
m4trace:configure.ac:216: -1- LTOPTIONS_VERSION
m4trace:configure.ac:216: -1- LTSUGAR_VERSION
m4trace:configure.ac:216: -1- LTVERSION_VERSION
m4trace:configure.ac:216: -1- LTOBSOLETE_VERSION
m4trace:configure.ac:216: -1- _LT_PROG_LTMAIN
m4trace:configure.ac:216: -1- m4_pattern_allow([LIBTOOL$])
m4trace:configure.ac:216: -1- _LT_PREPARE_SED_QUOTE_VARS
m4trace:configure.ac:216: -1- _LT_PROG_ECHO_BACKSLASH
m4trace:configure.ac:216: -1- LT_PATH_LD
m4trace:configure.ac:216: -1- m4_pattern_allow([SED$])
m4trace:configure.ac:216: -1- m4_pattern_allow([FGREP$])
m4trace:configure.ac:216: -1- m4_pattern_allow([GREP$])
m4trace:configure.ac:216: -1- m4_pattern_allow([LD$])
m4trace:configure.ac:216: -1- LT_PATH_NM
m4trace:configure.ac:216: -1- m4_pattern_allow([DUMPBIN$])
m4trace:configure.ac:216: -1- m4_pattern_allow([ac_ct_DUMPBIN$])
m4trace:configure.ac:216: -1- m4_pattern_allow([DUMPBIN$])
m4trace:configure.ac:216: -1- m4_pattern_allow([NM$])
m4trace:configure.ac:216: -1- m4_pattern_allow([LN_S$])

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m4trace:configure.ac:216: -1- LT_CMD_MAX_LEN
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^OBJDUMP$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^OBJDUMP$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^DLLTOOL$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^DLLTOOL$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^AR$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^ac_ct_AR$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^STRIP$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^RANLIB$ ])
m4trace:configure.ac:216: -1- _LT_WITH_SYSROOT
m4trace:configure.ac:216: -1- m4_pattern_allow([ LT_OBJDIR ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^LT_OBJDIR$ ])
m4trace:configure.ac:216: -1- _LT_CC_BASENAME([ $compiler ])
m4trace:configure.ac:216: -1-
_LT_PATH_TOOL_PREFIX([ ${ac_tool_prefix}file ],
[/usr/bin$PATH_SEPARATOR$PATH])
m4trace:configure.ac:216: -1- _LT_PATH_TOOL_PREFIX([ file ],
[/usr/bin$PATH_SEPARATOR$PATH])
m4trace:configure.ac:216: -1- LT_SUPPORTED_TAG([ CC ])
m4trace:configure.ac:216: -1- _LT_COMPILER_BOILERPLATE
m4trace:configure.ac:216: -1- _LT_LINKER_BOILERPLATE
m4trace:configure.ac:216: -1- _LT_COMPILER_OPTION([ if $compiler
supports -fno-rtti -fno-exceptions ],
[lt_cv_prog_compiler_rtti_exceptions], [-fno-rtti -fno-exceptions],
[], [ _LT_TAGVAR(lt_prog_compiler_no_built_in_flag,
)="$ _LT_TAGVAR(lt_prog_compiler_no_built_in_flag, ) -fno-rtti -fno-
exceptions" ])
m4trace:configure.ac:216: -1- _LT_COMPILER_OPTION([ if $compiler PIC
flag $ _LT_TAGVAR(lt_prog_compiler_pic, ) works ],
[ _LT_TAGVAR(lt_cv_prog_compiler_pic_works, ) ],
[ $ _LT_TAGVAR(lt_prog_compiler_pic, )@&t@m4_if([], [], [ -
DPIC ], [m4_if([], [CXX], [ -DPIC ], []) ])], [], [ case
$ _LT_TAGVAR(lt_prog_compiler_pic, ) in
    "" | " *" ) ;;
    *) _LT_TAGVAR(lt_prog_compiler_pic, )="
$ _LT_TAGVAR(lt_prog_compiler_pic, )" ;;
    esac ], [ _LT_TAGVAR(lt_prog_compiler_pic, )=
    _LT_TAGVAR(lt_prog_compiler_can_build_shared, )=no ])
m4trace:configure.ac:216: -1- _LT_LINKER_OPTION([ if $compiler static
flag $lt_tmp_static_flag works ], [lt_cv_prog_compiler_static_works],
[ $lt_tmp_static_flag ], [], [ _LT_TAGVAR(lt_prog_compiler_static, )= ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^MANIFEST_TOOL$ ])
m4trace:configure.ac:216: -1- _LT_REQUIRED_DARWIN_CHECKS
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^DSYMUUTIL$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^NMEDIT$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^LIPO$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^OTOOL$ ])
m4trace:configure.ac:216: -1- m4_pattern_allow([ ^OTOOL64$ ])
m4trace:configure.ac:216: -1- _LT_LINKER_OPTION([ if $CC understands -
b ], [lt_cv_prog_compiler__b], [-b], [ _LT_TAGVAR(archive_cmds, )='$CC -
b ${wl}+h ${wl}$soname ${wl}+b ${wl}$install_libdir -o $lib $libobjs

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$deplibs $compiler_flags'], [_LT_TAGVAR(archive_cmds, )='$LD -b +h
$soname +b $install_libdir -o $lib $libobjs $deplibs $linker_flags'])
m4trace:configure.ac:216: -1- LT_SYS_DLOPEN_SELF
m4trace:configure.ac:216: -1- m4_pattern_allow([^HAVE_DLFCN_H$])
m4trace:configure.ac:226: -1- m4_pattern_allow([^DBUS_GCOV_ENABLED$])
m4trace:configure.ac:236: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
configure.ac:236: the top level])
m4trace:configure.ac:247: -1- m4_pattern_allow([^HAVE_SOCKLEN_T$])
m4trace:configure.ac:253: -1- _m4_warn([cross], [AC_RUN_IFELSE called
without default to allow cross compiling],
[../../lib/autoconf/general.m4:2742: AC_RUN_IFELSE is expanded from...
../../lib/m4sugar/m4sh.m4:639: AS_IF is expanded from...
../../lib/autoconf/general.m4:2025: AC_CACHE_VAL is expanded from...
../../lib/autoconf/general.m4:2046: AC_CACHE_CHECK is expanded from...
configure.ac:253: the top level])
m4trace:configure.ac:308: -1-
m4_pattern_allow([^HAVE_ABSTRACT_SOCKETS$])
m4trace:configure.ac:315: -1-
m4_pattern_allow([^DBUS_PATH_OR_ABSTRACT$])
m4trace:configure.ac:320: -1- m4_pattern_allow([^HAVE_EXPAT_H$])
m4trace:configure.ac:334: -1- PKG_CHECK_MODULES([DBUS], [dbus-1 >=
1.2.16])
m4trace:configure.ac:334: -1- PKG_PROG_PKG_CONFIG
m4trace:configure.ac:334: -1- m4_pattern_forbid([^?PKG_[A-Z_]+$])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG_PATH$])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG_LIBDIR$])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:334: -1- m4_pattern_allow([^DBUS_CFLAGS$])
m4trace:configure.ac:334: -1- m4_pattern_allow([^DBUS_LIBS$])
m4trace:configure.ac:334: -1- PKG_CHECK_EXISTS([dbus-1 >= 1.2.16],
[pkg_cv_[_]DBUS_CFLAGS=`$PKG_CONFIG --[_]cflags "dbus-1 >= 1.2.16"
2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:334: -1- PKG_CHECK_EXISTS([dbus-1 >= 1.2.16],
[pkg_cv_[_]DBUS_LIBS=`$PKG_CONFIG --[_]libs "dbus-1 >= 1.2.16"
2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:334: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:335: -1- m4_pattern_allow([^DBUS_CFLAGS$])
m4trace:configure.ac:336: -1- m4_pattern_allow([^DBUS_LIBS$])
m4trace:configure.ac:339: -1- PKG_CHECK_MODULES([DBUS_GLIB], [gobject-
2.0 >= 2.26, gio-2.0 >= 2.26])
m4trace:configure.ac:339: -1- m4_pattern_allow([^DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:339: -1- m4_pattern_allow([^DBUS_GLIB_LIBS$])
m4trace:configure.ac:339: -1- PKG_CHECK_EXISTS([gobject-2.0 >= 2.26,
gio-2.0 >= 2.26], [pkg_cv_[_]DBUS_GLIB_CFLAGS=`$PKG_CONFIG --[_]cflags
"gobject-2.0 >= 2.26, gio-2.0 >= 2.26" 2>/dev/null`],
[pkg_failed=yes])

```

```
m4trace:configure.ac:339: -1- PKG_CHECK_EXISTS([gobject-2.0 >= 2.26,
gio-2.0 >= 2.26], [pkg_cv_[]DBUS_GLIB_LIBS=`$PKG_CONFIG --[]libs
"gobject-2.0 >= 2.26, gio-2.0 >= 2.26" 2>/dev/null`],
[pkg_failed=yes])
m4trace:configure.ac:339: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:340: -1- PKG_CHECK_MODULES([DBUS_GLIB_THREADS],
[gthread-2.0 >= 2.6], [have_glib_threads=yes], [have_glib_threads=no])
m4trace:configure.ac:340: -1-
m4_pattern_allow([^DBUS_GLIB_THREADS_CFLAGS$])
m4trace:configure.ac:340: -1-
m4_pattern_allow([^DBUS_GLIB_THREADS_LIBS$])
m4trace:configure.ac:340: -1- PKG_CHECK_EXISTS([gthread-2.0 >= 2.6],
[pkg_cv_[]DBUS_GLIB_THREADS_CFLAGS=`$PKG_CONFIG --[]cflags "gthread-
2.0 >= 2.6" 2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:340: -1- PKG_CHECK_EXISTS([gthread-2.0 >= 2.6],
[pkg_cv_[]DBUS_GLIB_THREADS_LIBS=`$PKG_CONFIG --[]libs "gthread-2.0 >=
2.6" 2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:340: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:342: -1- AM_CONDITIONAL([HAVE_GLIB_THREADS],
[test x$have_glib_threads = xyes])
m4trace:configure.ac:342: -1-
m4_pattern_allow([^HAVE_GLIB_THREADS_TRUE$])
m4trace:configure.ac:342: -1-
m4_pattern_allow([^HAVE_GLIB_THREADS_FALSE$])
m4trace:configure.ac:342: -1-
_AM_SUBST_NOTMAKE([HAVE_GLIB_THREADS_TRUE])
m4trace:configure.ac:342: -1-
_AM_SUBST_NOTMAKE([HAVE_GLIB_THREADS_FALSE])
m4trace:configure.ac:345: -1- m4_pattern_allow([^GLIB_GENMARSHAL$])
m4trace:configure.ac:348: -1- m4_pattern_allow([^DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:349: -1- m4_pattern_allow([^DBUS_GLIB_LIBS$])
m4trace:configure.ac:350: -1-
m4_pattern_allow([^DBUS_GLIB_THREADS_LIBS$])
m4trace:configure.ac:354: -1-
m4_pattern_allow([^DBUS_GLIB_TOOL_CFLAGS$])
m4trace:configure.ac:355: -1-
m4_pattern_allow([^DBUS_GLIB_TOOL_LIBS$])
m4trace:configure.ac:358: -1- GTK_DOC_CHECK([1.4])
m4trace:configure.ac:358: -1- m4_pattern_allow([^GTKDOC_CHECK$])
m4trace:configure.ac:358: -1- m4_pattern_allow([^GTKDOC_REBASE$])
m4trace:configure.ac:358: -1- m4_pattern_allow([^GTKDOC_MKPDF$])
m4trace:configure.ac:358: -1- m4_pattern_allow([^HTML_DIR$])
m4trace:configure.ac:358: -1- PKG_CHECK_EXISTS([gtk-doc >= 1.4], [],
[as_fn_error $? "You need to have gtk-doc >= 1.4 installed to build
$PACKAGE_NAME" "$LINENO" 5])
m4trace:configure.ac:358: -1- PKG_CHECK_MODULES([GTKDOC_DEPS], [glib-
2.0 >= 2.10.0 gobject-2.0 >= 2.10.0], [], [])
m4trace:configure.ac:358: -1- m4_pattern_allow([^GTKDOC_DEPS_CFLAGS$])
m4trace:configure.ac:358: -1- m4_pattern_allow([^GTKDOC_DEPS_LIBS$])
m4trace:configure.ac:358: -1- PKG_CHECK_EXISTS([glib-2.0 >= 2.10.0
gobject-2.0 >= 2.10.0], [pkg_cv_[]GTKDOC_DEPS_CFLAGS=`$PKG_CONFIG --
```

```
[ ]cflags "glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0" 2>/dev/null`,
[ pkg_failed=yes])
m4trace:configure.ac:358: -1- PKG_CHECK_EXISTS([glib-2.0 >= 2.10.0
gobject-2.0 >= 2.10.0], [pkg_cv_[ ]GTKDOC_DEPS_LIBS=`$PKG_CONFIG --
[ ]libs "glib-2.0 >= 2.10.0 gobject-2.0 >= 2.10.0" 2>/dev/null`,
[ pkg_failed=yes])
m4trace:configure.ac:358: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:358: -1- AM_CONDITIONAL([ENABLE_GTK_DOC], [test
x$enable_gtk_doc = xyes])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^ENABLE_GTK_DOC_TRUE$])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^ENABLE_GTK_DOC_FALSE$])
m4trace:configure.ac:358: -1- _AM_SUBST_NOTMAKE([ENABLE_GTK_DOC_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([ENABLE_GTK_DOC_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_BUILD_HTML],
[ test x$enable_gtk_doc_html = xyes])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^GTK_DOC_BUILD_HTML_TRUE$])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^GTK_DOC_BUILD_HTML_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_HTML_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_HTML_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_BUILD_PDF],
[ test x$enable_gtk_doc_pdf = xyes])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^GTK_DOC_BUILD_PDF_TRUE$])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^GTK_DOC_BUILD_PDF_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_PDF_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_PDF_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_USE_LIBTOOL],
[ test -n "$LIBTOOL"])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^GTK_DOC_USE_LIBTOOL_TRUE$])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^GTK_DOC_USE_LIBTOOL_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_LIBTOOL_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_LIBTOOL_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_USE_REBASE],
[ test -n "$GTKDOC_REBASE"])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^GTK_DOC_USE_REBASE_TRUE$])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ ^GTK_DOC_USE_REBASE_FALSE$])
```



```

m4trace:configure.ac:358: -1-
  _AM_SUBST_NOTMAKE([GTK_DOC_USE_REBASE_TRUE])
m4trace:configure.ac:358: -1-
  _AM_SUBST_NOTMAKE([GTK_DOC_USE_REBASE_FALSE])
m4trace:configure.ac:388: -1-
m4_pattern_allow([^EXPANDED_LOCALSTATEDIR$])
m4trace:configure.ac:392: -1-
m4_pattern_allow([^EXPANDED_SYSCONFDIR$])
m4trace:configure.ac:396: -1- m4_pattern_allow([^EXPANDED_BINDIR$])
m4trace:configure.ac:400: -1- m4_pattern_allow([^EXPANDED_LIBDIR$])
m4trace:configure.ac:404: -1- m4_pattern_allow([^EXPANDED_DATADIR$])
m4trace:configure.ac:413: -1- AC_DEFUN([TEST_PATH], [
TEST_$1=${ABSOLUTE_TOP_BUILDDIR}/test/$2
AC_DEFINE_UNQUOTED(TEST_$1, "$TEST_$1",
  [Full path to test file test/$2 in builddir])
AC_SUBST(TEST_$1)
])
m4trace:configure.ac:420: -1- TEST_PATH([SERVICE_DIR], [data/valid-
service-files])
m4trace:configure.ac:420: -1- m4_pattern_allow([^TEST_SERVICE_DIR$])
m4trace:configure.ac:420: -1- m4_pattern_allow([^TEST_SERVICE_DIR$])
m4trace:configure.ac:421: -1- TEST_PATH([SERVICE_BINARY], [test-
service])
m4trace:configure.ac:421: -1-
m4_pattern_allow([^TEST_SERVICE_BINARY$])
m4trace:configure.ac:421: -1-
m4_pattern_allow([^TEST_SERVICE_BINARY$])
m4trace:configure.ac:422: -1- TEST_PATH([SHELL_SERVICE_BINARY], [test-
shell-service])
m4trace:configure.ac:422: -1-
m4_pattern_allow([^TEST_SHELL_SERVICE_BINARY$])
m4trace:configure.ac:422: -1-
m4_pattern_allow([^TEST_SHELL_SERVICE_BINARY$])
m4trace:configure.ac:423: -1- TEST_PATH([CORE_SERVICE_BINARY],
[core/test-service-glib])
m4trace:configure.ac:423: -1-
m4_pattern_allow([^TEST_CORE_SERVICE_BINARY$])
m4trace:configure.ac:423: -1-
m4_pattern_allow([^TEST_CORE_SERVICE_BINARY$])
m4trace:configure.ac:424: -1- TEST_PATH([INTERFACES_SERVICE_BINARY],
[interfaces/test-service])
m4trace:configure.ac:424: -1-
m4_pattern_allow([^TEST_INTERFACES_SERVICE_BINARY$])
m4trace:configure.ac:424: -1-
m4_pattern_allow([^TEST_INTERFACES_SERVICE_BINARY$])
m4trace:configure.ac:425: -1- TEST_PATH([EXIT_BINARY], [test-exit])
m4trace:configure.ac:425: -1- m4_pattern_allow([^TEST_EXIT_BINARY$])
m4trace:configure.ac:425: -1- m4_pattern_allow([^TEST_EXIT_BINARY$])
m4trace:configure.ac:426: -1- TEST_PATH([SEGFAULT_BINARY], [test-
segfault])
m4trace:configure.ac:426: -1-
m4_pattern_allow([^TEST_SEGFAULT_BINARY$])

```

```

m4trace:configure.ac:426: -1-
m4_pattern_allow([ ^TEST_SEGFAULT_BINARY$])
m4trace:configure.ac:427: -1- TEST_PATH([SLEEP_FOREVER_BINARY], [test-
sleep-forever])
m4trace:configure.ac:427: -1-
m4_pattern_allow([ ^TEST_SLEEP_FOREVER_BINARY$])
m4trace:configure.ac:427: -1-
m4_pattern_allow([ ^TEST_SLEEP_FOREVER_BINARY$])
m4trace:configure.ac:428: -1-
m4_pattern_allow([ ^ABSOLUTE_TOP_BUILDDIR$])
m4trace:configure.ac:435: -1- m4_pattern_allow([ ^TEST_SOCKET_DIR$])
m4trace:configure.ac:436: -1-
m4_pattern_allow([ ^DBUS_TEST_SOCKET_DIR$])
m4trace:configure.ac:438: -1- _m4_warn([obsolete], [AC_OUTPUT should
be used without arguments.
You should run autoupdate.], [])
m4trace:configure.ac:438: -1- m4_pattern_allow([ ^LIB@&t@OBSJ$])
m4trace:configure.ac:438: -1- m4_pattern_allow([ ^LTLIBOBSJ$])
m4trace:configure.ac:438: -1- AM_CONDITIONAL([am__EXEEXT], [test -n
"$EXEEXT"])
m4trace:configure.ac:438: -1- m4_pattern_allow([ ^am__EXEEXT_TRUE$])
m4trace:configure.ac:438: -1- m4_pattern_allow([ ^am__EXEEXT_FALSE$])
m4trace:configure.ac:438: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_TRUE])
m4trace:configure.ac:438: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_FALSE])
m4trace:configure.ac:438: -1- _AC_AM_CONFIG_HEADER_HOOK(["$ac_file"])
m4trace:configure.ac:438: -1- _AM_OUTPUT_DEPENDENCY_COMMANDS
m4trace:configure.ac:438: -1- _LT_PROG_LTMAIN

```

File = traces.0.~1~

```

m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/argz.m4:12: -1-
AC_DEFUN([gl_FUNC_ARGZ], [gl_PREREQ_ARGZ

```

```

AC_CHECK_HEADERS([argz.h], [], [], [AC_INCLUDES_DEFAULT])

```

```

AC_CHECK_TYPES([error_t],
  [],
  [AC_DEFINE([error_t], [int],
    [Define to a type to use for `error_t' if it is not otherwise
available.])
  AC_DEFINE([__error_t_defined], [1], [Define so that glibc/gnulib
argp.h
  does not typedef error_t.])],
  [#if defined(HAVE_ARGZ_H)
# include <argz.h>
#endif])

```

```

ARGZ_H=

```

```

AC_CHECK_FUNCS([argz_add argz_append argz_count argz_create_sep
argz_insert \
    argz_next argz_stringify], [], [ARGZ_H=argz.h;
AC_LIBOBJ([argz])])

dnl if have system argz functions, allow forced use of
dnl libltdl-supplied implementation (and default to do so
dnl on "known bad" systems). Could use a runtime check, but
dnl (a) detecting malloc issues is notoriously unreliable
dnl (b) only known system that declares argz functions,
dnl     provides them, yet they are broken, is cygwin
dnl     releases prior to 16-Mar-2007 (1.5.24 and earlier)
dnl So, it's more straightforward simply to special case
dnl this for known bad systems.
AS_IF([test -z "$ARGZ_H"],
    [AC_CACHE_CHECK(
        [if argz actually works],
        [lt_cv_sys_argz_works],
        [[case $host_os in #(
*cygwin*)
    lt_cv_sys_argz_works=no
    if test "$cross_compiling" != no; then
        lt_cv_sys_argz_works="guessing no"
    else
        lt_sed_extract_leading_digits='s/^\([0-9\.]*\).*\/\1/'
        save_IFS=$IFS
        IFS=-.
        set x `uname -r | sed -e "$lt_sed_extract_leading_digits"`
        IFS=$save_IFS
        lt_os_major=${2-0}
        lt_os_minor=${3-0}
        lt_os_micro=${4-0}
        if test "$lt_os_major" -gt 1 \
            || { test "$lt_os_major" -eq 1 \
                && { test "$lt_os_minor" -gt 5 \
                    || { test "$lt_os_minor" -eq 5 \
                        && test "$lt_os_micro" -gt 24; }; }; }; then
            lt_cv_sys_argz_works=yes
        fi
    fi
    ;; #(
*) lt_cv_sys_argz_works=yes ;;
esac]])
AS_IF([test "$lt_cv_sys_argz_works" = yes],
    [AC_DEFINE([HAVE_WORKING_ARGZ], 1,
        [This value is set to 1 to indicate that the system
argz facility works])],
    [ARGZ_H=argz.h
    AC_LIBOBJ([argz])])

AC_SUBST([ARGZ_H])
])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/argz.m4:79: -1-
AC_DEFUN([gl_PREREQ_ARGZ], [:])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:16: -1-
AC_DEFUN([LT_CONFIG_LTDL_DIR], [AC_BEFORE([$0], [LTDL_INIT])
_$0($*)
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:68: -1-
AC_DEFUN([LTDL_CONVENIENCE], [AC_BEFORE([$0], [LTDL_INIT])dnl
dnl Although the argument is deprecated and no longer documented,
dnl LTDL_CONVENIENCE used to take a DIRECTORY argument, if we have one
dnl here make sure it is the same as any other declaration of
libltdl's
dnl location! This also ensures lt_ltdl_dir is set when configure.ac
is
dnl not yet using an explicit LT_CONFIG_LTDL_DIR.
m4_ifval([$1], [_LT_CONFIG_LTDL_DIR([$1]])dnl
_$0()
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:81: -1-
AU_DEFUN([AC_LIBLTDL_CONVENIENCE],
[_LT_CONFIG_LTDL_DIR([m4_default([$1], [libltdl])])
_LTDL_CONVENIENCE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:81: -1-
AC_DEFUN([AC_LIBLTDL_CONVENIENCE], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBLTDL_CONVENIENCE' is obsolete.
You should run autoupdate.])dnl
_LT_CONFIG_LTDL_DIR([m4_default([$1], [libltdl])])
_LTDL_CONVENIENCE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:124: -
1- AC_DEFUN([LTDL_INSTALLABLE], [AC_BEFORE([$0], [LTDL_INIT])dnl
dnl Although the argument is deprecated and no longer documented,
dnl LTDL_INSTALLABLE used to take a DIRECTORY argument, if we have one
dnl here make sure it is the same as any other declaration of
libltdl's
dnl location! This also ensures lt_ltdl_dir is set when configure.ac
is
dnl not yet using an explicit LT_CONFIG_LTDL_DIR.
m4_ifval([$1], [_LT_CONFIG_LTDL_DIR([$1]])dnl
_$0()
])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:137: -
1- AU_DEFUN([AC_LIBLTDL_INSTALLABLE],
[ _LT_CONFIG_LTDL_DIR([m4_default([$1], [libltdl]])]
_LTDL_INSTALLABLE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:137: -
1- AC_DEFUN([AC_LIBLTDL_INSTALLABLE], [AC_DIAGNOSE([obsolete], [The
macro `AC_LIBLTDL_INSTALLABLE' is obsolete.
You should run autoupdate.])dnl
_LT_CONFIG_LTDL_DIR([m4_default([$1], [libltdl]])]
_LTDL_INSTALLABLE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:213: -
1- AC_DEFUN([_LT_LIBOBJ], [
  m4_pattern_allow([^_LT_LIBOJS$])
  _LT_LIBOJS="$_LT_LIBOJS $1.$ac_objext"
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:226: -
1- AC_DEFUN([LTDL_INIT], [dnl Parse OPTIONS
_LT_SET_OPTIONS([$0], [$1])

dnl We need to keep our own list of libobjs separate from our parent
project,
dnl and the easiest way to do that is redefine the AC_LIBOBJs macro
while
dnl we look for our own LIBOBJs.
m4_pushdef([AC_LIBOBJ], m4_defn([_LT_LIBOBJ]))
m4_pushdef([AC_LIBSOURCES])

dnl If not otherwise defined, default to the 1.5.x compatible
subproject mode:
m4_if(_LTDL_MODE, [],
      [m4_define([_LTDL_MODE], m4_default([$2], [subproject]))]
      [m4_if([-1], [m4_bregexp(_LTDL_MODE,
[\(subproject\|\(non\)?\recursive\)])],
          [m4_fatal([unknown libltdl mode: ]_LTDL_MODE)])])])

AC_ARG_WITH([included_ltdl],
            [AS_HELP_STRING([--with-included-ltdl],
                            [use the GNU ltdl sources included here])])

if test "x$with_included_ltdl" != xyes; then
  # We are not being forced to use the included libltdl sources, so
  # decide whether there is a useful installed version we can use.
  AC_CHECK_HEADER([ltdl.h],
                  [AC_CHECK_DECL([lt_dlinterface_register],

```

```

        [AC_CHECK_LIB([ltdl], [lt_dladvise_preload],
            [with_included_ltdl=no],
            [with_included_ltdl=yes])],
        [with_included_ltdl=yes],
        [AC_INCLUDES_DEFAULT
            #include <ltdl.h>]],
        [with_included_ltdl=yes],
        [AC_INCLUDES_DEFAULT
    )
fi

dnl If neither LT_CONFIG_LTDL_DIR, LTDL_CONVENIENCE nor
LTDL_INSTALLABLE
dnl was called yet, then for old times' sake, we assume libltdl is in
an
dnl eponymous directory:
AC_PROVIDE_IFELSE([LT_CONFIG_LTDL_DIR], [],
    [_LT_CONFIG_LTDL_DIR([libltdl)])])

AC_ARG_WITH([ltdl_include],
    [AS_HELP_STRING([--with-ltdl-include=DIR],
        [use the ltdl headers installed in DIR])])

if test -n "$with_ltdl_include"; then
    if test -f "$with_ltdl_include/ltdl.h"; then :
    else
        AC_MSG_ERROR([invalid ltdl include directory:
`$with_ltdl_include'])
    fi
else
    with_ltdl_include=no
fi

AC_ARG_WITH([ltdl_lib],
    [AS_HELP_STRING([--with-ltdl-lib=DIR],
        [use the libltdl.la installed in DIR])])

if test -n "$with_ltdl_lib"; then
    if test -f "$with_ltdl_lib/libltdl.la"; then :
    else
        AC_MSG_ERROR([invalid ltdl library directory:
`$with_ltdl_lib'])
    fi
else
    with_ltdl_lib=no
fi

case , $with_included_ltdl, $with_ltdl_include, $with_ltdl_lib, in
    ,yes,no,no,)
        m4_case(m4_default(_LTDL_TYPE, [convenience]),
            [convenience], [_LTDL_CONVENIENCE],
            [installable], [_LTDL_INSTALLABLE],
            [m4_fatal([unknown libltdl build type: ]_LTDL_TYPE)])

```

```

;;
,no,no,no,)
# If the included ltdl is not to be used, then use the
# preinstalled libltdl we found.
AC_DEFINE([HAVE_LTDL], [1],
  [Define this if a modern libltdl is already installed])
LIBLTDL=-lltdl
LTDLDEPS=
LTDLINCL=
;;
,no*,no,*)
AC_MSG_ERROR(['--with-ltdl-include' and '--with-ltdl-lib' options
must be used together])
;;
*) with_included_ltdl=no
LIBLTDL="-L$with_ltdl_lib -lltdl"
LTDLDEPS=
LTDLINCL="-I$with_ltdl_include"
;;
esac
INCLTDL="$LTDLINCL"

# Report our decision...
AC_MSG_CHECKING([where to find libltdl headers])
AC_MSG_RESULT([$LTDLINCL])
AC_MSG_CHECKING([where to find libltdl library])
AC_MSG_RESULT([$LIBLTDL])

_LTDL_SETUP

dnl restore autoconf definition.
m4_popdef([AC_LIBOBJ])
m4_popdef([AC_LIBSOURCES])

AC_CONFIG_COMMANDS_PRE([
  _ltdl_libobjs=
  _ltdl_ltlibobjs=
  if test -n "$_LT_LIBOBJS"; then
    # Remove the extension.
    _lt_sed_drop_objext='s/\.$//;s/\.obj$//'
    for i in `for i in $_LT_LIBOBJS; do echo "$i"; done | sed
"$_lt_sed_drop_objext" | sort -u`; do
      _ltdl_libobjs="$_ltdl_libobjs $lt_libobj_prefix$i.$_lt_sed_drop_objext"
      _ltdl_ltlibobjs="$_ltdl_ltlibobjs $lt_libobj_prefix$i.lo"
    done
  fi
  AC_SUBST([ltdl_LIBOBJS], [$_ltdl_libobjs])
  AC_SUBST([ltdl_LTLIBOBJS], [$_ltdl_ltlibobjs])
])

# Only expand once:
m4_define([LTDL_INIT])

```

```

])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:352: -
1- AU_DEFUN([AC_LIB_LTDL], [LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:352: -
1- AC_DEFUN([AC_LIB_LTDL], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIB_LTDL' is obsolete.
You should run autoupdate.])dnl
LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:353: -
1- AU_DEFUN([AC_WITH_LTDL], [LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:353: -
1- AC_DEFUN([AC_WITH_LTDL], [AC_DIAGNOSE([obsolete], [The macro
`AC_WITH_LTDL' is obsolete.
You should run autoupdate.])dnl
LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:354: -
1- AU_DEFUN([LT_WITH_LTDL], [LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:354: -
1- AC_DEFUN([LT_WITH_LTDL], [AC_DIAGNOSE([obsolete], [The macro
`LT_WITH_LTDL' is obsolete.
You should run autoupdate.])dnl
LTDL_INIT($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:367: -
1- AC_DEFUN([_LTDL_SETUP], [AC_REQUIRE([AC_PROG_CC])dnl
AC_REQUIRE([LT_SYS_MODULE_EXT])dnl
AC_REQUIRE([LT_SYS_MODULE_PATH])dnl
AC_REQUIRE([LT_SYS_DLSEARCH_PATH])dnl
AC_REQUIRE([LT_LIB_DLLOAD])dnl
AC_REQUIRE([LT_SYS_SYMBOL_USCORE])dnl
AC_REQUIRE([LT_FUNC_DLSYM_USCORE])dnl
AC_REQUIRE([LT_SYS_DLOPEN_DEPLIBS])dnl
AC_REQUIRE([gl_FUNC_ARGZ])dnl

m4_require([_LT_CHECK_OBJDIR])dnl
m4_require([_LT_HEADER_DLFCN])dnl
m4_require([_LT_CHECK_DLPREOPEN])dnl
m4_require([_LT_DECL_SED])dnl

```



```

dnl Don't require this, or it will be expanded earlier than the code
dnl that sets the variables it relies on:
_LT_ENABLE_INSTALL

dnl _LTDL_MODE specific code must be called at least once:
_LTDL_MODE_DISPATCH

# In order that ltdl.c can compile, find out the first
AC_CONFIG_HEADERS
# the user used. This is so that ltdl.h can pick up the parent
projects
# config.h file, The first file in AC_CONFIG_HEADERS must contain the
# definitions required by ltdl.c.
# FIXME: Remove use of undocumented AC_LIST_HEADERS (2.59
compatibility).
AC_CONFIG_COMMANDS_PRE([dnl
m4_pattern_allow([^LT_CONFIG_H$])dnl
m4_ifset([AH_HEADER],
  [LT_CONFIG_H=AH_HEADER],
  [m4_ifset([AC_LIST_HEADERS],
    [LT_CONFIG_H=`echo "AC_LIST_HEADERS" | $SED 's,^[[
]]*,,,;s,[[:]].*$,,\'`,
    [ ])])]])
AC_SUBST([LT_CONFIG_H])

AC_CHECK_HEADERS([unistd.h dl.h sys/dl.h dld.h mach-o/dyld.h
dirent.h],
  [], [], [AC_INCLUDES_DEFAULT])

AC_CHECK_FUNCS([closedir opendir readdir], [],
[AC_LIBOBJ([lt_dirent])])
AC_CHECK_FUNCS([strlcat strlcpy], [], [AC_LIBOBJ([lt_strl])])

m4_pattern_allow([LT_LIBEXT])dnl
AC_DEFINE_UNQUOTED([LT_LIBEXT],["$libext"],[The archive extension])

name=
eval "lt_libprefix=\"\$libname_spec\""
m4_pattern_allow([LT_LIBPREFIX])dnl
AC_DEFINE_UNQUOTED([LT_LIBPREFIX],["$lt_libprefix"],[The archive
prefix])

name=ltdl
eval "LTDLOPEN=\"\$libname_spec\""
AC_SUBST([LTDLOPEN])
])
m4trace:/home/gangadhar/newyoctobuild/tisdtk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:443: -
1- AC_DEFUN([LT_SYS_DLOPEN_DEPLIBS],
[AC_REQUIRE([AC_CANONICAL_HOST])dnl
AC_CACHE_CHECK([whether deplibs are loaded by dlopen],

```

```

[lt_cv_sys_dlopen_deplibs],
[# PORTME does your system automatically load deplibs for dlopen?
# or its logical equivalent (e.g. shl_load for HP-UX < 11)
# For now, we just catch OSes we know something about -- in the
# future, we'll try test this programmatically.
lt_cv_sys_dlopen_deplibs=unknown
case $host_os in
aix3*|aix4.1.*|aix4.2.*)
# Unknown whether this is true for these versions of AIX, but
# we want this `case' here to explicitly catch those versions.
lt_cv_sys_dlopen_deplibs=unknown
;;
aix[[4-9]]*)
lt_cv_sys_dlopen_deplibs=yes
;;
amigaos*)
case $host_cpu in
powerpc)
lt_cv_sys_dlopen_deplibs=no
;;
esac
;;
darwin*)
# Assuming the user has installed a libdl from somewhere, this is
true
# If you are looking for one
http://www.opendarwin.org/projects/dlcompat
lt_cv_sys_dlopen_deplibs=yes
;;
freebsd* | dragonfly*)
lt_cv_sys_dlopen_deplibs=yes
;;
gnu* | linux* | k*bsd*-gnu | kopensolaris*-gnu)
# GNU and its variants, using gnu ld.so (Glibc)
lt_cv_sys_dlopen_deplibs=yes
;;
hpux10*|hpux11*)
lt_cv_sys_dlopen_deplibs=yes
;;
interix*)
lt_cv_sys_dlopen_deplibs=yes
;;
irix[[12345]]*|irix6.0*)
# Catch all versions of IRIX before 6.2, and indicate that we
don't
# know how it worked for any of those versions.
lt_cv_sys_dlopen_deplibs=unknown
;;
irix*)
# The case above catches anything before 6.2, and it's known that
# at 6.2 and later dlopen does load deplibs.
lt_cv_sys_dlopen_deplibs=yes

```

```

    ;;
netbsd*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
openbsd*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
osf[[1234]]*)
    # dlopen did load deplibs (at least at 4.x), but until the 5.x
series,
    # it did *not* use an RPATH in a shared library to find objects
the
    # library depends on, so we explicitly say `no'.
    lt_cv_sys_dlopen_deplibs=no
    ;;
osf5.0|osf5.0a|osf5.1)
    # dlopen *does* load deplibs and with the right loader patch
applied
    # it even uses RPATH in a shared library to search for shared
objects
    # that the library depends on, but there's no easy way to know if
that
    # patch is installed. Since this is the case, all we can really
    # say is unknown -- it depends on the patch being installed. If
    # it is, this changes to `yes'. Without it, it would be `no'.
    lt_cv_sys_dlopen_deplibs=unknown
    ;;
osf*)
    # the two cases above should catch all versions of osf <= 5.1.
Read
    # the comments above for what we know about them.
    # At > 5.1, deplibs are loaded *and* any RPATH in a shared library
    # is used to find them so we can finally say `yes'.
    lt_cv_sys_dlopen_deplibs=yes
    ;;
qnx*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
solaris*)
    lt_cv_sys_dlopen_deplibs=yes
    ;;
sysv5* | sco3.2v5* | sco5v6* | unixware* | OpenUNIX* | sysv4*uw2*)
    libltdl_cv_sys_dlopen_deplibs=yes
    ;;
esac
])
if test "$lt_cv_sys_dlopen_deplibs" != yes; then
    AC_DEFINE([LTDL_DLOPEN_DEPLIBS], [1],
        [Define if the OS needs help to load dependent libraries for
dlopen().])
fi
])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:542: -
1- AU_DEFUN([AC_LTDL_SYS_DLOPEN_DEPLIBS], [m4_if($#, 0,
[LT_SYS_DLOPEN_DEPLIBS], [LT_SYS_DLOPEN_DEPLIBS($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:542: -
1- AC_DEFUN([AC_LTDL_SYS_DLOPEN_DEPLIBS], [AC_DIAGNOSE([obsolete],
[The macro `AC_LTDL_SYS_DLOPEN_DEPLIBS' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_DLOPEN_DEPLIBS], [LT_SYS_DLOPEN_DEPLIBS($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:549: -
1- AC_DEFUN([LT_SYS_MODULE_EXT],
[m4_require([LT_SYS_DYNAMIC_LINKER])dnl
AC_CACHE_CHECK([which extension is used for runtime loadable modules],
[libltdl_cv_shlibext],
[
module=yes
eval libltdl_cv_shlibext=$shrext_cmds
module=no
eval libltdl_cv_shrext=$shrext_cmds
])
if test -n "$libltdl_cv_shlibext"; then
m4_pattern_allow([LT_MODULE_EXT])dnl
AC_DEFINE_UNQUOTED([LT_MODULE_EXT], ["$libltdl_cv_shlibext"],
[Define to the extension used for runtime loadable modules, say,
".so".])
fi
if test "$libltdl_cv_shrext" != "$libltdl_cv_shlibext"; then
m4_pattern_allow([LT_SHARED_EXT])dnl
AC_DEFINE_UNQUOTED([LT_SHARED_EXT], ["$libltdl_cv_shrext"],
[Define to the shared library suffix, say, ".dylib".])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:572: -
1- AU_DEFUN([AC_LTDL_SHLIBEXT], [m4_if($#, 0, [LT_SYS_MODULE_EXT],
[LT_SYS_MODULE_EXT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:572: -
1- AC_DEFUN([AC_LTDL_SHLIBEXT], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_SHLIBEXT' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_MODULE_EXT], [LT_SYS_MODULE_EXT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:579: -

```

```

1- AC_DEFUN([LT_SYS_MODULE_PATH],
[m4_require([_LT_SYS_DYNAMIC_LINKER])dnl
AC_CACHE_CHECK([which variable specifies run-time module search path],
[lt_cv_module_path_var], [lt_cv_module_path_var="$shlibpath_var"])
if test -n "$lt_cv_module_path_var"; then
  m4_pattern_allow([LT_MODULE_PATH_VAR])dnl
  AC_DEFINE_UNQUOTED([LT_MODULE_PATH_VAR], ["$lt_cv_module_path_var"],
[Define to the name of the environment variable that determines
the run-time module search path.])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:591: -
1- AU_DEFUN([AC_LTDL_SHLIBPATH], [m4_if($#, 0, [LT_SYS_MODULE_PATH],
[LT_SYS_MODULE_PATH($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:591: -
1- AC_DEFUN([AC_LTDL_SHLIBPATH], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_SHLIBPATH' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_MODULE_PATH], [LT_SYS_MODULE_PATH($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:598: -
1- AC_DEFUN([LT_SYS_DLSEARCH_PATH],
[m4_require([_LT_SYS_DYNAMIC_LINKER])dnl
AC_CACHE_CHECK([for the default library search path],
[lt_cv_sys_dlsearch_path],
[lt_cv_sys_dlsearch_path="$sys_lib_dlsearch_path_spec"])
if test -n "$lt_cv_sys_dlsearch_path"; then
  sys_dlsearch_path=
  for dir in $lt_cv_sys_dlsearch_path; do
    if test -z "$sys_dlsearch_path"; then
      sys_dlsearch_path="$dir"
    else
      sys_dlsearch_path="$sys_dlsearch_path$PATH_SEPARATOR$dir"
    fi
  done
  m4_pattern_allow([LT_DLSEARCH_PATH])dnl
  AC_DEFINE_UNQUOTED([LT_DLSEARCH_PATH], ["$sys_dlsearch_path"],
[Define to the system default library search path.])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:619: -
1- AU_DEFUN([AC_LTDL_SYSSEARCHPATH], [m4_if($#, 0,
[LT_SYS_DLSEARCH_PATH], [LT_SYS_DLSEARCH_PATH($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-

```

```

gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltldl.m4:619: -
1- AC_DEFUN([AC_LTDL_SYSSEARCHPATH], [AC_DIAGNOSE([obsolete], [The
macro `AC_LTDL_SYSSEARCHPATH' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_DLSEARCH_PATH], [LT_SYS_DLSEARCH_PATH($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltldl.m4:645: -
1- AC_DEFUN([LT_LIB_DLLOAD], [m4_pattern_allow([LT_DLLOADERS$])
LT_DLLOADERS=
AC_SUBST([LT_DLLOADERS])

AC_LANG_PUSH([C])

LIBADD_DLOPEN=
AC_SEARCH_LIBS([dlopen], [dl],
  [AC_DEFINE([HAVE_LIBDL], [1],
    [Define if you have the libdl library or equivalent.])
  if test "$ac_cv_search_dlopen" != "none required" ; then
    LIBADD_DLOPEN="-ldl"
  fi
  libltdl_cv_lib_dl_dlopen="yes"
  LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir}/}dlopen.la"],
  [AC_LINK_IFELSE([AC_LANG_PROGRAM([[#if HAVE_DLFCN_H
# include <dlfcn.h>
#endif
]], [[dlopen(0, 0);]])],
    [AC_DEFINE([HAVE_LIBDL], [1],
      [Define if you have the libdl library or
equivalent.])
    libltdl_cv_func_dlopen="yes"
    LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir}/}dlopen.la"],
    [AC_CHECK_LIB([svld], [dlopen],
      [AC_DEFINE([HAVE_LIBDL], [1],
        [Define if you have the libdl library or
equivalent.])
      LIBADD_DLOPEN="-lsvld" libltdl_cv_func_dlopen="yes"
      LT_DLLOADERS="$LT_DLLOADERS
${lt_dlopen_dir+${lt_dlopen_dir}/}dlopen.la"])]))
if test x"$libltdl_cv_func_dlopen" = xyes || test
x"$libltdl_cv_lib_dl_dlopen" = xyes
then
  lt_save_LIBS="$LIBS"
  LIBS="$LIBS $LIBADD_DLOPEN"
  AC_CHECK_FUNCS([dlerror])
  LIBS="$lt_save_LIBS"
fi
AC_SUBST([LIBADD_DLOPEN])

LIBADD_SHL_LOAD=

```

```

AC_CHECK_FUNC([shl_load],
  [AC_DEFINE([HAVE_SHL_LOAD], [1],
    [Define if you have the shl_load function.])
  LT_DLLOADERS="$LT_DLLOADERS
  ${lt_dlopen_dir+${lt_dlopen_dir}/}shl_load.la"],
  [AC_CHECK_LIB([dld], [shl_load],
    [AC_DEFINE([HAVE_SHL_LOAD], [1],
      [Define if you have the shl_load function.])
    LT_DLLOADERS="$LT_DLLOADERS
    ${lt_dlopen_dir+${lt_dlopen_dir}/}shl_load.la"
    LIBADD_SHL_LOAD="-ldld"])]])
AC_SUBST([LIBADD_SHL_LOAD])

case $host_os in
darwin[[1567]].*)
# We only want this for pre-Mac OS X 10.4.
  AC_CHECK_FUNC([_dyld_func_lookup],
    [AC_DEFINE([HAVE_DYLD], [1],
      [Define if you have the _dyld_func_lookup function.])
    LT_DLLOADERS="$LT_DLLOADERS
    ${lt_dlopen_dir+${lt_dlopen_dir}/}dyld.la"])
  ;;
beos*)
  LT_DLLOADERS="$LT_DLLOADERS
  ${lt_dlopen_dir+${lt_dlopen_dir}/}load_add_on.la"
  ;;
cygwin* | mingw* | os2* | pw32*)
  AC_CHECK_DECLS([cygwin_conv_path], [], [], [#include
<sys/cygwin.h>])
  LT_DLLOADERS="$LT_DLLOADERS
  ${lt_dlopen_dir+${lt_dlopen_dir}/}loadlibrary.la"
  ;;
esac

AC_CHECK_LIB([dld], [dld_link],
  [AC_DEFINE([HAVE_DLD], [1],
    [Define if you have the GNU dld library.])
  LT_DLLOADERS="$LT_DLLOADERS
  ${lt_dlopen_dir+${lt_dlopen_dir}/}dld_link.la"])
AC_SUBST([LIBADD_DLD_LINK])

m4_pattern_allow([^LT_DLPREOPEN$])
LT_DLPREOPEN=
if test -n "$LT_DLLOADERS"
then
  for lt_loader in $LT_DLLOADERS; do
    LT_DLPREOPEN="$LT_DLPREOPEN-dlpreopen $lt_loader "
  done
  AC_DEFINE([HAVE_LIBDLOADER], [1],
    [Define if libdloader will be built on this platform])
fi
AC_SUBST([LT_DLPREOPEN])

```

```

dnl This isn't used anymore, but set it for backwards compatibility
LIBADD_DL="$LIBADD_DLOPEN $LIBADD_SHL_LOAD"
AC_SUBST([LIBADD_DL])

AC_LANG_POP
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/lt dl.m4:738: -
1- AU_DEFUN([AC_LTDL_DLLIB], [m4_if($#, 0, [LT_LIB_DLLOAD],
[LT_LIB_DLLOAD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/lt dl.m4:738: -
1- AC_DEFUN([AC_LTDL_DLLIB], [AC_DIAGNOSE([obsolete], [The macro
`AC_LTDL_DLLIB' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_LIB_DLLOAD], [LT_LIB_DLLOAD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/lt dl.m4:746: -
1- AC_DEFUN([LT_SYS_SYMBOL_USCORE],
[m4_require([_LT_CMD_GLOBAL_SYMBOLS])dnl
AC_CACHE_CHECK([for _ prefix in compiled symbols],
[lt_cv_sys_symbol_underscore],
[lt_cv_sys_symbol_underscore=no
cat > confptest.$ac_ext <<_LT_EOF
void nm_test_func(){}
int main(){nm_test_func;return 0;}
_LT_EOF
if AC_TRY_EVAL(ac_compile); then
# Now try to grab the symbols.
ac_nlist=confptest.nm
if AC_TRY_EVAL(NM confptest.$ac_objext \
$lt_cv_sys_global_symbol_pipe \> $ac_nlist) && test -s "$ac_nlist";
then
# See whether the symbols have a leading underscore.
if grep '^._nm_test_func' "$ac_nlist" >/dev/null; then
lt_cv_sys_symbol_underscore=yes
else
if grep '^.nm_test_func ' "$ac_nlist" >/dev/null; then
:
else
echo "configure: cannot find nm_test_func in $ac_nlist"
>&AS_MESSAGE_LOG_FD
fi
fi
else
echo "configure: cannot run $lt_cv_sys_global_symbol_pipe"
>&AS_MESSAGE_LOG_FD
fi

```



```

else
  echo "configure: failed program was:" >&AS_MESSAGE_LOG_FD
  cat conftest.c >&AS_MESSAGE_LOG_FD
fi
rm -rf conftest*
])
sys_symbol_underscore=$lt_cv_sys_symbol_underscore
AC_SUBST([sys_symbol_underscore])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:783: -
1- AU_DEFUN([AC_LTDL_SYMBOL_USCORE], [m4_if($#, 0,
[LT_SYS_SYMBOL_USCORE], [LT_SYS_SYMBOL_USCORE($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:783: -
1- AC_DEFUN([AC_LTDL_SYMBOL_USCORE], [AC_DIAGNOSE([obsolete], [The
macro `AC_LTDL_SYMBOL_USCORE' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_SYMBOL_USCORE], [LT_SYS_SYMBOL_USCORE($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:790: -
1- AC_DEFUN([LT_FUNC_DLSYM_USCORE],
[AC_REQUIRE([LT_SYS_SYMBOL_USCORE])dnl
if test x"$lt_cv_sys_symbol_underscore" = xyes; then
  if test x"$libltdl_cv_func_dlopen" = xyes ||
    test x"$libltdl_cv_lib_dl_dlopen" = xyes ; then
    AC_CACHE_CHECK([whether we have to add an underscore for dlsym],
      [libltdl_cv_need_uscore],
      [libltdl_cv_need_uscore=unknown
        save_LIBS="$LIBS"
        LIBS="$LIBS $LIBADD_DLOPEN"
        _LT_TRY_DLOPEN_SELF(
          [libltdl_cv_need_uscore=no], [libltdl_cv_need_uscore=yes],
          [], [libltdl_cv_need_uscore=cross])
        LIBS="$save_LIBS"
      ])
  fi
fi
if test x"$libltdl_cv_need_uscore" = xyes; then
  AC_DEFINE([NEED_USCORE], [1],
    [Define if dlsym() requires a leading underscore in symbol
names.])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:815: -

```

```

1- AU_DEFUN([AC_LTDL_DLSYM_USCORE], [m4_if($#, 0,
[LT_FUNC_DLSYM_USCORE], [LT_FUNC_DLSYM_USCORE($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/aclocal-copy/ltdl.m4:815: -
1- AC_DEFUN([AC_LTDL_DLSYM_USCORE], [AC_DIAGNOSE([obsolete], [The
macro `AC_LTDL_DLSYM_USCORE' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_FUNC_DLSYM_USCORE], [LT_FUNC_DLSYM_USCORE($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/amversion.m4:14: -1- AC_DEFUN([AM_AUTOMAKE_VERSION],
[am__api_version='1.12'
dnl Some users find AM_AUTOMAKE_VERSION and mistake it for a way to
dnl require some minimum version. Point them to the right macro.
m4_if([$1], [1.12.6], [],
      [AC_FATAL([Do not call $0, use AM_INIT_AUTOMAKE([$1]).])])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/amversion.m4:33: -1- AC_DEFUN([AM_SET_CURRENT_AUTOMAKE_VERSION],
[AM_AUTOMAKE_VERSION([1.12.6])dnl
m4_ifndef([AC_AUTOCONF_VERSION],
  [m4_copy([m4_PACKAGE_VERSION], [AC_AUTOCONF_VERSION])])dnl
_AM_AUTOCONF_VERSION(m4_defn([AC_AUTOCONF_VERSION]))])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/auxdir.m4:47: -1- AC_DEFUN([AM_AUX_DIR_EXPAND], [dnl Rely on
autoconf to set up CDPATH properly.
AC_PREREQ([2.50])dnl
# expand $ac_aux_dir to an absolute path
am_aux_dir=`cd $ac_aux_dir && pwd`
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/cond.m4:12: -1- AC_DEFUN([AM_CONDITIONAL], [AC_PREREQ([2.52])dnl
m4_if([$1], [TRUE], [AC_FATAL([$0: invalid condition: $1]),
      [$1], [FALSE], [AC_FATAL([$0: invalid condition: $1])])dnl
AC_SUBST([$1_TRUE])dnl
AC_SUBST([$1_FALSE])dnl
_AM_SUBST_NOTMAKE([$1_TRUE])dnl
_AM_SUBST_NOTMAKE([$1_FALSE])dnl
m4_define([_AM_COND_VALUE_$1], [$2])dnl
if $2; then
  $1_TRUE=
  $1_FALSE='#'
else
  $1_TRUE='#'
  $1_FALSE=
fi
AC_CONFIG_COMMANDS_PRE(
[if test -z "${$1_TRUE}" && test -z "${$1_FALSE}"; then

```

```

AC_MSG_ERROR([[conditional "$1" was never defined.
Usually this means the macro was only invoked conditionally.]]
fi]))
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depend.m4:26: -1- AC_DEFUN([_AM_DEPENDENCIES],
[AC_REQUIRE([AM_SET_DEPDIR])dnl
AC_REQUIRE([AM_OUTPUT_DEPENDENCY_COMMANDS])dnl
AC_REQUIRE([AM_MAKE_INCLUDE])dnl
AC_REQUIRE([AM_DEP_TRACK])dnl

m4_if([$1], [CC], [depcc="$CC" am_compiler_list=],
      [$1], [CXX], [depcc="$CXX" am_compiler_list=],
      [$1], [OBJC], [depcc="$OBJC" am_compiler_list='gcc3 gcc'],
      [$1], [OBJCXX], [depcc="$OBJCXX" am_compiler_list='gcc3 gcc'],
      [$1], [UPC], [depcc="$UPC" am_compiler_list=],
      [$1], [GCJ], [depcc="$GCJ" am_compiler_list='gcc3 gcc'],
              [depcc="$1" am_compiler_list=])

AC_CACHE_CHECK([dependency style of $depcc],
                [am_cv_$1_dependencies_compiler_type],
[if test -z "$AMDEP_TRUE" && test -f "$am_depcomp"; then
  # We make a subdir and do the tests there.  Otherwise we can end up
  # making bogus files that we don't know about and never remove.  For
  # instance it was reported that on HP-UX the gcc test will end up
  # making a dummy file named 'D' -- because '-MD' means "put the
output
  # in D".
  rm -rf conftest.dir
  mkdir conftest.dir
  # Copy depcomp to subdir because otherwise we won't find it if we're
  # using a relative directory.
  cp "$am_depcomp" conftest.dir
  cd conftest.dir
  # We will build objects and dependencies in a subdirectory because
  # it helps to detect inapplicable dependency modes.  For instance
  # both Tru64's cc and ICC support -MD to output dependencies as a
  # side effect of compilation, but ICC will put the dependencies in
  # the current directory while Tru64 will put them in the object
  # directory.
  mkdir sub

  am_cv_$1_dependencies_compiler_type=none
  if test "$am_compiler_list" = ""; then
    am_compiler_list=`sed -n ['s/^#\*\([a-zA-Z0-9]*\)$/\1/p'] <
./depcomp`
  fi
  am__universal=false
  m4_case([$1], [CC],
        [case " $depcc " in #(
          *\ -arch\ *\ -arch\ *) am__universal=true ;;
        esac],

```

```

[CXX],
[case " $depcc " in #(
  *\ -arch\ *\ -arch\ *) am__universal=true ;;
esac])

for depmode in $am_compiler_list; do
# Setup a source with many dependencies, because some compilers
# like to wrap large dependency lists on column 80 (with \), and
# we should not choose a depcomp mode which is confused by this.
#
# We need to recreate these files for each test, as the compiler
may
# overwrite some of them when testing with obscure command lines.
# This happens at least with the AIX C compiler.
: > sub/confctest.c
for i in 1 2 3 4 5 6; do
  echo '#include "conftst'$i'.h"' >> sub/confctest.c
  # Using ": > sub/conftst$i.h" creates only sub/conftst1.h with
  # Solaris 10 /bin/sh.
  echo '/* dummy */' > sub/conftst$i.h
done
echo "${am__include} ${am__quote}sub/confctest.Po${am__quote}" >
confmf

# We check with '-c' and '-o' for the sake of the "dashmstdout"
# mode. It turns out that the SunPro C++ compiler does not
properly
# handle '-M -o', and we need to detect this. Also, some Intel
# versions had trouble with output in subdirs.
am__obj=sub/confctest.${OBJEXT-o}
am__minus_obj="-o $am__obj"
case $depmode in
gcc)
  # This depmode causes a compiler race in universal mode.
  test "$am__universal" = false || continue
  ;;
nosideeffect)
  # After this tag, mechanisms are not by side-effect, so they'll
  # only be used when explicitly requested.
  if test "x$enable_dependency_tracking" = xyes; then
    continue
  else
    break
  fi
  ;;
msvc7 | msvc7msys | msvisualcpp | msvcmsys)
  # This compiler won't grok '-c -o', but also, the minuso test
has
  # not run yet. These depmodes are late enough in the game, and
  # so weak that their functioning should not be impacted.
  am__obj=confctest.${OBJEXT-o}
  am__minus_obj=

```

```

;;
none) break ;;
esac
if depmode=$depmode \
    source=sub/confptest.c object=$am__obj \
    depfile=sub/confptest.Po tmpdepfile=sub/confptest.TPo \
    $SHELL ./depcomp $depcc -c $am__minus_obj sub/confptest.c \
        >/dev/null 2>confptest.err &&
    grep sub/confftst1.h sub/confptest.Po > /dev/null 2>&1 &&
    grep sub/confftst6.h sub/confptest.Po > /dev/null 2>&1 &&
    grep $am__obj sub/confptest.Po > /dev/null 2>&1 &&
    ${MAKE-make} -s -f confmf > /dev/null 2>&1; then
    # icc doesn't choke on unknown options, it will just issue
warnings
    # or remarks (even with -Werror). So we grep stderr for any
message
    # that says an option was ignored or not supported.
    # When given -MP, icc 7.0 and 7.1 complain thusly:
    #   icc: Command line warning: ignoring option '-M'; no argument
required
    # The diagnosis changed in icc 8.0:
    #   icc: Command line remark: option '-MP' not supported
    if (grep 'ignoring option' confptest.err ||
        grep 'not supported' confptest.err) >/dev/null 2>&1; then ;;
else
    am_cv_$1_dependencies_compiler_type=$depmode
    break
fi
fi
done

cd ..
rm -rf confptest.dir
else
    am_cv_$1_dependencies_compiler_type=none
fi
])
AC_SUBST([$1DEPMODE], [depmode=$am_cv_$1_dependencies_compiler_type])
AM_CONDITIONAL([am__fastdep$1], [
    test "x$enable_dependency_tracking" != xno \
    && test "$am_cv_$1_dependencies_compiler_type" = gcc3])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depend.m4:163: -1- AC_DEFUN([AM_SET_DEPDIR],
[AC_REQUIRE([AM_SET_LEADING_DOT])dnl
AC_SUBST([DEPDIR], ["${am__leading_dot}deps"])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depend.m4:171: -1- AC_DEFUN([AM_DEP_TRACK],
[AC_ARG_ENABLE([dependency-tracking], [dnl

```

```

AS_HELP_STRING(
  [--enable-dependency-tracking],
  [do not reject slow dependency extractors])
AS_HELP_STRING(
  [--disable-dependency-tracking],
  [speeds up one-time build]))
if test "x$enable_dependency_tracking" != xno; then
  am_depcomp="$ac_aux_dir/depcomp"
  AMDEPBACKSLASH='\'
  am__nodep='_no'
fi
AM_CONDITIONAL([AMDEP], [test "x$enable_dependency_tracking" != xno])
AC_SUBST([AMDEPBACKSLASH])dnl
_AM_SUBST_NOTMAKE([AMDEPBACKSLASH])dnl
AC_SUBST([am__nodep])dnl
_AM_SUBST_NOTMAKE([am__nodep])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depout.m4:12: -1- AC_DEFUN([_AM_OUTPUT_DEPENDENCY_COMMANDS], [{
  # Autoconf 2.62 quotes --file arguments for eval, but not when files
  # are listed without --file.  Let's play safe and only enable the
eval
  # if we detect the quoting.
  case $CONFIG_FILES in
  *\'*) eval set x "$CONFIG_FILES" ;;
  *)   set x $CONFIG_FILES ;;
  esac
  shift
  for mf
  do
    # Strip MF so we end up with the name of the file.
    mf=`echo "$mf" | sed -e 's/:.*/'`
    # Check whether this is an Automake generated Makefile or not.
    # We used to match only the files named 'Makefile.in', but
    # some people rename them; so instead we look at the file content.
    # Grep'ing the first line is not enough: some people post-process
    # each Makefile.in and add a new line on top of each file to say
so.
    # Grep'ing the whole file is not good either: AIX grep has a line
    # limit of 2048, but all sed's we know have understand at least
4000.
    if sed -n 's,^#.*generated by automake.*,X,p' "$mf" | grep X
>/dev/null 2>&1; then
      dirpart=`AS_DIRNAME("$mf")`
    else
      continue
    fi
    # Extract the definition of DEPDIR, am__include, and am__quote
    # from the Makefile without running 'make'.
    DEPDIR=`sed -n 's/^DEPDIR = //p' < "$mf"`
    test -z "$DEPDIR" && continue

```

```

am__include=`sed -n 's/^am__include = //p' < "$mf"`
test -z "am__include" && continue
am__quote=`sed -n 's/^am__quote = //p' < "$mf"`
# Find all dependency output files, they are included files with
# $(DEPDIR) in their names. We invoke sed twice because it is the
# simplest approach to changing $(DEPDIR) to its actual value in
the
# expansion.
for file in `sed -n "
s/^\$am__include \$am__quote\(.*(DEPDIR).*\) \$am__quote"'\$/\1/p'
<"$mf" | \
sed -e 's/\$(DEPDIR)/'"$DEPDIR"'/g`; do
# Make sure the directory exists.
test -f "$dirpart/$file" && continue
fdir=`AS_DIRNAME(["$file"])`
AS_MKDIR_P([$dirpart/$fdir])
# echo "creating $dirpart/$file"
echo '# dummy' > "$dirpart/$file"
done
done
}
])
m4trace:/home/gangadhar/newyocbuild/tisd/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/depout.m4:71: -1- AC_DEFUN([AM_OUTPUT_DEPENDENCY_COMMANDS],
[AC_CONFIG_COMMANDS([depfiles],
[test x"$AMDEP_TRUE" != x"" || _AM_OUTPUT_DEPENDENCY_COMMANDS],
[AMDEP_TRUE="$AMDEP_TRUE" ac_aux_dir="$ac_aux_dir"])
])
m4trace:/home/gangadhar/newyocbuild/tisd/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/init.m4:23: -1- AC_DEFUN([AM_INIT_AUTOMAKE],
[AC_PREREQ([2.62])dnl
dnl Autoconf wants to disallow AM_ names. We explicitly allow
dnl the ones we care about.
m4_pattern_allow([^AM_[A-Z]+FLAGS$])dnl
AC_REQUIRE([AM_SET_CURRENT_AUTOMAKE_VERSION])dnl
AC_REQUIRE([AC_PROG_INSTALL])dnl
if test "`cd $srcdir && pwd`" != "`pwd`"; then
# Use -I$(srcdir) only when $(srcdir) != ., so that make's output
# is not polluted with repeated "-I."
AC_SUBST([am__isrc], [' -
I$(srcdir)'])_AM_SUBST_NOTMAKE([am__isrc])dnl
# test to see if srcdir already configured
if test -f $srcdir/config.status; then
AC_MSG_ERROR([source directory already configured; run "make
distclean" there first])
fi
fi
fi

# test whether we have cygpath
if test -z "$CYGPATH_W"; then

```

```

if (cygpath --version) >/dev/null 2>/dev/null; then
  CYGPATH_W='cygpath -w'
else
  CYGPATH_W=echo
fi
fi
AC_SUBST([CYGPATH_W])

# Define the identity of the package.
dnl Distinguish between old-style and new-style calls.
m4_ifval([$2],
[AC_DIAGNOSE([obsolete],
[$0: two- and three-arguments forms are deprecated.  For more info,
see:
http://www.gnu.org/software/automake/manual/automake.html#Modernize-AM\_INIT\_AUTOMAKE-invocation])dnl
m4_ifval([$3], [_AM_SET_OPTION([no-define]))]dnl
AC_SUBST([PACKAGE], [$1])dnl
AC_SUBST([VERSION], [$2]),
[_AM_SET_OPTIONS([$1])dnl
dnl Diagnose old-style AC_INIT with new-style AM_AUTOMAKE_INIT.
m4_if(
  m4_ifdef([AC_PACKAGE_NAME], [ok]):m4_ifdef([AC_PACKAGE_VERSION],
[ok]),
  [ok:ok],,
  [m4_fatal([AC_INIT should be called with package and version
arguments])])dnl
AC_SUBST([PACKAGE], ['AC_PACKAGE_TARNAME'])dnl
AC_SUBST([VERSION], ['AC_PACKAGE_VERSION'])])dnl

_AM_IF_OPTION([no-define],,
[AC_DEFINE_UNQUOTED([PACKAGE], ["$PACKAGE"], [Name of package])
AC_DEFINE_UNQUOTED([VERSION], ["$VERSION"], [Version number of
package])])dnl

# Some tools Automake needs.
AC_REQUIRE([AM_SANITY_CHECK])dnl
AC_REQUIRE([AC_ARG_PROGRAM])dnl
AM_MISSING_PROG([ACLOCAL], [aclocal-${am__api_version}])
AM_MISSING_PROG([AUTOCONF], [autoconf])
AM_MISSING_PROG([AUTOMAKE], [automake-${am__api_version}])
AM_MISSING_PROG([AUTOHEADER], [autoheader])
AM_MISSING_PROG([MAKEINFO], [makeinfo])
AC_REQUIRE([AM_PROG_INSTALL_SH])dnl
AC_REQUIRE([AM_PROG_INSTALL_STRIP])dnl
AC_REQUIRE([AC_PROG_MKDIR_P])dnl
# For better backward compatibility.  To be removed once Automake
1.9.x
# dies out for good.  For more background, see:
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00001.html>
# <http://lists.gnu.org/archive/html/automake/2012-07/msg00014.html>
AC_SUBST([mkdir_p], ['$(MKDIR_P)'])

```



```

# We need awk for the "check" target.  The system "awk" is bad on
# some platforms.
AC_REQUIRE([AC_PROG_AWK])dn1
AC_REQUIRE([AC_PROG_MAKE_SET])dn1
AC_REQUIRE([AM_SET_LEADING_DOT])dn1
_AM_IF_OPTION([tar-ustar], [_AM_PROG_TAR([ustar])],
              [_AM_IF_OPTION([tar-pax], [_AM_PROG_TAR([pax])],
                             [_AM_PROG_TAR([v7])])])
_AM_IF_OPTION([no-dependencies],,
[AC_PROVIDE_IFELSE([AC_PROG_CC],
                  [_AM_DEPENDENCIES([CC])],
                  [m4_define([AC_PROG_CC],
m4_defn([AC_PROG_CC])[_AM_DEPENDENCIES([CC])])])dn1
AC_PROVIDE_IFELSE([AC_PROG_CXX],
                  [_AM_DEPENDENCIES([CXX])],
                  [m4_define([AC_PROG_CXX],
m4_defn([AC_PROG_CXX])[_AM_DEPENDENCIES([CXX])])])dn1
AC_PROVIDE_IFELSE([AC_PROG_OBJC],
                  [_AM_DEPENDENCIES([OBJC])],
                  [m4_define([AC_PROG_OBJC],
m4_defn([AC_PROG_OBJC])[_AM_DEPENDENCIES([OBJC])])])dn1
dn1 Support for Objective C++ was only introduced in Autoconf 2.65,
dn1 but we still cater to Autoconf 2.62.
m4_ifdef([AC_PROG_OBJCXX],
[AC_PROVIDE_IFELSE([AC_PROG_OBJCXX],
                  [_AM_DEPENDENCIES([OBJCXX])],
                  [m4_define([AC_PROG_OBJCXX],
m4_defn([AC_PROG_OBJCXX])[_AM_DEPENDENCIES([OBJCXX])])])])dn1
])
_AM_IF_OPTION([silent-rules], [AC_REQUIRE([AM_SILENT_RULES])])dn1
dn1 The 'parallel-tests' driver may need to know about EXEEXT, so add
the
dn1 'am__EXEEXT' conditional if _AM_COMPILER_EXEEXT was seen.  This
macro
dn1 is hooked onto _AC_COMPILER_EXEEXT early, see below.
AC_CONFIG_COMMANDS_PRE(dn1
[m4_provide_if([_AM_COMPILER_EXEEXT],
              [AM_CONDITIONAL([am__EXEEXT], [test -n "$EXEEXT"])])])dn1
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/init.m4:140: -1- AC_DEFUN([_AC_AM_CONFIG_HEADER_HOOK], [# Compute
$1's index in $config_headers.
_am_arg=$1
_am_stamp_count=1
for _am_header in $config_headers ;; do
  case $_am_header in
    $_am_arg | $_am_arg:* )

```

```

        break ;;
    * )
        _am_stamp_count=`expr $_am_stamp_count + 1` ;;
    esac
done
echo "timestamp for $_am_arg" >`AS_DIRNAME(["$_am_arg"])`/stamp-
h[]$_am_stamp_count])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/install-
sh.m4:11: -1- AC_DEFUN([AM_PROG_INSTALL_SH],
[AC_REQUIRE([AM_AUX_DIR_EXPAND])dnl
if test x"${install_sh}" != xset; then
    case $am_aux_dir in
    *\ * | *\ *)
        install_sh="\${SHELL} '$am_aux_dir/install-sh'" ;;
    *)
        install_sh="\${SHELL} $am_aux_dir/install-sh"
    esac
fi
AC_SUBST([install_sh])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/lead-
dot.m4:10: -1- AC_DEFUN([AM_SET_LEADING_DOT], [rm -rf .tst 2>/dev/null
mkdir .tst 2>/dev/null
if test -d .tst; then
    am__leading_dot=.
else
    am__leading_dot=_
fi
rmdir .tst 2>/dev/null
AC_SUBST([am__leading_dot])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/maintainer.m4:16: -1- AC_DEFUN([AM_MAINTAINER_MODE],
[m4_case(m4_default([$1], [disable]),
    [enable], [m4_define([am_maintainer_other], [disable])],
    [disable], [m4_define([am_maintainer_other], [enable])],
    [m4_define([am_maintainer_other], [enable])
    m4_warn([syntax], [unexpected argument to
AM@&t@_MAINTAINER_MODE: $1])])
AC_MSG_CHECKING([whether to enable maintainer-specific portions of
Makefiles])
    dnl maintainer-mode's default is 'disable' unless 'enable' is passed
    AC_ARG_ENABLE([maintainer-mode],
        [AS_HELP_STRING([--]am_maintainer_other[-maintainer-mode],
            am_maintainer_other[ make rules and dependencies not useful
            (and sometimes confusing) to the casual installer]),
        [USE_MAINTAINER_MODE=$enableval],
        [USE_MAINTAINER_MODE=]m4_if(am_maintainer_other, [enable], [no],
[yes]))
    AC_MSG_RESULT([$USE_MAINTAINER_MODE])
    AM_CONDITIONAL([MAINTAINER_MODE], [test $USE_MAINTAINER_MODE = yes])

```

```

MAINT=$MAINTAINER_MODE_TRUE
AC_SUBST([MAINT])dnl

])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/maintainer.m4:37: -1- AU_DEFUN([jm_MAINTAINER_MODE],
[AM_MAINTAINER_MODE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/maintainer.m4:37: -1- AC_DEFUN([jm_MAINTAINER_MODE],
[AC_DIAGNOSE([obsolete], [The macro `jm_MAINTAINER_MODE' is obsolete.
You should run autoupdate.])dnl
AM_MAINTAINER_MODE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/make.m4:12: -1- AC_DEFUN([AM_MAKE_INCLUDE], [am_make=${MAKE-make}
cat > confinc << 'END'
am__doit:
    @echo this is the am__doit target
.PHONY: am__doit
END
# If we don't find an include directive, just comment out the code.
AC_MSG_CHECKING([for style of include used by $am_make])
am__include="#"
am__quote=
__am_result=none
# First try GNU make style include.
echo "include confinc" > confmf
# Ignore all kinds of additional output from 'make'.
case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
    am__include=include
    am__quote=
    __am_result=GNU
    ;;
esac
# Now try BSD make style include.
if test "$am__include" = "#"; then
    echo '.include "confinc"' > confmf
    case ` $am_make -s -f confmf 2> /dev/null ` in #(
*the\ am__doit\ target*)
        am__include=.include
        am__quote="\\"
        __am_result=BSD
        ;;
    esac
fi
AC_SUBST([am__include])
AC_SUBST([am__quote])
AC_MSG_RESULT([$_am_result])
rm -f confinc confmf

```

```

])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/minuso.m4:11: -1- AC_DEFUN([AM_PROG_CC_C_O],
[AC_REQUIRE([AC_PROG_CC_C_O])dnl
AC_REQUIRE([AM_AUX_DIR_EXPAND])dnl
AC_REQUIRE_AUX_FILE([compile])dnl
# FIXME: we rely on the cache variable name because
# there is no other way.
set dummy $CC
am_cc=`echo $[2] | sed ['s/[^a-zA-Z0-9]//_g;s/^[0-9]//_']`
eval am_t=\$ac_cv_prog_cc_${am_cc}_c_o
if test "$am_t" != yes; then
    # Losing compiler, so override with the script.
    # FIXME: It is wrong to rewrite CC.
    # But if we don't then we get into trouble of one sort or another.
    # A longer-term fix would be to have automake use am__CC in this
case,
    # and then we could set am__CC="\$(top_srcdir)/compile `\${CC}"
    CC="$am_aux_dir/compile $CC"
fi
dnl Make sure AC_PROG_CC is never called again, or it will override
our
dnl setting of CC.
m4_define([AC_PROG_CC],
[m4_fatal([AC_PROG_CC cannot be called after
AM_PROG_CC_C_O])])
])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/missing.m4:11: -1- AC_DEFUN([AM_MISSING_PROG],
[AC_REQUIRE([AM_MISSING_HAS_RUN])
$1=${1-"${am_missing_run}$2"}
AC_SUBST($1)])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/missing.m4:20: -1- AC_DEFUN([AM_MISSING_HAS_RUN],
[AC_REQUIRE([AM_AUX_DIR_EXPAND])dnl
AC_REQUIRE_AUX_FILE([missing])dnl
if test x"${MISSING+set}" != xset; then
    case $am_aux_dir in
*\ * | *\ *)
        MISSING="\${SHELL} \"$am_aux_dir/missing\" " ;;
*)
        MISSING="\${SHELL} $am_aux_dir/missing" ;;
esac
fi
# Use eval to expand $SHELL
if eval "$MISSING --run true"; then
    am_missing_run="$MISSING --run "
else
    am_missing_run=

```

```

    AC_MSG_WARN(['missing' script is too old or missing])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/options.m4:11: -1- AC_DEFUN([_AM_MANGLE_OPTION],
[[_AM_OPTION_]m4_bpatsubst($1, [[^a-zA-Z0-9_]], [_])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/options.m4:17: -1- AC_DEFUN([_AM_SET_OPTION],
[m4_define(_AM_MANGLE_OPTION([$1]), [1])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/options.m4:23: -1- AC_DEFUN([_AM_SET_OPTIONS],
[m4_foreach_w([_AM_Option], [$1], [_AM_SET_OPTION(_AM_Option)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/options.m4:29: -1- AC_DEFUN([_AM_IF_OPTION],
[m4_ifset(_AM_MANGLE_OPTION([$1]), [$2], [$3])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/python.m4:35: -1- AC_DEFUN([AM_PATH_PYTHON], [
    dnl Find a Python interpreter.  Python versions prior to 2.0 are not
    dnl supported.  (2.0 was released on October 16, 2000).
    m4_define_default([_AM_PYTHON_INTERPRETER_LIST],
[python python2 python3 python3.3 python3.2 python3.1 python3.0
python2.7 dnl
python2.6 python2.5 python2.4 python2.3 python2.2 python2.1
python2.0])

    AC_ARG_VAR([PYTHON], [the Python interpreter])

    m4_if([$1], [], [
        dnl No version check is needed.
        # Find any Python interpreter.
        if test -z "$PYTHON"; then
            AC_PATH_PROGS([PYTHON], _AM_PYTHON_INTERPRETER_LIST, :)
        fi
        am_display_PYTHON=python
    ], [
        dnl A version check is needed.
        if test -n "$PYTHON"; then
            # If the user set $PYTHON, use it and don't search something
else.
            AC_MSG_CHECKING([whether $PYTHON version is >= $1])
            AM_PYTHON_CHECK_VERSION([$PYTHON], [$1],
                [AC_MSG_RESULT([yes])],
                [AC_MSG_RESULT([no])],
                AC_MSG_ERROR([Python interpreter is too old]))
            am_display_PYTHON=$PYTHON
        else

```

```

        # Otherwise, try each interpreter until we find one that
satisfies
        # VERSION.
        AC_CACHE_CHECK([for a Python interpreter with version >= $1],
[am_cv_pathless_PYTHON],[
for am_cv_pathless_PYTHON in _AM_PYTHON_INTERPRETER_LIST none; do
    test "$am_cv_pathless_PYTHON" = none && break
    AM_PYTHON_CHECK_VERSION([$am_cv_pathless_PYTHON], [$1],
[break])
done])
        # Set $PYTHON to the absolute path of $am_cv_pathless_PYTHON.
        if test "$am_cv_pathless_PYTHON" = none; then
        PYTHON=:
        else
            AC_PATH_PROG([PYTHON], [$am_cv_pathless_PYTHON])
        fi
        am_display_PYTHON=$am_cv_pathless_PYTHON
    fi
])

if test "$PYTHON" = :; then
    dnl Run any user-specified action, or abort.
    m4_default([$3], [AC_MSG_ERROR([no suitable Python interpreter
found])])
else

    dnl Query Python for its version number. Getting [:3] seems to be
    dnl the best way to do this; it's what "site.py" does in the
standard
    dnl library.

    AC_CACHE_CHECK([for $am_display_PYTHON version],
[am_cv_python_version],
    [am_cv_python_version=`$PYTHON -c "import sys;
sys.stdout.write(sys.version[:3])"`])
    AC_SUBST([PYTHON_VERSION], [$am_cv_python_version])

    dnl Use the values of $prefix, $libdir and $exec_prefix for the
corresponding
    dnl values of PYTHON_PREFIX PYTHON_LIB_PREFIX, and
PYTHON_EXEC_PREFIX. These are made
    dnl distinct variables so they can be overridden if need be.
However,
    dnl general consensus is that you shouldn't need this ability.

    AC_SUBST([PYTHON_PREFIX], ['${prefix}'])
    AC_SUBST([PYTHON_LIB_PREFIX], ['${libdir}'])
    AC_SUBST([PYTHON_EXEC_PREFIX], ['${exec_prefix}'])

    dnl At times (like when building shared libraries) you may want
    dnl to know which OS platform Python thinks this is.

```

```

AC_CACHE_CHECK([for $am_display_PYTHON platform],
[am_cv_python_platform],
  [am_cv_python_platform=`$PYTHON -c "import sys;
sys.stdout.write(sys.platform)"`])
AC_SUBST([PYTHON_PLATFORM], [$am_cv_python_platform])

# Just factor out some code duplication.
am_python_setup_sysconfig="\
import sys
# Prefer sysconfig over distutils.sysconfig, for better compatibility
# with python 3.x. See automake bug#10227.
try:
    import sysconfig
except ImportError:
    can_use_sysconfig = 0
else:
    can_use_sysconfig = 1
# Can't use sysconfig in CPython 2.7, since it's broken in
virtualenvs:
# <https://github.com/pypa/virtualenv/issues/118>
try:
    from platform import python_implementation
    if python_implementation() == 'CPython' and sys.version[[:3]] ==
'2.7':
        can_use_sysconfig = 0
except ImportError:
    pass"

dnl Set up 4 directories:

dnl pythondir -- where to install python scripts. This is the
dnl site-packages directory, not the python standard library
dnl directory like in previous automake betas. This behavior
dnl is more consistent with lispdir.m4 for example.
dnl Query distutils for this directory.
AC_CACHE_CHECK([for $am_display_PYTHON script directory],
[am_cv_python_pythondir],
  [if test "x$prefix" = xNONE
  then
    am_py_prefix=$ac_default_prefix
  else
    am_py_prefix=$prefix
  fi
  am_cv_python_pythondir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
    sitedir = sysconfig.get_path('purelib',
vars={'base': '$am_py_prefix'})
else:
    from distutils import sysconfig
    sitedir = sysconfig.get_python_lib(0, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)"` ||

```

```

    echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
    case $am_cv_python_pythondir in
    $am_py_prefix*)
        am__strip_prefix=`echo "$am_py_prefix" | sed 's|.|.|g'`
        am_cv_python_pythondir=`echo "$am_cv_python_pythondir" | sed
"s,^$am__strip_prefix,$PYTHON_PREFIX,"`
        ;;
    *)
        case $am_py_prefix in
        /usr|/System*) ;;
        *)
am_cv_python_pythondir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
        ;;
        esac
        ;;
    esac
    ])
AC_SUBST([pythondir], [$am_cv_python_pythondir])

dnl pkgpythondir -- $PACKAGE directory under pythondir. Was
dnl PYTHON_SITE_PACKAGE in previous betas, but this naming is
dnl more consistent with the rest of automake.

AC_SUBST([pkgpythondir], [\${pythondir}/$PACKAGE])

dnl pyexecdir -- directory for installing python extension modules
dnl (shared libraries)
dnl Query distutils for this directory.
AC_CACHE_CHECK([for $am_display_PYTHON extension module directory],
[am_cv_python_pyexecdir],
[if test "x$exec_prefix" = xNONE
then
    am_py_exec_prefix=$am_py_prefix
else
    am_py_exec_prefix=$exec_prefix
fi
    am_cv_python_pyexecdir=`$PYTHON -c "
$am_python_setup_sysconfig
if can_use_sysconfig:
    sitedir = sysconfig.get_path('platlib',
vars={'platbase': '$am_py_prefix'})
else:
    from distutils import sysconfig
    sitedir = sysconfig.get_python_lib(1, 0, prefix='$am_py_prefix')
sys.stdout.write(sitedir)"` ||
    echo "$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-packages" `
    case $am_cv_python_pyexecdir in
    $am_py_exec_prefix*)
        am__strip_prefix=`echo "$am_py_exec_prefix" | sed 's|.|.|g'`

```



```

        am_cv_python_pyexecdir=`echo "$am_cv_python_pyexecdir" | sed
"s,^$am__strip_prefix,$PYTHON_EXEC_PREFIX,"`
        ;;
    *)
        case $am_py_exec_prefix in
            /usr|/System*) ;;
        *)
am_cv_python_pyexecdir=$PYTHON_LIB_PREFIX/python$PYTHON_VERSION/site-
packages
        ;;
    esac
        ;;
    esac
    ])
AC_SUBST([pyexecdir], [$am_cv_python_pyexecdir])

dnl pkgpyexecdir -- $(pyexecdir)/$(PACKAGE)

AC_SUBST([pkgpyexecdir], [\${pyexecdir}/$PACKAGE])

dnl Run any user-specified action.
$2
fi

])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/python.m4:232: -1- AC_DEFUN([AM_PYTHON_CHECK_VERSION],
[prog="import sys
# split strings by '.' and convert to numeric. Append some zeros
# because we need at least 4 digits for the hex conversion.
# map returns an iterator in Python 3.0 and a list in 2.x
minver = list(map(int, '$2'.split('.'))) + [[0, 0, 0]]
minverhex = 0
# xrange is not present in Python 3.0 and range returns an iterator
for i in list(range(0, 4)): minverhex = (minverhex << 8) + minver[[i]]
sys.exit(sys.hexversion < minverhex)"
AS_IF([AM_RUN_LOG([$1 -c "$prog"])], [$3], [$4]])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/runlog.m4:12: -1- AC_DEFUN([AM_RUN_LOG], [{ echo "$as_me:$LINENO:
$1" >&AS_MESSAGE_LOG_FD
($1) >&AS_MESSAGE_LOG_FD 2>&AS_MESSAGE_LOG_FD
ac_status=$?
echo "$as_me:$LINENO: \ $? = $ac_status" >&AS_MESSAGE_LOG_FD
(exit $ac_status); }])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/sanity.m4:11: -1- AC_DEFUN([AM_SANITY_CHECK],
[AC_MSG_CHECKING([whether build environment is sane])

```

```

# Reject unsafe characters in $srcdir or the absolute working
directory
# name.  Accept space and tab only in the latter.
am_lf='
'
case `pwd` in
  *[[\\\"#\$\&\'`$am_lf]]*)
    AC_MSG_ERROR([unsafe absolute working directory name]);;
esac
case $srcdir in
  *[[\\\"#\$\&\'`$am_lf\ \ ]]*)
    AC_MSG_ERROR([unsafe srcdir value: '$srcdir']);;
esac

# Do 'set' in a subshell so we don't clobber the current shell's
# arguments.  Must try -L first in case configure is actually a
# symlink; some systems play weird games with the mod time of symlinks
# (eg FreeBSD returns the mod time of the symlink's containing
# directory).
if (
  am_has_slept=no
  for am_try in 1 2; do
    echo "timestamp, slept: $am_has_slept" > conftest.file
    set X `ls -Lt "$srcdir/configure" conftest.file 2> /dev/null`
    if test "$[*]" = "X"; then
      # -L didn't work.
      set X `ls -t "$srcdir/configure" conftest.file`
    fi
    if test "$[*]" != "X $srcdir/configure conftest.file" \
      && test "$[*]" != "X conftest.file $srcdir/configure"; then

      # If neither matched, then we have a broken ls.  This can happen
      # if, for instance, CONFIG_SHELL is bash and it inherits a
      # broken ls alias from the environment.  This has actually
      # happened.  Such a system could not be considered "sane".
      AC_MSG_ERROR([ls -t appears to fail.  Make sure there is not a
broken
alias in your environment])
    fi
    if test "$[2]" = conftest.file || test $am_try -eq 2; then
      break
    fi
    # Just in case.
    sleep 1
    am_has_slept=yes
  done
  test "$[2]" = conftest.file
)
then
  # Ok.
  :
else

```

```

    AC_MSG_ERROR([newly created file is older than distributed files!
Check your system clock])
fi
AC_MSG_RESULT([yes])
# If we didn't sleep, we still need to ensure time stamps of
config.status and
# generated files are strictly newer.
am_sleep_pid=
if grep 'slept: no' conftest.file >/dev/null 2>&1; then
    ( sleep 1 ) &
    am_sleep_pid=$!
fi
AC_CONFIG_COMMANDS_PRE(
  [AC_MSG_CHECKING([that generated files are newer than configure])
  if test -n "$am_sleep_pid"; then
    # Hide warnings about reused PIDs.
    wait $am_sleep_pid 2>/dev/null
  fi
  AC_MSG_RESULT([done])])
rm -f conftest.file
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/silent.m4:12: -1- AC_DEFUN([AM_SILENT_RULES],
[AC_ARG_ENABLE([silent-rules], [dnl
AS_HELP_STRING(
  [--enable-silent-rules],
  [less verbose build output (undo: "make V=1")])
AS_HELP_STRING(
  [--disable-silent-rules],
  [verbose build output (undo: "make V=0")])dnl
])
case $enable_silent_rules in @%:@ (((
  yes) AM_DEFAULT_VERBOSITY=0;;
  no) AM_DEFAULT_VERBOSITY=1;;
  *) AM_DEFAULT_VERBOSITY=m4_if([$1], [yes], [0], [1]);;
esac
dnl
dnl A few 'make' implementations (e.g., NonStop OS and NextStep)
dnl do not support nested variable expansions.
dnl See automake bug#9928 and bug#10237.
am_make=${MAKE-make}
AC_CACHE_CHECK([whether $am_make supports nested variables],
  [am_cv_make_support_nested_variables],
  [if AS_ECHO([['TRUE=$(BAR$(V))
BAR0=false
BAR1=true
V=1
am__doit:
  @$(TRUE)
.PHONY: am__doit']]) | $am_make -f - >/dev/null 2>&1; then
    am_cv_make_support_nested_variables=yes

```

```

else
  am_cv_make_support_nested_variables=no
fi])
if test $am_cv_make_support_nested_variables = yes; then
  dnl Using '$V' instead of '$(V)' breaks IRIX make.
  AM_V='$(V)'
  AM_DEFAULT_V='$(AM_DEFAULT_VERBOSITY)'
else
  AM_V=$AM_DEFAULT_VERBOSITY
  AM_DEFAULT_V=$AM_DEFAULT_VERBOSITY
fi
AC_SUBST([AM_V])dnl
AM_SUBST_NOTMAKE([AM_V])dnl
AC_SUBST([AM_DEFAULT_V])dnl
AM_SUBST_NOTMAKE([AM_DEFAULT_V])dnl
AC_SUBST([AM_DEFAULT_VERBOSITY])dnl
AM_BACKSLASH='\ '
AC_SUBST([AM_BACKSLASH])dnl
_AM_SUBST_NOTMAKE([AM_BACKSLASH])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/strip.m4:17: -1- AC_DEFUN([AM_PROG_INSTALL_STRIP],
[AC_REQUIRE([AM_PROG_INSTALL_SH])dnl
# Installed binaries are usually stripped using 'strip' when the user
# run "make install-strip". However 'strip' might not be the right
# tool to use in cross-compilation environments, therefore Automake
# will honor the 'STRIP' environment variable to overrule this
program.
dnl Don't test for $cross_compiling = yes, because it might be
'maybe'.
if test "$cross_compiling" != no; then
  AC_CHECK_TOOL([STRIP], [strip], :)
fi
INSTALL_STRIP_PROGRAM="\$(install_sh) -c -s"
AC_SUBST([INSTALL_STRIP_PROGRAM])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/substnot.m4:12: -1- AC_DEFUN([_AM_SUBST_NOTMAKE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-
1.12/substnot.m4:17: -1- AC_DEFUN([AM_SUBST_NOTMAKE],
[_AM_SUBST_NOTMAKE($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/sysroots/i686-linux/usr/share/aclocal-1.12/tar.m4:22:
-1- AC_DEFUN([_AM_PROG_TAR], [# Always define AMTAR for backward
compatibility. Yes, it's still used
# in the wild :- ( We should find a proper way to deprecate it ...
AC_SUBST([AMTAR], ['${TAR-tar}'])
m4_if([$1], [v7],
  [am__tar='${TAR-tar} chof - "$stardir"' am__untar='${TAR-tar}
xf -'],

```

```

        [m4_case([$1], [ustar],, [pax],,
                [m4_fatal([Unknown tar format]])])
AC_MSG_CHECKING([how to create a $1 tar archive])
# Loop over all known methods to create a tar archive until one works.
_am_tools='gnutar m4_if([$1], [ustar], [plaintar]) cpio pax none'
_am_tools=${am_cv_prog_tar_$1-$_am_tools}
# Do not fold the above two line into one, because Tru64 sh and
# Solaris sh will not grok spaces in the rhs of '-'.
for _am_tool in $_am_tools
do
  case $_am_tool in
    gnutar)
      for _am_tar in tar gnutar gtar;
      do
        AM_RUN_LOG([$_am_tar --version]) && break
      done
      am__tar="$_am_tar --format=m4_if([$1], [pax], [posix], [$1]) -chf
- "$tardir"
      am__tar="$_am_tar --format=m4_if([$1], [pax], [posix], [$1]) -chf
- "$tardir"
      am__untar="$_am_tar -xf -"
      ;;
    plaintar)
      # Must skip GNU tar: if it does not support --format= it doesn't
create
      # ustar tarball either.
      (tar --version) >/dev/null 2>&1 && continue
      am__tar='tar chf - "$tardir"'
      am__tar='tar chf - "$tardir"'
      am__untar='tar xf -'
      ;;
    pax)
      am__tar='pax -L -x $1 -w "$tardir"'
      am__tar='pax -L -x $1 -w "$tardir"'
      am__untar='pax -r'
      ;;
    cpio)
      am__tar='find "$tardir" -print | cpio -o -H $1 -L'
      am__tar='find "$tardir" -print | cpio -o -H $1 -L'
      am__untar='cpio -i -H $1 -d'
      ;;
    none)
      am__tar=false
      am__tar=false
      am__untar=false
      ;;
  esac

# If the value was cached, stop now. We just wanted to have am__tar
# and am__untar set.
test -n "${am_cv_prog_tar_$1}" && break

```

```

# tar/untar a dummy directory, and stop if the command works
rm -rf confptest.dir
mkdir confptest.dir
echo GrepMe > confptest.dir/file
AM_RUN_LOG([tardir=confptest.dir && eval $am__tar_ >confptest.tar])
rm -rf confptest.dir
if test -s confptest.tar; then
  AM_RUN_LOG([$am__untar <confptest.tar])
  grep GrepMe confptest.dir/file >/dev/null 2>&1 && break
fi
done
rm -rf confptest.dir

AC_CACHE_VAL([am_cv_prog_tar_$1], [am_cv_prog_tar_$1=$am_tool])
AC_MSG_RESULT([$am_cv_prog_tar_$1])
AC_SUBST([am__tar])
AC_SUBST([am__untar])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/as-ac-expand.m4:16: -1-
AC_DEFUN([AS_AC_EXPAND], [
  EXP_VAR=[$1]
  FROM_VAR=[$2]

  dnl first expand prefix and exec_prefix if necessary
  prefix_save=$prefix
  exec_prefix_save=$exec_prefix

  dnl if no prefix given, then use /usr/local, the default prefix
  if test "x$prefix" = "xNONE"; then
    prefix="$ac_default_prefix"
  fi
  dnl if no exec_prefix given, then use prefix
  if test "x$exec_prefix" = "xNONE"; then
    exec_prefix=$prefix
  fi

  full_var="$FROM_VAR"
  dnl loop until it doesn't change anymore
  while true; do
    new_full_var="`eval echo $full_var`"
    if test "x$new_full_var" = "x$full_var"; then break; fi
    full_var=$new_full_var
  done

  dnl clean up
  full_var=$new_full_var
  AC_SUBST([$1], "$full_var")

  dnl restore prefix and exec_prefix
  prefix=$prefix_save

```

```

    exec_prefix=$exec_prefix_save
  })
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/compiler.m4:29: -1-
AC_DEFUN([COMPILER_WARNINGS], [AC_ARG_ENABLE(compiler-warnings,
    AS_HELP_STRING([--enable-compiler-warnings],
                    [Enable additional compiler warnings]),
[if test "x$enable_compiler_warnings" = "xyes"; then
    if test "x$GCC" = "xyes"; then
        CFLAGS="-Wall -Werror $CFLAGS"
    fi
    if test "x$GXX" = "xyes"; then
        CXXFLAGS="-Wall -Werror $CXXFLAGS"
    fi
fi])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/compiler.m4:46: -1-
AC_DEFUN([COMPILER_OPTIMISATIONS], [AC_ARG_ENABLE(compiler-
optimisations,
    AS_HELP_STRING([--disable-compiler-optimisations],
                    [Disable compiler optimisations]),
[if test "x$enable_compiler_optimisations" = "xno"; then
    [CFLAGS=`echo "$CFLAGS" | sed -e "s/ -O[1-9]*\b/ -O0/g`"]
fi])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/compiler.m4:58: -1-
AC_DEFUN([COMPILER_COVERAGE], [AC_ARG_ENABLE(compiler-coverage,
    AS_HELP_STRING([--enable-compiler-coverage],
                    [Enable generation of coverage data]),
[if test "x$enable_compiler_coverage" = "xyes"; then
    if test "x$GCC" = "xyes"; then
        CFLAGS="$CFLAGS -fprofile-arcs -ftest-coverage"
    fi
fi])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:69: -1-
AC_DEFUN([LT_INIT], [AC_PREREQ([2.58])dnl We use AC_INCLUDES_DEFAULT
AC_REQUIRE([AC_CONFIG_AUX_DIR_DEFAULT])dnl
AC_BEFORE([$0], [LT_LANG])dnl
AC_BEFORE([$0], [LT_OUTPUT])dnl
AC_BEFORE([$0], [LTDL_INIT])dnl
m4_require([_LT_CHECK_BUILDDIR])dnl

dnl Autoconf doesn't catch unexpanded LT_ macros by default:
m4_pattern_forbid([^_?LT_[A-Z_]+$])dnl

```

```

m4_pattern_allow([^( _LT_EOF|LT_DLGLOBAL|LT_DLLAZY_OR_NOW|LT_MULTI_MODU
LE)$])dnl
dnl aclocal doesn't pull ltoptions.m4, ltsugar.m4, or ltversion.m4
dnl unless we require an AC_DEFUNed macro:
AC_REQUIRE([LTOPTIONS_VERSION])dnl
AC_REQUIRE([LTSUGAR_VERSION])dnl
AC_REQUIRE([LTVERSION_VERSION])dnl
AC_REQUIRE([LTOBSOLETE_VERSION])dnl
m4_require([_LT_PROG_LTMAIN])dnl

_LT_SHELL_INIT([SHELL=${CONFIG_SHELL-/bin/sh}])

dnl Parse OPTIONS
_LT_SET_OPTIONS([$0], [$1])

# This can be used to rebuild libtool when needed
LIBTOOL_DEPS="$ltmain"

# Always use our own libtool.
LIBTOOL='$(top_builddir)'
LIBTOOL="$LIBTOOL/${host_alias}-libtool"
AC_SUBST(LIBTOOL)dnl

_LT_SETUP

# Only expand once:
m4_define([LT_INIT])
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:108: -1-
AU_DEFUN([AC_PROG_LIBTOOL], [m4_if($#, 0, [LT_INIT], [LT_INIT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:108: -1-
AC_DEFUN([AC_PROG_LIBTOOL], [AC_DIAGNOSE([obsolete], [The macro
`AC_PROG_LIBTOOL' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_INIT], [LT_INIT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:109: -1-
AU_DEFUN([AM_PROG_LIBTOOL], [m4_if($#, 0, [LT_INIT], [LT_INIT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:109: -1-
AC_DEFUN([AM_PROG_LIBTOOL], [AC_DIAGNOSE([obsolete], [The macro
`AM_PROG_LIBTOOL' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_INIT], [LT_INIT($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-

```



```

gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:610: -1-
AC_DEFUN([LT_OUTPUT], [: ${CONFIG_LT=./config.lt}
AC_MSG_NOTICE([creating $CONFIG_LT])
_LT_GENERATED_FILE_INIT(["$CONFIG_LT"],
[# Run this file to recreate a libtool stub with the current
configuration.])

cat >>"$CONFIG_LT" <<\_LTEOF
lt_cl_silent=false
exec AS_MESSAGE_LOG_FD>>config.log
{
  echo
  AS_BOX([Running $as_me.])
} >&AS_MESSAGE_LOG_FD

lt_cl_help="\
\`$as_me' creates a local libtool stub from the current configuration,
for use in further configure time tests before the real libtool is
generated.

Usage: $[0] [[OPTIONS]]

  -h, --help          print this help, then exit
  -V, --version       print version number, then exit
  -q, --quiet         do not print progress messages
  -d, --debug         don't remove temporary files

Report bugs to <bug-libtool@gnu.org>."

lt_cl_version="\
m4_ifset([AC_PACKAGE_NAME], [AC_PACKAGE_NAME ])config.lt[[]dnl
m4_ifset([AC_PACKAGE_VERSION], [ AC_PACKAGE_VERSION])
configured by $[0], generated by m4_PACKAGE_STRING.

Copyright (C) 2011 Free Software Foundation, Inc.
This config.lt script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it."

while test $# != 0
do
  case $[1] in
    --version | --v* | -V )
      echo "$lt_cl_version"; exit 0 ;;
    --help | --h* | -h )
      echo "$lt_cl_help"; exit 0 ;;
    --debug | --d* | -d )
      debug=: ;;
    --quiet | --q* | --silent | --s* | -q )
      lt_cl_silent=: ;;

    -*) AC_MSG_ERROR([unrecognized option: $[1]
Try \`${0} --help' for more information.]) ;;

```

```

        *) AC_MSG_ERROR([unrecognized argument: ${1}
Try \`${0} --help' for more information.]) ;;
    esac
    shift
done

if $lt_cl_silent; then
    exec AS_MESSAGE_FD>/dev/null
fi
_LTEOF

cat >>"$CONFIG_LT" <<_LTEOF
_LT_OUTPUT_LIBTOOL_COMMANDS_INIT
_LTEOF

cat >>"$CONFIG_LT" <<\_LTEOF
AC_MSG_NOTICE([creating $ofile])
_LT_OUTPUT_LIBTOOL_COMMANDS
AS_EXIT(0)
_LTEOF
chmod +x "$CONFIG_LT"

# configure is writing to config.log, but config.lt does its own
redirection,
# appending to config.log, which fails on DOS, as config.log is still
kept
# open by configure.  Here we exec the FD to /dev/null, effectively
closing
# config.log, so it can be properly (re)opened and appended to by
config.lt.
lt_cl_success=:
test "$silent" = yes &&
    lt_config_lt_args="$lt_config_lt_args --quiet"
exec AS_MESSAGE_LOG_FD>/dev/null
$SHELL "$CONFIG_LT" $lt_config_lt_args || lt_cl_success=false
exec AS_MESSAGE_LOG_FD>>config.log
$lt_cl_success || AS_EXIT(1)
])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:791: -1-
AC_DEFUN([LT_SUPPORTED_TAG], [])
m4trace:/home/gangadhar/newyocbuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:802: -1-
AC_DEFUN([LT_LANG], [AC_BEFORE([${0}], [LT_OUTPUT])dn1
m4_case([${1}],
    [C],                [_LT_LANG(C)],
    [C++],              [_LT_LANG(CXX)],
    [Go],               [_LT_LANG(GO)],
    [Java],             [_LT_LANG(GCJ)],

```

```

[Fortran 77],      [_LT_LANG(F77)],
[Fortran],        [_LT_LANG(FC)],
[Windows Resource], [_LT_LANG(RC)],
[m4_ifdef([_LT_LANG_]$1[_CONFIG],
[_LT_LANG($1)],
[m4_fatal([$0: unsupported language: "$1"])]))]dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:894: -1-
AU_DEFUN([AC_LIBTOOL_CXX], [LT_LANG(C++)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:894: -1-
AC_DEFUN([AC_LIBTOOL_CXX], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_CXX' is obsolete.
You should run autoupdate.])]dnl
LT_LANG(C++)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:895: -1-
AU_DEFUN([AC_LIBTOOL_F77], [LT_LANG(Fortran 77)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:895: -1-
AC_DEFUN([AC_LIBTOOL_F77], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_F77' is obsolete.
You should run autoupdate.])]dnl
LT_LANG(Fortran 77)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:896: -1-
AU_DEFUN([AC_LIBTOOL_FC], [LT_LANG(Fortran)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:896: -1-
AC_DEFUN([AC_LIBTOOL_FC], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_FC' is obsolete.
You should run autoupdate.])]dnl
LT_LANG(Fortran)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:897: -1-
AU_DEFUN([AC_LIBTOOL_GCJ], [LT_LANG(Java)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:897: -1-
AC_DEFUN([AC_LIBTOOL_GCJ], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_GCJ' is obsolete.
You should run autoupdate.])]dnl
LT_LANG(Java)])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:898: -1-
AU_DEFUN([AC_LIBTOOL_RC], [LT_LANG(Windows Resource)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:898: -1-
AC_DEFUN([AC_LIBTOOL_RC], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_RC' is obsolete.
You should run autoupdate.])dnl
LT_LANG(Windows Resource)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1226: -1-
AC_DEFUN([_LT_WITH_SYSROOT], [AC_MSG_CHECKING([for sysroot])
AC_ARG_WITH([libtool-sysroot],
[ --with-libtool-sysroot[=DIR] Search for dependent libraries within
DIR
(or the compiler's sysroot if not
specified).],
[], [with_libtool_sysroot=no])

dnl lt_sysroot will always be passed unquoted. We quote it here
dnl in case the user passed a directory name.
lt_sysroot=
case ${with_libtool_sysroot} in #(
yes)
if test "$GCC" = yes; then
lt_sysroot=`$CC --print-sysroot 2>/dev/null`
fi
;; #(
/*)
lt_sysroot=`echo "$with_libtool_sysroot" | sed -e
"$sed_quote_subst"`
;; #(
no|'')
;; #(
*)
AC_MSG_RESULT([${with_libtool_sysroot}])
AC_MSG_ERROR([The sysroot must be an absolute path.])
;;
esac

AC_MSG_RESULT([${lt_sysroot:-no}])
_LT_DECL([], [lt_sysroot], [0], [The root where to search for ]dnl
[dependent libraries, and in which our libraries should be
installed.]])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1503: -1-
AC_DEFUN([_LT_COMPILER_OPTION],
[m4_require([_LT_FILEUTILS_DEFAULTS])dnl

```

```

m4_require([_LT_DECL_SED])dnl
AC_CACHE_CHECK([$1], [$2],
  [$2=no
  m4_if([$4], , [ac_outfile=conftest.$ac_objext], [ac_outfile=$4])
  echo "$lt_simple_compile_test_code" > conftest.$ac_ext
  lt_compiler_flag="$3"
  # Insert the option either (1) after the last *FLAGS variable, or
  # (2) before a word containing "conftest.", or (3) at the end.
  # Note that $ac_compile itself does not contain backslashes and
begins
  # with a dollar sign (not a hyphen), so the echo should work
correctly.
  # The option is referenced via a variable to avoid confusing sed.
  lt_compile=`echo "$ac_compile" | $SED \
-e 's:.*FLAGS}\{0,1\} :&$lt_compiler_flag ;; t' \
-e 's: [[^ ]]*conftest\. : $lt_compiler_flag&; t' \
-e 's:$ : $lt_compiler_flag:'`
  (eval echo "\"\$as_me:$LINENO: $lt_compile\"" >&AS_MESSAGE_LOG_FD)
  (eval "$lt_compile" 2>conftest.err)
  ac_status=$?
  cat conftest.err >&AS_MESSAGE_LOG_FD
  echo "$as_me:$LINENO: \$? = $ac_status" >&AS_MESSAGE_LOG_FD
  if (exit $ac_status) && test -s "$ac_outfile"; then
    # The compiler can only warn and ignore the option if not
recognized
    # So say no if there are warnings other than the usual output.
    $ECHO "$_lt_compiler_boilerplate" | $SED '/^$/d' >conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if test ! -s conftest.er2 || diff conftest.exp conftest.er2
>/dev/null; then
      $2=yes
    fi
  fi
  $RM conftest*
])

if test x"$2" = xyes; then
  m4_if([$5], , :, [$5])
else
  m4_if([$6], , :, [$6])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1545: -1-
AU_DEFUN([AC_LIBTOOL_COMPILER_OPTION], [m4_if($#, 0,
[_LT_COMPILER_OPTION], [_LT_COMPILER_OPTION($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1545: -1-
AC_DEFUN([AC_LIBTOOL_COMPILER_OPTION], [AC_DIAGNOSE([obsolete], [The
macro `AC_LIBTOOL_COMPILER_OPTION' is obsolete.

```

```

You should run autoupdate.])dnl
m4_if($#, 0, [_LT_COMPILER_OPTION], [_LT_COMPILER_OPTION($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1554: -1-
AC_DEFUN([_LT_LINKER_OPTION], [m4_require([_LT_FILEUTILS_DEFAULTS])dnl
m4_require([_LT_DECL_SED])dnl
AC_CACHE_CHECK([$1], [$2],
  [$2=no
  save_LDFLAGS="$LDFLAGS"
  LDFLAGS="$LDFLAGS $3"
  echo "$lt_simple_link_test_code" > conftest.$ac_ext
  if (eval $ac_link 2>conftest.err) && test -s conftest.$ac_exeext;
then
  # The linker can only warn and ignore the option if not
recognized
  # So say no if there are warnings
  if test -s conftest.err; then
    # Append any errors to the config.log.
    cat conftest.err 1>&AS_MESSAGE_LOG_FD
    $ECHO "$_lt_linker_boilerplate" | $SED '/^$/d' > conftest.exp
    $SED '/^$/d; /^ *+/d' conftest.err >conftest.er2
    if diff conftest.exp conftest.er2 >/dev/null; then
      $2=yes
    fi
  else
    $2=yes
  fi
fi
$RM -r conftest*
LDFLAGS="$save_LDFLAGS"
])

if test x"[$]$2" = xyes; then
  m4_if([$4], , :, [$4])
else
  m4_if([$5], , :, [$5])
fi
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1589: -1-
AU_DEFUN([AC_LIBTOOL_LINKER_OPTION], [m4_if($#, 0,
[_LT_LINKER_OPTION], [_LT_LINKER_OPTION($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1589: -1-
AC_DEFUN([AC_LIBTOOL_LINKER_OPTION], [AC_DIAGNOSE([obsolete], [The
macro `AC_LIBTOOL_LINKER_OPTION' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [_LT_LINKER_OPTION], [_LT_LINKER_OPTION($@)])])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1596: -1-
AC_DEFUN([LT_CMD_MAX_LEN], [AC_REQUIRE([AC_CANONICAL_HOST])dnl
# find the maximum length of command line arguments
AC_MSG_CHECKING([the maximum length of command line arguments])
AC_CACHE_VAL([lt_cv_sys_max_cmd_len], [dnl
  i=0
  teststring="ABCD"

  case $build_os in
    msdosdjgpp*)
      # On DJGPP, this test can blow up pretty badly due to problems in
      libc
      # (any single argument exceeding 2000 bytes causes a buffer
      overrun
      # during glob expansion). Even if it were fixed, the result of
      this
      # check would be larger than it should be.
      lt_cv_sys_max_cmd_len=12288;    # 12K is about right
      ;;

    gnu*)
      # Under GNU Hurd, this test is not required because there is
      # no limit to the length of command line arguments.
      # Libtool will interpret -1 as no limit whatsoever
      lt_cv_sys_max_cmd_len=-1;
      ;;

    cygwin* | mingw* | cegcc*)
      # On Win9x/ME, this test blows up -- it succeeds, but takes
      # about 5 minutes as the teststring grows exponentially.
      # Worse, since 9x/ME are not pre-emptively multitasking,
      # you end up with a "frozen" computer, even though with patience
      # the test eventually succeeds (with a max line length of 256k).
      # Instead, let's just punt: use the minimum linelength reported by
      # all of the supported platforms: 8192 (on NT/2K/XP).
      lt_cv_sys_max_cmd_len=8192;
      ;;

    mint*)
      # On MiNT this can take a long time and run out of memory.
      lt_cv_sys_max_cmd_len=8192;
      ;;

    amigaos*)
      # On AmigaOS with pdksh, this test takes hours, literally.
      # So we just punt and use a minimum line length of 8192.
      lt_cv_sys_max_cmd_len=8192;
      ;;

    netbsd* | freebsd* | openbsd* | darwin* | dragonfly*)

```

```

# This has been around since 386BSD, at least. Likely further.
if test -x /sbin/sysctl; then
    lt_cv_sys_max_cmd_len=`/sbin/sysctl -n kern.argmax`
elif test -x /usr/sbin/sysctl; then
    lt_cv_sys_max_cmd_len=`/usr/sbin/sysctl -n kern.argmax`
else
    lt_cv_sys_max_cmd_len=65536      # usable default for all BSDs
fi
# And add a safety zone
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
;;

interix*)
    # We know the value 262144 and hardcode it with a safety zone
    (like BSD)
    lt_cv_sys_max_cmd_len=196608
    ;;

os2*)
    # The test takes a long time on OS/2.
    lt_cv_sys_max_cmd_len=8192
    ;;

osf*)
    # Dr. Hans Ekkehard Plesser reports seeing a kernel panic running
    configure
    # due to this test when exec_disable_arg_limit is 1 on Tru64. It
    is not
    # nice to cause kernel panics so lets avoid the loop below.
    # First set a reasonable default.
    lt_cv_sys_max_cmd_len=16384
    #
    if test -x /sbin/sysconfig; then
        case ` /sbin/sysconfig -q proc exec_disable_arg_limit` in
            *1*) lt_cv_sys_max_cmd_len=-1 ;;
        esac
    fi
    ;;

sco3.2v5*)
    lt_cv_sys_max_cmd_len=102400
    ;;

sysv5* | sco5v6* | sysv4.2uw2*)
    kargmax=`grep ARG_MAX /etc/conf/cf.d/stune 2>/dev/null`
    if test -n "$kargmax"; then
        lt_cv_sys_max_cmd_len=`echo $kargmax | sed 's/.*[[      ]]'//`
    else
        lt_cv_sys_max_cmd_len=32768
    fi
    ;;

*)
    lt_cv_sys_max_cmd_len=`(getconf ARG_MAX) 2> /dev/null`

```



```

if test -n "$lt_cv_sys_max_cmd_len"; then
  lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 4`
  lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \* 3`
else
  # Make teststring a little bigger before we do anything with it.
  # a 1K string should be a reasonable start.
  for i in 1 2 3 4 5 6 7 8 ; do
    teststring=$teststring$teststring
  done
  SHELL=${SHELL-${CONFIG_SHELL-/bin/sh}}
  # If test is not a shell built-in, we'll probably end up
computing a
  # maximum length that is only half of the actual maximum length,
but
  # we can't tell.
  while { test "X"`env echo "$teststring$teststring" 2>/dev/null`
\
    = "X$teststring$teststring"; } >/dev/null 2>&1 &&
    test $i != 17 # 1/2 MB should be enough
  do
    i=`expr $i + 1`
    teststring=$teststring$teststring
  done
  # Only check the string length outside the loop.
  lt_cv_sys_max_cmd_len=`expr "X$teststring" : ".*" 2>&1`
  teststring=
  # Add a significant safety factor because C++ compilers can tack
on
  # massive amounts of additional arguments before passing them to
the
  # linker. It appears as though 1/2 is a usable value.
  lt_cv_sys_max_cmd_len=`expr $lt_cv_sys_max_cmd_len \/ 2`
fi
;;
esac
])
if test -n $lt_cv_sys_max_cmd_len ; then
  AC_MSG_RESULT($lt_cv_sys_max_cmd_len)
else
  AC_MSG_RESULT(none)
fi
max_cmd_len=$lt_cv_sys_max_cmd_len
_LT_DECL([], [max_cmd_len], [0],
  [What is the maximum length of a command?])
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1734: -1-
AU_DEFUN([AC_LIBTOOL_SYS_MAX_CMD_LEN], [m4_if($#, 0, [LT_CMD_MAX_LEN],
[LT_CMD_MAX_LEN($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-

```

```

gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1734: -1-
AC_DEFUN([AC_LIBTOOL_SYS_MAX_CMD_LEN], [AC_DIAGNOSE([obsolete], [The
macro `AC_LIBTOOL_SYS_MAX_CMD_LEN' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_CMD_MAX_LEN], [LT_CMD_MAX_LEN($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdK/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1845: -1-
AC_DEFUN([LT_SYS_DLOPEN_SELF], [m4_require([_LT_HEADER_DLFCN])dnl
if test "x$enable_dlopen" != xyes; then
  enable_dlopen=unknown
  enable_dlopen_self=unknown
  enable_dlopen_self_static=unknown
else
  lt_cv_dlopen=no
  lt_cv_dlopen_libs=

  case $host_os in
beos*)
  lt_cv_dlopen="load_add_on"
  lt_cv_dlopen_libs=
  lt_cv_dlopen_self=yes
  ;;

mingw* | pw32* | cegcc*)
  lt_cv_dlopen="LoadLibrary"
  lt_cv_dlopen_libs=
  ;;

cygwin*)
  lt_cv_dlopen="dlopen"
  lt_cv_dlopen_libs=
  ;;

darwin*)
# if libdl is installed we need to link against it
AC_CHECK_LIB([dl], [dlopen],
  [lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"], [
  lt_cv_dlopen="dyld"
  lt_cv_dlopen_libs=
  lt_cv_dlopen_self=yes
  ])
  ;;

*)
AC_CHECK_FUNC([shl_load],
  [lt_cv_dlopen="shl_load"],
  [AC_CHECK_LIB([dld], [shl_load],
    [lt_cv_dlopen="shl_load" lt_cv_dlopen_libs="-ldld"],
    [AC_CHECK_FUNC([dlopen],
      [lt_cv_dlopen="dlopen"],
      [AC_CHECK_LIB([dl], [dlopen],

```

```

        [lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-ldl"],
        [AC_CHECK_LIB([svld], [dlopen],
            [lt_cv_dlopen="dlopen" lt_cv_dlopen_libs="-lsvld"],
            [AC_CHECK_LIB([dld], [dld_link],
                [lt_cv_dlopen="dld_link" lt_cv_dlopen_libs="-ldld"])]
        ])
    ])
])
])
])
;;
esac

if test "x$lt_cv_dlopen" != xno; then
    enable_dlopen=yes
else
    enable_dlopen=no
fi

case $lt_cv_dlopen in
dlopen)
    save_CPPFLAGS="$CPPFLAGS"
    test "x$ac_cv_header_dlfcn_h" = xyes && CPPFLAGS="$CPPFLAGS -
DHAVE_DLFCN_H"

    save_LDFLAGS="$LDFLAGS"
    wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$export_dynamic_flag_spec\`"

    save_LIBS="$LIBS"
    LIBS="$lt_cv_dlopen_libs $LIBS"

    AC_CACHE_CHECK([whether a program can dlopen itself],
        [lt_cv_dlopen_self, [dnl
            _LT_TRY_DLOPEN_SELF(
                [lt_cv_dlopen_self=yes, lt_cv_dlopen_self=yes,
                [lt_cv_dlopen_self=no, lt_cv_dlopen_self=cross)
        ])

    if test "x$lt_cv_dlopen_self" = xyes; then
        wl=$lt_prog_compiler_wl eval LDFLAGS="\`$LDFLAGS
$lt_prog_compiler_static\`"
        AC_CACHE_CHECK([whether a statically linked program can dlopen
itself],
            [lt_cv_dlopen_self_static, [dnl
                _LT_TRY_DLOPEN_SELF(
                    [lt_cv_dlopen_self_static=yes, lt_cv_dlopen_self_static=yes,
                    [lt_cv_dlopen_self_static=no, lt_cv_dlopen_self_static=cross)
            ])
        fi

        CPPFLAGS="$save_CPPFLAGS"

```

```

    LDFLAGS="$save_LDFLAGS"
    LIBS="$save_LIBS"
    ;;
esac

case $lt_cv_dlopen_self in
yes|no) enable_dlopen_self=$lt_cv_dlopen_self ;;
*) enable_dlopen_self=unknown ;;
esac

case $lt_cv_dlopen_self_static in
yes|no) enable_dlopen_self_static=$lt_cv_dlopen_self_static ;;
*) enable_dlopen_self_static=unknown ;;
esac
fi
_LT_DECL([dlopen_support], [enable_dlopen], [0],
  [Whether dlopen is supported])
_LT_DECL([dlopen_self], [enable_dlopen_self], [0],
  [Whether dlopen of programs is supported])
_LT_DECL([dlopen_self_static], [enable_dlopen_self_static], [0],
  [Whether dlopen of statically linked programs is supported])
])
m4trace:/home/gangadhar/newyoctobuild/tisdtk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1962: -1-
AU_DEFUN([AC_LIBTOOL_DLOPEN_SELF], [m4_if($#, 0, [LT_SYS_DLOPEN_SELF],
[LT_SYS_DLOPEN_SELF($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdtk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:1962: -1-
AC_DEFUN([AC_LIBTOOL_DLOPEN_SELF], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_DLOPEN_SELF' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_SYS_DLOPEN_SELF], [LT_SYS_DLOPEN_SELF($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdtk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:2931: -1-
AC_DEFUN([_LT_PATH_TOOL_PREFIX], [m4_require([_LT_DECL_EGREP])dnl
AC_MSG_CHECKING([for $1])
AC_CACHE_VAL([lt_cv_path_MAGIC_CMD],
[case $MAGIC_CMD in
[\\/*] | ?:[\\/*]*)
  lt_cv_path_MAGIC_CMD="$MAGIC_CMD" # Let the user override the test
with a path.
  ;;
*)
  lt_save_MAGIC_CMD="$MAGIC_CMD"
  lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
  dnl $ac_dummy forces splitting on constant user-supplied paths.
  dnl POSIX.2 word splitting is done only on the output of word
  expansions,
  dnl not every word.  This closes a longstanding sh security hole.

```

```

ac_dummy="m4_if([$2], , $PATH, [$2])"
for ac_dir in $ac_dummy; do
  IFS="$lt_save_ifs"
  test -z "$ac_dir" && ac_dir=.
  if test -f $ac_dir/$1; then
    lt_cv_path_MAGIC_CMD="$ac_dir/$1"
    if test -n "$file_magic_test_file"; then
      case $deplibs_check_method in
        "file_magic" *)
          file_magic_regex=`expr "$deplibs_check_method" : "file_magic
\(.*\)"`
          MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
          if eval $file_magic_cmd \$file_magic_test_file 2> /dev/null |
            $EGREP "$file_magic_regex" > /dev/null; then
            :
          else
            cat <<_LT_EOF 1>&2

*** Warning: the command libtool uses to detect shared libraries,
*** $file_magic_cmd, produces output that libtool cannot recognize.
*** The result is that libtool may fail to recognize shared libraries
*** as such. This will affect the creation of libtool libraries that
*** depend on shared libraries, but programs linked with such libtool
*** libraries will work regardless of this problem. Nevertheless, you
*** may want to report the problem to your system manager and/or to
*** bug-libtool@gnu.org

_LT_EOF
          fi ;;
        esac
      fi
      break
    fi
  done
  IFS="$lt_save_ifs"
  MAGIC_CMD="$lt_save_MAGIC_CMD"
  ;;
esac])
MAGIC_CMD="$lt_cv_path_MAGIC_CMD"
if test -n "$MAGIC_CMD"; then
  AC_MSG_RESULT($MAGIC_CMD)
else
  AC_MSG_RESULT(no)
fi
_LT_DECL([], [MAGIC_CMD], [0],
  [Used to examine libraries when file_magic_cmd begins with
"file"])dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdtk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:2993: -1-

```

```

AU_DEFUN([AC_PATH_TOOL_PREFIX], [m4_if($#, 0, [_LT_PATH_TOOL_PREFIX],
[_LT_PATH_TOOL_PREFIX($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:2993: -1-
AC_DEFUN([AC_PATH_TOOL_PREFIX], [AC_DIAGNOSE([obsolete], [The macro
`AC_PATH_TOOL_PREFIX' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [_LT_PATH_TOOL_PREFIX], [_LT_PATH_TOOL_PREFIX($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3016: -1-
AC_DEFUN([LT_PATH_LD], [AC_REQUIRE([AC_PROG_CC])dnl
AC_REQUIRE([AC_CANONICAL_HOST])dnl
AC_REQUIRE([AC_CANONICAL_BUILD])dnl
m4_require([_LT_DECL_SED])dnl
m4_require([_LT_DECL_EGREP])dnl
m4_require([_LT_PROG_ECHO_BACKSLASH])dnl

AC_ARG_WITH([gnu-ld],
  [AS_HELP_STRING([--with-gnu-ld],
    [assume the C compiler uses GNU ld @<:@default=no@:>@]),
  [test "$withval" = no || with_gnu_ld=yes],
  [with_gnu_ld=no])dnl

ac_prog=ld
if test "$GCC" = yes; then
  # Check if gcc -print-prog-name=ld gives a path.
  AC_MSG_CHECKING([for ld used by $CC])
  case $host in
  *-*-mingw*)
    # gcc leaves a trailing carriage return which upsets mingw
    ac_prog=`($CC -print-prog-name=ld) 2>&5 | tr -d '\015'` ;;
  *)
    ac_prog=`($CC -print-prog-name=ld) 2>&5` ;;
  esac
  case $ac_prog in
  # Accept absolute paths.
  [[\\\/]]* | ?:[[\\\/]]*)
    re_direlt='/[[^/]]/[^\.]*\./'
    # Canonicalize the pathname of ld
    ac_prog=`$ECHO "$ac_prog"| $SED 's%\\\\\%/g'`
    while $ECHO "$ac_prog" | $GREP "$re_direlt" > /dev/null 2>&1; do
      ac_prog=`$ECHO $ac_prog| $SED "s%$re_direlt%/"`
    done
    test -z "$LD" && LD="$ac_prog"
    ;;
  "")
    # If it fails, then pretend we aren't using GCC.
    ac_prog=ld
    ;;
  *)

```

```

        # If it is relative, then search for the first ld in PATH.
        with_gnu_ld=unknown
        ;;
    esac
elif test "$with_gnu_ld" = yes; then
    AC_MSG_CHECKING([for GNU ld])
else
    AC_MSG_CHECKING([for non-GNU ld])
fi
AC_CACHE_VAL([lt_cv_path_LD],
[if test -z "$LD"; then
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH; do
        IFS="$lt_save_ifs"
        test -z "$ac_dir" && ac_dir=.
        if test -f "$ac_dir/$ac_prog" || test -f
"$ac_dir/$ac_prog$ac_exeext"; then
            lt_cv_path_LD="$ac_dir/$ac_prog"
            # Check to see if the program is GNU ld.  I'd rather use --
version,
            # but apparently some variants of GNU ld only accept -v.
            # Break only if it was the GNU/non-GNU ld that we prefer.
            case `"$lt_cv_path_LD" -v 2>&1 </dev/null` in
                *GNU* | *'with BFD'*)
                    test "$with_gnu_ld" != no && break
                    ;;
                *)
                    test "$with_gnu_ld" != yes && break
                    ;;
            esac
        fi
    done
    IFS="$lt_save_ifs"
else
    lt_cv_path_LD="$LD" # Let the user override the test with a path.
fi])
LD="$lt_cv_path_LD"
if test -n "$LD"; then
    AC_MSG_RESULT($LD)
else
    AC_MSG_RESULT(no)
fi
test -z "$LD" && AC_MSG_ERROR([no acceptable ld found in \${PATH}])
_LT_PATH_LD_GNU
AC_SUBST([LD])

_LT_TAGDECL([], [LD], [1], [The linker used to build libraries])
])
m4trace:/home/gangadhar/newyoctobuild/tisdtk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3105: -1-
AU_DEFUN([AM_PROG_LD], [m4_if($#, 0, [LT_PATH_LD], [LT_PATH_LD($@)])])

```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3105: -1-
AC_DEFUN([AM_PROG_LD], [AC_DIAGNOSE([obsolete], [The macro
`AM_PROG_LD' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PATH_LD], [LT_PATH_LD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3106: -1-
AU_DEFUN([AC_PROG_LD], [m4_if($#, 0, [LT_PATH_LD], [LT_PATH_LD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3106: -1-
AC_DEFUN([AC_PROG_LD], [AC_DIAGNOSE([obsolete], [The macro
`AC_PROG_LD' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PATH_LD], [LT_PATH_LD($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3400: -1-
AC_DEFUN([LT_PATH_NM], [AC_REQUIRE([AC_PROG_CC])dnl
AC_CACHE_CHECK([for BSD- or MS-compatible name lister (nm)],
lt_cv_path_NM,
[if test -n "$NM"; then
  # Let the user override the test.
  lt_cv_path_NM="$NM"
else
  lt_nm_to_check="${ac_tool_prefix}nm"
  if test -n "$ac_tool_prefix" && test "$build" = "$host"; then
    lt_nm_to_check="$lt_nm_to_check nm"
  fi
  for lt_tmp_nm in $lt_nm_to_check; do
    lt_save_ifs="$IFS"; IFS=$PATH_SEPARATOR
    for ac_dir in $PATH /usr/ccs/bin/elf /usr/ccs/bin /usr/ucb /bin;
do
      IFS="$lt_save_ifs"
      test -z "$ac_dir" && ac_dir=.
      tmp_nm="$ac_dir/$lt_tmp_nm"
      if test -f "$tmp_nm" || test -f "$tmp_nm$ac_exeext" ; then
        # Check to see if the nm accepts a BSD-compat flag.
        # Adding the `sed 1q' prevents false positives on HP-UX, which
says:
        # nm: unknown option "B" ignored
        # Tru64's nm complains that /dev/null is an invalid object file
        case `"$tmp_nm" -B /dev/null 2>&1 | sed '1q'` in
        */dev/null* | *'Invalid file or object type'*)
          lt_cv_path_NM="$tmp_nm -B"
          break
        ;;
        *)
          case `"$tmp_nm" -p /dev/null 2>&1 | sed '1q'` in

```



```

        */dev/null*)
            lt_cv_path_NM="$tmp_nm -p"
            break
            ;;
        *)
            lt_cv_path_NM=${lt_cv_path_NM="$tmp_nm"} # keep the first
match, but
            continue # so that we can try to find one that supports BSD
flags
            ;;
        esac
    ;;
done
fi
done
IFS="$lt_save_ifs"
done
: ${lt_cv_path_NM=no}
fi])
if test "$lt_cv_path_NM" != "no"; then
    NM="$lt_cv_path_NM"
else
    # Didn't find any BSD compatible name lister, look for dumpbin.
    if test -n "$DUMPBIN"; then :
        # Let the user override the test.
    else
        AC_CHECK_TOOLS(DUMPBIN, [dumpbin "link -dump"], :)
        case ` $DUMPBIN -symbols /dev/null 2>&1 | sed '1q' ` in
        *COFF*)
            DUMPBIN="$DUMPBIN -symbols"
            ;;
        *)
            DUMPBIN=:
            ;;
        esac
    fi
    AC_SUBST([DUMPBIN])
    if test "$DUMPBIN" != ":"; then
        NM="$DUMPBIN"
    fi
fi
test -z "$NM" && NM=nm
AC_SUBST([NM])
_LT_DECL([], [NM], [1], [A BSD- or MS-compatible name lister])dnl

AC_CACHE_CHECK([the name lister ($NM) interface],
[lt_cv_nm_interface],
[lt_cv_nm_interface="BSD nm"
echo "int some_variable = 0;" > conftest.$ac_ext
(eval echo "\`$as_me:$LINENO: $ac_compile\`" >&AS_MESSAGE_LOG_FD)
(eval "$ac_compile" 2>conftest.err)
cat conftest.err >&AS_MESSAGE_LOG_FD

```

```

    (eval echo "\"\$as_me:$LINENO: $NM \\\"confptest.$ac_objext\\\"\""
>&AS_MESSAGE_LOG_FD)
    (eval "$NM \"confptest.$ac_objext\" 2>confptest.err > confptest.out)
    cat confptest.err >&AS_MESSAGE_LOG_FD
    (eval echo "\"\$as_me:$LINENO: output\"" >&AS_MESSAGE_LOG_FD)
    cat confptest.out >&AS_MESSAGE_LOG_FD
    if $GREP 'External.*some_variable' confptest.out > /dev/null; then
        lt_cv_nm_interface="MS dumpbin"
    fi
    rm -f confptest*)
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3490: -1-
AU_DEFUN([AM_PROG_NM], [m4_if($#, 0, [LT_PATH_NM], [LT_PATH_NM($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3490: -1-
AC_DEFUN([AM_PROG_NM], [AC_DIAGNOSE([obsolete], [The macro
`AM_PROG_NM' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PATH_NM], [LT_PATH_NM($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3491: -1-
AU_DEFUN([AC_PROG_NM], [m4_if($#, 0, [LT_PATH_NM], [LT_PATH_NM($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3491: -1-
AC_DEFUN([AC_PROG_NM], [AC_DIAGNOSE([obsolete], [The macro
`AC_PROG_NM' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PATH_NM], [LT_PATH_NM($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3561: -1-
AC_DEFUN([LT_LIB_M], [AC_REQUIRE([AC_CANONICAL_HOST])dnl
LIBM=
case $host in
*-*-beos* | *-*-cegcc* | *-*-cygwin* | *-*-haiku* | *-*-pw32* | *-*-
darwin*)
    # These system don't have libm, or don't need it
    ;;
*-*-ncr-sysv4.3*)
    AC_CHECK_LIB(mw, _mwvalidcheck1, LIBM="-lmw")
    AC_CHECK_LIB(m, cos, LIBM="$LIBM -lm")
    ;;
*)
    AC_CHECK_LIB(m, cos, LIBM="-lm")
    ;;
esac
AC_SUBST([LIBM])

```

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])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3580: -1-
AU_DEFUN([AC_CHECK_LIBM], [m4_if($#, 0, [LT_LIB_M], [LT_LIB_M($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:3580: -1-
AC_DEFUN([AC_CHECK_LIBM], [AC_DIAGNOSE([obsolete], [The macro
`AC_CHECK_LIBM' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_LIB_M], [LT_LIB_M($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7623: -1-
AC_DEFUN([LT_PROG_GCJ], [m4_ifdef([AC_PROG_GCJ], [AC_PROG_GCJ],
[m4_ifdef([A][M_PROG_GCJ], [A][M_PROG_GCJ],
[AC_CHECK_TOOL(GCJ, gcj,)
test "x${GCJFLAGS+set}" = xset || GCJFLAGS="-g -O2"
AC_SUBST(GCJFLAGS)])]) [dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7632: -1-
AU_DEFUN([LT_AC_PROG_GCJ], [m4_if($#, 0, [LT_PROG_GCJ],
[LT_PROG_GCJ($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7632: -1-
AC_DEFUN([LT_AC_PROG_GCJ], [AC_DIAGNOSE([obsolete], [The macro
`LT_AC_PROG_GCJ' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PROG_GCJ], [LT_PROG_GCJ($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7639: -1-
AC_DEFUN([LT_PROG_GO], [AC_CHECK_TOOL(GOC, gccgo,)
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7646: -1-
AC_DEFUN([LT_PROG_RC], [AC_CHECK_TOOL(RC, windres,)
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7651: -1-
AU_DEFUN([LT_AC_PROG_RC], [m4_if($#, 0, [LT_PROG_RC],
[LT_PROG_RC($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7651: -1-

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AC_DEFUN([LT_AC_PROG_RC], [AC_DIAGNOSE([obsolete], [The macro
`LT_AC_PROG_RC' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [LT_PROG_RC], [LT_PROG_RC($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7771: -1-
AU_DEFUN([LT_AC_PROG_SED], [m4_if($#, 0, [AC_PROG_SED],
[AC_PROG_SED($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7771: -1-
AC_DEFUN([LT_AC_PROG_SED], [AC_DIAGNOSE([obsolete], [The macro
`LT_AC_PROG_SED' is obsolete.
You should run autoupdate.])dnl
m4_if($#, 0, [AC_PROG_SED], [AC_PROG_SED($@)])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:14: -1-
AC_DEFUN([LTOPTIONS_VERSION], [m4_if([1])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:111: -1-
AU_DEFUN([AC_LIBTOOL_DLOPEN], [_LT_SET_OPTION([LT_INIT], [dlopen])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `dlopen' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:111: -1-
AC_DEFUN([AC_LIBTOOL_DLOPEN], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_DLOPEN' is obsolete.
You should run autoupdate.])dnl
_LT_SET_OPTION([LT_INIT], [dlopen])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `dlopen' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:146: -1-
AU_DEFUN([AC_LIBTOOL_WIN32_DLL], [AC_REQUIRE([AC_CANONICAL_HOST])dnl
_LT_SET_OPTION([LT_INIT], [win32-dll])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `win32-dll' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:146: -1-

```

```

AC_DEFUN([AC_LIBTOOL_WIN32_DLL], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_WIN32_DLL' is obsolete.
You should run autoupdate.])dnl
AC_REQUIRE([AC_CANONICAL_HOST])dnl
_LT_SET_OPTION([LT_INIT], [win32-dll])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `win32-dll' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:195: -1-
AC_DEFUN([AC_ENABLE_SHARED], [_LT_SET_OPTION([LT_INIT], m4_if([$1],
[no], [disable-])[shared])
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:199: -1-
AC_DEFUN([AC_DISABLE_SHARED], [_LT_SET_OPTION([LT_INIT], [disable-
shared])
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:203: -1-
AU_DEFUN([AM_ENABLE_SHARED], [AC_ENABLE_SHARED($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:203: -1-
AC_DEFUN([AM_ENABLE_SHARED], [AC_DIAGNOSE([obsolete], [The macro
`AM_ENABLE_SHARED' is obsolete.
You should run autoupdate.])dnl
AC_ENABLE_SHARED($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:204: -1-
AU_DEFUN([AM_DISABLE_SHARED], [AC_DISABLE_SHARED($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:204: -1-
AC_DEFUN([AM_DISABLE_SHARED], [AC_DIAGNOSE([obsolete], [The macro
`AM_DISABLE_SHARED' is obsolete.
You should run autoupdate.])dnl
AC_DISABLE_SHARED($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:249: -1-
AC_DEFUN([AC_ENABLE_STATIC], [_LT_SET_OPTION([LT_INIT], m4_if([$1],
[no], [disable-])[static])
])
m4trace:/home/gangadhar/newyoctobuild/tisdsk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:253: -1-

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AC_DEFUN([AC_DISABLE_STATIC], [_LT_SET_OPTION([LT_INIT], [disable-
static])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:257: -1-
AU_DEFUN([AM_ENABLE_STATIC], [AC_ENABLE_STATIC($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:257: -1-
AC_DEFUN([AM_ENABLE_STATIC], [AC_DIAGNOSE([obsolete], [The macro
`AM_ENABLE_STATIC' is obsolete.
You should run autoupdate.])dnl
AC_ENABLE_STATIC($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:258: -1-
AU_DEFUN([AC_DISABLE_STATIC], [AC_DISABLE_STATIC($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:258: -1-
AC_DEFUN([AC_DISABLE_STATIC], [AC_DIAGNOSE([obsolete], [The macro
`AM_DISABLE_STATIC' is obsolete.
You should run autoupdate.])dnl
AC_DISABLE_STATIC($@)])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:303: -1-
AU_DEFUN([AC_ENABLE_FAST_INSTALL], [_LT_SET_OPTION([LT_INIT],
m4_if([$1], [no], [disable-])[fast-install])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you put
the `fast-install' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:303: -1-
AC_DEFUN([AC_ENABLE_FAST_INSTALL], [AC_DIAGNOSE([obsolete], [The macro
`AC_ENABLE_FAST_INSTALL' is obsolete.
You should run autoupdate.])dnl
_LT_SET_OPTION([LT_INIT], m4_if([$1], [no], [disable-])[fast-install])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you put
the `fast-install' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:310: -1-
AU_DEFUN([AC_DISABLE_FAST_INSTALL], [_LT_SET_OPTION([LT_INIT],
[disable-fast-install])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you put

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the `disable-fast-install' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:310: -1-
AC_DEFUN([AC_DISABLE_FAST_INSTALL], [AC_DIAGNOSE([obsolete], [The
macro `AC_DISABLE_FAST_INSTALL' is obsolete.
You should run autoupdate.])dnl
_LT_SET_OPTION([LT_INIT], [disable-fast-install])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you put
the `disable-fast-install' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:358: -1-
AU_DEFUN([AC_LIBTOOL_PICMODE], [_LT_SET_OPTION([LT_INIT], [pic-only])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `pic-only' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltoptions.m4:358: -1-
AC_DEFUN([AC_LIBTOOL_PICMODE], [AC_DIAGNOSE([obsolete], [The macro
`AC_LIBTOOL_PICMODE' is obsolete.
You should run autoupdate.])dnl
_LT_SET_OPTION([LT_INIT], [pic-only])
AC_DIAGNOSE([obsolete],
[$0: Remove this warning and the call to _LT_SET_OPTION when you
put the `pic-only' option into LT_INIT's first parameter.])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltsugar.m4:13: -1-
AC_DEFUN([LTSUGAR_VERSION], [m4_if([0.1])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/ltversion.m4:18: -1-
AC_DEFUN([LTVERSION_VERSION], [macro_version='2.4.2'
macro_revision='1.3337'
_LT_DECL(, macro_version, 0, [Which release of libtool.m4 was used?])
_LT_DECL(, macro_revision, 0)
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:36: -1-
AC_DEFUN([LTOBSOLETE_VERSION], [m4_if([1])])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:40: -1-
AC_DEFUN([_LT_AC_PROG_ECHO_BACKSLASH])

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m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:41: -1-  
AC_DEFUN([_LT_AC_SHELL_INIT])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:42: -1-  
AC_DEFUN([_LT_AC_SYS_LIBPATH_AIX])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:44: -1-  
AC_DEFUN([_LT_AC_TAGVAR])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:45: -1-  
AC_DEFUN([AC_LTDL_ENABLE_INSTALL])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:46: -1-  
AC_DEFUN([AC_LTDL_PREOPEN])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:47: -1-  
AC_DEFUN([_LT_AC_SYS_COMPILER])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:48: -1-  
AC_DEFUN([_LT_AC_LOCK])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:49: -1-  
AC_DEFUN([AC_LIBTOOL_SYS_OLD_ARCHIVE])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:50: -1-  
AC_DEFUN([_LT_AC_TRY_DLOPEN_SELF])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:51: -1-  
AC_DEFUN([AC_LIBTOOL_PROG_CC_C_O])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:52: -1-  
AC_DEFUN([AC_LIBTOOL_SYS_HARD_LINK_LOCKS])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:53: -1-  
AC_DEFUN([AC_LIBTOOL_OBJDIR])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:54: -1-  
AC_DEFUN([AC_LTDL_OBJDIR])
```



```
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:55: -1-
AC_DEFUN([AC_LIBTOOL_PROG_LD_HARDCODE_LIBPATH])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:56: -1-
AC_DEFUN([AC_LIBTOOL_SYS_LIB_STRIP])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:57: -1-
AC_DEFUN([AC_PATH_MAGIC])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:58: -1-
AC_DEFUN([AC_PROG_LD_GNU])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:59: -1-
AC_DEFUN([AC_PROG_LD_RELOAD_FLAG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:60: -1-
AC_DEFUN([AC_DEPLIBS_CHECK_METHOD])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:61: -1-
AC_DEFUN([AC_LIBTOOL_PROG_COMPILER_NO_RTTI])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:62: -1-
AC_DEFUN([AC_LIBTOOL_SYS_GLOBAL_SYMBOL_PIPE])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:63: -1-
AC_DEFUN([AC_LIBTOOL_PROG_COMPILER_PIC])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:64: -1-
AC_DEFUN([AC_LIBTOOL_PROG_LD_SHLIBS])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:65: -1-
AC_DEFUN([AC_LIBTOOL_POSTDEP_PREDEP])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:66: -1-
AC_DEFUN([LT_AC_PROG_EGREP])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:71: -1-
AC_DEFUN([_AC_PROG_LIBTOOL])
```

```
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:72: -1-  
AC_DEFUN([AC_LIBTOOL_SETUP])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:73: -1-  
AC_DEFUN([_LT_AC_CHECK_DLFCN])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:74: -1-  
AC_DEFUN([AC_LIBTOOL_SYS_DYNAMIC_LINKER])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:75: -1-  
AC_DEFUN([_LT_AC_TAGCONFIG])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:77: -1-  
AC_DEFUN([_LT_AC_LANG_CXX])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:78: -1-  
AC_DEFUN([_LT_AC_LANG_F77])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:79: -1-  
AC_DEFUN([_LT_AC_LANG_GCJ])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:80: -1-  
AC_DEFUN([AC_LIBTOOL_LANG_C_CONFIG])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:81: -1-  
AC_DEFUN([_LT_AC_LANG_C_CONFIG])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:82: -1-  
AC_DEFUN([AC_LIBTOOL_LANG_CXX_CONFIG])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:83: -1-  
AC_DEFUN([_LT_AC_LANG_CXX_CONFIG])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:84: -1-  
AC_DEFUN([AC_LIBTOOL_LANG_F77_CONFIG])  
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-  
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-  
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:85: -1-  
AC_DEFUN([_LT_AC_LANG_F77_CONFIG])
```

```

m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:86: -1-
AC_DEFUN([AC_LIBTOOL_LANG_GCJ_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:87: -1-
AC_DEFUN([_LT_AC_LANG_GCJ_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:88: -1-
AC_DEFUN([AC_LIBTOOL_LANG_RC_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:89: -1-
AC_DEFUN([_LT_AC_LANG_RC_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:90: -1-
AC_DEFUN([AC_LIBTOOL_CONFIG])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:91: -1-
AC_DEFUN([_LT_AC_FILE_LTDLL_C])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:93: -1-
AC_DEFUN([_LT_AC_PROG_CXXCPP])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:96: -1-
AC_DEFUN([_LT_PROG_F77])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:97: -1-
AC_DEFUN([_LT_PROG_FC])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/lt~obsolete.m4:98: -1-
AC_DEFUN([_LT_PROG_CXX])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/pkg.m4:26: -1-
AC_DEFUN([PKG_PROG_PKG_CONFIG], [m4_pattern_forbid([^?PKG_[A-Z_]+$])
m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
AC_ARG_VAR([PKG_CONFIG], [path to pkg-config utility])dnl
if test "x$ac_cv_env_PKG_CONFIG_set" != "xset"; then
    AC_PATH_TOOL([PKG_CONFIG], [pkg-config])
fi
if test -n "$PKG_CONFIG"; then
    _pkg_min_version=m4_default([$1], [0.9.0])

```

```

        AC_MSG_CHECKING([pkg-config is at least version
$_pkg_min_version])
        if $PKG_CONFIG --atleast-pkgconfig-version $_pkg_min_version;
then
            AC_MSG_RESULT([yes])
        else
            AC_MSG_RESULT([no])
            PKG_CONFIG=""
        fi
    fi[]dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/pkg.m4:56: -1-
AC_DEFUN([PKG_CHECK_EXISTS], [AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
if test -n "$PKG_CONFIG" && \
    AC_RUN_LOG([$PKG_CONFIG --exists --print-errors "$1"]); then
    m4_ifval([$2], [$2], [:])
m4_ifvaln([$3], [else
    $3])dnl
fi])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/pkg.m4:82: -1-
AC_DEFUN([_PKG_SHORT_ERRORS_SUPPORTED],
[AC_REQUIRE([PKG_PROG_PKG_CONFIG])
if $PKG_CONFIG --atleast-pkgconfig-version 0.20; then
    _pkg_short_errors_supported=yes
else
    _pkg_short_errors_supported=no
fi[]dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/pkg.m4:102: -1-
AC_DEFUN([PKG_CHECK_MODULES], [AC_REQUIRE([PKG_PROG_PKG_CONFIG])dnl
AC_ARG_VAR([$1][_CFLAGS], [C compiler flags for $1, overriding pkg-
config])dnl
AC_ARG_VAR([$1][_LIBS], [linker flags for $1, overriding pkg-
config])dnl

pkg_failed=no
AC_MSG_CHECKING([for $1])

_PKG_CONFIG([$1][_CFLAGS], [cflags], [$2])
_PKG_CONFIG([$1][_LIBS], [libs], [$2])

m4_define([_PKG_TEXT], [Alternatively, you may set the environment
variables $1[_CFLAGS]
and $1[_LIBS] to avoid the need to call pkg-config.
See the pkg-config man page for more details.]])

```

```

if test $pkg_failed = yes; then
    _PKG_SHORT_ERRORS_SUPPORTED
    if test $_pkg_short_errors_supported = yes; then
        $1[_PKG_ERRORS=`$PKG_CONFIG --short-errors --print-
errors "$2" 2>&1`
    else
        $1[_PKG_ERRORS=`$PKG_CONFIG --print-errors "$2" 2>&1`
    fi
    # Put the nasty error message in config.log where it belongs
    echo "$$_PKG_ERRORS" >&AS_MESSAGE_LOG_FD

    ifelse([$4], , [AC_MSG_ERROR(dnl
[Package requirements ($2) were not met:

$$_PKG_ERRORS

Consider adjusting the PKG_CONFIG_PATH environment variable if you
installed software in a non-standard prefix.

_PKG_TEXT
])],
        [AC_MSG_RESULT([no])
$4])
elif test $pkg_failed = untried; then
    ifelse([$4], , [AC_MSG_FAILURE(dnl
[The pkg-config script could not be found or is too old. Make sure it
is in your PATH or set the PKG_CONFIG environment variable to the full
path to pkg-config.

_PKG_TEXT

To get pkg-config, see <http://pkg-config.freedesktop.org/>.)]),
        [AC_MSG_RESULT([no])
$4])
else
    $1[_CFLAGS=$pkg_cv_[]$1[_CFLAGS
$1[_LIBS=$pkg_cv_[]$1[_LIBS
AC_MSG_RESULT([yes])
    ifelse([$3], , :, [$3])
fi[]dnl
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: -
1- AC_DEFUN([TP_COMPILER_FLAG], [
AC_MSG_CHECKING([to see if compiler understands $1])

save_CFLAGS="$CFLAGS"
save_CXXFLAGS="$CXXFLAGS"
CFLAGS="$CFLAGS $1"
CXXFLAGS="$CXXFLAGS $1"

```

```

AC_TRY_COMPILE([ ], [], [flag_ok=yes], [flag_ok=no])
CFLAGS="$save_CFLAGS"
CXXFLAGS="$save_CXXFLAGS"

if test "X$flag_ok" = Xyes ; then
    $2
    true
else
    $3
    true
fi
AC_MSG_RESULT([$flag_ok])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:40: -
1- AC_DEFUN([TP_ADD_COMPILER_FLAG], [
    TP_COMPILER_FLAG([$2], [$1="[$]$1 $2"])
])
m4trace:/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-
linaro-toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-
gnueabi/dbus/1.6.8-r6.0-arago1/dbus-1.6.8/m4/tp-compiler-
warnings.m4:8: -1- AC_DEFUN([TP_COMPILER_WARNINGS], [
    AC_REQUIRE([AC_ARG_ENABLE])dnl
    AC_REQUIRE([AC_HELP_STRING])dnl
    AC_REQUIRE([TP_COMPILER_FLAG])dnl

    tp_warnings=""
    for tp_flag in $3; do
        TP_COMPILER_FLAG([-W$tp_flag], [tp_warnings="$tp_warnings -
W$tp_flag"])
    done

    tp_error_flags="-Werror"
    TP_COMPILER_FLAG([-Werror], [tp_werror=yes], [tp_werror=no])

    for tp_flag in $4; do
        TP_COMPILER_FLAG([-Wno-$tp_flag],
            [tp_warnings="$tp_warnings -Wno-$tp_flag"])
    done
    dnl Yes, we do need to use both -Wno-foo and -Wno-error=foo. Simon
    says:
    dnl     some warnings we explicitly don't want, like unused-parameter,
    but
    dnl     they're in -Wall. when a distro using cdb's compiles us, we
    have:
    dnl     -Werror -Wno-unused-parameter           -Wall
    dnl         ^ from us                           ^ from cdb's
    dnl     which turns -Wunused-parameter back on, in effect
    TP_COMPILER_FLAG([-Wno-error=$tp_flag],
        [tp_error_flags="$tp_error_flags -Wno-error=$tp_flag"],
        [tp_werror=no])
    done

```

```

AC_ARG_ENABLE([Werror],
  AC_HELP_STRING([--disable-Werror],
    [compile without -Werror (normally enabled in development
builds)]),
  tp_werror=$enableval, :)

  if test "x$tp_werror" = xyes && $2; then
dnl We put -Wno-error=foo before -Wno-foo because clang interprets -
Wall
dnl -Werror -Wno-foo -Wno-error=foo as "make foo a non-fatal
warning", but does
dnl what we want if you reverse them.
  $1="$tp_error_flags $tp_warnings"
  else
  $1="$tp_warnings"
  fi
])

m4trace:configure.ac:9: -1- m4_pattern_forbid([^_?A[CHUM]_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([_AC_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^LIBOBJ$], [do not use
LIBOBJ directly, use AC_LIBOBJ (see section `AC_LIBOBJ vs LIBOBJ')]
m4trace:configure.ac:9: -1- m4_pattern_allow([^AS_FLAGS$])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^_?m4_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^dnl$])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^_?AS_])
m4trace:configure.ac:9: -1- m4_pattern_allow([^SHELL$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PATH_SEPARATOR$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_VERSION$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_STRING$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_BUGREPORT$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_URL$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^exec_prefix$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^prefix$])
m4trace:configure.ac:9: -1-
m4_pattern_allow([^program_transform_name$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^bindir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^sbindir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^libexecdir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^datarootdir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^datadir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^sysconfdir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^sharedstatedir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^localstatedir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^includedir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^oldincludedir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^docdir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^infodir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^htmldir$])

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m4trace:configure.ac:9: -1- m4_pattern_allow([^dvidir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^pdfdir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^psdir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^libdir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^localedir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^mandir$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_VERSION$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_STRING$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_BUGREPORT$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_URL$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^DEFS$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^ECHO_C$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^ECHO_N$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^ECHO_T$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^build_alias$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^host_alias$])
m4trace:configure.ac:9: -1- m4_pattern_allow([^target_alias$])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build$])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_cpu$])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_vendor$])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_os$])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host$])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_cpu$])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_vendor$])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_os$])
m4trace:configure.ac:16: -1- AM_INIT_AUTOMAKE([1.10 tar-ustar -Wno-
portability])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AM_[A-Z]+FLAGS$])
m4trace:configure.ac:16: -1- AM_SET_CURRENT_AUTOMAKE_VERSION
m4trace:configure.ac:16: -1- AM_AUTOMAKE_VERSION([1.12.6])
m4trace:configure.ac:16: -1- _AM_AUTOCONF_VERSION([2.69])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_PROGRAM$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_SCRIPT$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_DATA$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__isrc$])
m4trace:configure.ac:16: -1- _AM_SUBST_NOTMAKE([am__isrc])
m4trace:configure.ac:16: -1- m4_pattern_allow([^CYGPATH_W$])
m4trace:configure.ac:16: -1- _AM_SET_OPTIONS([1.10 tar-ustar -Wno-
portability])
m4trace:configure.ac:16: -1- _AM_SET_OPTION([1.10])
m4trace:configure.ac:16: -2- _AM_MANGLE_OPTION([1.10])
m4trace:configure.ac:16: -1- _AM_SET_OPTION([tar-ustar])
m4trace:configure.ac:16: -2- _AM_MANGLE_OPTION([tar-ustar])
m4trace:configure.ac:16: -1- _AM_SET_OPTION([-Wno-portability])
m4trace:configure.ac:16: -2- _AM_MANGLE_OPTION([-Wno-portability])
m4trace:configure.ac:16: -1- m4_pattern_allow([^PACKAGE$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^VERSION$])
m4trace:configure.ac:16: -1- _AM_IF_OPTION([no-define], [],
[AC_DEFINE_UNQUOTED([PACKAGE], ["$PACKAGE"], [Name of package])

```



```

AC_DEFINE_UNQUOTED([VERSION], ["$VERSION"], [Version number of
package]))
m4trace:configure.ac:16: -2- _AM_MANGLE_OPTION([no-define])
m4trace:configure.ac:16: -1- m4_pattern_allow([^PACKAGE$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^VERSION$])
m4trace:configure.ac:16: -1- AM_SANITY_CHECK
m4trace:configure.ac:16: -1- AM_MISSING_PROG([ACLOCAL], [aclocal-
${am__api_version}])
m4trace:configure.ac:16: -1- AM_MISSING_HAS_RUN
m4trace:configure.ac:16: -1- AM_AUX_DIR_EXPAND
m4trace:configure.ac:16: -1- m4_pattern_allow([^ACLOCAL$])
m4trace:configure.ac:16: -1- AM_MISSING_PROG([AUTOCONF], [autoconf])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOCONF$])
m4trace:configure.ac:16: -1- AM_MISSING_PROG([AUTOMAKE], [automake-
${am__api_version}])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOMAKE$])
m4trace:configure.ac:16: -1- AM_MISSING_PROG([AUTOHEADER],
[autoheader])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOHEADER$])
m4trace:configure.ac:16: -1- AM_MISSING_PROG([MAKEINFO], [makeinfo])
m4trace:configure.ac:16: -1- m4_pattern_allow([^MAKEINFO$])
m4trace:configure.ac:16: -1- AM_PROG_INSTALL_SH
m4trace:configure.ac:16: -1- m4_pattern_allow([^install_sh$])
m4trace:configure.ac:16: -1- AM_PROG_INSTALL_STRIP
m4trace:configure.ac:16: -1- m4_pattern_allow([^STRIP$])
m4trace:configure.ac:16: -1-
m4_pattern_allow([^INSTALL_STRIP_PROGRAM$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^MKDIR_P$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^mkdir_p$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AWK$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^SET_MAKE$])
m4trace:configure.ac:16: -1- AM_SET_LEADING_DOT
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__leading_dot$])
m4trace:configure.ac:16: -1- _AM_IF_OPTION([tar-ustar],
[_AM_PROG_TAR([ustar])], [_AM_IF_OPTION([tar-pax],
[_AM_PROG_TAR([pax])],
[_AM_PROG_TAR([v7])])])
m4trace:configure.ac:16: -2- _AM_MANGLE_OPTION([tar-ustar])
m4trace:configure.ac:16: -1- _AM_PROG_TAR([ustar])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AMTAR$])
m4trace:configure.ac:16: -1- AM_RUN_LOG([$am__tar --version])
m4trace:configure.ac:16: -1- AM_RUN_LOG([tardir=confptest.dir && eval
$am__tar_ >confptest.tar])
m4trace:configure.ac:16: -1- AM_RUN_LOG([$am__untar <confptest.tar])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__tar$])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__untar$])
m4trace:configure.ac:16: -1- _AM_IF_OPTION([no-dependencies], [],
[AC_PROVIDE_IFELSE([AC_PROG_CC],
[_AM_DEPENDENCIES([CC])],
[m4_define([AC_PROG_CC],
m4_defn([AC_PROG_CC])[_AM_DEPENDENCIES([CC])])])])

```

```

AC_PROVIDE_IFELSE([AC_PROG_CXX],
    [_AM_DEPENDENCIES([CXX])],
    [m4_define([AC_PROG_CXX],

m4_defn([AC_PROG_CXX])[_AM_DEPENDENCIES([CXX])])])dn1
AC_PROVIDE_IFELSE([AC_PROG_OBJC],
    [_AM_DEPENDENCIES([OBJC])],
    [m4_define([AC_PROG_OBJC],

m4_defn([AC_PROG_OBJC])[_AM_DEPENDENCIES([OBJC])])])dn1
dn1 Support for Objective C++ was only introduced in Autoconf 2.65,
dn1 but we still cater to Autoconf 2.62.
m4_ifdef([AC_PROG_OBJCXX],
    [AC_PROVIDE_IFELSE([AC_PROG_OBJCXX],
        [_AM_DEPENDENCIES([OBJCXX])],
        [m4_define([AC_PROG_OBJCXX],

m4_defn([AC_PROG_OBJCXX])[_AM_DEPENDENCIES([OBJCXX])])])])dn1
])
m4trace:configure.ac:16: -2- _AM_MANGLE_OPTION([no-dependencies])
m4trace:configure.ac:16: -1- _AM_IF_OPTION([silent-rules],
    [AC_REQUIRE([AM_SILENT_RULES])])
m4trace:configure.ac:16: -2- _AM_MANGLE_OPTION([silent-rules])
m4trace:configure.ac:19: -1- m4_pattern_allow([^GETTEXT_PACKAGE$])
m4trace:configure.ac:20: -1- m4_pattern_allow([^GETTEXT_PACKAGE$])
m4trace:configure.ac:24: -1- AM_MAINTAINER_MODE([enable])
m4trace:configure.ac:24: -1- AM_CONDITIONAL([MAINTAINER_MODE], [test
$USE_MAINTAINER_MODE = yes])
m4trace:configure.ac:24: -1-
m4_pattern_allow([^MAINTAINER_MODE_TRUE$])
m4trace:configure.ac:24: -1-
m4_pattern_allow([^MAINTAINER_MODE_FALSE$])
m4trace:configure.ac:24: -1- _AM_SUBST_NOTMAKE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:24: -1-
_AM_SUBST_NOTMAKE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:24: -1- m4_pattern_allow([^MAINT$])
m4trace:configure.ac:26: -1- AM_SILENT_RULES([yes])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_V$])
m4trace:configure.ac:26: -1- AM_SUBST_NOTMAKE([AM_V])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_V])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_DEFAULT_V$])
m4trace:configure.ac:26: -1- AM_SUBST_NOTMAKE([AM_DEFAULT_V])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_DEFAULT_V])
m4trace:configure.ac:26: -1-
m4_pattern_allow([^AM_DEFAULT_VERBOSITY$])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_BACKSLASH$])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_BACKSLASH])
m4trace:configure.ac:28: -1- m4_pattern_allow([^DBUS_DAEMON_NAME$])
m4trace:configure.ac:47: -1- m4_pattern_allow([^LT_CURRENT$])
m4trace:configure.ac:48: -1- m4_pattern_allow([^LT_REVISION$])
m4trace:configure.ac:49: -1- m4_pattern_allow([^LT_AGE$])
m4trace:configure.ac:56: -1- m4_pattern_allow([^DBUS_MAJOR_VERSION$])

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m4trace:configure.ac:57: -1- m4_pattern_allow([ ^DBUS_MINOR_VERSION$ ])
m4trace:configure.ac:58: -1- m4_pattern_allow([ ^DBUS_MICRO_VERSION$ ])
m4trace:configure.ac:59: -1- m4_pattern_allow([ ^DBUS_VERSION$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^CC$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^CFLAGS$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^LDFLAGS$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^LIBS$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^CPPFLAGS$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^CC$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^CC$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^CC$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^CC$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^ac_ct_CC$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^EXEEXT$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^OBJEXT$ ])
m4trace:configure.ac:61: -1- _AM_DEPENDENCIES([CC])
m4trace:configure.ac:61: -1- AM_SET_DEPDIR
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^DEPDIR$ ])
m4trace:configure.ac:61: -1- AM_OUTPUT_DEPENDENCY_COMMANDS
m4trace:configure.ac:61: -1- AM_MAKE_INCLUDE
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^am__include$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^am__quote$ ])
m4trace:configure.ac:61: -1- AM_DEP_TRACK
m4trace:configure.ac:61: -1- AM_CONDITIONAL([AMDEP], [test
"x$enable_dependency_tracking" != xno])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^AMDEP_TRUE$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^AMDEP_FALSE$ ])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEP_TRUE])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEP_FALSE])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^AMDEPBACKSLASH$ ])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEPBACKSLASH])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^am__nodep$ ])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__nodep])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^CCDEPMODE$ ])
m4trace:configure.ac:61: -1- AM_CONDITIONAL([am__fastdepCC], [
test "x$enable_dependency_tracking" != xno \
&& test "$am_cv_CC_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^am__fastdepCC_TRUE$ ])
m4trace:configure.ac:61: -1- m4_pattern_allow([ ^am__fastdepCC_FALSE$ ])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_TRUE])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_FALSE])
m4trace:configure.ac:62: -1- AM_PROG_CC_C_O
m4trace:configure.ac:62: -1- m4_pattern_allow([ ^NO_MINUS_C_MINUS_O$ ])
m4trace:configure.ac:63: -1- m4_pattern_allow([ ^CXX$ ])
m4trace:configure.ac:63: -1- m4_pattern_allow([ ^CXXFLAGS$ ])
m4trace:configure.ac:63: -1- m4_pattern_allow([ ^LDFLAGS$ ])
m4trace:configure.ac:63: -1- m4_pattern_allow([ ^LIBS$ ])
m4trace:configure.ac:63: -1- m4_pattern_allow([ ^CPPFLAGS$ ])
m4trace:configure.ac:63: -1- m4_pattern_allow([ ^CXX$ ])
m4trace:configure.ac:63: -1- m4_pattern_allow([ ^ac_ct_CXX$ ])
m4trace:configure.ac:63: -1- _AM_DEPENDENCIES([CXX])
m4trace:configure.ac:63: -1- m4_pattern_allow([ ^CXXDEPMODE$ ])

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m4trace:configure.ac:63: -1- AM_CONDITIONAL([am__fastdepCXX], [
  test "x$enable_dependency_tracking" != xno \
  && test "$am_cv_CXX_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:63: -1- m4_pattern_allow([am__fastdepCXX_TRUE$])
m4trace:configure.ac:63: -1-
m4_pattern_allow([am__fastdepCXX_FALSE$])
m4trace:configure.ac:63: -1- _AM_SUBST_NOTMAKE([am__fastdepCXX_TRUE])
m4trace:configure.ac:63: -1- _AM_SUBST_NOTMAKE([am__fastdepCXX_FALSE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:64: -1- AC_PROG_EGREP
m4trace:configure.ac:64: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^EGREP$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_POSIX_SOURCE$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_POSIX_1_SOURCE$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_MINIX$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_EXTENSIONS_$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_ALL_SOURCE$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_GNU_SOURCE$])
m4trace:configure.ac:64: -1-
m4_pattern_allow([^_POSIX_PTHREAD_SEMANTICS$])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_TANDEM_SOURCE$])
m4trace:configure.ac:65: -1- _m4_warn([obsolete], [The macro
`AC_ISC_POSIX' is obsolete.
You should run autoupdate.], [../../lib/autoconf/specific.m4:446:
AC_ISC_POSIX is expanded from...
configure.ac:65: the top level])
m4trace:configure.ac:66: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:68: -1- AM_PROG_LIBTOOL
m4trace:configure.ac:68: -1- _m4_warn([obsolete], [The macro
`AM_PROG_LIBTOOL' is obsolete.
You should run autoupdate.],
[/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/libtool.m4:109: AM_PROG_LIBTOOL is expanded
from...
configure.ac:68: the top level])
m4trace:configure.ac:68: -1- LT_INIT
m4trace:configure.ac:68: -1- m4_pattern_forbid([^?LT_[A-Z_]+$])
m4trace:configure.ac:68: -1-
m4_pattern_allow([^(LT_EOF|LT_DLGLOBAL|LT_DLLAZY_OR_NOW|LT_MULTI_MODU
LE)$])
m4trace:configure.ac:68: -1- LTOPTIONS_VERSION
m4trace:configure.ac:68: -1- LTSUGAR_VERSION
m4trace:configure.ac:68: -1- LTVERSION_VERSION
m4trace:configure.ac:68: -1- LTOBSOLETE_VERSION
m4trace:configure.ac:68: -1- _LT_PROG_LTMAIN
m4trace:configure.ac:68: -1- m4_pattern_allow([^LIBTOOL$])
m4trace:configure.ac:68: -1- _LT_PREPARE_SED_QUOTE_VARS
m4trace:configure.ac:68: -1- _LT_PROG_ECHO_BACKSLASH

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m4trace:configure.ac:68: -1- LT_PATH_LD
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^SED$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^FGREP$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^GREP$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^LD$])
m4trace:configure.ac:68: -1- LT_PATH_NM
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^DUMPBIN$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^ac_ct_DUMPBIN$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^DUMPBIN$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^NM$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^LN_S$])
m4trace:configure.ac:68: -1- LT_CMD_MAX_LEN
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^OBJDUMP$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^OBJDUMP$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^DLLTOOL$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^DLLTOOL$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^AR$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^ac_ct_AR$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^STRIP$])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^RANLIB$])
m4trace:configure.ac:68: -1- _LT_WITH_SYSROOT
m4trace:configure.ac:68: -1- m4_pattern_allow([LT_OBJDIR])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^LT_OBJDIR$])
m4trace:configure.ac:68: -1- _LT_CC_BASENAME([$compiler])
m4trace:configure.ac:68: -1-
  _LT_PATH_TOOL_PREFIX([${ac_tool_prefix}file],
  [/usr/bin$PATH_SEPARATOR$PATH])
m4trace:configure.ac:68: -1- _LT_PATH_TOOL_PREFIX([file],
  [/usr/bin$PATH_SEPARATOR$PATH])
m4trace:configure.ac:68: -1- LT_SUPPORTED_TAG([CC])
m4trace:configure.ac:68: -1- _LT_COMPILER_BOILERPLATE
m4trace:configure.ac:68: -1- _LT_LINKER_BOILERPLATE
m4trace:configure.ac:68: -1- _LT_COMPILER_OPTION([if $compiler
supports -fno-rtti -fno-exceptions],
[lt_cv_prog_compiler_rtti_exceptions], [-fno-rtti -fno-exceptions],
[], [_LT_TAGVAR(lt_prog_compiler_no_builtin_flag,
)="$ _LT_TAGVAR(lt_prog_compiler_no_builtin_flag, ) -fno-rtti -fno-
exceptions" ])
m4trace:configure.ac:68: -1- _LT_COMPILER_OPTION([if $compiler PIC
flag $ _LT_TAGVAR(lt_prog_compiler_pic, ) works],
[_LT_TAGVAR(lt_cv_prog_compiler_pic_works, )],
[$ _LT_TAGVAR(lt_prog_compiler_pic, )@&t@m4_if([], [], [ -
DPIC], [m4_if([], [CXX], [ -DPIC], [])])], [], [case
$ _LT_TAGVAR(lt_prog_compiler_pic, ) in
  "" | " *" ) ;;
  *) _LT_TAGVAR(lt_prog_compiler_pic, )="$
$ _LT_TAGVAR(lt_prog_compiler_pic, )" ;;
  esac], [_LT_TAGVAR(lt_prog_compiler_pic, )=
 _LT_TAGVAR(lt_prog_compiler_can_build_shared, )=no])
m4trace:configure.ac:68: -1- _LT_LINKER_OPTION([if $compiler static
flag $lt_tmp_static_flag works], [lt_cv_prog_compiler_static_works],
[$lt_tmp_static_flag], [], [_LT_TAGVAR(lt_prog_compiler_static, )=])

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m4trace:configure.ac:68: -1- m4_pattern_allow([MANIFEST_TOOL$])
m4trace:configure.ac:68: -1- _LT_REQUIRED_DARWIN_CHECKS
m4trace:configure.ac:68: -1- m4_pattern_allow([DSYMUTIL$])
m4trace:configure.ac:68: -1- m4_pattern_allow([NMEDIT$])
m4trace:configure.ac:68: -1- m4_pattern_allow([LIPO$])
m4trace:configure.ac:68: -1- m4_pattern_allow([OTOOL$])
m4trace:configure.ac:68: -1- m4_pattern_allow([OTOOL64$])
m4trace:configure.ac:68: -1- _LT_LINKER_OPTION([if $CC understands -
b], [lt_cv_prog_compiler_b], [-b], [_LT_TAGVAR(archive_cmds, )='$CC -
b ${wl}+h ${wl}$soname ${wl}+b ${wl}$install_libdir -o $lib $libobjs
$deplibs $compiler_flags'], [_LT_TAGVAR(archive_cmds, )='$LD -b +h
$soname +b $install_libdir -o $lib $libobjs $deplibs $linker_flags'])
m4trace:configure.ac:68: -1- LT_SYS_DLOPEN_SELF
m4trace:configure.ac:68: -1- m4_pattern_allow([HAVE_DLFCN_H$])
m4trace:configure.ac:68: -1- LT_LANG([CXX])
m4trace:configure.ac:68: -1- LT_SUPPORTED_TAG([CXX])
m4trace:configure.ac:68: -1- m4_pattern_allow([CXXCPP$])
m4trace:configure.ac:68: -1- m4_pattern_allow([CPPFLAGS$])
m4trace:configure.ac:68: -1- m4_pattern_allow([CXXCPP$])
m4trace:configure.ac:68: -1- _LT_COMPILER_BOILERPLATE
m4trace:configure.ac:68: -1- _LT_LINKER_BOILERPLATE
m4trace:configure.ac:68: -1- _LT_CC_BASENAME([$compiler])
m4trace:configure.ac:68: -1- LT_PATH_LD
m4trace:configure.ac:68: -1- m4_pattern_allow([LD$])
m4trace:configure.ac:68: -1- _LT_COMPILER_OPTION([if $compiler PIC
flag $_LT_TAGVAR(lt_prog_compiler_pic, CXX) works],
[_LT_TAGVAR(lt_cv_prog_compiler_pic_works, CXX)],
[$_LT_TAGVAR(lt_prog_compiler_pic, CXX)@&t@m4_if([CXX],[],[-
DPIC],[m4_if([CXX],[CXX],[-DPIC],[ ])]), [], [case
$_LT_TAGVAR(lt_prog_compiler_pic, CXX) in
    "" | " ") ;;
    *) _LT_TAGVAR(lt_prog_compiler_pic, CXX)="
$_LT_TAGVAR(lt_prog_compiler_pic, CXX)" ;;
    esac], [_LT_TAGVAR(lt_prog_compiler_pic, CXX)=
    _LT_TAGVAR(lt_prog_compiler_can_build_shared, CXX)=no])
m4trace:configure.ac:68: -1- _LT_LINKER_OPTION([if $compiler static
flag $lt_tmp_static_flag works],
[lt_cv_prog_compiler_static_works_CXX], [$lt_tmp_static_flag], [],
[_LT_TAGVAR(lt_prog_compiler_static, CXX)=])
m4trace:configure.ac:70: -1- COMPILER_COVERAGE
m4trace:configure.ac:71: -1- COMPILER_OPTIMISATIONS
m4trace:configure.ac:72: -1- PKG_PROG_PKG_CONFIG
m4trace:configure.ac:72: -1- m4_pattern_forbid([_PKG_[A-Z_]+$])
m4trace:configure.ac:72: -1- m4_pattern_allow([PKG_CONFIG(_PATH)?$])
m4trace:configure.ac:72: -1- m4_pattern_allow([PKG_CONFIG$])
m4trace:configure.ac:72: -1- m4_pattern_allow([PKG_CONFIG$])
m4trace:configure.ac:75: -1- LT_INIT([win32-dll])
m4trace:configure.ac:76: -1- LT_LANG([Windows Resource])
m4trace:configure.ac:76: -1- LT_SUPPORTED_TAG([RC])
m4trace:configure.ac:76: -1- LT_PROG_RC
m4trace:configure.ac:76: -1- m4_pattern_allow([RC$])
m4trace:configure.ac:76: -1- LT_LANG([RC])

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m4trace:configure.ac:76: -1- _m4_warn([obsolete], [The macro
`AC_LANG_SAVE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/lang.m4:125:
AC_LANG_SAVE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7573: _LT_LANG_RC_CONFIG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/libtool.m4:820: _LT_LANG is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/libtool.m4:802: LT_LANG is expanded from...
configure.ac:76: the top level])
m4trace:configure.ac:76: -1- _LT_COMPILER_BOILERPLATE
m4trace:configure.ac:76: -1- _LT_LINKER_BOILERPLATE
m4trace:configure.ac:76: -1- _LT_CC_BASENAME([$compiler])
m4trace:configure.ac:76: -1- _m4_warn([obsolete], [The macro
`AC_LANG_RESTORE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/lang.m4:134:
AC_LANG_RESTORE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/libtool.m4:7573: _LT_LANG_RC_CONFIG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/libtool.m4:820: _LT_LANG is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/libtool.m4:802: LT_LANG is expanded from...
configure.ac:76: the top level])
m4trace:configure.ac:101: -1- m4_pattern_allow([`^DBUS_WIN$])
m4trace:configure.ac:103: -1- m4_pattern_allow([`^BUILD_TIMESTAMP$])
m4trace:configure.ac:106: -1- m4_pattern_allow([`^BUILD_FILEVERSION$])
m4trace:configure.ac:107: -1- m4_pattern_allow([`^WINDRES$])
m4trace:configure.ac:112: -1- m4_pattern_allow([`^DBUS_WINCE$])
m4trace:configure.ac:113: -1- m4_pattern_allow([`^WIN32_WCE$])
m4trace:configure.ac:116: -1- m4_pattern_allow([`^DBUS_UNIX$])
m4trace:configure.ac:119: -1- m4_pattern_allow([`^DBUS_CYGWIN$])
m4trace:configure.ac:122: -1- AM_CONDITIONAL([DBUS_WIN], [test
"$dbus_win" = yes])
m4trace:configure.ac:122: -1- m4_pattern_allow([`^DBUS_WIN_TRUE$])
m4trace:configure.ac:122: -1- m4_pattern_allow([`^DBUS_WIN_FALSE$])
m4trace:configure.ac:122: -1- _AM_SUBST_NOTMAKE([DBUS_WIN_TRUE])
m4trace:configure.ac:122: -1- _AM_SUBST_NOTMAKE([DBUS_WIN_FALSE])
m4trace:configure.ac:123: -1- AM_CONDITIONAL([DBUS_WINCE], [test
"$dbus_wince" = yes])
m4trace:configure.ac:123: -1- m4_pattern_allow([`^DBUS_WINCE_TRUE$])
m4trace:configure.ac:123: -1- m4_pattern_allow([`^DBUS_WINCE_FALSE$])
m4trace:configure.ac:123: -1- _AM_SUBST_NOTMAKE([DBUS_WINCE_TRUE])
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m4trace:configure.ac:123: -1- _AM_SUBST_NOTMAKE([DBUS_Wince_FALSE])
m4trace:configure.ac:124: -1- AM_CONDITIONAL([DBUS_UNIX], [test
"$dbus_unix" = yes])
m4trace:configure.ac:124: -1- m4_pattern_allow([DBUS_UNIX_TRUE$])
m4trace:configure.ac:124: -1- m4_pattern_allow([DBUS_UNIX_FALSE$])
m4trace:configure.ac:124: -1- _AM_SUBST_NOTMAKE([DBUS_UNIX_TRUE])
m4trace:configure.ac:124: -1- _AM_SUBST_NOTMAKE([DBUS_UNIX_FALSE])
m4trace:configure.ac:125: -1- AM_CONDITIONAL([DBUS_CYGWIN], [test
"$dbus_cygwin" = yes])
m4trace:configure.ac:125: -1- m4_pattern_allow([DBUS_CYGWIN_TRUE$])
m4trace:configure.ac:125: -1- m4_pattern_allow([DBUS_CYGWIN_FALSE$])
m4trace:configure.ac:125: -1- _AM_SUBST_NOTMAKE([DBUS_CYGWIN_TRUE])
m4trace:configure.ac:125: -1- _AM_SUBST_NOTMAKE([DBUS_CYGWIN_FALSE])
m4trace:configure.ac:142: -1-
m4_pattern_allow([DBUS_STATIC_BUILD_CPPFLAGS$])
m4trace:configure.ac:200: -1- AM_CONDITIONAL([DBUS_BUILD_TESTS], [test
"x$enable_embedded_tests" = xyes])
m4trace:configure.ac:200: -1-
m4_pattern_allow([DBUS_BUILD_TESTS_TRUE$])
m4trace:configure.ac:200: -1-
m4_pattern_allow([DBUS_BUILD_TESTS_FALSE$])
m4trace:configure.ac:200: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:200: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:201: -1-
AM_CONDITIONAL([DBUS_ENABLE_EMBEDDED_TESTS], [test
"x$enable_embedded_tests" = xyes])
m4trace:configure.ac:201: -1-
m4_pattern_allow([DBUS_ENABLE_EMBEDDED_TESTS_TRUE$])
m4trace:configure.ac:201: -1-
m4_pattern_allow([DBUS_ENABLE_EMBEDDED_TESTS_FALSE$])
m4trace:configure.ac:201: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_EMBEDDED_TESTS_TRUE])
m4trace:configure.ac:201: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_EMBEDDED_TESTS_FALSE])
m4trace:configure.ac:204: -1-
m4_pattern_allow([DBUS_ENABLE_EMBEDDED_TESTS$])
m4trace:configure.ac:206: -1- m4_pattern_allow([DBUS_BUILD_TESTS$])
m4trace:configure.ac:218: -1- PKG_CHECK_MODULES([GLIB], [glib-2.0 >=
2.24, gio-2.0 >= 2.24], [], [if test "x$enable_modular_tests" = xyes;
then
    AC_MSG_NOTICE([Full test coverage (--enable-modular-tests=yes or
--enable-tests=yes) requires GLib])
    AC_MSG_ERROR([$GLIB_ERRORS])
    else # assumed to be "auto"
        with_glib=no
    fi])
m4trace:configure.ac:218: -1- m4_pattern_allow([GLIB_CFLAGS$])
m4trace:configure.ac:218: -1- m4_pattern_allow([GLIB_LIBS$])

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m4trace:configure.ac:218: -1- PKG_CHECK_EXISTS([glib-2.0 >= 2.24, gio-
2.0 >= 2.24], [pkg_cv_]GLIB_CFLAGS=`$PKG_CONFIG --[]cflags "glib-2.0
>= 2.24, gio-2.0 >= 2.24" 2>/dev/null`, [pkg_failed=yes])
m4trace:configure.ac:218: -1- PKG_CHECK_EXISTS([glib-2.0 >= 2.24, gio-
2.0 >= 2.24], [pkg_cv_]GLIB_LIBS=`$PKG_CONFIG --[]libs "glib-2.0 >=
2.24, gio-2.0 >= 2.24" 2>/dev/null`, [pkg_failed=yes])
m4trace:configure.ac:218: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:227: -1- PKG_CHECK_MODULES([DBUS_GLIB], [dbus-
glib-1], [], [if test "x$enable_modular_tests" = xyes; then
    AC_MSG_NOTICE([Full test coverage (--enable-modular-tests=yes or
--enable-tests=yes) requires dbus-glib])
    AC_MSG_ERROR([$DBUS_GLIB_ERRORS])
    else # assumed to be "auto"
        with_glib=no
    fi])
m4trace:configure.ac:227: -1- m4_pattern_allow([^DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:227: -1- m4_pattern_allow([^DBUS_GLIB_LIBS$])
m4trace:configure.ac:227: -1- PKG_CHECK_EXISTS([dbus-glib-1],
[pkg_cv_]DBUS_GLIB_CFLAGS=`$PKG_CONFIG --[]cflags "dbus-glib-1"
2>/dev/null`, [pkg_failed=yes])
m4trace:configure.ac:227: -1- PKG_CHECK_EXISTS([dbus-glib-1],
[pkg_cv_]DBUS_GLIB_LIBS=`$PKG_CONFIG --[]libs "dbus-glib-1"
2>/dev/null`, [pkg_failed=yes])
m4trace:configure.ac:227: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:237: -1-
m4_pattern_allow([^DBUS_ENABLE_MODULAR_TESTS$])
m4trace:configure.ac:240: -1-
AM_CONDITIONAL([DBUS_ENABLE_MODULAR_TESTS], [test
"x$enable_modular_tests" != xno])
m4trace:configure.ac:240: -1-
m4_pattern_allow([^DBUS_ENABLE_MODULAR_TESTS_TRUE$])
m4trace:configure.ac:240: -1-
m4_pattern_allow([^DBUS_ENABLE_MODULAR_TESTS_FALSE$])
m4trace:configure.ac:240: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_MODULAR_TESTS_TRUE])
m4trace:configure.ac:240: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_MODULAR_TESTS_FALSE])
m4trace:configure.ac:244: -1- m4_pattern_allow([^DBUS_WITH_GLIB$])
m4trace:configure.ac:247: -1- AM_CONDITIONAL([DBUS_WITH_GLIB], [test
"x$with_glib" != xno])
m4trace:configure.ac:247: -1-
m4_pattern_allow([^DBUS_WITH_GLIB_TRUE$])
m4trace:configure.ac:247: -1-
m4_pattern_allow([^DBUS_WITH_GLIB_FALSE$])
m4trace:configure.ac:247: -1- _AM_SUBST_NOTMAKE([DBUS_WITH_GLIB_TRUE])
m4trace:configure.ac:247: -1-
_AM_SUBST_NOTMAKE([DBUS_WITH_GLIB_FALSE])
m4trace:configure.ac:253: -1-
AM_CONDITIONAL([DBUS_ENABLE_INSTALLED_TESTS], [test
"x$enable_installed_tests" = xyes])
m4trace:configure.ac:253: -1-
m4_pattern_allow([^DBUS_ENABLE_INSTALLED_TESTS_TRUE$])

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m4trace:configure.ac:253: -1-
m4_pattern_allow([^DBUS_ENABLE_INSTALLED_TESTS_FALSE$])
m4trace:configure.ac:253: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_INSTALLED_TESTS_TRUE])
m4trace:configure.ac:253: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_INSTALLED_TESTS_FALSE])
m4trace:configure.ac:259: -1- AM_PATH_PYTHON([2.6])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:259: -1- AM_PYTHON_CHECK_VERSION([$PYTHON],
[2.6], [AC_MSG_RESULT([yes])], [AC_MSG_RESULT([no])
      AC_MSG_ERROR([Python interpreter is too old])])
m4trace:configure.ac:259: -1- AM_RUN_LOG([$PYTHON -c "$prog"])
m4trace:configure.ac:259: -1-
AM_PYTHON_CHECK_VERSION([$am_cv_pathless_PYTHON], [2.6], [break])
m4trace:configure.ac:259: -1- AM_RUN_LOG([$am_cv_pathless_PYTHON -c
"$prog"])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_VERSION$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_PREFIX$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_LIB_PREFIX$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_EXEC_PREFIX$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_PLATFORM$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^pythondir$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^pkgpythondir$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^pyexecdir$])
m4trace:configure.ac:259: -1- m4_pattern_allow([^pkgpyexecdir$])
m4trace:configure.ac:269: -1- AM_PATH_PYTHON([2.6], [], [:])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:269: -1- AM_PYTHON_CHECK_VERSION([$PYTHON],
[2.6], [AC_MSG_RESULT([yes])], [AC_MSG_RESULT([no])
      AC_MSG_ERROR([Python interpreter is too old])])
m4trace:configure.ac:269: -1- AM_RUN_LOG([$PYTHON -c "$prog"])
m4trace:configure.ac:269: -1-
AM_PYTHON_CHECK_VERSION([$am_cv_pathless_PYTHON], [2.6], [break])
m4trace:configure.ac:269: -1- AM_RUN_LOG([$am_cv_pathless_PYTHON -c
"$prog"])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_VERSION$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_PREFIX$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_LIB_PREFIX$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_EXEC_PREFIX$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_PLATFORM$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^pythondir$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^pkgpythondir$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^pyexecdir$])
m4trace:configure.ac:269: -1- m4_pattern_allow([^pkgpyexecdir$])
m4trace:configure.ac:273: -1-
m4_pattern_allow([^DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:277: -1-
m4_pattern_allow([^DBUS_DISABLE_ASSERT$])
m4trace:configure.ac:288: -1-
m4_pattern_allow([^DBUS_BUILT_R_DYNAMIC$])

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m4trace:configure.ac:291: -1- m4_pattern_allow([R_DYNAMIC_LDFLAG$])
m4trace:configure.ac:294: -1-
m4_pattern_allow([DBUS_DISABLE_CHECKS$])
m4trace:configure.ac:295: -1- m4_pattern_allow([G_DISABLE_CHECKS$])
m4trace:configure.ac:300: -1-
m4_pattern_allow([DBUS_ENABLE_USERDB_CACHE$])
m4trace:configure.ac:305: -1- m4_pattern_allow([DBUS_GCOV_ENABLED$])
m4trace:configure.ac:335: -1- m4_pattern_allow([SIZEOF_CHAR$])
m4trace:configure.ac:336: -1- m4_pattern_allow([SIZEOF_SHORT$])
m4trace:configure.ac:337: -1- m4_pattern_allow([SIZEOF_LONG$])
m4trace:configure.ac:338: -1- m4_pattern_allow([SIZEOF_INT$])
m4trace:configure.ac:339: -1- m4_pattern_allow([SIZEOF_VOID_P$])
m4trace:configure.ac:340: -1- m4_pattern_allow([SIZEOF_LONG_LONG$])
m4trace:configure.ac:341: -1- m4_pattern_allow([SIZEOF___INT64$])
m4trace:configure.ac:386: -1-
m4_pattern_allow([DBUS_INT64_PRINTF_MODIFIER$])
m4trace:configure.ac:422: -1- m4_pattern_allow([DBUS_INT64_TYPE$])
m4trace:configure.ac:423: -1-
m4_pattern_allow([DBUS_INT64_CONSTANT$])
m4trace:configure.ac:424: -1-
m4_pattern_allow([DBUS_UINT64_CONSTANT$])
m4trace:configure.ac:425: -1- m4_pattern_allow([DBUS_HAVE_INT64$])
m4trace:configure.ac:450: -1- m4_pattern_allow([DBUS_INT32_TYPE$])
m4trace:configure.ac:472: -1- m4_pattern_allow([DBUS_INT16_TYPE$])
m4trace:configure.ac:487: -1- m4_pattern_allow([WORDS_BIGENDIAN$])
m4trace:configure.ac:487: -1-
m4_pattern_allow([AC_APPLE_UNIVERSAL_BUILD$])
m4trace:configure.ac:541: -1- m4_pattern_allow([DBUS_VA_COPY$])
m4trace:configure.ac:573: -1-
m4_pattern_allow([DBUS_VA_COPY_AS_ARRAY$])
m4trace:configure.ac:593: -1- m4_pattern_allow([DBUS_USE_SYNC$])
m4trace:configure.ac:597: -1- m4_pattern_allow([HAVE_LIBNSL$])
m4trace:configure.ac:601: -1- m4_pattern_allow([HAVE_SYSLOG_H$])
m4trace:configure.ac:603: -1-
m4_pattern_allow([HAVE_DECL_LOG_PERROR$])
m4trace:configure.ac:609: -1- m4_pattern_allow([BROKEN_POLL$])
m4trace:configure.ac:648: -1- m4_pattern_allow([HAVE_DIRFD$])
m4trace:configure.ac:665: -1- m4_pattern_allow([HAVE_DDFD$])
m4trace:configure.ac:669: -1-
m4_pattern_allow([HAVE_SYS_RESOURCE_H$])
m4trace:configure.ac:671: -1- m4_pattern_allow([HAVE_DIRENT_H$])
m4trace:configure.ac:673: -1- m4_pattern_allow([HAVE_EXECINFO_H$])
m4trace:configure.ac:673: -1- m4_pattern_allow([HAVE_BACKTRACE$])
m4trace:configure.ac:675: -1- m4_pattern_allow([HAVE_ERRNO_H$])
m4trace:configure.ac:677: -1- m4_pattern_allow([HAVE_SIGNAL_H$])
m4trace:configure.ac:679: -1- m4_pattern_allow([HAVE_LOCALE_H$])
m4trace:configure.ac:681: -1- m4_pattern_allow([HAVE_BYTESWAP_H$])
m4trace:configure.ac:683: -1- m4_pattern_allow([HAVE_UNISTD_H$])
m4trace:configure.ac:685: -1- m4_pattern_allow([HAVE_WS2TCPIP_H$])
m4trace:configure.ac:687: -1- m4_pattern_allow([HAVE_WSPIAPI_H$])
m4trace:configure.ac:726: -1-
m4_pattern_allow([HAVE_POSIX_GETPWNAM_R$])
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m4trace:configure.ac:738: -1-
m4_pattern_allow([^HAVE_NONPOSIX_GETPWNAM_R$])
m4trace:configure.ac:758: -1- m4_pattern_allow([^HAVE_SOCKLEN_T$])
m4trace:configure.ac:763: -1- m4_pattern_allow([^HAVE_SYS_UIO_H$])
m4trace:configure.ac:763: -1- m4_pattern_allow([^HAVE_WRITEV$])
m4trace:configure.ac:766: -1-
m4_pattern_allow([^HAVE_SYS_SYSLIMITS_H$])
m4trace:configure.ac:769: -1-
m4_pattern_allow([^HAVE_DECL_MSG_NOSIGNAL$])
m4trace:configure.ac:795: -1- m4_pattern_allow([^HAVE_ISO_VARARGS$])
m4trace:configure.ac:798: -1- m4_pattern_allow([^HAVE_GNUC_VARARGS$])
m4trace:configure.ac:816: -1- m4_pattern_allow([^HAVE_CMSGCRED$])
m4trace:configure.ac:896: -1-
m4_pattern_allow([^HAVE_ABSTRACT_SOCKETS$])
m4trace:configure.ac:903: -1-
m4_pattern_allow([^DBUS_PATH_OR_ABSTRACT$])
m4trace:configure.ac:905: -1- PKG_PROG_PKG_CONFIG
m4trace:configure.ac:905: -1- m4_pattern_forbid([^?PKG_[A-Z_]+$])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:910: -1- m4_pattern_allow([^HAVE_EXPAT_H$])
m4trace:configure.ac:923: -1- PKG_CHECK_MODULES([LIBXML], [libxml-2.0
>= 2.6.0], [have_libxml=true], [have_libxml=false])
m4trace:configure.ac:923: -1- m4_pattern_allow([^LIBXML_CFLAGS$])
m4trace:configure.ac:923: -1- m4_pattern_allow([^LIBXML_LIBS$])
m4trace:configure.ac:923: -1- PKG_CHECK_EXISTS([libxml-2.0 >= 2.6.0],
[pkg_cv_[LIBXML_CFLAGS=$PKG_CONFIG --[cflags "libxml-2.0 >= 2.6.0"
2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:923: -1- PKG_CHECK_EXISTS([libxml-2.0 >= 2.6.0],
[pkg_cv_[LIBXML_LIBS=$PKG_CONFIG --[libs "libxml-2.0 >= 2.6.0"
2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:923: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:941: -1- AM_CONDITIONAL([DBUS_USE_EXPAT],
[$dbus_use_expate])
m4trace:configure.ac:941: -1-
m4_pattern_allow([^DBUS_USE_EXPAT_TRUE$])
m4trace:configure.ac:941: -1-
m4_pattern_allow([^DBUS_USE_EXPAT_FALSE$])
m4trace:configure.ac:941: -1- _AM_SUBST_NOTMAKE([DBUS_USE_EXPAT_TRUE])
m4trace:configure.ac:941: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_EXPAT_FALSE])
m4trace:configure.ac:942: -1- AM_CONDITIONAL([DBUS_USE_LIBXML],
[$dbus_use_libxml])
m4trace:configure.ac:942: -1-
m4_pattern_allow([^DBUS_USE_LIBXML_TRUE$])
m4trace:configure.ac:942: -1-
m4_pattern_allow([^DBUS_USE_LIBXML_FALSE$])
m4trace:configure.ac:942: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_LIBXML_TRUE])
m4trace:configure.ac:942: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_LIBXML_FALSE])

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m4trace:configure.ac:952: -1- m4_pattern_allow([^XML_CFLAGS$])
m4trace:configure.ac:953: -1- m4_pattern_allow([^XML_LIBS$])
m4trace:configure.ac:977: -1-
m4_pattern_allow([^HAVE_MONOTONIC_CLOCK$])
m4trace:configure.ac:984: -1- m4_pattern_allow([^THREAD_LIBS$])
m4trace:configure.ac:1018: -1- AM_CONDITIONAL([HAVE_SELINUX], [test
x$have_selinux = xyes])
m4trace:configure.ac:1018: -1- m4_pattern_allow([^HAVE_SELINUX_TRUE$])
m4trace:configure.ac:1018: -1-
m4_pattern_allow([^HAVE_SELINUX_FALSE$])
m4trace:configure.ac:1018: -1- _AM_SUBST_NOTMAKE([HAVE_SELINUX_TRUE])
m4trace:configure.ac:1018: -1- _AM_SUBST_NOTMAKE([HAVE_SELINUX_FALSE])
m4trace:configure.ac:1027: -1- m4_pattern_allow([^HAVE_SELINUX$])
m4trace:configure.ac:1036: -1-
m4_pattern_allow([^HAVE_SYS_INOTIFY_H$])
m4trace:configure.ac:1041: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_INOTIFY$])
m4trace:configure.ac:1042: -1-
m4_pattern_allow([^HAVE_INOTIFY_INIT1$])
m4trace:configure.ac:1045: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_INOTIFY], [test x$have_inotify =
xyes])
m4trace:configure.ac:1045: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_INOTIFY_TRUE$])
m4trace:configure.ac:1045: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_INOTIFY_FALSE$])
m4trace:configure.ac:1045: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_INOTIFY_TRUE])
m4trace:configure.ac:1045: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_INOTIFY_FALSE])
m4trace:configure.ac:1060: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX$])
m4trace:configure.ac:1063: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX], [test
x$have_dnotify = xyes])
m4trace:configure.ac:1063: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE$])
m4trace:configure.ac:1063: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE$])
m4trace:configure.ac:1063: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE])
m4trace:configure.ac:1063: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE])
m4trace:configure.ac:1091: -1-
m4_pattern_allow([^DBUS_HAVE_LINUX_EPOLL$])
m4trace:configure.ac:1093: -1- AM_CONDITIONAL([HAVE_LINUX_EPOLL],
[test x$have_linux_epoll = xyes])
m4trace:configure.ac:1093: -1-
m4_pattern_allow([^HAVE_LINUX_EPOLL_TRUE$])
m4trace:configure.ac:1093: -1-
m4_pattern_allow([^HAVE_LINUX_EPOLL_FALSE$])
```

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m4trace:configure.ac:1093: -1-
_AM_SUBST_NOTMAKE([HAVE_LINUX_EPOLL_TRUE])
m4trace:configure.ac:1093: -1-
_AM_SUBST_NOTMAKE([HAVE_LINUX_EPOLL_FALSE])
m4trace:configure.ac:1110: -1-
m4_pattern_allow([DBUS_BUS_ENABLE_KQUEUE$])
m4trace:configure.ac:1113: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_KQUEUE], [test x$have_kqueue = xyes])
m4trace:configure.ac:1113: -1-
m4_pattern_allow([DBUS_BUS_ENABLE_KQUEUE_TRUE$])
m4trace:configure.ac:1113: -1-
m4_pattern_allow([DBUS_BUS_ENABLE_KQUEUE_FALSE$])
m4trace:configure.ac:1113: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_KQUEUE_TRUE])
m4trace:configure.ac:1113: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_KQUEUE_FALSE])
m4trace:configure.ac:1121: -1- m4_pattern_allow([LAUNCHCTL$])
m4trace:configure.ac:1133: -1-
m4_pattern_allow([DBUS_ENABLE_LAUNCHED$])
m4trace:configure.ac:1136: -1- AM_CONDITIONAL([DBUS_ENABLE_LAUNCHED],
[test x$have_launched = xyes])
m4trace:configure.ac:1136: -1-
m4_pattern_allow([DBUS_ENABLE_LAUNCHED_TRUE$])
m4trace:configure.ac:1136: -1-
m4_pattern_allow([DBUS_ENABLE_LAUNCHED_FALSE$])
m4trace:configure.ac:1136: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_LAUNCHED_TRUE])
m4trace:configure.ac:1136: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_LAUNCHED_FALSE])
m4trace:configure.ac:1145: -1- m4_pattern_allow([LAUNCHED_AGENT_DIR$])
m4trace:configure.ac:1154: -1-
m4_pattern_allow([HAVE_CONSOLE_OWNER_FILE$])
m4trace:configure.ac:1161: -1-
AM_CONDITIONAL([HAVE_CONSOLE_OWNER_FILE], [test
x$have_console_owner_file = xyes])
m4trace:configure.ac:1161: -1-
m4_pattern_allow([HAVE_CONSOLE_OWNER_FILE_TRUE$])
m4trace:configure.ac:1161: -1-
m4_pattern_allow([HAVE_CONSOLE_OWNER_FILE_FALSE$])
m4trace:configure.ac:1161: -1-
_AM_SUBST_NOTMAKE([HAVE_CONSOLE_OWNER_FILE_TRUE])
m4trace:configure.ac:1161: -1-
_AM_SUBST_NOTMAKE([HAVE_CONSOLE_OWNER_FILE_FALSE])
m4trace:configure.ac:1167: -1- PKG_CHECK_MODULES([SYSTEMD],
[libsystemd-login >= 32, libsystemd-daemon >= 32], [have_systemd=yes],
[have_systemd=no])
m4trace:configure.ac:1167: -1- m4_pattern_allow([SYSTEMD_CFLAGS$])
m4trace:configure.ac:1167: -1- m4_pattern_allow([SYSTEMD_LIBS$])
m4trace:configure.ac:1167: -1- PKG_CHECK_EXISTS([libsystemd-login >=
32, libsystemd-daemon >= 32], [pkg_cv_[SYSTEMD_CFLAGS=`$PKG_CONFIG --
[cflags "libsystemd-login >= 32, libsystemd-daemon >= 32"
2>/dev/null`], [pkg_failed=yes])
```

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m4trace:configure.ac:1167: -1- PKG_CHECK_EXISTS([libsystemd-login >=
32, libsystemd-daemon >= 32], [pkg_cv_[]SYSTEMD_LIBS=`$PKG_CONFIG --
[]libs "libsystemd-login >= 32, libsystemd-daemon >= 32"
2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:1167: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:1174: -1- m4_pattern_allow([^HAVE_SYSTEMD$])
m4trace:configure.ac:1194: -1- AM_CONDITIONAL([HAVE_LIBAUDIT], [test
x$have_libaudit = xyes])
m4trace:configure.ac:1194: -1-
m4_pattern_allow([^HAVE_LIBAUDIT_TRUE$])
m4trace:configure.ac:1194: -1-
m4_pattern_allow([^HAVE_LIBAUDIT_FALSE$])
m4trace:configure.ac:1194: -1- _AM_SUBST_NOTMAKE([HAVE_LIBAUDIT_TRUE])
m4trace:configure.ac:1194: -1-
_AM_SUBST_NOTMAKE([HAVE_LIBAUDIT_FALSE])
m4trace:configure.ac:1198: -1- m4_pattern_allow([^HAVE_LIBAUDIT$])
m4trace:configure.ac:1201: -1- m4_pattern_allow([^SELINUX_LIBS$])
m4trace:configure.ac:1212: -1- m4_pattern_allow([^HAVE_ADT$])
m4trace:configure.ac:1219: -1- m4_pattern_allow([^ADT_LIBS$])
m4trace:configure.ac:1223: -1-
m4_pattern_allow([^HAVE_UNIX_FD_PASSING$])
m4trace:configure.ac:1242: -1- m4_pattern_allow([^NETWORK_libs$])
m4trace:configure.ac:1251: -1- PKG_CHECK_MODULES([VALGRIND], [valgrind
>= 3.6])
m4trace:configure.ac:1251: -1- m4_pattern_allow([^VALGRIND_CFLAGS$])
m4trace:configure.ac:1251: -1- m4_pattern_allow([^VALGRIND_LIBS$])
m4trace:configure.ac:1251: -1- PKG_CHECK_EXISTS([valgrind >= 3.6],
[pkg_cv_[]VALGRIND_CFLAGS=`$PKG_CONFIG --[]cflags "valgrind >= 3.6"
2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:1251: -1- PKG_CHECK_EXISTS([valgrind >= 3.6],
[pkg_cv_[]VALGRIND_LIBS=`$PKG_CONFIG --[]libs "valgrind >= 3.6"
2>/dev/null`], [pkg_failed=yes])
m4trace:configure.ac:1251: -1- _PKG_SHORT_ERRORS_SUPPORTED
m4trace:configure.ac:1252: -1- m4_pattern_allow([^WITH_VALGRIND$])
m4trace:configure.ac:1257: -1- m4_pattern_allow([^LIBDBUS_LIBS$])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_DISPLAY_MISSING$])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_CFLAGS$])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_PRE_LIBS$])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_LIBS$])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_EXTRA_LIBS$])
m4trace:configure.ac:1296: -1- m4_pattern_allow([^DBUS_BUILD_X11$])
m4trace:configure.ac:1300: -1-
m4_pattern_allow([^DBUS_ENABLE_X11_AUTOLAUNCH$])
m4trace:configure.ac:1303: -1- m4_pattern_allow([^DBUS_X_CFLAGS$])
m4trace:configure.ac:1304: -1- m4_pattern_allow([^DBUS_X_LIBS$])
m4trace:configure.ac:1312: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
configure.ac:1312: the top level])
```

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m4trace:configure.ac:1318: -1- TP_COMPILER_WARNINGS([WARNING_CFLAGS],
[      test x$dbus_win != xyes -a x$dbus_cygwin != xyes -a
x$enable_developer = xyes], [ all \
  extra \
  char-subscripts \
  missing-declarations \
  missing-prototypes \
  nested-externs \
  pointer-arith \
  cast-align \
  no-address \
  float-equal \
  declaration-after-statement \
], [      $DISABLE_UNUSED_WARNINGS \
  missing-field-initializers \
  unused-parameter \
  sign-compare \
  pointer-sign \
  type-limits \
])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_HELP_STRING' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:207:
AC_HELP_STRING is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-warnings.m4:8:
TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- TP_COMPILER_FLAG
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: TP_COMPILER_FLAG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-warnings.m4:8:
TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- TP_COMPILER_FLAG([-W$tp_flag],
[tp_warnings="$tp_warnings -W$tp_flag"])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-

```



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r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: TP_COMPILER_FLAG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-warnings.m4:8:
TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- TP_COMPILER_FLAG([-Werror],
[tp_werror=yes], [tp_werror=no])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: TP_COMPILER_FLAG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-warnings.m4:8:
TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- TP_COMPILER_FLAG([-Wno-$tp_flag],
[tp_warnings="$tp_warnings -Wno-$tp_flag"])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: TP_COMPILER_FLAG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-warnings.m4:8:
TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- TP_COMPILER_FLAG([-Wno-error=$tp_flag],
[tp_error_flags="$tp_error_flags -Wno-error=$tp_flag"],
[tp_werror=no])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: TP_COMPILER_FLAG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-warnings.m4:8:
TP_COMPILER_WARNINGS is expanded from...
```

```
configure.ac:1318: the top level))
m4trace:configure.ac:1318: -2- _m4_warn([obsolete], [The macro
`AC_HELP_STRING' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:207:
AC_HELP_STRING is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-warnings.m4:8:
TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level))
m4trace:configure.ac:1363: -1- TP_ADD_COMPILER_FLAG([WARNING_CFLAGS],
[-fno-common])
m4trace:configure.ac:1363: -1- TP_COMPILER_FLAG([-fno-common],
[WARNING_CFLAGS="[$]WARNING_CFLAGS -fno-common"])
m4trace:configure.ac:1363: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: TP_COMPILER_FLAG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:40: TP_ADD_COMPILER_FLAG
is expanded from...
configure.ac:1363: the top level))
m4trace:configure.ac:1366: -1- TP_ADD_COMPILER_FLAG([WARNING_CFLAGS],
[-fno-strict-aliasing])
m4trace:configure.ac:1366: -1- TP_COMPILER_FLAG([-fno-strict-
aliasing], [WARNING_CFLAGS="[$]WARNING_CFLAGS -fno-strict-aliasing"])
m4trace:configure.ac:1366: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: TP_COMPILER_FLAG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:40: TP_ADD_COMPILER_FLAG
is expanded from...
configure.ac:1366: the top level))
m4trace:configure.ac:1369: -1- TP_ADD_COMPILER_FLAG([WARNING_CFLAGS],
[-ansi -D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -pedantic])
m4trace:configure.ac:1369: -1- TP_COMPILER_FLAG([-ansi -
D_POSIX_C_SOURCE=199309L -D_BSD_SOURCE -pedantic],
[WARNING_CFLAGS="[$]WARNING_CFLAGS -ansi -D_POSIX_C_SOURCE=199309L -
D_BSD_SOURCE -pedantic"])
m4trace:configure.ac:1369: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
```

```
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:15: TP_COMPILER_FLAG is
expanded from...
/home/gangadhar/newyoctobuild/tisdk/build/arago-tmp-external-linaro-
toolchain/work/cortexa8hf-vfp-neon-3.8-oe-linux-gnueabi/dbus/1.6.8-
r6.0-arago1/dbus-1.6.8/m4/tp-compiler-flag.m4:40: TP_ADD_COMPILER_FLAG
is expanded from...
configure.ac:1369: the top level])
m4trace:configure.ac:1393: -1- m4_pattern_allow([DOXYGEN$])
m4trace:configure.ac:1417: -1-
AM_CONDITIONAL([DBUS_DOXYGEN_DOCS_ENABLED], [test
x$enable_doxygen_docs = xyes])
m4trace:configure.ac:1417: -1-
m4_pattern_allow([DBUS_DOXYGEN_DOCS_ENABLED_TRUE$])
m4trace:configure.ac:1417: -1-
m4_pattern_allow([DBUS_DOXYGEN_DOCS_ENABLED_FALSE$])
m4trace:configure.ac:1417: -1-
_AM_SUBST_NOTMAKE([DBUS_DOXYGEN_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1417: -1-
_AM_SUBST_NOTMAKE([DBUS_DOXYGEN_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1420: -1- m4_pattern_allow([XSLTPROC$])
m4trace:configure.ac:1421: -1- AM_CONDITIONAL([DBUS_HAVE_XSLTPROC],
[test "x$XSLTPROC" != "x"])
m4trace:configure.ac:1421: -1-
m4_pattern_allow([DBUS_HAVE_XSLTPROC_TRUE$])
m4trace:configure.ac:1421: -1-
m4_pattern_allow([DBUS_HAVE_XSLTPROC_FALSE$])
m4trace:configure.ac:1421: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_XSLTPROC_TRUE])
m4trace:configure.ac:1421: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_XSLTPROC_FALSE])
m4trace:configure.ac:1425: -1- m4_pattern_allow([XMLTO$])
m4trace:configure.ac:1449: -1- AM_CONDITIONAL([DBUS_XML_DOCS_ENABLED],
[test x$enable_xml_docs = xyes])
m4trace:configure.ac:1449: -1-
m4_pattern_allow([DBUS_XML_DOCS_ENABLED_TRUE$])
m4trace:configure.ac:1449: -1-
m4_pattern_allow([DBUS_XML_DOCS_ENABLED_FALSE$])
m4trace:configure.ac:1449: -1-
_AM_SUBST_NOTMAKE([DBUS_XML_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1449: -1-
_AM_SUBST_NOTMAKE([DBUS_XML_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1452: -1- m4_pattern_allow([MAN2HTML$])
m4trace:configure.ac:1453: -1- m4_pattern_allow([MAN2HTML$])
m4trace:configure.ac:1454: -1- AM_CONDITIONAL([DBUS_HAVE_MAN2HTML],
[test x$MAN2HTML != x])
m4trace:configure.ac:1454: -1-
m4_pattern_allow([DBUS_HAVE_MAN2HTML_TRUE$])
```

```
m4trace:configure.ac:1454: -1-
m4_pattern_allow([^DBUS_HAVE_MAN2HTML_FALSE$])
m4trace:configure.ac:1454: -1-
  _AM_SUBST_NOTMAKE([DBUS_HAVE_MAN2HTML_TRUE])
m4trace:configure.ac:1454: -1-
  _AM_SUBST_NOTMAKE([DBUS_HAVE_MAN2HTML_FALSE])
m4trace:configure.ac:1456: -1- AM_CONDITIONAL([DBUS_CAN_UPLOAD_DOCS],
[test x$enable_doxygen_docs = xyes -a x$enable_xml_docs = xyes -a \
  x$MAN2HTML != x])
m4trace:configure.ac:1456: -1-
m4_pattern_allow([^DBUS_CAN_UPLOAD_DOCS_TRUE$])
m4trace:configure.ac:1456: -1-
m4_pattern_allow([^DBUS_CAN_UPLOAD_DOCS_FALSE$])
m4trace:configure.ac:1456: -1-
  _AM_SUBST_NOTMAKE([DBUS_CAN_UPLOAD_DOCS_TRUE])
m4trace:configure.ac:1456: -1-
  _AM_SUBST_NOTMAKE([DBUS_CAN_UPLOAD_DOCS_FALSE])
m4trace:configure.ac:1465: -1- AS_AC_EXPAND([EXPANDED_PREFIX],
["$prefix"])
m4trace:configure.ac:1465: -1- m4_pattern_allow([^EXPANDED_PREFIX$])
m4trace:configure.ac:1466: -1- AS_AC_EXPAND([EXPANDED_LOCALSTATEDIR],
["$localstatedir"])
m4trace:configure.ac:1466: -1-
m4_pattern_allow([^EXPANDED_LOCALSTATEDIR$])
m4trace:configure.ac:1467: -1- AS_AC_EXPAND([EXPANDED_SYSCONFDIR],
["$sysconfdir"])
m4trace:configure.ac:1467: -1-
m4_pattern_allow([^EXPANDED_SYSCONFDIR$])
m4trace:configure.ac:1468: -1- AS_AC_EXPAND([EXPANDED_BINDIR],
["$bindir"])
m4trace:configure.ac:1468: -1- m4_pattern_allow([^EXPANDED_BINDIR$])
m4trace:configure.ac:1469: -1- AS_AC_EXPAND([EXPANDED_LIBDIR],
["$libdir"])
m4trace:configure.ac:1469: -1- m4_pattern_allow([^EXPANDED_LIBDIR$])
m4trace:configure.ac:1470: -1- AS_AC_EXPAND([EXPANDED_LIBEXECDIR],
["$libexecdir"])
m4trace:configure.ac:1470: -1-
m4_pattern_allow([^EXPANDED_LIBEXECDIR$])
m4trace:configure.ac:1471: -1- AS_AC_EXPAND([EXPANDED_DATADIR],
["$datadir"])
m4trace:configure.ac:1471: -1- m4_pattern_allow([^EXPANDED_DATADIR$])
m4trace:configure.ac:1498: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_RED_HAT], [test x$with_init_scripts
= xredhat])
m4trace:configure.ac:1498: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_RED_HAT_TRUE$])
m4trace:configure.ac:1498: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_RED_HAT_FALSE$])
m4trace:configure.ac:1498: -1-
  _AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_RED_HAT_TRUE])
m4trace:configure.ac:1498: -1-
  _AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_RED_HAT_FALSE])
```

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m4trace:configure.ac:1499: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_SLACKWARE], [test
x$with_init_scripts = xslackware])
m4trace:configure.ac:1499: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_SLACKWARE_TRUE$])
m4trace:configure.ac:1499: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_SLACKWARE_FALSE$])
m4trace:configure.ac:1499: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_SLACKWARE_TRUE])
m4trace:configure.ac:1499: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_SLACKWARE_FALSE])
m4trace:configure.ac:1500: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_CYGWIN], [test x$with_init_scripts =
xcygwin])
m4trace:configure.ac:1500: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_CYGWIN_TRUE$])
m4trace:configure.ac:1500: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_CYGWIN_FALSE$])
m4trace:configure.ac:1500: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_CYGWIN_TRUE])
m4trace:configure.ac:1500: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_CYGWIN_FALSE])
m4trace:configure.ac:1503: -1- PKG_CHECK_EXISTS([systemd],
[with_systemdsystemunitdir=$(^PKG_CONFIG --
variable=systemdsystemunitdir systemd)],
[with_systemdsystemunitdir=no])
m4trace:configure.ac:1512: -1-
m4_pattern_allow([^systemdsystemunitdir$])
m4trace:configure.ac:1514: -1- AM_CONDITIONAL([HAVE_SYSTEMD], [test -n
"$with_systemdsystemunitdir" -a "x$with_systemdsystemunitdir" != xno
])
m4trace:configure.ac:1514: -1- m4_pattern_allow([^HAVE_SYSTEMD_TRUE$])
m4trace:configure.ac:1514: -1-
m4_pattern_allow([^HAVE_SYSTEMD_FALSE$])
m4trace:configure.ac:1514: -1- _AM_SUBST_NOTMAKE([HAVE_SYSTEMD_TRUE])
m4trace:configure.ac:1514: -1- _AM_SUBST_NOTMAKE([HAVE_SYSTEMD_FALSE])
m4trace:configure.ac:1523: -1-
m4_pattern_allow([^DBUS_SYSTEM_SOCKET$])
m4trace:configure.ac:1524: -1-
m4_pattern_allow([^DBUS_SYSTEM_SOCKET$])
m4trace:configure.ac:1529: -1-
m4_pattern_allow([^DBUS_SYSTEM_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1530: -1-
m4_pattern_allow([^DBUS_SYSTEM_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1541: -1-
m4_pattern_allow([^DBUS_SYSTEM_PID_FILE$])
m4trace:configure.ac:1550: -1-
m4_pattern_allow([^DBUS_CONSOLE_AUTH_DIR$])
m4trace:configure.ac:1551: -1-
m4_pattern_allow([^DBUS_CONSOLE_AUTH_DIR$])
m4trace:configure.ac:1564: -1-
m4_pattern_allow([^DBUS_CONSOLE_OWNER_FILE$])
```

```
m4trace:configure.ac:1565: -1-
m4_pattern_allow([ ^DBUS_CONSOLE_OWNER_FILES$])
m4trace:configure.ac:1573: -1- m4_pattern_allow([ ^DBUS_USERS$])
m4trace:configure.ac:1574: -1- m4_pattern_allow([ ^DBUS_USERS$])
m4trace:configure.ac:1578: -1- m4_pattern_allow([ ^DBUS_PREFIX$])
m4trace:configure.ac:1579: -1- m4_pattern_allow([ ^DBUS_PREFIX$])
m4trace:configure.ac:1583: -1- m4_pattern_allow([ ^DBUS_DATADIR$])
m4trace:configure.ac:1584: -1- m4_pattern_allow([ ^DBUS_DATADIR$])
m4trace:configure.ac:1592: -1- m4_pattern_allow([ ^DBUS_DAEMONDIR$])
m4trace:configure.ac:1593: -1- m4_pattern_allow([ ^DBUS_DAEMONDIR$])
m4trace:configure.ac:1597: -1- m4_pattern_allow([ ^DBUS_BINDIR$])
m4trace:configure.ac:1598: -1- m4_pattern_allow([ ^DBUS_BINDIR$])
m4trace:configure.ac:1602: -1- m4_pattern_allow([ ^DBUS_LIBEXECDIR$])
m4trace:configure.ac:1603: -1- m4_pattern_allow([ ^DBUS_LIBEXECDIR$])
m4trace:configure.ac:1615: -1- m4_pattern_allow([ ^DBUS_TEST_DATA$])
m4trace:configure.ac:1616: -1- m4_pattern_allow([ ^DBUS_TEST_EXEC$])
m4trace:configure.ac:1618: -1- m4_pattern_allow([ ^DBUS_TEST_EXEC$])
m4trace:configure.ac:1620: -1- m4_pattern_allow([ ^DBUS_EXEEXT$])
m4trace:configure.ac:1623: -1- m4_pattern_allow([ ^TEST_BUS_BINARY$])
m4trace:configure.ac:1625: -1- m4_pattern_allow([ ^TEST_BUS_BINARY$])
m4trace:configure.ac:1629: -1-
m4_pattern_allow([ ^TEST_LAUNCH_HELPER_BINARY$])
m4trace:configure.ac:1630: -1-
m4_pattern_allow([ ^DBUS_TEST_LAUNCH_HELPER_BINARY$])
m4trace:configure.ac:1642: -1- m4_pattern_allow([ ^TEST_SOCKET_DIR$])
m4trace:configure.ac:1643: -1-
m4_pattern_allow([ ^DBUS_TEST_SOCKET_DIR$])
m4trace:configure.ac:1650: -1- m4_pattern_allow([ ^TEST_LISTEN$])
m4trace:configure.ac:1651: -1- m4_pattern_allow([ ^TEST_LISTEN$])
m4trace:configure.ac:1659: -1-
m4_pattern_allow([ ^DBUS_SESSION_SOCKET_DIR$])
m4trace:configure.ac:1660: -1-
m4_pattern_allow([ ^DBUS_SESSION_SOCKET_DIR$])
m4trace:configure.ac:1669: -1-
m4_pattern_allow([ ^DBUS_SESSION_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1672: -1-
m4_pattern_allow([ ^HAVE_CRT_EXTERNS_H$])
m4trace:configure.ac:1673: -1- m4_pattern_allow([ ^HAVE_NSGETENVIRON$])
m4trace:configure.ac:1688: -1- m4_pattern_allow([ ^DBUS_ENABLE_STATS$])
m4trace:configure.ac:1732: -1- m4_pattern_allow([ ^LIB@&t@OBJSS$])
m4trace:configure.ac:1732: -1- m4_pattern_allow([ ^LTLIBOBJSS$])
m4trace:configure.ac:1732: -1- AM_CONDITIONAL([am__EXEEXT], [test -n
"$EXEEXT"])
m4trace:configure.ac:1732: -1- m4_pattern_allow([ ^am__EXEEXT_TRUE$])
m4trace:configure.ac:1732: -1- m4_pattern_allow([ ^am__EXEEXT_FALSE$])
m4trace:configure.ac:1732: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_TRUE])
m4trace:configure.ac:1732: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_FALSE])
m4trace:configure.ac:1732: -1- _AC_AM_CONFIG_HEADER_HOOK(["$ac_file"])
m4trace:configure.ac:1732: -1- _AM_OUTPUT_DEPENDENCY_COMMANDS
m4trace:configure.ac:1732: -1- _LT_PROG_LTMAIN
```

File = traces.1

```
m4trace:configure.ac:4: -1- AC_INIT([dbus-glib], [0.100.2],
[https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLi
b])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^_?A[CHUM]_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([_AC_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^LIBOBJ$], [do not use
LIBOBJ directly, use AC_LIBOBJ (see section `AC_LIBOBJ vs LIBOBJ')]
m4trace:configure.ac:4: -1- m4_pattern_allow([^AS_FLAGS$])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^_?m4_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^dn1$])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^_?AS_])
m4trace:configure.ac:4: -1- AC_SUBST([SHELL])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([SHELL])
m4trace:configure.ac:4: -1- m4_pattern_allow([^SHELL$])
m4trace:configure.ac:4: -1- AC_SUBST([PATH_SEPARATOR])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PATH_SEPARATOR])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PATH_SEPARATOR$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_NAME],
[m4_ifdef([AC_PACKAGE_NAME], ['AC_PACKAGE_NAME'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_NAME])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_TARNAME],
[m4_ifdef([AC_PACKAGE_TARNAME], ['AC_PACKAGE_TARNAME'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_TARNAME])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_VERSION],
[m4_ifdef([AC_PACKAGE_VERSION], ['AC_PACKAGE_VERSION'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_VERSION])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_VERSION$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_STRING],
[m4_ifdef([AC_PACKAGE_STRING], ['AC_PACKAGE_STRING'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_STRING])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_STRING$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_BUGREPORT],
[m4_ifdef([AC_PACKAGE_BUGREPORT], ['AC_PACKAGE_BUGREPORT'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_BUGREPORT])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_BUGREPORT$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_URL],
[m4_ifdef([AC_PACKAGE_URL], ['AC_PACKAGE_URL'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_URL])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_URL$])
m4trace:configure.ac:4: -1- AC_SUBST([exec_prefix], [NONE])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([exec_prefix])
m4trace:configure.ac:4: -1- m4_pattern_allow([^exec_prefix$])
m4trace:configure.ac:4: -1- AC_SUBST([prefix], [NONE])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([prefix])
m4trace:configure.ac:4: -1- m4_pattern_allow([^prefix$])
m4trace:configure.ac:4: -1- AC_SUBST([program_transform_name],
[s,x,x,])
```

```

m4trace:configure.ac:4: -1- AC_SUBST_TRACE([program_transform_name])
m4trace:configure.ac:4: -1-
m4_pattern_allow([^program_transform_name$])
m4trace:configure.ac:4: -1- AC_SUBST([bindir], ['${exec_prefix}/bin'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([bindir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^bindir$])
m4trace:configure.ac:4: -1- AC_SUBST([sbindir],
['${exec_prefix}/sbin'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([sbindir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^sbindir$])
m4trace:configure.ac:4: -1- AC_SUBST([libexecdir],
['${exec_prefix}/libexec'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([libexecdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^libexecdir$])
m4trace:configure.ac:4: -1- AC_SUBST([datarootdir],
['${prefix}/share'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([datarootdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^datarootdir$])
m4trace:configure.ac:4: -1- AC_SUBST([datadir], ['${datarootdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([datadir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^datadir$])
m4trace:configure.ac:4: -1- AC_SUBST([sysconfdir], ['${prefix}/etc'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([sysconfdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^sysconfdir$])
m4trace:configure.ac:4: -1- AC_SUBST([sharedstatedir],
['${prefix}/com'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([sharedstatedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^sharedstatedir$])
m4trace:configure.ac:4: -1- AC_SUBST([localstatedir],
['${prefix}/var'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([localstatedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^localstatedir$])
m4trace:configure.ac:4: -1- AC_SUBST([includedir],
['${prefix}/include'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([includedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^includedir$])
m4trace:configure.ac:4: -1- AC_SUBST([oldincludedir],
['/usr/include'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([oldincludedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^oldincludedir$])
m4trace:configure.ac:4: -1- AC_SUBST([docdir],
[m4_ifset([AC_PACKAGE_TARNAME],
          ['${datarootdir}/doc/${PACKAGE_TARNAME}'],
          ['${datarootdir}/doc/${PACKAGE}'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([docdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^docdir$])
m4trace:configure.ac:4: -1- AC_SUBST([infodir],
['${datarootdir}/info'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([infodir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^infodir$])
m4trace:configure.ac:4: -1- AC_SUBST([htmldir], ['${docdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([htmldir])

```



```

m4trace:configure.ac:4: -1- m4_pattern_allow([^htmlmdir$])
m4trace:configure.ac:4: -1- AC_SUBST([dvidir], ['${docdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([dvidir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^dvidir$])
m4trace:configure.ac:4: -1- AC_SUBST([pdfdir], ['${docdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([pdfdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^pdfdir$])
m4trace:configure.ac:4: -1- AC_SUBST([psdir], ['${docdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([psdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^psdir$])
m4trace:configure.ac:4: -1- AC_SUBST([libdir], ['${exec_prefix}/lib'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([libdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^libdir$])
m4trace:configure.ac:4: -1- AC_SUBST([localedir],
['${datarootdir}/locale'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([localedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^localedir$])
m4trace:configure.ac:4: -1- AC_SUBST([mandir], ['${datarootdir}/man'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([mandir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^mandir$])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_NAME])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_NAME], [/* Define to
the full name of this package. */
@%:@undef PACKAGE_NAME])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_TARNAME])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_TARNAME], [/* Define to
the one symbol short name of this package. */
@%:@undef PACKAGE_TARNAME])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_VERSION])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_VERSION$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_VERSION], [/* Define to
the version of this package. */
@%:@undef PACKAGE_VERSION])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_STRING])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_STRING$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_STRING], [/* Define to
the full name and version of this package. */
@%:@undef PACKAGE_STRING])
m4trace:configure.ac:4: -1-
AC_DEFINE_TRACE_LITERAL([PACKAGE_BUGREPORT])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_BUGREPORT$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_BUGREPORT], [/* Define
to the address where bug reports for this package should be sent. */
@%:@undef PACKAGE_BUGREPORT])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_URL])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_URL$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_URL], [/* Define to the
home page for this package. */
@%:@undef PACKAGE_URL])
m4trace:configure.ac:4: -1- AC_SUBST([DEFS])

```

```
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([DEFS])
m4trace:configure.ac:4: -1- m4_pattern_allow([^DEFS$])
m4trace:configure.ac:4: -1- AC_SUBST([ECHO_C])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([ECHO_C])
m4trace:configure.ac:4: -1- m4_pattern_allow([^ECHO_C$])
m4trace:configure.ac:4: -1- AC_SUBST([ECHO_N])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([ECHO_N])
m4trace:configure.ac:4: -1- m4_pattern_allow([^ECHO_N$])
m4trace:configure.ac:4: -1- AC_SUBST([ECHO_T])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([ECHO_T])
m4trace:configure.ac:4: -1- m4_pattern_allow([^ECHO_T$])
m4trace:configure.ac:4: -1- AC_SUBST([LIBS])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:4: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:4: -1- AC_SUBST([build_alias])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([build_alias])
m4trace:configure.ac:4: -1- m4_pattern_allow([^build_alias$])
m4trace:configure.ac:4: -1- AC_SUBST([host_alias])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([host_alias])
m4trace:configure.ac:4: -1- m4_pattern_allow([^host_alias$])
m4trace:configure.ac:4: -1- AC_SUBST([target_alias])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([target_alias])
m4trace:configure.ac:4: -1- m4_pattern_allow([^target_alias$])
m4trace:configure.ac:7: -1- AC_CANONICAL_HOST
m4trace:configure.ac:7: -1- AC_CANONICAL_BUILD
m4trace:configure.ac:7: -1- AC_REQUIRE_AUX_FILE([config.sub])
m4trace:configure.ac:7: -1- AC_REQUIRE_AUX_FILE([config.guess])
m4trace:configure.ac:7: -1- AC_SUBST([build], [$ac_cv_build])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([build])
m4trace:configure.ac:7: -1- m4_pattern_allow([^build$])
m4trace:configure.ac:7: -1- AC_SUBST([build_cpu], [${1}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([build_cpu])
m4trace:configure.ac:7: -1- m4_pattern_allow([^build_cpu$])
m4trace:configure.ac:7: -1- AC_SUBST([build_vendor], [${2}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([build_vendor])
m4trace:configure.ac:7: -1- m4_pattern_allow([^build_vendor$])
m4trace:configure.ac:7: -1- AC_SUBST([build_os])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([build_os])
m4trace:configure.ac:7: -1- m4_pattern_allow([^build_os$])
m4trace:configure.ac:7: -1- AC_SUBST([host], [$ac_cv_host])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([host])
m4trace:configure.ac:7: -1- m4_pattern_allow([^host$])
m4trace:configure.ac:7: -1- AC_SUBST([host_cpu], [${1}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([host_cpu])
m4trace:configure.ac:7: -1- m4_pattern_allow([^host_cpu$])
m4trace:configure.ac:7: -1- AC_SUBST([host_vendor], [${2}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([host_vendor])
m4trace:configure.ac:7: -1- m4_pattern_allow([^host_vendor$])
m4trace:configure.ac:7: -1- AC_SUBST([host_os])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([host_os])
m4trace:configure.ac:7: -1- m4_pattern_allow([^host_os$])
m4trace:configure.ac:9: -1- AM_INIT_AUTOMAKE([1.9])
```

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m4trace:configure.ac:9: -1- m4_pattern_allow([AM_[A-Z]+FLAGS$])
m4trace:configure.ac:9: -1- AM_AUTOMAKE_VERSION([1.12.6])
m4trace:configure.ac:9: -1- AC_REQUIRE_AUX_FILE([install-sh])
m4trace:configure.ac:9: -1- AC_SUBST([INSTALL_PROGRAM])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([INSTALL_PROGRAM])
m4trace:configure.ac:9: -1- m4_pattern_allow([INSTALL_PROGRAM$])
m4trace:configure.ac:9: -1- AC_SUBST([INSTALL_SCRIPT])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([INSTALL_SCRIPT])
m4trace:configure.ac:9: -1- m4_pattern_allow([INSTALL_SCRIPT$])
m4trace:configure.ac:9: -1- AC_SUBST([INSTALL_DATA])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([INSTALL_DATA])
m4trace:configure.ac:9: -1- m4_pattern_allow([INSTALL_DATA$])
m4trace:configure.ac:9: -1- AC_SUBST([am__isrc], [' -I$(srcdir)'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([am__isrc])
m4trace:configure.ac:9: -1- m4_pattern_allow([am__isrc$])
m4trace:configure.ac:9: -1- AM_SUBST_NOTMAKE([am__isrc])
m4trace:configure.ac:9: -1- AC_SUBST([CYGPATH_W])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([CYGPATH_W])
m4trace:configure.ac:9: -1- m4_pattern_allow([CYGPATH_W$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE],
['AC_PACKAGE_TARNAME'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE$])
m4trace:configure.ac:9: -1- AC_SUBST([VERSION],
['AC_PACKAGE_VERSION'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([VERSION])
m4trace:configure.ac:9: -1- m4_pattern_allow([VERSION$])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE], [/* Name of package
*/
@%:@undef PACKAGE])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([VERSION])
m4trace:configure.ac:9: -1- m4_pattern_allow([VERSION$])
m4trace:configure.ac:9: -1- AH_OUTPUT([VERSION], [/* Version number of
package */
@%:@undef VERSION])
m4trace:configure.ac:9: -1- AC_REQUIRE_AUX_FILE([missing])
m4trace:configure.ac:9: -1- AC_SUBST([ACLOCAL])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([ACLOCAL])
m4trace:configure.ac:9: -1- m4_pattern_allow([ACLOCAL$])
m4trace:configure.ac:9: -1- AC_SUBST([AUTOCONF])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AUTOCONF])
m4trace:configure.ac:9: -1- m4_pattern_allow([AUTOCONF$])
m4trace:configure.ac:9: -1- AC_SUBST([AUTOMAKE])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AUTOMAKE])
m4trace:configure.ac:9: -1- m4_pattern_allow([AUTOMAKE$])
m4trace:configure.ac:9: -1- AC_SUBST([AUTOHEADER])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AUTOHEADER])
m4trace:configure.ac:9: -1- m4_pattern_allow([AUTOHEADER$])
m4trace:configure.ac:9: -1- AC_SUBST([MAKEINFO])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([MAKEINFO])

```

```
m4trace:configure.ac:9: -1- m4_pattern_allow([MAKEINFO$])
m4trace:configure.ac:9: -1- AC_SUBST([install_sh])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([install_sh])
m4trace:configure.ac:9: -1- m4_pattern_allow([install_sh$])
m4trace:configure.ac:9: -1- AC_SUBST([STRIP])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([STRIP])
m4trace:configure.ac:9: -1- m4_pattern_allow([STRIP$])
m4trace:configure.ac:9: -1- AC_SUBST([INSTALL_STRIP_PROGRAM])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([INSTALL_STRIP_PROGRAM])
m4trace:configure.ac:9: -1-
m4trace:configure.ac:9: -1- m4_pattern_allow([INSTALL_STRIP_PROGRAM$])
m4trace:configure.ac:9: -1- AC_REQUIRE_AUX_FILE([install-sh])
m4trace:configure.ac:9: -1- AC_SUBST([MKDIR_P])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([MKDIR_P])
m4trace:configure.ac:9: -1- m4_pattern_allow([MKDIR_P$])
m4trace:configure.ac:9: -1- AC_SUBST([mkdir_p], ['$(MKDIR_P)'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([mkdir_p])
m4trace:configure.ac:9: -1- m4_pattern_allow([mkdir_p$])
m4trace:configure.ac:9: -1- AC_SUBST([AWK])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AWK])
m4trace:configure.ac:9: -1- m4_pattern_allow([AWK$])
m4trace:configure.ac:9: -1- AC_SUBST([SET_MAKE])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([SET_MAKE])
m4trace:configure.ac:9: -1- m4_pattern_allow([SET_MAKE$])
m4trace:configure.ac:9: -1- AC_SUBST([am__leading_dot])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([am__leading_dot])
m4trace:configure.ac:9: -1- m4_pattern_allow([am__leading_dot$])
m4trace:configure.ac:9: -1- AC_SUBST([AMTAR], ['${TAR-tar}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AMTAR])
m4trace:configure.ac:9: -1- m4_pattern_allow([AMTAR$])
m4trace:configure.ac:9: -1- AC_SUBST([am__tar])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([am__tar])
m4trace:configure.ac:9: -1- m4_pattern_allow([am__tar$])
m4trace:configure.ac:9: -1- AC_SUBST([am__untar])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([am__untar])
m4trace:configure.ac:9: -1- m4_pattern_allow([am__untar$])
m4trace:configure.ac:11: -1- AC_CONFIG_HEADERS([config.h])
m4trace:configure.ac:18: -1- AM_MAINTAINER_MODE
m4trace:configure.ac:18: -1- AM_CONDITIONAL([MAINTAINER_MODE], [test
$USE_MAINTAINER_MODE = yes])
m4trace:configure.ac:18: -1- AC_SUBST([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:18: -1- AC_SUBST_TRACE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:18: -1-
m4trace:configure.ac:18: -1- m4_pattern_allow([MAINTAINER_MODE_TRUE$])
m4trace:configure.ac:18: -1- AC_SUBST([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:18: -1- AC_SUBST_TRACE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:18: -1-
m4trace:configure.ac:18: -1- m4_pattern_allow([MAINTAINER_MODE_FALSE$])
m4trace:configure.ac:18: -1- _AM_SUBST_NOTMAKE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:18: -1-
_AM_SUBST_NOTMAKE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:18: -1- AC_SUBST([MAINT])
```

```
m4trace:configure.ac:18: -1- AC_SUBST_TRACE([MAINT])
m4trace:configure.ac:18: -1- m4_pattern_allow([ ^MAINT$])
m4trace:configure.ac:20: -1- AM_SILENT_RULES([yes])
m4trace:configure.ac:20: -1- AC_SUBST([AM_V])
m4trace:configure.ac:20: -1- AC_SUBST_TRACE([AM_V])
m4trace:configure.ac:20: -1- m4_pattern_allow([ ^AM_V$])
m4trace:configure.ac:20: -1- _AM_SUBST_NOTMAKE([AM_V])
m4trace:configure.ac:20: -1- AC_SUBST([AM_DEFAULT_V])
m4trace:configure.ac:20: -1- AC_SUBST_TRACE([AM_DEFAULT_V])
m4trace:configure.ac:20: -1- m4_pattern_allow([ ^AM_DEFAULT_V$])
m4trace:configure.ac:20: -1- _AM_SUBST_NOTMAKE([AM_DEFAULT_V])
m4trace:configure.ac:20: -1- AC_SUBST([AM_DEFAULT_VERBOSITY])
m4trace:configure.ac:20: -1- AC_SUBST_TRACE([AM_DEFAULT_VERBOSITY])
m4trace:configure.ac:20: -1-
m4trace:configure.ac:20: -1- m4_pattern_allow([ ^AM_DEFAULT_VERBOSITY$])
m4trace:configure.ac:20: -1- AC_SUBST([AM_BACKSLASH])
m4trace:configure.ac:20: -1- AC_SUBST_TRACE([AM_BACKSLASH])
m4trace:configure.ac:20: -1- m4_pattern_allow([ ^AM_BACKSLASH$])
m4trace:configure.ac:20: -1- _AM_SUBST_NOTMAKE([AM_BACKSLASH])
m4trace:configure.ac:39: -1- AC_SUBST([LT_CURRENT])
m4trace:configure.ac:39: -1- AC_SUBST_TRACE([LT_CURRENT])
m4trace:configure.ac:39: -1- m4_pattern_allow([ ^LT_CURRENT$])
m4trace:configure.ac:40: -1- AC_SUBST([LT_REVISION])
m4trace:configure.ac:40: -1- AC_SUBST_TRACE([LT_REVISION])
m4trace:configure.ac:40: -1- m4_pattern_allow([ ^LT_REVISION$])
m4trace:configure.ac:41: -1- AC_SUBST([LT_AGE])
m4trace:configure.ac:41: -1- AC_SUBST_TRACE([LT_AGE])
m4trace:configure.ac:41: -1- m4_pattern_allow([ ^LT_AGE$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([ ^CC$])
m4trace:configure.ac:44: -1- AC_SUBST([CFLAGS])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CFLAGS])
m4trace:configure.ac:44: -1- m4_pattern_allow([ ^CFLAGS$])
m4trace:configure.ac:44: -1- AC_SUBST([LDFLAGS])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([LDFLAGS])
m4trace:configure.ac:44: -1- m4_pattern_allow([ ^LDFLAGS$])
m4trace:configure.ac:44: -1- AC_SUBST([LIBS])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:44: -1- m4_pattern_allow([ ^LIBS$])
m4trace:configure.ac:44: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:44: -1- m4_pattern_allow([ ^CPPFLAGS$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([ ^CC$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([ ^CC$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([ ^CC$])
```

```

m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:44: -1- AC_SUBST([ac_ct_CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([ac_ct_CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([^ac_ct_CC$])
m4trace:configure.ac:44: -1- AC_SUBST([EXEEXT], [$ac_cv_exeext])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([EXEEXT])
m4trace:configure.ac:44: -1- m4_pattern_allow([^EXEEXT$])
m4trace:configure.ac:44: -1- AC_SUBST([OBJEXT], [$ac_cv_objext])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([OBJEXT])
m4trace:configure.ac:44: -1- m4_pattern_allow([^OBJEXT$])
m4trace:configure.ac:44: -1- AC_SUBST([DEPDIR],
["${am__leading_dot}deps"])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([DEPDIR])
m4trace:configure.ac:44: -1- m4_pattern_allow([^DEPDIR$])
m4trace:configure.ac:44: -1- AC_SUBST([am__include])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__include])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__include$])
m4trace:configure.ac:44: -1- AC_SUBST([am__quote])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__quote])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__quote$])
m4trace:configure.ac:44: -1- AM_CONDITIONAL([AMDEP], [test
"x$enable_dependency_tracking" != xno])
m4trace:configure.ac:44: -1- AC_SUBST([AMDEP_TRUE])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([AMDEP_TRUE])
m4trace:configure.ac:44: -1- m4_pattern_allow([^AMDEP_TRUE$])
m4trace:configure.ac:44: -1- AC_SUBST([AMDEP_FALSE])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([AMDEP_FALSE])
m4trace:configure.ac:44: -1- m4_pattern_allow([^AMDEP_FALSE$])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([AMDEP_TRUE])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([AMDEP_FALSE])
m4trace:configure.ac:44: -1- AC_SUBST([AMDEPBACKSLASH])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([AMDEPBACKSLASH])
m4trace:configure.ac:44: -1- m4_pattern_allow([^AMDEPBACKSLASH$])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([AMDEPBACKSLASH])
m4trace:configure.ac:44: -1- AC_SUBST([am__nodep])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__nodep])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__nodep$])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([am__nodep])
m4trace:configure.ac:44: -1- AC_SUBST([CCDEPMODE],
[depmode=$am_cv_CC_dependencies_compiler_type])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CCDEPMODE])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CCDEPMODE$])
m4trace:configure.ac:44: -1- AM_CONDITIONAL([am__fastdepCC], [
test "x$enable_dependency_tracking" != xno \
&& test "$am_cv_CC_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:44: -1- AC_SUBST([am__fastdepCC_TRUE])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__fastdepCC_TRUE])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__fastdepCC_TRUE$])
m4trace:configure.ac:44: -1- AC_SUBST([am__fastdepCC_FALSE])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__fastdepCC_FALSE])

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m4trace:configure.ac:44: -1- m4_pattern_allow([am__fastdepCC_FALSE$])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_TRUE])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_FALSE])
m4trace:configure.ac:45: -1- _m4_warn([obsolete], [The macro
`AC_ISC_POSIX' is obsolete.
You should run autoupdate.], [../../lib/autoconf/specific.m4:446:
AC_ISC_POSIX is expanded from...
configure.ac:45: the top level])
m4trace:configure.ac:46: -1- AC_SUBST([CPP])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([CPP])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:46: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:46: -1- AC_SUBST([CPP])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([CPP])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:46: -1- AC_SUBST([GREP])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([GREP])
m4trace:configure.ac:46: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:46: -1- AC_SUBST([EGREP])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([EGREP])
m4trace:configure.ac:46: -1- m4_pattern_allow([^EGREP$])
m4trace:configure.ac:46: -1- AC_DEFINE_TRACE_LITERAL([STDC_HEADERS])
m4trace:configure.ac:46: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:46: -1- AH_OUTPUT([STDC_HEADERS], [/* Define to 1
if you have the ANSI C header files. */
@%:@undef STDC_HEADERS])
m4trace:configure.ac:61: -1- AM_CONDITIONAL([DBUS_BASH_COMPLETION],
[test x$enable_bash_completion = xyes])
m4trace:configure.ac:61: -1- AC_SUBST([DBUS_BASH_COMPLETION_TRUE])
m4trace:configure.ac:61: -1-
AC_SUBST_TRACE([DBUS_BASH_COMPLETION_TRUE])
m4trace:configure.ac:61: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION_TRUE$])
m4trace:configure.ac:61: -1- AC_SUBST([DBUS_BASH_COMPLETION_FALSE])
m4trace:configure.ac:61: -1-
AC_SUBST_TRACE([DBUS_BASH_COMPLETION_FALSE])
m4trace:configure.ac:61: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION_FALSE$])
m4trace:configure.ac:61: -1-
_AM_SUBST_NOTMAKE([DBUS_BASH_COMPLETION_TRUE])
m4trace:configure.ac:61: -1-
_AM_SUBST_NOTMAKE([DBUS_BASH_COMPLETION_FALSE])
m4trace:configure.ac:63: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BASH_COMPLETION])
m4trace:configure.ac:63: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION$])
m4trace:configure.ac:63: -1- AH_OUTPUT([DBUS_BASH_COMPLETION], [/*
Enable bash completion */
@%:@undef DBUS_BASH_COMPLETION])

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m4trace:configure.ac:67: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:67: -1-
m4_pattern_allow([^DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:67: -1- AH_OUTPUT([DBUS_ENABLE_VERBOSE_MODE], [/*
Support a verbose mode */
@%:@undef DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:73: -1- AC_SUBST([DBUS_BINDING_TOOL])
m4trace:configure.ac:73: -1- AC_SUBST_TRACE([DBUS_BINDING_TOOL])
m4trace:configure.ac:73: -1- m4_pattern_allow([^DBUS_BINDING_TOOL$])
m4trace:configure.ac:78: -1- AM_CONDITIONAL([DBUS_BUILD_TESTS], [test
x$enable_tests = xyes])
m4trace:configure.ac:78: -1- AC_SUBST([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:78: -1- AC_SUBST_TRACE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:78: -1-
m4_pattern_allow([^DBUS_BUILD_TESTS_TRUE$])
m4trace:configure.ac:78: -1- AC_SUBST([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:78: -1- AC_SUBST_TRACE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:78: -1-
m4_pattern_allow([^DBUS_BUILD_TESTS_FALSE$])
m4trace:configure.ac:78: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:78: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:80: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUILD_TESTS])
m4trace:configure.ac:80: -1- m4_pattern_allow([^DBUS_BUILD_TESTS$])
m4trace:configure.ac:80: -1- AH_OUTPUT([DBUS_BUILD_TESTS], [/* Build
test code */
@%:@undef DBUS_BUILD_TESTS])
m4trace:configure.ac:84: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:84: -1-
m4_pattern_allow([^DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:84: -1- AH_OUTPUT([DBUS_ENABLE_VERBOSE_MODE], [/*
Support a verbose mode */
@%:@undef DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:87: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DISABLE_ASSERT])
m4trace:configure.ac:87: -1- m4_pattern_allow([^DBUS_DISABLE_ASSERT$])
m4trace:configure.ac:87: -1- AH_OUTPUT([DBUS_DISABLE_ASSERT], [/*
Disable assertion checking */
@%:@undef DBUS_DISABLE_ASSERT])
m4trace:configure.ac:88: -1-
AC_DEFINE_TRACE_LITERAL([G_DISABLE_ASSERT])
m4trace:configure.ac:88: -1- m4_pattern_allow([^G_DISABLE_ASSERT$])
m4trace:configure.ac:88: -1- AH_OUTPUT([G_DISABLE_ASSERT], [/* Disable
GLib assertion macros */
@%:@undef G_DISABLE_ASSERT])
m4trace:configure.ac:91: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DISABLE_CHECKS])
m4trace:configure.ac:91: -1- m4_pattern_allow([^DBUS_DISABLE_CHECKS$])

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m4trace:configure.ac:91: -1- AH_OUTPUT([DBUS_DISABLE_CHECKS], [/*
Disable public API sanity checking */
@%:@undef DBUS_DISABLE_CHECKS])
m4trace:configure.ac:92: -1-
AC_DEFINE_TRACE_LITERAL([G_DISABLE_CHECKS])
m4trace:configure.ac:92: -1- m4_pattern_allow([^G_DISABLE_CHECKS$])
m4trace:configure.ac:92: -1- AH_OUTPUT([G_DISABLE_CHECKS], [/* Disable
GLib public API sanity checking */
@%:@undef G_DISABLE_CHECKS])
m4trace:configure.ac:115: -1- _m4_warn([syntax], [AC_LANG_CONFTEST: no
AC_LANG_SOURCE call detected in body],
[../lib/autoconf/lang.m4:193: AC_LANG_CONFTEST is expanded from...
../lib/autoconf/general.m4:2584: AC_COMPILE_IFELSE is expanded
from...
../lib/autoconf/general.m4:2600: AC_COMPILE_IFELSE is expanded
from...
configure.ac:97: AC_CC_TRY_FLAG is expanded from...
configure.ac:115: the top level])
m4trace:configure.ac:216: -1- _m4_warn([obsolete], [The macro
`AM_PROG_LIBTOOL' is obsolete.
You should run autoupdate.], [aclocal.m4:1377: AM_PROG_LIBTOOL is
expanded from...
configure.ac:216: the top level])
m4trace:configure.ac:216: -1- LT_INIT
m4trace:configure.ac:216: -1- m4_pattern_forbid([^?LT_[A-Z_]+$])
m4trace:configure.ac:216: -1-
m4_pattern_allow([^(LT_EOF|LT_DLGLOBAL|LT_DLLAZY_OR_NOW|LT_MULTI_MODU
LE)$])
m4trace:configure.ac:216: -1- AC_REQUIRE_AUX_FILE([ltmain.sh])
m4trace:configure.ac:216: -1- AC_SUBST([LIBTOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([LIBTOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([^LIBTOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([SED])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([SED])
m4trace:configure.ac:216: -1- m4_pattern_allow([^SED$])
m4trace:configure.ac:216: -1- AC_SUBST([FGREP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([FGREP])
m4trace:configure.ac:216: -1- m4_pattern_allow([^FGREP$])
m4trace:configure.ac:216: -1- AC_SUBST([GREP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([GREP])
m4trace:configure.ac:216: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:216: -1- AC_SUBST([LD])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([LD])
m4trace:configure.ac:216: -1- m4_pattern_allow([^LD$])
m4trace:configure.ac:216: -1- AC_SUBST([DUMPBIN])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DUMPBIN])
m4trace:configure.ac:216: -1- m4_pattern_allow([^DUMPBIN$])
m4trace:configure.ac:216: -1- AC_SUBST([ac_ct_DUMPBIN])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([ac_ct_DUMPBIN])
m4trace:configure.ac:216: -1- m4_pattern_allow([^ac_ct_DUMPBIN$])
m4trace:configure.ac:216: -1- AC_SUBST([DUMPBIN])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DUMPBIN])

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m4trace:configure.ac:216: -1- m4_pattern_allow([DUMPBIN$])
m4trace:configure.ac:216: -1- AC_SUBST([NM])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([NM])
m4trace:configure.ac:216: -1- m4_pattern_allow([NM$])
m4trace:configure.ac:216: -1- AC_SUBST([LN_S], [$as_ln_s])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([LN_S])
m4trace:configure.ac:216: -1- m4_pattern_allow([LN_S$])
m4trace:configure.ac:216: -1- AC_SUBST([OBJDUMP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([OBJDUMP])
m4trace:configure.ac:216: -1- m4_pattern_allow([OBJDUMP$])
m4trace:configure.ac:216: -1- AC_SUBST([OBJDUMP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([OBJDUMP])
m4trace:configure.ac:216: -1- m4_pattern_allow([OBJDUMP$])
m4trace:configure.ac:216: -1- AC_SUBST([DLLTOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DLLTOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([DLLTOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([DLLTOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DLLTOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([DLLTOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([AR])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([AR])
m4trace:configure.ac:216: -1- m4_pattern_allow([AR$])
m4trace:configure.ac:216: -1- AC_SUBST([ac_ct_AR])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([ac_ct_AR])
m4trace:configure.ac:216: -1- m4_pattern_allow([ac_ct_AR$])
m4trace:configure.ac:216: -1- AC_SUBST([STRIP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([STRIP])
m4trace:configure.ac:216: -1- m4_pattern_allow([STRIP$])
m4trace:configure.ac:216: -1- AC_SUBST([RANLIB])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([RANLIB])
m4trace:configure.ac:216: -1- m4_pattern_allow([RANLIB$])
m4trace:configure.ac:216: -1- m4_pattern_allow([LT_OBJDIR])
m4trace:configure.ac:216: -1- AC_DEFINE_TRACE_LITERAL([LT_OBJDIR])
m4trace:configure.ac:216: -1- m4_pattern_allow([LT_OBJDIR$])
m4trace:configure.ac:216: -1- AH_OUTPUT([LT_OBJDIR], [/* Define to the
sub-directory in which libtool stores uninstalled libraries.
*/
@%:@undef LT_OBJDIR])
m4trace:configure.ac:216: -1- LT_SUPPORTED_TAG([CC])
m4trace:configure.ac:216: -1- AC_SUBST([MANIFEST_TOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([MANIFEST_TOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([MANIFEST_TOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([DSYMUTIL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DSYMUTIL])
m4trace:configure.ac:216: -1- m4_pattern_allow([DSYMUTIL$])
m4trace:configure.ac:216: -1- AC_SUBST([NMEDIT])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([NMEDIT])
m4trace:configure.ac:216: -1- m4_pattern_allow([NMEDIT$])
m4trace:configure.ac:216: -1- AC_SUBST([LIPO])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([LIPO])
m4trace:configure.ac:216: -1- m4_pattern_allow([LIPO$])
m4trace:configure.ac:216: -1- AC_SUBST([OTOOL])

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m4trace:configure.ac:216: -1- AC_SUBST_TRACE([OTOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([^OTOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([OTOOL64])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([OTOOL64])
m4trace:configure.ac:216: -1- m4_pattern_allow([^OTOOL64$])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_DLFCN_H], [/* Define to
1 if you have the <dlfcn.h> header file. */
@%:@undef HAVE_DLFCN_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_SYS_TYPES_H], [/* Define
to 1 if you have the <sys/types.h> header file. */
@%:@undef HAVE_SYS_TYPES_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_SYS_STAT_H], [/* Define
to 1 if you have the <sys/stat.h> header file. */
@%:@undef HAVE_SYS_STAT_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_STDLIB_H], [/* Define to
1 if you have the <stdlib.h> header file. */
@%:@undef HAVE_STDLIB_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_STRING_H], [/* Define to
1 if you have the <string.h> header file. */
@%:@undef HAVE_STRING_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_MEMORY_H], [/* Define to
1 if you have the <memory.h> header file. */
@%:@undef HAVE_MEMORY_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_STRINGS_H], [/* Define
to 1 if you have the <strings.h> header file. */
@%:@undef HAVE_STRINGS_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_INTTYPES_H], [/* Define
to 1 if you have the <inttypes.h> header file. */
@%:@undef HAVE_INTTYPES_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_STDINT_H], [/* Define to
1 if you have the <stdint.h> header file. */
@%:@undef HAVE_STDINT_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_UNISTD_H], [/* Define to
1 if you have the <unistd.h> header file. */
@%:@undef HAVE_UNISTD_H])
m4trace:configure.ac:216: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DLFCN_H])
m4trace:configure.ac:216: -1- m4_pattern_allow([^HAVE_DLFCN_H$])
m4trace:configure.ac:226: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_GCOV_ENABLED])
m4trace:configure.ac:226: -1- m4_pattern_allow([^DBUS_GCOV_ENABLED$])
m4trace:configure.ac:226: -1- AH_OUTPUT([DBUS_GCOV_ENABLED], [/*
Defined to the gcc version if gcov is enabled, to force a rebuild due
to
config.h changing */
@%:@undef DBUS_GCOV_ENABLED])
m4trace:configure.ac:236: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
configure.ac:236: the top level])
m4trace:configure.ac:247: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SOCKLEN_T])

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m4trace:configure.ac:247: -1- m4_pattern_allow([^HAVE_SOCKLEN_T$])
m4trace:configure.ac:247: -1- AH_OUTPUT([HAVE_SOCKLEN_T], [/* Have
socklen_t type */
@%:@undef HAVE_SOCKLEN_T])
m4trace:configure.ac:253: -1- _m4_warn([cross], [AC_RUN_IFELSE called
without default to allow cross compiling],
[../lib/autoconf/general.m4:2742: AC_RUN_IFELSE is expanded from...
../lib/m4sugar/m4sh.m4:639: AS_IF is expanded from...
../lib/autoconf/general.m4:2025: AC_CACHE_VAL is expanded from...
../lib/autoconf/general.m4:2046: AC_CACHE_CHECK is expanded from...
configure.ac:253: the top level])
m4trace:configure.ac:308: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_ABSTRACT_SOCKETS])
m4trace:configure.ac:308: -1-
m4_pattern_allow([^HAVE_ABSTRACT_SOCKETS$])
m4trace:configure.ac:308: -1- AH_OUTPUT([HAVE_ABSTRACT_SOCKETS], [/*
Have abstract socket namespace */
@%:@undef HAVE_ABSTRACT_SOCKETS])
m4trace:configure.ac:315: -1- AC_SUBST([DBUS_PATH_OR_ABSTRACT])
m4trace:configure.ac:315: -1- AC_SUBST_TRACE([DBUS_PATH_OR_ABSTRACT])
m4trace:configure.ac:315: -1-
m4_pattern_allow([^DBUS_PATH_OR_ABSTRACT$])
m4trace:configure.ac:320: -1- AH_OUTPUT([HAVE_EXPAT_H], [/* Define to
1 if you have the <expat.h> header file. */
@%:@undef HAVE_EXPAT_H])
m4trace:configure.ac:320: -1- AC_DEFINE_TRACE_LITERAL([HAVE_EXPAT_H])
m4trace:configure.ac:320: -1- m4_pattern_allow([^HAVE_EXPAT_H$])
m4trace:configure.ac:334: -1- m4_pattern_forbid([^?PKG_[A-Z_]+$])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
m4trace:configure.ac:334: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:334: -1- AC_SUBST([PKG_CONFIG_PATH])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([PKG_CONFIG_PATH])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG_PATH$])
m4trace:configure.ac:334: -1- AC_SUBST([PKG_CONFIG_LIBDIR])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([PKG_CONFIG_LIBDIR])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG_LIBDIR$])
m4trace:configure.ac:334: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:334: -1- AC_SUBST([DBUS_CFLAGS])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([DBUS_CFLAGS])
m4trace:configure.ac:334: -1- m4_pattern_allow([^DBUS_CFLAGS$])
m4trace:configure.ac:334: -1- AC_SUBST([DBUS_LIBS])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([DBUS_LIBS])
m4trace:configure.ac:334: -1- m4_pattern_allow([^DBUS_LIBS$])
m4trace:configure.ac:335: -1- AC_SUBST([DBUS_CFLAGS])
m4trace:configure.ac:335: -1- AC_SUBST_TRACE([DBUS_CFLAGS])
m4trace:configure.ac:335: -1- m4_pattern_allow([^DBUS_CFLAGS$])
m4trace:configure.ac:336: -1- AC_SUBST([DBUS_LIBS])
m4trace:configure.ac:336: -1- AC_SUBST_TRACE([DBUS_LIBS])

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m4trace:configure.ac:336: -1- m4_pattern_allow([^DBUS_LIBS$])
m4trace:configure.ac:339: -1- AC_SUBST([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:339: -1- AC_SUBST_TRACE([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:339: -1- m4_pattern_allow([^DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:339: -1- AC_SUBST([DBUS_GLIB_LIBS])
m4trace:configure.ac:339: -1- AC_SUBST_TRACE([DBUS_GLIB_LIBS])
m4trace:configure.ac:339: -1- m4_pattern_allow([^DBUS_GLIB_LIBS$])
m4trace:configure.ac:340: -1- AC_SUBST([DBUS_GLIB_THREADS_CFLAGS])
m4trace:configure.ac:340: -1-
AC_SUBST_TRACE([DBUS_GLIB_THREADS_CFLAGS])
m4trace:configure.ac:340: -1-
m4_pattern_allow([^DBUS_GLIB_THREADS_CFLAGS$])
m4trace:configure.ac:340: -1- AC_SUBST([DBUS_GLIB_THREADS_LIBS])
m4trace:configure.ac:340: -1- AC_SUBST_TRACE([DBUS_GLIB_THREADS_LIBS])
m4trace:configure.ac:340: -1-
m4_pattern_allow([^DBUS_GLIB_THREADS_LIBS$])
m4trace:configure.ac:342: -1- AM_CONDITIONAL([HAVE_GLIB_THREADS],
[test x$have_glib_threads = xyes])
m4trace:configure.ac:342: -1- AC_SUBST([HAVE_GLIB_THREADS_TRUE])
m4trace:configure.ac:342: -1- AC_SUBST_TRACE([HAVE_GLIB_THREADS_TRUE])
m4trace:configure.ac:342: -1-
m4_pattern_allow([^HAVE_GLIB_THREADS_TRUE$])
m4trace:configure.ac:342: -1- AC_SUBST([HAVE_GLIB_THREADS_FALSE])
m4trace:configure.ac:342: -1-
AC_SUBST_TRACE([HAVE_GLIB_THREADS_FALSE])
m4trace:configure.ac:342: -1-
m4_pattern_allow([^HAVE_GLIB_THREADS_FALSE$])
m4trace:configure.ac:342: -1-
_AM_SUBST_NOTMAKE([HAVE_GLIB_THREADS_TRUE])
m4trace:configure.ac:342: -1-
_AM_SUBST_NOTMAKE([HAVE_GLIB_THREADS_FALSE])
m4trace:configure.ac:345: -1- AC_SUBST([GLIB_GENMARSHAL])
m4trace:configure.ac:345: -1- AC_SUBST_TRACE([GLIB_GENMARSHAL])
m4trace:configure.ac:345: -1- m4_pattern_allow([^GLIB_GENMARSHAL$])
m4trace:configure.ac:348: -1- AC_SUBST([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:348: -1- AC_SUBST_TRACE([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:348: -1- m4_pattern_allow([^DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:349: -1- AC_SUBST([DBUS_GLIB_LIBS])
m4trace:configure.ac:349: -1- AC_SUBST_TRACE([DBUS_GLIB_LIBS])
m4trace:configure.ac:349: -1- m4_pattern_allow([^DBUS_GLIB_LIBS$])
m4trace:configure.ac:350: -1- AC_SUBST([DBUS_GLIB_THREADS_LIBS])
m4trace:configure.ac:350: -1- AC_SUBST_TRACE([DBUS_GLIB_THREADS_LIBS])
m4trace:configure.ac:350: -1-
m4_pattern_allow([^DBUS_GLIB_THREADS_LIBS$])
m4trace:configure.ac:354: -1- AC_SUBST([DBUS_GLIB_TOOL_CFLAGS])
m4trace:configure.ac:354: -1- AC_SUBST_TRACE([DBUS_GLIB_TOOL_CFLAGS])
m4trace:configure.ac:354: -1-
m4_pattern_allow([^DBUS_GLIB_TOOL_CFLAGS$])
m4trace:configure.ac:355: -1- AC_SUBST([DBUS_GLIB_TOOL_LIBS])
m4trace:configure.ac:355: -1- AC_SUBST_TRACE([DBUS_GLIB_TOOL_LIBS])
m4trace:configure.ac:355: -1-
m4_pattern_allow([^DBUS_GLIB_TOOL_LIBS$])
```

```
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_CHECK])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_CHECK])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_CHECK$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_REBASE])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_REBASE])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_REBASE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_MKPDF])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_MKPDF])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_MKPDF$])
m4trace:configure.ac:358: -1- AC_SUBST([HTML_DIR])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([HTML_DIR])
m4trace:configure.ac:358: -1- m4_pattern_allow([HTML_DIR$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_DEPS_CFLAGS])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_DEPS_CFLAGS])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_DEPS_CFLAGS$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_DEPS_LIBS])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_DEPS_LIBS])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_DEPS_LIBS$])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([ENABLE_GTK_DOC], [test
x$enable_gtk_doc = xyes])
m4trace:configure.ac:358: -1- AC_SUBST([ENABLE_GTK_DOC_TRUE])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([ENABLE_GTK_DOC_TRUE])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- m4_pattern_allow([ENABLE_GTK_DOC_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([ENABLE_GTK_DOC_FALSE])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([ENABLE_GTK_DOC_FALSE])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- m4_pattern_allow([ENABLE_GTK_DOC_FALSE$])
m4trace:configure.ac:358: -1- _AM_SUBST_NOTMAKE([ENABLE_GTK_DOC_TRUE])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- _AM_SUBST_NOTMAKE([ENABLE_GTK_DOC_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_BUILD_HTML],
[test x$enable_gtk_doc_html = xyes])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_BUILD_HTML_TRUE])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTK_DOC_BUILD_HTML_TRUE])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- m4_pattern_allow([GTK_DOC_BUILD_HTML_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_BUILD_HTML_FALSE])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTK_DOC_BUILD_HTML_FALSE])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- m4_pattern_allow([GTK_DOC_BUILD_HTML_FALSE$])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- _AM_SUBST_NOTMAKE([GTK_DOC_BUILD_HTML_TRUE])
m4trace:configure.ac:358: -1-
m4trace:configure.ac:358: -1- _AM_SUBST_NOTMAKE([GTK_DOC_BUILD_HTML_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_BUILD_PDF],
[test x$enable_gtk_doc_pdf = xyes])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_BUILD_PDF_TRUE])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTK_DOC_BUILD_PDF_TRUE])
```

```
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_BUILD_PDF_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_BUILD_PDF_FALSE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_BUILD_PDF_FALSE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_BUILD_PDF_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_PDF_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_PDF_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_USE_LIBTOOL],
[test -n "$LIBTOOL"])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_USE_LIBTOOL_TRUE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_USE_LIBTOOL_TRUE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_USE_LIBTOOL_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_USE_LIBTOOL_FALSE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_USE_LIBTOOL_FALSE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_USE_LIBTOOL_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_LIBTOOL_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_LIBTOOL_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_USE_REBASE],
[test -n "$GTKDOC_REBASE"])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_USE_REBASE_TRUE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_USE_REBASE_TRUE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_USE_REBASE_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_USE_REBASE_FALSE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_USE_REBASE_FALSE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_USE_REBASE_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_REBASE_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_REBASE_FALSE])
m4trace:configure.ac:388: -1- AC_SUBST([EXPANDED_LOCALSTATEDIR])
m4trace:configure.ac:388: -1- AC_SUBST_TRACE([EXPANDED_LOCALSTATEDIR])
m4trace:configure.ac:388: -1-
m4_pattern_allow([EXPANDED_LOCALSTATEDIR$])
m4trace:configure.ac:392: -1- AC_SUBST([EXPANDED_SYSCONFDIR])
m4trace:configure.ac:392: -1- AC_SUBST_TRACE([EXPANDED_SYSCONFDIR])
m4trace:configure.ac:392: -1-
m4_pattern_allow([EXPANDED_SYSCONFDIR$])
m4trace:configure.ac:396: -1- AC_SUBST([EXPANDED_BINDIR])
```

```
m4trace:configure.ac:396: -1- AC_SUBST_TRACE([EXPANDED_BINDIR])
m4trace:configure.ac:396: -1- m4_pattern_allow([EXPANDED_BINDIR$])
m4trace:configure.ac:400: -1- AC_SUBST([EXPANDED_LIBDIR])
m4trace:configure.ac:400: -1- AC_SUBST_TRACE([EXPANDED_LIBDIR])
m4trace:configure.ac:400: -1- m4_pattern_allow([EXPANDED_LIBDIR$])
m4trace:configure.ac:404: -1- AC_SUBST([EXPANDED_DATADIR])
m4trace:configure.ac:404: -1- AC_SUBST_TRACE([EXPANDED_DATADIR])
m4trace:configure.ac:404: -1- m4_pattern_allow([EXPANDED_DATADIR$])
m4trace:configure.ac:420: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SERVICE_DIR])
m4trace:configure.ac:420: -1- m4_pattern_allow([TEST_SERVICE_DIR$])
m4trace:configure.ac:420: -1- AH_OUTPUT([TEST_SERVICE_DIR], [/* Full
path to test file test/data/valid-service-files in builddir */
@%:@undef TEST_SERVICE_DIR])
m4trace:configure.ac:420: -1- AC_SUBST([TEST_SERVICE_DIR])
m4trace:configure.ac:420: -1- AC_SUBST_TRACE([TEST_SERVICE_DIR])
m4trace:configure.ac:420: -1- m4_pattern_allow([TEST_SERVICE_DIR$])
m4trace:configure.ac:421: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SERVICE_BINARY])
m4trace:configure.ac:421: -1-
m4_pattern_allow([TEST_SERVICE_BINARY$])
m4trace:configure.ac:421: -1- AH_OUTPUT([TEST_SERVICE_BINARY], [/*
Full path to test file test/test-service in builddir */
@%:@undef TEST_SERVICE_BINARY])
m4trace:configure.ac:421: -1- AC_SUBST([TEST_SERVICE_BINARY])
m4trace:configure.ac:421: -1- AC_SUBST_TRACE([TEST_SERVICE_BINARY])
m4trace:configure.ac:421: -1-
m4_pattern_allow([TEST_SERVICE_BINARY$])
m4trace:configure.ac:422: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SHELL_SERVICE_BINARY])
m4trace:configure.ac:422: -1-
m4_pattern_allow([TEST_SHELL_SERVICE_BINARY$])
m4trace:configure.ac:422: -1- AH_OUTPUT([TEST_SHELL_SERVICE_BINARY],
[/* Full path to test file test/test-shell-service in builddir */
@%:@undef TEST_SHELL_SERVICE_BINARY])
m4trace:configure.ac:422: -1- AC_SUBST([TEST_SHELL_SERVICE_BINARY])
m4trace:configure.ac:422: -1-
AC_SUBST_TRACE([TEST_SHELL_SERVICE_BINARY])
m4trace:configure.ac:422: -1-
m4_pattern_allow([TEST_SHELL_SERVICE_BINARY$])
m4trace:configure.ac:423: -1-
AC_DEFINE_TRACE_LITERAL([TEST_CORE_SERVICE_BINARY])
m4trace:configure.ac:423: -1-
m4_pattern_allow([TEST_CORE_SERVICE_BINARY$])
m4trace:configure.ac:423: -1- AH_OUTPUT([TEST_CORE_SERVICE_BINARY],
[/* Full path to test file test/core/test-service-glib in builddir */
@%:@undef TEST_CORE_SERVICE_BINARY])
m4trace:configure.ac:423: -1- AC_SUBST([TEST_CORE_SERVICE_BINARY])
m4trace:configure.ac:423: -1-
AC_SUBST_TRACE([TEST_CORE_SERVICE_BINARY])
m4trace:configure.ac:423: -1-
m4_pattern_allow([TEST_CORE_SERVICE_BINARY$])
```



```
m4trace:configure.ac:424: -1-
AC_DEFINE_TRACE_LITERAL([TEST_INTERFACES_SERVICE_BINARY])
m4trace:configure.ac:424: -1-
m4_pattern_allow([^TEST_INTERFACES_SERVICE_BINARY$])
m4trace:configure.ac:424: -1-
AH_OUTPUT([TEST_INTERFACES_SERVICE_BINARY], [/* Full path to test file
test/interfaces/test-service in builddir */
@%:@undef TEST_INTERFACES_SERVICE_BINARY])
m4trace:configure.ac:424: -1-
AC_SUBST([TEST_INTERFACES_SERVICE_BINARY])
m4trace:configure.ac:424: -1-
AC_SUBST_TRACE([TEST_INTERFACES_SERVICE_BINARY])
m4trace:configure.ac:424: -1-
m4_pattern_allow([^TEST_INTERFACES_SERVICE_BINARY$])
m4trace:configure.ac:425: -1-
AC_DEFINE_TRACE_LITERAL([TEST_EXIT_BINARY])
m4trace:configure.ac:425: -1- m4_pattern_allow([^TEST_EXIT_BINARY$])
m4trace:configure.ac:425: -1- AH_OUTPUT([TEST_EXIT_BINARY], [/* Full
path to test file test/test-exit in builddir */
@%:@undef TEST_EXIT_BINARY])
m4trace:configure.ac:425: -1- AC_SUBST([TEST_EXIT_BINARY])
m4trace:configure.ac:425: -1- AC_SUBST_TRACE([TEST_EXIT_BINARY])
m4trace:configure.ac:425: -1- m4_pattern_allow([^TEST_EXIT_BINARY$])
m4trace:configure.ac:426: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SEGFAULT_BINARY])
m4trace:configure.ac:426: -1-
m4_pattern_allow([^TEST_SEGFAULT_BINARY$])
m4trace:configure.ac:426: -1- AH_OUTPUT([TEST_SEGFAULT_BINARY], [/*
Full path to test file test/test-segfault in builddir */
@%:@undef TEST_SEGFAULT_BINARY])
m4trace:configure.ac:426: -1- AC_SUBST([TEST_SEGFAULT_BINARY])
m4trace:configure.ac:426: -1- AC_SUBST_TRACE([TEST_SEGFAULT_BINARY])
m4trace:configure.ac:426: -1-
m4_pattern_allow([^TEST_SEGFAULT_BINARY$])
m4trace:configure.ac:427: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SLEEP_FOREVER_BINARY])
m4trace:configure.ac:427: -1-
m4_pattern_allow([^TEST_SLEEP_FOREVER_BINARY$])
m4trace:configure.ac:427: -1- AH_OUTPUT([TEST_SLEEP_FOREVER_BINARY],
[/* Full path to test file test/test-sleep-forever in builddir */
@%:@undef TEST_SLEEP_FOREVER_BINARY])
m4trace:configure.ac:427: -1- AC_SUBST([TEST_SLEEP_FOREVER_BINARY])
m4trace:configure.ac:427: -1-
AC_SUBST_TRACE([TEST_SLEEP_FOREVER_BINARY])
m4trace:configure.ac:427: -1-
m4_pattern_allow([^TEST_SLEEP_FOREVER_BINARY$])
m4trace:configure.ac:428: -1- AC_SUBST([ABSOLUTE_TOP_BUILDDIR])
m4trace:configure.ac:428: -1- AC_SUBST_TRACE([ABSOLUTE_TOP_BUILDDIR])
m4trace:configure.ac:428: -1-
m4_pattern_allow([^ABSOLUTE_TOP_BUILDDIR$])
m4trace:configure.ac:435: -1- AC_SUBST([TEST_SOCKET_DIR])
m4trace:configure.ac:435: -1- AC_SUBST_TRACE([TEST_SOCKET_DIR])
```

```

m4trace:configure.ac:435: -1- m4_pattern_allow([ ^TEST_SOCKET_DIR$])
m4trace:configure.ac:436: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_TEST_SOCKET_DIR])
m4trace:configure.ac:436: -1-
m4_pattern_allow([ ^DBUS_TEST_SOCKET_DIR$])
m4trace:configure.ac:436: -1- AH_OUTPUT([DBUS_TEST_SOCKET_DIR], [/*
Where to put test sockets */
@%:@undef DBUS_TEST_SOCKET_DIR])
m4trace:configure.ac:438: -1- AC_CONFIG_FILES([
Makefile
m4/Makefile
doc/Makefile
doc/reference/Makefile
doc/reference/version.xml
dbus/Makefile
dbus/examples/Makefile
dbus/examples/statemachine/Makefile
test/Makefile
test/core/Makefile
test/interfaces/Makefile
test/data/valid-service-files/debug-glib.service
test/data/valid-service-files/debug-echo.service
test/data/valid-service-files/interfaces-test.service
test/lib/Makefile
test/manual/Makefile
tools/Makefile
dbus-glib-1.pc
dbus-glib-1-uninstalled.pc
])
m4trace:configure.ac:438: -1- _m4_warn([obsolete], [AC_OUTPUT should
be used without arguments.
You should run autoupdate.], [])
m4trace:configure.ac:438: -1- AC_SUBST([LIB@&t@OBSJ], [$ac_libobjs])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([LIB@&t@OBSJ])
m4trace:configure.ac:438: -1- m4_pattern_allow([ ^LIB@&t@OBSJ$])
m4trace:configure.ac:438: -1- AC_SUBST([LTLIBOBSJ], [$ac_ltlibobjs])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([LTLIBOBSJ])
m4trace:configure.ac:438: -1- m4_pattern_allow([ ^LTLIBOBSJ$])
m4trace:configure.ac:438: -1- AM_CONDITIONAL([am__EXEEXT], [test -n
"$EXEEXT"])
m4trace:configure.ac:438: -1- AC_SUBST([am__EXEEXT_TRUE])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([am__EXEEXT_TRUE])
m4trace:configure.ac:438: -1- m4_pattern_allow([ ^am__EXEEXT_TRUE$])
m4trace:configure.ac:438: -1- AC_SUBST([am__EXEEXT_FALSE])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([am__EXEEXT_FALSE])
m4trace:configure.ac:438: -1- m4_pattern_allow([ ^am__EXEEXT_FALSE$])
m4trace:configure.ac:438: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_TRUE])
m4trace:configure.ac:438: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_FALSE])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([top_builddir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([top_build_prefix])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([srcdir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([abs_srcdir])

```

```
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([top_srcdir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([abs_top_srcdir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([builddir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([abs_builddir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([abs_top_builddir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([INSTALL])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([MKDIR_P])
m4trace:configure.ac:438: -1- AC_REQUIRE_AUX_FILE([ltmain.sh])
```

File = traces.1.~1~

```
m4trace:configure.ac:9: -1- AC_INIT([dbus], [dbus_version],
[https://bugs.freedesktop.org/enter_bug.cgi?product=dbus], [dbus])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^_?A[CHUM]_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([_AC_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^LIBOBJ$], [do not use
LIBOBJ directly, use AC_LIBOBJ (see section `AC_LIBOBJ vs LIBOBJ')]
m4trace:configure.ac:9: -1- m4_pattern_allow([^AS_FLAGS$])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^?m4_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^dn1$])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^?AS_])
m4trace:configure.ac:9: -1- AC_SUBST([SHELL])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([SHELL])
m4trace:configure.ac:9: -1- m4_pattern_allow([^SHELL$])
m4trace:configure.ac:9: -1- AC_SUBST([PATH_SEPARATOR])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PATH_SEPARATOR])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PATH_SEPARATOR$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_NAME],
[m4_ifdef([AC_PACKAGE_NAME], ['AC_PACKAGE_NAME'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_NAME])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_TARNAME],
[m4_ifdef([AC_PACKAGE_TARNAME], ['AC_PACKAGE_TARNAME'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_TARNAME])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_VERSION],
[m4_ifdef([AC_PACKAGE_VERSION], ['AC_PACKAGE_VERSION'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_VERSION])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_VERSION$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_STRING],
[m4_ifdef([AC_PACKAGE_STRING], ['AC_PACKAGE_STRING'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_STRING])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_STRING$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_BUGREPORT],
[m4_ifdef([AC_PACKAGE_BUGREPORT], ['AC_PACKAGE_BUGREPORT'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_BUGREPORT])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_BUGREPORT$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_URL],
[m4_ifdef([AC_PACKAGE_URL], ['AC_PACKAGE_URL'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_URL])
```

```

m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE_URL$])
m4trace:configure.ac:9: -1- AC_SUBST([exec_prefix], [NONE])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([exec_prefix])
m4trace:configure.ac:9: -1- m4_pattern_allow([exec_prefix$])
m4trace:configure.ac:9: -1- AC_SUBST([prefix], [NONE])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([prefix])
m4trace:configure.ac:9: -1- m4_pattern_allow([prefix$])
m4trace:configure.ac:9: -1- AC_SUBST([program_transform_name],
[s,x,x,])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([program_transform_name])
m4trace:configure.ac:9: -1-
m4_pattern_allow([program_transform_name$])
m4trace:configure.ac:9: -1- AC_SUBST([bindir], ['${exec_prefix}/bin'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([bindir])
m4trace:configure.ac:9: -1- m4_pattern_allow([bindir$])
m4trace:configure.ac:9: -1- AC_SUBST([sbindir],
['${exec_prefix}/sbin'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([sbindir])
m4trace:configure.ac:9: -1- m4_pattern_allow([sbindir$])
m4trace:configure.ac:9: -1- AC_SUBST([libexecdir],
['${exec_prefix}/libexec'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([libexecdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([libexecdir$])
m4trace:configure.ac:9: -1- AC_SUBST([datarootdir],
['${prefix}/share'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([datarootdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([datarootdir$])
m4trace:configure.ac:9: -1- AC_SUBST([datadir], ['${datarootdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([datadir])
m4trace:configure.ac:9: -1- m4_pattern_allow([datadir$])
m4trace:configure.ac:9: -1- AC_SUBST([sysconfdir], ['${prefix}/etc'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([sysconfdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([sysconfdir$])
m4trace:configure.ac:9: -1- AC_SUBST([sharedstatedir],
['${prefix}/com'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([sharedstatedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([sharedstatedir$])
m4trace:configure.ac:9: -1- AC_SUBST([localstatedir],
['${prefix}/var'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([localstatedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([localstatedir$])
m4trace:configure.ac:9: -1- AC_SUBST([includedir],
['${prefix}/include'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([includedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([includedir$])
m4trace:configure.ac:9: -1- AC_SUBST([oldincludedir],
['/usr/include'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([oldincludedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([oldincludedir$])
m4trace:configure.ac:9: -1- AC_SUBST([docdir],
[m4_ifset([AC_PACKAGE_TARNAME],
['${datarootdir}/doc/${PACKAGE_TARNAME}'],

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                                ['${datarootdir}/doc/${PACKAGE}'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([docdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^docdir$])
m4trace:configure.ac:9: -1- AC_SUBST([infodir],
['${datarootdir}/info'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([infodir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^infodir$])
m4trace:configure.ac:9: -1- AC_SUBST([htmldir], ['${docdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([htmldir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^htmldir$])
m4trace:configure.ac:9: -1- AC_SUBST([dvidir], ['${docdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([dvidir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^dvidir$])
m4trace:configure.ac:9: -1- AC_SUBST([pdfdir], ['${docdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([pdfdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^pdfdir$])
m4trace:configure.ac:9: -1- AC_SUBST([psdir], ['${docdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([psdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^psdir$])
m4trace:configure.ac:9: -1- AC_SUBST([libdir], ['${exec_prefix}/lib'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([libdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^libdir$])
m4trace:configure.ac:9: -1- AC_SUBST([localedir],
['${datarootdir}/locale'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([localedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^localedir$])
m4trace:configure.ac:9: -1- AC_SUBST([mandir], ['${datarootdir}/man'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([mandir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^mandir$])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_NAME])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_NAME], [/* Define to
the full name of this package. */
@%:@undef PACKAGE_NAME])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_TARNAME])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_TARNAME], [/* Define to
the one symbol short name of this package. */
@%:@undef PACKAGE_TARNAME])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_VERSION])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_VERSION$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_VERSION], [/* Define to
the version of this package. */
@%:@undef PACKAGE_VERSION])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_STRING])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_STRING$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_STRING], [/* Define to
the full name and version of this package. */
@%:@undef PACKAGE_STRING])
m4trace:configure.ac:9: -1-
AC_DEFINE_TRACE_LITERAL([PACKAGE_BUGREPORT])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_BUGREPORT$])

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m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_BUGREPORT], [/* Define
to the address where bug reports for this package should be sent. */
@%:@undef PACKAGE_BUGREPORT])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_URL])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_URL$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_URL], [/* Define to the
home page for this package. */
@%:@undef PACKAGE_URL])
m4trace:configure.ac:9: -1- AC_SUBST([DEFS])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([DEFS])
m4trace:configure.ac:9: -1- m4_pattern_allow([^DEFS$])
m4trace:configure.ac:9: -1- AC_SUBST([ECHO_C])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([ECHO_C])
m4trace:configure.ac:9: -1- m4_pattern_allow([^ECHO_C$])
m4trace:configure.ac:9: -1- AC_SUBST([ECHO_N])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([ECHO_N])
m4trace:configure.ac:9: -1- m4_pattern_allow([^ECHO_N$])
m4trace:configure.ac:9: -1- AC_SUBST([ECHO_T])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([ECHO_T])
m4trace:configure.ac:9: -1- m4_pattern_allow([^ECHO_T$])
m4trace:configure.ac:9: -1- AC_SUBST([LIBS])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:9: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:9: -1- AC_SUBST([build_alias])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([build_alias])
m4trace:configure.ac:9: -1- m4_pattern_allow([^build_alias$])
m4trace:configure.ac:9: -1- AC_SUBST([host_alias])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([host_alias])
m4trace:configure.ac:9: -1- m4_pattern_allow([^host_alias$])
m4trace:configure.ac:9: -1- AC_SUBST([target_alias])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([target_alias])
m4trace:configure.ac:9: -1- m4_pattern_allow([^target_alias$])
m4trace:configure.ac:11: -1- AC_CANONICAL_HOST
m4trace:configure.ac:11: -1- AC_CANONICAL_BUILD
m4trace:configure.ac:11: -1- AC_REQUIRE_AUX_FILE([config.sub])
m4trace:configure.ac:11: -1- AC_REQUIRE_AUX_FILE([config.guess])
m4trace:configure.ac:11: -1- AC_SUBST([build], [$ac_cv_build])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([build])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build$])
m4trace:configure.ac:11: -1- AC_SUBST([build_cpu], [${1}])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([build_cpu])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_cpu$])
m4trace:configure.ac:11: -1- AC_SUBST([build_vendor], [${2}])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([build_vendor])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_vendor$])
m4trace:configure.ac:11: -1- AC_SUBST([build_os])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([build_os])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_os$])
m4trace:configure.ac:11: -1- AC_SUBST([host], [$ac_cv_host])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([host])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host$])
m4trace:configure.ac:11: -1- AC_SUBST([host_cpu], [${1}])
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m4trace:configure.ac:11: -1- AC_SUBST_TRACE([host_cpu])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_cpu$])
m4trace:configure.ac:11: -1- AC_SUBST([host_vendor], [${2}])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([host_vendor])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_vendor$])
m4trace:configure.ac:11: -1- AC_SUBST([host_os])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([host_os])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_os$])
m4trace:configure.ac:13: -1- AC_CONFIG_HEADERS([config.h])
m4trace:configure.ac:16: -1- AM_INIT_AUTOMAKE([1.10 tar-ustar -Wno-
portability])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AM_[A-Z]+FLAGS$])
m4trace:configure.ac:16: -1- AM_AUTOMAKE_VERSION([1.12.6])
m4trace:configure.ac:16: -1- AC_REQUIRE_AUX_FILE([install-sh])
m4trace:configure.ac:16: -1- AC_SUBST([INSTALL_PROGRAM])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([INSTALL_PROGRAM])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_PROGRAM$])
m4trace:configure.ac:16: -1- AC_SUBST([INSTALL_SCRIPT])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([INSTALL_SCRIPT])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_SCRIPT$])
m4trace:configure.ac:16: -1- AC_SUBST([INSTALL_DATA])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([INSTALL_DATA])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_DATA$])
m4trace:configure.ac:16: -1- AC_SUBST([am_isrc], [' -I$(srcdir)'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([am_isrc])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am_isrc$])
m4trace:configure.ac:16: -1- _AM_SUBST_NOTMAKE([am_isrc])
m4trace:configure.ac:16: -1- AC_SUBST([CYGPATH_W])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([CYGPATH_W])
m4trace:configure.ac:16: -1- m4_pattern_allow([^CYGPATH_W$])
m4trace:configure.ac:16: -1- AC_SUBST([PACKAGE],
['AC_PACKAGE_TARNAME'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([PACKAGE])
m4trace:configure.ac:16: -1- m4_pattern_allow([^PACKAGE$])
m4trace:configure.ac:16: -1- AC_SUBST([VERSION],
['AC_PACKAGE_VERSION'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([VERSION])
m4trace:configure.ac:16: -1- m4_pattern_allow([^VERSION$])
m4trace:configure.ac:16: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE])
m4trace:configure.ac:16: -1- m4_pattern_allow([^PACKAGE$])
m4trace:configure.ac:16: -1- AH_OUTPUT([PACKAGE], [/* Name of package
*/
@%:@undef PACKAGE])
m4trace:configure.ac:16: -1- AC_DEFINE_TRACE_LITERAL([VERSION])
m4trace:configure.ac:16: -1- m4_pattern_allow([^VERSION$])
m4trace:configure.ac:16: -1- AH_OUTPUT([VERSION], [/* Version number
of package */
@%:@undef VERSION])
m4trace:configure.ac:16: -1- AC_REQUIRE_AUX_FILE([missing])
m4trace:configure.ac:16: -1- AC_SUBST([ACLOCAL])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([ACLOCAL])
m4trace:configure.ac:16: -1- m4_pattern_allow([^ACLOCAL$])

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m4trace:configure.ac:16: -1- AC_SUBST([AUTOCONF])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AUTOCONF])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOCONF$])
m4trace:configure.ac:16: -1- AC_SUBST([AUTOMAKE])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AUTOMAKE])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOMAKE$])
m4trace:configure.ac:16: -1- AC_SUBST([AUTOHEADER])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AUTOHEADER])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOHEADER$])
m4trace:configure.ac:16: -1- AC_SUBST([MAKEINFO])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([MAKEINFO])
m4trace:configure.ac:16: -1- m4_pattern_allow([^MAKEINFO$])
m4trace:configure.ac:16: -1- AC_SUBST([install_sh])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([install_sh])
m4trace:configure.ac:16: -1- m4_pattern_allow([^install_sh$])
m4trace:configure.ac:16: -1- AC_SUBST([STRIP])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([STRIP])
m4trace:configure.ac:16: -1- m4_pattern_allow([^STRIP$])
m4trace:configure.ac:16: -1- AC_SUBST([INSTALL_STRIP_PROGRAM])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([INSTALL_STRIP_PROGRAM])
m4trace:configure.ac:16: -1-
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_STRIP_PROGRAM$])
m4trace:configure.ac:16: -1- AC_REQUIRE_AUX_FILE([install-sh])
m4trace:configure.ac:16: -1- AC_SUBST([MKDIR_P])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([MKDIR_P])
m4trace:configure.ac:16: -1- m4_pattern_allow([^MKDIR_P$])
m4trace:configure.ac:16: -1- AC_SUBST([mkdir_p], ['$(MKDIR_P)'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([mkdir_p])
m4trace:configure.ac:16: -1- m4_pattern_allow([^mkdir_p$])
m4trace:configure.ac:16: -1- AC_SUBST([AWK])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AWK])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AWK$])
m4trace:configure.ac:16: -1- AC_SUBST([SET_MAKE])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([SET_MAKE])
m4trace:configure.ac:16: -1- m4_pattern_allow([^SET_MAKE$])
m4trace:configure.ac:16: -1- AC_SUBST([am__leading_dot])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([am__leading_dot])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__leading_dot$])
m4trace:configure.ac:16: -1- AC_SUBST([AMTAR], ['${TAR-tar}'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AMTAR])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AMTAR$])
m4trace:configure.ac:16: -1- AC_SUBST([am__tar])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([am__tar])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__tar$])
m4trace:configure.ac:16: -1- AC_SUBST([am__untar])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([am__untar])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__untar$])
m4trace:configure.ac:19: -1- AC_SUBST([GETTEXT_PACKAGE])
m4trace:configure.ac:19: -1- AC_SUBST_TRACE([GETTEXT_PACKAGE])
m4trace:configure.ac:19: -1- m4_pattern_allow([^GETTEXT_PACKAGE$])
m4trace:configure.ac:20: -1-
AC_DEFINE_TRACE_LITERAL([GETTEXT_PACKAGE])
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m4trace:configure.ac:20: -1- m4_pattern_allow([^GETTEXT_PACKAGE$])
m4trace:configure.ac:20: -1- AH_OUTPUT([GETTEXT_PACKAGE], [/* The name
of the gettext domain */
@%:@undef GETTEXT_PACKAGE])
m4trace:configure.ac:24: -1- AM_MAINTAINER_MODE([enable])
m4trace:configure.ac:24: -1- AM_CONDITIONAL([MAINTAINER_MODE], [test
$USE_MAINTAINER_MODE = yes])
m4trace:configure.ac:24: -1- AC_SUBST([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:24: -1- AC_SUBST_TRACE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:24: -1-
m4_pattern_allow([^MAINTAINER_MODE_TRUE$])
m4trace:configure.ac:24: -1- AC_SUBST([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:24: -1- AC_SUBST_TRACE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:24: -1-
m4_pattern_allow([^MAINTAINER_MODE_FALSE$])
m4trace:configure.ac:24: -1- _AM_SUBST_NOTMAKE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:24: -1-
_AM_SUBST_NOTMAKE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:24: -1- AC_SUBST([MAINT])
m4trace:configure.ac:24: -1- AC_SUBST_TRACE([MAINT])
m4trace:configure.ac:24: -1- m4_pattern_allow([^MAINT$])
m4trace:configure.ac:26: -1- AM_SILENT_RULES([yes])
m4trace:configure.ac:26: -1- AC_SUBST([AM_V])
m4trace:configure.ac:26: -1- AC_SUBST_TRACE([AM_V])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_V$])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_V])
m4trace:configure.ac:26: -1- AC_SUBST([AM_DEFAULT_V])
m4trace:configure.ac:26: -1- AC_SUBST_TRACE([AM_DEFAULT_V])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_DEFAULT_V$])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_DEFAULT_V])
m4trace:configure.ac:26: -1- AC_SUBST([AM_DEFAULT_VERBOSITY])
m4trace:configure.ac:26: -1- AC_SUBST_TRACE([AM_DEFAULT_VERBOSITY])
m4trace:configure.ac:26: -1-
m4_pattern_allow([^AM_DEFAULT_VERBOSITY$])
m4trace:configure.ac:26: -1- AC_SUBST([AM_BACKSLASH])
m4trace:configure.ac:26: -1- AC_SUBST_TRACE([AM_BACKSLASH])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_BACKSLASH$])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_BACKSLASH])
m4trace:configure.ac:28: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DAEMON_NAME])
m4trace:configure.ac:28: -1- m4_pattern_allow([^DBUS_DAEMON_NAME$])
m4trace:configure.ac:28: -1- AH_OUTPUT([DBUS_DAEMON_NAME], [/* Name of
executable */
@%:@undef DBUS_DAEMON_NAME])
m4trace:configure.ac:47: -1- AC_SUBST([LT_CURRENT])
m4trace:configure.ac:47: -1- AC_SUBST_TRACE([LT_CURRENT])
m4trace:configure.ac:47: -1- m4_pattern_allow([^LT_CURRENT$])
m4trace:configure.ac:48: -1- AC_SUBST([LT_REVISION])
m4trace:configure.ac:48: -1- AC_SUBST_TRACE([LT_REVISION])
m4trace:configure.ac:48: -1- m4_pattern_allow([^LT_REVISION$])
m4trace:configure.ac:49: -1- AC_SUBST([LT_AGE])
m4trace:configure.ac:49: -1- AC_SUBST_TRACE([LT_AGE])

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m4trace:configure.ac:49: -1- m4_pattern_allow([^LT_AGE$])
m4trace:configure.ac:56: -1- AC_SUBST([DBUS_MAJOR_VERSION])
m4trace:configure.ac:56: -1- AC_SUBST_TRACE([DBUS_MAJOR_VERSION])
m4trace:configure.ac:56: -1- m4_pattern_allow([^DBUS_MAJOR_VERSION$])
m4trace:configure.ac:57: -1- AC_SUBST([DBUS_MINOR_VERSION])
m4trace:configure.ac:57: -1- AC_SUBST_TRACE([DBUS_MINOR_VERSION])
m4trace:configure.ac:57: -1- m4_pattern_allow([^DBUS_MINOR_VERSION$])
m4trace:configure.ac:58: -1- AC_SUBST([DBUS_MICRO_VERSION])
m4trace:configure.ac:58: -1- AC_SUBST_TRACE([DBUS_MICRO_VERSION])
m4trace:configure.ac:58: -1- m4_pattern_allow([^DBUS_MICRO_VERSION$])
m4trace:configure.ac:59: -1- AC_SUBST([DBUS_VERSION])
m4trace:configure.ac:59: -1- AC_SUBST_TRACE([DBUS_VERSION])
m4trace:configure.ac:59: -1- m4_pattern_allow([^DBUS_VERSION$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([CFLAGS])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CFLAGS])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CFLAGS$])
m4trace:configure.ac:61: -1- AC_SUBST([LDFLAGS])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([LDFLAGS])
m4trace:configure.ac:61: -1- m4_pattern_allow([^LDFLAGS$])
m4trace:configure.ac:61: -1- AC_SUBST([LIBS])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:61: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:61: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([ac_ct_CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([ac_ct_CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^ac_ct_CC$])
m4trace:configure.ac:61: -1- AC_SUBST([EXEEXT], [$ac_cv_exeext])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([EXEEXT])
m4trace:configure.ac:61: -1- m4_pattern_allow([^EXEEXT$])
m4trace:configure.ac:61: -1- AC_SUBST([OBJEXT], [$ac_cv_objext])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([OBJEXT])
m4trace:configure.ac:61: -1- m4_pattern_allow([^OBJEXT$])
m4trace:configure.ac:61: -1- AC_SUBST([DEPDIR],
["${am__leading_dot}deps"])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([DEPDIR])

```

```

m4trace:configure.ac:61: -1- m4_pattern_allow([^DEPDIR$])
m4trace:configure.ac:61: -1- AC_SUBST([am__include])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__include])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__include$])
m4trace:configure.ac:61: -1- AC_SUBST([am__quote])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__quote])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__quote$])
m4trace:configure.ac:61: -1- AM_CONDITIONAL([AMDEP], [test
"x$enable_dependency_tracking" != xno])
m4trace:configure.ac:61: -1- AC_SUBST([AMDEP_TRUE])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([AMDEP_TRUE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^AMDEP_TRUE$])
m4trace:configure.ac:61: -1- AC_SUBST([AMDEP_FALSE])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([AMDEP_FALSE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^AMDEP_FALSE$])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEP_TRUE])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEP_FALSE])
m4trace:configure.ac:61: -1- AC_SUBST([AMDEPBACKSLASH])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([AMDEPBACKSLASH])
m4trace:configure.ac:61: -1- m4_pattern_allow([^AMDEPBACKSLASH$])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEPBACKSLASH])
m4trace:configure.ac:61: -1- AC_SUBST([am__nodep])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__nodep])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__nodep$])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__nodep])
m4trace:configure.ac:61: -1- AC_SUBST([CCDEPMODE],
[depmode=$am_cv_CC_dependencies_compiler_type])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CCDEPMODE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CCDEPMODE$])
m4trace:configure.ac:61: -1- AM_CONDITIONAL([am__fastdepCC], [
test "x$enable_dependency_tracking" != xno \
&& test "$am_cv_CC_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:61: -1- AC_SUBST([am__fastdepCC_TRUE])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__fastdepCC_TRUE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__fastdepCC_TRUE$])
m4trace:configure.ac:61: -1- AC_SUBST([am__fastdepCC_FALSE])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__fastdepCC_FALSE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__fastdepCC_FALSE$])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_TRUE])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_FALSE])
m4trace:configure.ac:62: -1- AM_PROG_CC_C_O
m4trace:configure.ac:62: -1-
AC_DEFINE_TRACE_LITERAL([NO_MINUS_C_MINUS_O])
m4trace:configure.ac:62: -1- m4_pattern_allow([^NO_MINUS_C_MINUS_O$])
m4trace:configure.ac:62: -1- AH_OUTPUT([NO_MINUS_C_MINUS_O], [/*
Define to 1 if your C compiler doesn't accept -c and -o together. */
@%:@undef NO_MINUS_C_MINUS_O])
m4trace:configure.ac:62: -1- AC_REQUIRE_AUX_FILE([compile])
m4trace:configure.ac:63: -1- AC_SUBST([CXX])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CXX])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CXX$])
m4trace:configure.ac:63: -1- AC_SUBST([CXXFLAGS])

```

```

m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CXXFLAGS])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CXXFLAGS$])
m4trace:configure.ac:63: -1- AC_SUBST([LDFLAGS])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([LDFLAGS])
m4trace:configure.ac:63: -1- m4_pattern_allow([^LDFLAGS$])
m4trace:configure.ac:63: -1- AC_SUBST([LIBS])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:63: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:63: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:63: -1- AC_SUBST([CXX])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CXX])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CXX$])
m4trace:configure.ac:63: -1- AC_SUBST([ac_ct_CXX])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([ac_ct_CXX])
m4trace:configure.ac:63: -1- m4_pattern_allow([^ac_ct_CXX$])
m4trace:configure.ac:63: -1- AC_SUBST([CXXDEPMODE],
[depmode=$am_cv_CXX_dependencies_compiler_type])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CXXDEPMODE])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CXXDEPMODE$])
m4trace:configure.ac:63: -1- AM_CONDITIONAL([am__fastdepCXX], [
  test "x$enable_dependency_tracking" != xno \
  && test "$am_cv_CXX_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:63: -1- AC_SUBST([am__fastdepCXX_TRUE])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([am__fastdepCXX_TRUE])
m4trace:configure.ac:63: -1- m4_pattern_allow([^am__fastdepCXX_TRUE$])
m4trace:configure.ac:63: -1- AC_SUBST([am__fastdepCXX_FALSE])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([am__fastdepCXX_FALSE])
m4trace:configure.ac:63: -1-
m4trace:configure.ac:63: -1- m4_pattern_allow([^am__fastdepCXX_FALSE$])
m4trace:configure.ac:63: -1- _AM_SUBST_NOTMAKE([am__fastdepCXX_TRUE])
m4trace:configure.ac:63: -1- _AM_SUBST_NOTMAKE([am__fastdepCXX_FALSE])
m4trace:configure.ac:64: -1- AC_SUBST([CPP])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([CPP])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:64: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:64: -1- AC_SUBST([CPP])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([CPP])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:64: -1- AC_SUBST([GREP])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([GREP])
m4trace:configure.ac:64: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:64: -1- AC_SUBST([EGREP])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([EGREP])
m4trace:configure.ac:64: -1- m4_pattern_allow([^EGREP$])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([STDC_HEADERS])
m4trace:configure.ac:64: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:64: -1- AH_OUTPUT([STDC_HEADERS], [/* Define to 1
if you have the ANSI C header files. */

```

```

@%:@undef STDC_HEADERS])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_SYS_TYPES_H], [/* Define
to 1 if you have the <sys/types.h> header file. */
@%:@undef HAVE_SYS_TYPES_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_SYS_STAT_H], [/* Define
to 1 if you have the <sys/stat.h> header file. */
@%:@undef HAVE_SYS_STAT_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_STDLIB_H], [/* Define to
1 if you have the <stdlib.h> header file. */
@%:@undef HAVE_STDLIB_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_STRING_H], [/* Define to
1 if you have the <string.h> header file. */
@%:@undef HAVE_STRING_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_MEMORY_H], [/* Define to
1 if you have the <memory.h> header file. */
@%:@undef HAVE_MEMORY_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_STRINGS_H], [/* Define to
1 if you have the <strings.h> header file. */
@%:@undef HAVE_STRINGS_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_INTTYPES_H], [/* Define
to 1 if you have the <inttypes.h> header file. */
@%:@undef HAVE_INTTYPES_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_STDINT_H], [/* Define to
1 if you have the <stdint.h> header file. */
@%:@undef HAVE_STDINT_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_UNISTD_H], [/* Define to
1 if you have the <unistd.h> header file. */
@%:@undef HAVE_UNISTD_H])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_POSIX_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_POSIX_SOURCE$])
m4trace:configure.ac:64: -1- AH_OUTPUT([_POSIX_SOURCE], [/* Define to
1 if you need to in order for `stat\` and other things to work. */
@%:@undef _POSIX_SOURCE])
m4trace:configure.ac:64: -1-
AC_DEFINE_TRACE_LITERAL([_POSIX_1_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_POSIX_1_SOURCE$])
m4trace:configure.ac:64: -1- AH_OUTPUT([_POSIX_1_SOURCE], [/* Define
to 2 if the system does not provide POSIX.1 features except with
this defined. */
@%:@undef _POSIX_1_SOURCE])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_MINIX])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_MINIX$])
m4trace:configure.ac:64: -1- AH_OUTPUT([_MINIX], [/* Define to 1 if on
MINIX. */
@%:@undef _MINIX])
m4trace:configure.ac:64: -1- AH_OUTPUT([USE_SYSTEM_EXTENSIONS], [/*
Enable extensions on AIX 3, Interix. */
#ifdef _ALL_SOURCE
# undef _ALL_SOURCE
#endif
/* Enable GNU extensions on systems that have them. */
#ifdef _GNU_SOURCE

```

```

# undef _GNU_SOURCE
#endif
/* Enable threading extensions on Solaris. */
#ifndef _POSIX_PTHREAD_SEMANTICS
# undef _POSIX_PTHREAD_SEMANTICS
#endif
/* Enable extensions on HP NonStop. */
#ifndef _TANDEM_SOURCE
# undef _TANDEM_SOURCE
#endif
/* Enable general extensions on Solaris. */
#ifndef __EXTENSIONS__
# undef __EXTENSIONS__
#endif
])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([__EXTENSIONS__])
m4trace:configure.ac:64: -1- m4_pattern_allow([^__EXTENSIONS__$])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_ALL_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_ALL_SOURCE$])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_GNU_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_GNU_SOURCE$])
m4trace:configure.ac:64: -1-
AC_DEFINE_TRACE_LITERAL([_POSIX_PTHREAD_SEMANTICS])
m4trace:configure.ac:64: -1-
m4_pattern_allow([^_POSIX_PTHREAD_SEMANTICS$])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_TANDEM_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_TANDEM_SOURCE$])
m4trace:configure.ac:65: -1- _m4_warn([obsolete], [The macro
`AC_ISC_POSIX' is obsolete.
You should run autoupdate.], [../../lib/autoconf/specific.m4:446:
AC_ISC_POSIX is expanded from...
configure.ac:65: the top level])
m4trace:configure.ac:66: -1- AC_DEFINE_TRACE_LITERAL([STDC_HEADERS])
m4trace:configure.ac:66: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:66: -1- AH_OUTPUT([STDC_HEADERS], [/* Define to 1
if you have the ANSI C header files. */
@%:@undef STDC_HEADERS])
m4trace:configure.ac:67: -1- AH_OUTPUT([inline], [/* Define to
`__inline__' or `__inline' if that's what the C compiler
calls it, or to nothing if `inline' is not supported under any
name. */
#ifndef __cplusplus
#undef inline
#endif])
m4trace:configure.ac:68: -1- _m4_warn([obsolete], [The macro
`AM_PROG_LIBTOOL' is obsolete.
You should run autoupdate.], [aclocal.m4:1556: AM_PROG_LIBTOOL is
expanded from...
configure.ac:68: the top level])
m4trace:configure.ac:68: -1- LT_INIT
m4trace:configure.ac:68: -1- m4_pattern_forbid([^?LT_[A-Z_]+$])

```

```
m4trace:configure.ac:68: -1-
m4_pattern_allow([^( _LT_EOF|LT_DLGLOBAL|LT_DLLAZY_OR_NOW|LT_MULTI_MODU
LE)$])
m4trace:configure.ac:68: -1- AC_REQUIRE_AUX_FILE([ltmain.sh])
m4trace:configure.ac:68: -1- AC_SUBST([LIBTOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LIBTOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^LIBTOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([SED])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([SED])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^SED$])
m4trace:configure.ac:68: -1- AC_SUBST([FGREP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([FGREP])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^FGREP$])
m4trace:configure.ac:68: -1- AC_SUBST([GREP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([GREP])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^GREP$])
m4trace:configure.ac:68: -1- AC_SUBST([LD])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LD])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^LD$])
m4trace:configure.ac:68: -1- AC_SUBST([DUMPBIN])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DUMPBIN])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^DUMPBIN$])
m4trace:configure.ac:68: -1- AC_SUBST([ac_ct_DUMPBIN])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([ac_ct_DUMPBIN])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^ac_ct_DUMPBIN$])
m4trace:configure.ac:68: -1- AC_SUBST([DUMPBIN])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DUMPBIN])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^DUMPBIN$])
m4trace:configure.ac:68: -1- AC_SUBST([NM])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([NM])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^NM$])
m4trace:configure.ac:68: -1- AC_SUBST([LN_S], [$as_ln_s])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LN_S])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^LN_S$])
m4trace:configure.ac:68: -1- AC_SUBST([OBJDUMP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([OBJDUMP])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^OBJDUMP$])
m4trace:configure.ac:68: -1- AC_SUBST([OBJDUMP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([OBJDUMP])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^OBJDUMP$])
m4trace:configure.ac:68: -1- AC_SUBST([DLLTOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DLLTOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^DLLTOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([DLLTOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DLLTOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^DLLTOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([AR])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([AR])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^AR$])
m4trace:configure.ac:68: -1- AC_SUBST([ac_ct_AR])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([ac_ct_AR])
m4trace:configure.ac:68: -1- m4_pattern_allow([ ^ac_ct_AR$])
```

```

m4trace:configure.ac:68: -1- AC_SUBST([STRIP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([STRIP])
m4trace:configure.ac:68: -1- m4_pattern_allow([STRIP$])
m4trace:configure.ac:68: -1- AC_SUBST([RANLIB])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([RANLIB])
m4trace:configure.ac:68: -1- m4_pattern_allow([RANLIB$])
m4trace:configure.ac:68: -1- m4_pattern_allow([LT_OBJDIR])
m4trace:configure.ac:68: -1- AC_DEFINE_TRACE_LITERAL([LT_OBJDIR])
m4trace:configure.ac:68: -1- m4_pattern_allow([LT_OBJDIR$])
m4trace:configure.ac:68: -1- AH_OUTPUT([LT_OBJDIR], [/* Define to the
sub-directory in which libtool stores uninstalled libraries.
*/
@%:@undef LT_OBJDIR])
m4trace:configure.ac:68: -1- LT_SUPPORTED_TAG([CC])
m4trace:configure.ac:68: -1- AC_SUBST([MANIFEST_TOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([MANIFEST_TOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([MANIFEST_TOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([DSYMUTIL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DSYMUTIL])
m4trace:configure.ac:68: -1- m4_pattern_allow([DSYMUTIL$])
m4trace:configure.ac:68: -1- AC_SUBST([NMEDIT])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([NMEDIT])
m4trace:configure.ac:68: -1- m4_pattern_allow([NMEDIT$])
m4trace:configure.ac:68: -1- AC_SUBST([LIPO])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LIPO])
m4trace:configure.ac:68: -1- m4_pattern_allow([LIPO$])
m4trace:configure.ac:68: -1- AC_SUBST([OTOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([OTOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([OTOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([OTOOL64])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([OTOOL64])
m4trace:configure.ac:68: -1- m4_pattern_allow([OTOOL64$])
m4trace:configure.ac:68: -1- AH_OUTPUT([HAVE_DLFCN_H], [/* Define to 1
if you have the <dlfcn.h> header file. */
@%:@undef HAVE_DLFCN_H])
m4trace:configure.ac:68: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DLFCN_H])
m4trace:configure.ac:68: -1- m4_pattern_allow([HAVE_DLFCN_H$])
m4trace:configure.ac:68: -1- LT_SUPPORTED_TAG([CXX])
m4trace:configure.ac:68: -1- AC_SUBST([CXXCPP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([CXXCPP])
m4trace:configure.ac:68: -1- m4_pattern_allow([CXXCPP$])
m4trace:configure.ac:68: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:68: -1- m4_pattern_allow([CPPFLAGS$])
m4trace:configure.ac:68: -1- AC_SUBST([CXXCPP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([CXXCPP])
m4trace:configure.ac:68: -1- m4_pattern_allow([CXXCPP$])
m4trace:configure.ac:68: -1- AC_SUBST([LD])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LD])
m4trace:configure.ac:68: -1- m4_pattern_allow([LD$])
m4trace:configure.ac:72: -1- m4_pattern_forbid([_PKG_[A-Z]_+$])
m4trace:configure.ac:72: -1- m4_pattern_allow([PKG_CONFIG(_PATH)?$])

```



```

m4trace:configure.ac:72: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:72: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:72: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:72: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:72: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:72: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:75: -1- LT_INIT([win32-dll])
m4trace:configure.ac:76: -1- LT_SUPPORTED_TAG([RC])
m4trace:configure.ac:76: -1- AC_SUBST([RC])
m4trace:configure.ac:76: -1- AC_SUBST_TRACE([RC])
m4trace:configure.ac:76: -1- m4_pattern_allow([^RC$])
m4trace:configure.ac:76: -1- _m4_warn([obsolete], [The macro
`AC_LANG_SAVE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/lang.m4:125:
AC_LANG_SAVE is expanded from...
aclocal.m4:9000: _LT_LANG_RC_CONFIG is expanded from...
aclocal.m4:2261: _LT_LANG is expanded from...
aclocal.m4:2243: LT_LANG is expanded from...
configure.ac:76: the top level])
m4trace:configure.ac:76: -1- _m4_warn([obsolete], [The macro
`AC_LANG_RESTORE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/lang.m4:134:
AC_LANG_RESTORE is expanded from...
aclocal.m4:9000: _LT_LANG_RC_CONFIG is expanded from...
aclocal.m4:2261: _LT_LANG is expanded from...
aclocal.m4:2243: LT_LANG is expanded from...
configure.ac:76: the top level])
m4trace:configure.ac:101: -1- AC_DEFINE_TRACE_LITERAL([DBUS_WIN])
m4trace:configure.ac:101: -1- m4_pattern_allow([^DBUS_WIN$])
m4trace:configure.ac:101: -1- AH_OUTPUT([DBUS_WIN], [/* Defined if we
run on a W32 API based system */
@%:@undef DBUS_WIN])
m4trace:configure.ac:103: -1- AC_SUBST([BUILD_TIMESTAMP])
m4trace:configure.ac:103: -1- AC_SUBST_TRACE([BUILD_TIMESTAMP])
m4trace:configure.ac:103: -1- m4_pattern_allow([^BUILD_TIMESTAMP$])
m4trace:configure.ac:106: -1- AC_SUBST([BUILD_FILEVERSION])
m4trace:configure.ac:106: -1- AC_SUBST_TRACE([BUILD_FILEVERSION])
m4trace:configure.ac:106: -1- m4_pattern_allow([^BUILD_FILEVERSION$])
m4trace:configure.ac:107: -1- AC_SUBST([WINDRES])
m4trace:configure.ac:107: -1- AC_SUBST_TRACE([WINDRES])
m4trace:configure.ac:107: -1- m4_pattern_allow([^WINDRES$])
m4trace:configure.ac:112: -1- AC_DEFINE_TRACE_LITERAL([DBUS_WINCE])
m4trace:configure.ac:112: -1- m4_pattern_allow([^DBUS_WINCE$])
m4trace:configure.ac:112: -1- AH_OUTPUT([DBUS_WINCE], [/* Defined if
we run on a W32 CE API based system */
@%:@undef DBUS_WINCE])
m4trace:configure.ac:113: -1- AC_DEFINE_TRACE_LITERAL([_WIN32_WCE])
m4trace:configure.ac:113: -1- m4_pattern_allow([^_WIN32_WCE$])
m4trace:configure.ac:113: -1- AH_OUTPUT([_WIN32_WCE], [/* Defined to
get newer W32 CE APIs */
@%:@undef _WIN32_WCE])
m4trace:configure.ac:116: -1- AC_DEFINE_TRACE_LITERAL([DBUS_UNIX])

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m4trace:configure.ac:116: -1- m4_pattern_allow([^DBUS_UNIX$])
m4trace:configure.ac:116: -1- AH_OUTPUT([DBUS_UNIX], [/* Defined if we
run on a Unix-based system */
@%:@undef DBUS_UNIX])
m4trace:configure.ac:119: -1- AC_DEFINE_TRACE_LITERAL([DBUS_CYGWIN])
m4trace:configure.ac:119: -1- m4_pattern_allow([^DBUS_CYGWIN$])
m4trace:configure.ac:119: -1- AH_OUTPUT([DBUS_CYGWIN], [/* Defined if
we run on a cygwin API based system */
@%:@undef DBUS_CYGWIN])
m4trace:configure.ac:122: -1- AM_CONDITIONAL([DBUS_WIN], [test
"$dbus_win" = yes])
m4trace:configure.ac:122: -1- AC_SUBST([DBUS_WIN_TRUE])
m4trace:configure.ac:122: -1- AC_SUBST_TRACE([DBUS_WIN_TRUE])
m4trace:configure.ac:122: -1- m4_pattern_allow([^DBUS_WIN_TRUE$])
m4trace:configure.ac:122: -1- AC_SUBST([DBUS_WIN_FALSE])
m4trace:configure.ac:122: -1- AC_SUBST_TRACE([DBUS_WIN_FALSE])
m4trace:configure.ac:122: -1- m4_pattern_allow([^DBUS_WIN_FALSE$])
m4trace:configure.ac:122: -1- _AM_SUBST_NOTMAKE([DBUS_WIN_TRUE])
m4trace:configure.ac:122: -1- _AM_SUBST_NOTMAKE([DBUS_WIN_FALSE])
m4trace:configure.ac:123: -1- AM_CONDITIONAL([DBUS_WINCE], [test
"$dbus_wince" = yes])
m4trace:configure.ac:123: -1- AC_SUBST([DBUS_WINCE_TRUE])
m4trace:configure.ac:123: -1- AC_SUBST_TRACE([DBUS_WINCE_TRUE])
m4trace:configure.ac:123: -1- m4_pattern_allow([^DBUS_WINCE_TRUE$])
m4trace:configure.ac:123: -1- AC_SUBST([DBUS_WINCE_FALSE])
m4trace:configure.ac:123: -1- AC_SUBST_TRACE([DBUS_WINCE_FALSE])
m4trace:configure.ac:123: -1- m4_pattern_allow([^DBUS_WINCE_FALSE$])
m4trace:configure.ac:123: -1- _AM_SUBST_NOTMAKE([DBUS_WINCE_TRUE])
m4trace:configure.ac:123: -1- _AM_SUBST_NOTMAKE([DBUS_WINCE_FALSE])
m4trace:configure.ac:124: -1- AM_CONDITIONAL([DBUS_UNIX], [test
"$dbus_unix" = yes])
m4trace:configure.ac:124: -1- AC_SUBST([DBUS_UNIX_TRUE])
m4trace:configure.ac:124: -1- AC_SUBST_TRACE([DBUS_UNIX_TRUE])
m4trace:configure.ac:124: -1- m4_pattern_allow([^DBUS_UNIX_TRUE$])
m4trace:configure.ac:124: -1- AC_SUBST([DBUS_UNIX_FALSE])
m4trace:configure.ac:124: -1- AC_SUBST_TRACE([DBUS_UNIX_FALSE])
m4trace:configure.ac:124: -1- m4_pattern_allow([^DBUS_UNIX_FALSE$])
m4trace:configure.ac:124: -1- _AM_SUBST_NOTMAKE([DBUS_UNIX_TRUE])
m4trace:configure.ac:124: -1- _AM_SUBST_NOTMAKE([DBUS_UNIX_FALSE])
m4trace:configure.ac:125: -1- AM_CONDITIONAL([DBUS_CYGWIN], [test
"$dbus_cygwin" = yes])
m4trace:configure.ac:125: -1- AC_SUBST([DBUS_CYGWIN_TRUE])
m4trace:configure.ac:125: -1- AC_SUBST_TRACE([DBUS_CYGWIN_TRUE])
m4trace:configure.ac:125: -1- m4_pattern_allow([^DBUS_CYGWIN_TRUE$])
m4trace:configure.ac:125: -1- AC_SUBST([DBUS_CYGWIN_FALSE])
m4trace:configure.ac:125: -1- AC_SUBST_TRACE([DBUS_CYGWIN_FALSE])
m4trace:configure.ac:125: -1- m4_pattern_allow([^DBUS_CYGWIN_FALSE$])
m4trace:configure.ac:125: -1- _AM_SUBST_NOTMAKE([DBUS_CYGWIN_TRUE])
m4trace:configure.ac:125: -1- _AM_SUBST_NOTMAKE([DBUS_CYGWIN_FALSE])
m4trace:configure.ac:142: -1- AC_SUBST([DBUS_STATIC_BUILD_CPPFLAGS])
m4trace:configure.ac:142: -1-
AC_SUBST_TRACE([DBUS_STATIC_BUILD_CPPFLAGS])

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m4trace:configure.ac:142: -1-
m4_pattern_allow([^DBUS_STATIC_BUILD_CPPFLAGS$])
m4trace:configure.ac:200: -1- AM_CONDITIONAL([DBUS_BUILD_TESTS], [test
"x$enable_embedded_tests" = xyes])
m4trace:configure.ac:200: -1- AC_SUBST([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:200: -1- AC_SUBST_TRACE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:200: -1-
m4_pattern_allow([^DBUS_BUILD_TESTS_TRUE$])
m4trace:configure.ac:200: -1- AC_SUBST([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:200: -1- AC_SUBST_TRACE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:200: -1-
m4_pattern_allow([^DBUS_BUILD_TESTS_FALSE$])
m4trace:configure.ac:200: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:200: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:201: -1-
AM_CONDITIONAL([DBUS_ENABLE_EMBEDDED_TESTS], [test
"x$enable_embedded_tests" = xyes])
m4trace:configure.ac:201: -1-
AC_SUBST([DBUS_ENABLE_EMBEDDED_TESTS_TRUE])
m4trace:configure.ac:201: -1-
AC_SUBST_TRACE([DBUS_ENABLE_EMBEDDED_TESTS_TRUE])
m4trace:configure.ac:201: -1-
m4_pattern_allow([^DBUS_ENABLE_EMBEDDED_TESTS_TRUE$])
m4trace:configure.ac:201: -1-
AC_SUBST([DBUS_ENABLE_EMBEDDED_TESTS_FALSE])
m4trace:configure.ac:201: -1-
AC_SUBST_TRACE([DBUS_ENABLE_EMBEDDED_TESTS_FALSE])
m4trace:configure.ac:201: -1-
m4_pattern_allow([^DBUS_ENABLE_EMBEDDED_TESTS_FALSE$])
m4trace:configure.ac:201: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_EMBEDDED_TESTS_TRUE])
m4trace:configure.ac:201: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_EMBEDDED_TESTS_FALSE])
m4trace:configure.ac:204: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_EMBEDDED_TESTS])
m4trace:configure.ac:204: -1-
m4_pattern_allow([^DBUS_ENABLE_EMBEDDED_TESTS$])
m4trace:configure.ac:204: -1- AH_OUTPUT([DBUS_ENABLE_EMBEDDED_TESTS],
[/* Define to build test code into the library and binaries */
@%:@undef DBUS_ENABLE_EMBEDDED_TESTS])
m4trace:configure.ac:206: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUILD_TESTS])
m4trace:configure.ac:206: -1- m4_pattern_allow([^DBUS_BUILD_TESTS$])
m4trace:configure.ac:206: -1- AH_OUTPUT([DBUS_BUILD_TESTS], [/* Define
to build test code into the library and binaries */
@%:@undef DBUS_BUILD_TESTS])
m4trace:configure.ac:218: -1- AC_SUBST([GLIB_CFLAGS])
m4trace:configure.ac:218: -1- AC_SUBST_TRACE([GLIB_CFLAGS])
m4trace:configure.ac:218: -1- m4_pattern_allow([^GLIB_CFLAGS$])
m4trace:configure.ac:218: -1- AC_SUBST([GLIB_LIBS])
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m4trace:configure.ac:218: -1- AC_SUBST_TRACE([GLIB_LIBS])
m4trace:configure.ac:218: -1- m4_pattern_allow([GLIB_LIBS$])
m4trace:configure.ac:227: -1- AC_SUBST([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:227: -1- AC_SUBST_TRACE([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:227: -1- m4_pattern_allow([DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:227: -1- AC_SUBST([DBUS_GLIB_LIBS])
m4trace:configure.ac:227: -1- AC_SUBST_TRACE([DBUS_GLIB_LIBS])
m4trace:configure.ac:227: -1- m4_pattern_allow([DBUS_GLIB_LIBS$])
m4trace:configure.ac:237: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_MODULAR_TESTS])
m4trace:configure.ac:237: -1-
m4_pattern_allow([DBUS_ENABLE_MODULAR_TESTS$])
m4trace:configure.ac:237: -1- AH_OUTPUT([DBUS_ENABLE_MODULAR_TESTS],
[/ * Define to build independent test binaries * /
@%:@undef DBUS_ENABLE_MODULAR_TESTS])
m4trace:configure.ac:240: -1-
AM_CONDITIONAL([DBUS_ENABLE_MODULAR_TESTS], [test
"x$enable_modular_tests" != xno])
m4trace:configure.ac:240: -1-
AC_SUBST([DBUS_ENABLE_MODULAR_TESTS_TRUE])
m4trace:configure.ac:240: -1-
AC_SUBST_TRACE([DBUS_ENABLE_MODULAR_TESTS_TRUE])
m4trace:configure.ac:240: -1-
m4_pattern_allow([DBUS_ENABLE_MODULAR_TESTS_TRUE$])
m4trace:configure.ac:240: -1-
AC_SUBST([DBUS_ENABLE_MODULAR_TESTS_FALSE])
m4trace:configure.ac:240: -1-
AC_SUBST_TRACE([DBUS_ENABLE_MODULAR_TESTS_FALSE])
m4trace:configure.ac:240: -1-
m4_pattern_allow([DBUS_ENABLE_MODULAR_TESTS_FALSE$])
m4trace:configure.ac:240: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_MODULAR_TESTS_TRUE])
m4trace:configure.ac:240: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_MODULAR_TESTS_FALSE])
m4trace:configure.ac:244: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_WITH_GLIB])
m4trace:configure.ac:244: -1- m4_pattern_allow([DBUS_WITH_GLIB$])
m4trace:configure.ac:244: -1- AH_OUTPUT([DBUS_WITH_GLIB], [/ * Define
if GLib, GObject, GIO are available * /
@%:@undef DBUS_WITH_GLIB])
m4trace:configure.ac:247: -1- AM_CONDITIONAL([DBUS_WITH_GLIB], [test
"x$with_glib" != xno])
m4trace:configure.ac:247: -1- AC_SUBST([DBUS_WITH_GLIB_TRUE])
m4trace:configure.ac:247: -1- AC_SUBST_TRACE([DBUS_WITH_GLIB_TRUE])
m4trace:configure.ac:247: -1-
m4_pattern_allow([DBUS_WITH_GLIB_TRUE$])
m4trace:configure.ac:247: -1- AC_SUBST([DBUS_WITH_GLIB_FALSE])
m4trace:configure.ac:247: -1- AC_SUBST_TRACE([DBUS_WITH_GLIB_FALSE])
m4trace:configure.ac:247: -1-
m4_pattern_allow([DBUS_WITH_GLIB_FALSE$])
m4trace:configure.ac:247: -1- _AM_SUBST_NOTMAKE([DBUS_WITH_GLIB_TRUE])
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m4trace:configure.ac:247: -1-
  _AM_SUBST_NOTMAKE([DBUS_WITH_GLIB_FALSE])
m4trace:configure.ac:253: -1-
AM_CONDITIONAL([DBUS_ENABLE_INSTALLED_TESTS], [test
"x$enable_installed_tests" = xyes])
m4trace:configure.ac:253: -1-
AC_SUBST([DBUS_ENABLE_INSTALLED_TESTS_TRUE])
m4trace:configure.ac:253: -1-
AC_SUBST_TRACE([DBUS_ENABLE_INSTALLED_TESTS_TRUE])
m4trace:configure.ac:253: -1-
m4_pattern_allow([^DBUS_ENABLE_INSTALLED_TESTS_TRUE$])
m4trace:configure.ac:253: -1-
AC_SUBST([DBUS_ENABLE_INSTALLED_TESTS_FALSE])
m4trace:configure.ac:253: -1-
AC_SUBST_TRACE([DBUS_ENABLE_INSTALLED_TESTS_FALSE])
m4trace:configure.ac:253: -1-
m4_pattern_allow([^DBUS_ENABLE_INSTALLED_TESTS_FALSE$])
m4trace:configure.ac:253: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_INSTALLED_TESTS_TRUE])
m4trace:configure.ac:253: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_INSTALLED_TESTS_FALSE])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_VERSION],
[$am_cv_python_version])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_VERSION])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_VERSION$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_PREFIX], ['${prefix}'])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_PREFIX])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_PREFIX$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_LIB_PREFIX],
['${libdir}'])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_LIB_PREFIX])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_LIB_PREFIX$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_EXEC_PREFIX],
['${exec_prefix}'])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_EXEC_PREFIX])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_EXEC_PREFIX$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_PLATFORM],
[$am_cv_python_platform])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_PLATFORM])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON_PLATFORM$])
m4trace:configure.ac:259: -1- AC_SUBST([pythondir],
[$am_cv_python_pythondir])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([pythondir])
m4trace:configure.ac:259: -1- m4_pattern_allow([^pythondir$])
m4trace:configure.ac:259: -1- AC_SUBST([pkgpythondir],
[\${pythondir}/$PACKAGE])

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m4trace:configure.ac:259: -1- AC_SUBST_TRACE([pkgpythondir])
m4trace:configure.ac:259: -1- m4_pattern_allow([^pkgpythondir$])
m4trace:configure.ac:259: -1- AC_SUBST([pyexecdir],
[$am_cv_python_pyexecdir])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([pyexecdir])
m4trace:configure.ac:259: -1- m4_pattern_allow([^pyexecdir$])
m4trace:configure.ac:259: -1- AC_SUBST([pkgpyexecdir],
[\${pyexecdir}/$PACKAGE])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([pkgpyexecdir])
m4trace:configure.ac:259: -1- m4_pattern_allow([^pkgpyexecdir$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_VERSION],
[$am_cv_python_version])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_VERSION])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_VERSION$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_PREFIX], ['${prefix}'])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_PREFIX])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_PREFIX$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_LIB_PREFIX],
['${libdir}'])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_LIB_PREFIX])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_LIB_PREFIX$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_EXEC_PREFIX],
['${exec_prefix}'])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_EXEC_PREFIX])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_EXEC_PREFIX$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_PLATFORM],
[$am_cv_python_platform])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_PLATFORM])
m4trace:configure.ac:269: -1- m4_pattern_allow([^PYTHON_PLATFORM$])
m4trace:configure.ac:269: -1- AC_SUBST([pythondir],
[$am_cv_python_pythondir])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([pythondir])
m4trace:configure.ac:269: -1- m4_pattern_allow([^pythondir$])
m4trace:configure.ac:269: -1- AC_SUBST([pkgpythondir],
[\${pythondir}/$PACKAGE])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([pkgpythondir])
m4trace:configure.ac:269: -1- m4_pattern_allow([^pkgpythondir$])
m4trace:configure.ac:269: -1- AC_SUBST([pyexecdir],
[$am_cv_python_pyexecdir])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([pyexecdir])
m4trace:configure.ac:269: -1- m4_pattern_allow([^pyexecdir$])
m4trace:configure.ac:269: -1- AC_SUBST([pkgpyexecdir],
[\${pyexecdir}/$PACKAGE])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([pkgpyexecdir])
m4trace:configure.ac:269: -1- m4_pattern_allow([^pkgpyexecdir$])
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m4trace:configure.ac:273: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:273: -1-
m4_pattern_allow([^DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:273: -1- AH_OUTPUT([DBUS_ENABLE_VERBOSE_MODE],
[/ * Support a verbose mode * /
@%:@undef DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:277: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DISABLE_ASSERT])
m4trace:configure.ac:277: -1-
m4_pattern_allow([^DBUS_DISABLE_ASSERT$])
m4trace:configure.ac:277: -1- AH_OUTPUT([DBUS_DISABLE_ASSERT], [/ *
Disable assertion checking * /
@%:@undef DBUS_DISABLE_ASSERT])
m4trace:configure.ac:288: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUILT_R_DYNAMIC])
m4trace:configure.ac:288: -1-
m4_pattern_allow([^DBUS_BUILT_R_DYNAMIC$])
m4trace:configure.ac:288: -1- AH_OUTPUT([DBUS_BUILT_R_DYNAMIC], [/ *
whether -export-dynamic was passed to libtool * /
@%:@undef DBUS_BUILT_R_DYNAMIC])
m4trace:configure.ac:291: -1- AC_SUBST([R_DYNAMIC_LDFLAG])
m4trace:configure.ac:291: -1- AC_SUBST_TRACE([R_DYNAMIC_LDFLAG])
m4trace:configure.ac:291: -1- m4_pattern_allow([^R_DYNAMIC_LDFLAG$])
m4trace:configure.ac:294: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DISABLE_CHECKS])
m4trace:configure.ac:294: -1-
m4_pattern_allow([^DBUS_DISABLE_CHECKS$])
m4trace:configure.ac:294: -1- AH_OUTPUT([DBUS_DISABLE_CHECKS], [/ *
Disable public API sanity checking * /
@%:@undef DBUS_DISABLE_CHECKS])
m4trace:configure.ac:295: -1-
AC_DEFINE_TRACE_LITERAL([G_DISABLE_CHECKS])
m4trace:configure.ac:295: -1- m4_pattern_allow([^G_DISABLE_CHECKS$])
m4trace:configure.ac:295: -1- AH_OUTPUT([G_DISABLE_CHECKS], [/ *
Disable GLib public API sanity checking * /
@%:@undef G_DISABLE_CHECKS])
m4trace:configure.ac:300: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_USERDB_CACHE])
m4trace:configure.ac:300: -1-
m4_pattern_allow([^DBUS_ENABLE_USERDB_CACHE$])
m4trace:configure.ac:300: -1- AH_OUTPUT([DBUS_ENABLE_USERDB_CACHE],
[/ * Build with caching of user data * /
@%:@undef DBUS_ENABLE_USERDB_CACHE])
m4trace:configure.ac:305: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_GCOV_ENABLED])
m4trace:configure.ac:305: -1- m4_pattern_allow([^DBUS_GCOV_ENABLED$])
m4trace:configure.ac:305: -1- AH_OUTPUT([DBUS_GCOV_ENABLED], [/ *
Defined if gcov is enabled to force a rebuild due to config.h changing
* /
@%:@undef DBUS_GCOV_ENABLED])
m4trace:configure.ac:335: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_CHAR])

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m4trace:configure.ac:335: -1- m4_pattern_allow([^SIZEOF_CHAR$])
m4trace:configure.ac:335: -1- AH_OUTPUT([SIZEOF_CHAR], [/* The size of
`char`, as computed by sizeof. */
@%:@undef SIZEOF_CHAR])
m4trace:configure.ac:336: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_SHORT])
m4trace:configure.ac:336: -1- m4_pattern_allow([^SIZEOF_SHORT$])
m4trace:configure.ac:336: -1- AH_OUTPUT([SIZEOF_SHORT], [/* The size
of `short`, as computed by sizeof. */
@%:@undef SIZEOF_SHORT])
m4trace:configure.ac:337: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_LONG])
m4trace:configure.ac:337: -1- m4_pattern_allow([^SIZEOF_LONG$])
m4trace:configure.ac:337: -1- AH_OUTPUT([SIZEOF_LONG], [/* The size of
`long`, as computed by sizeof. */
@%:@undef SIZEOF_LONG])
m4trace:configure.ac:338: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_INT])
m4trace:configure.ac:338: -1- m4_pattern_allow([^SIZEOF_INT$])
m4trace:configure.ac:338: -1- AH_OUTPUT([SIZEOF_INT], [/* The size of
`int`, as computed by sizeof. */
@%:@undef SIZEOF_INT])
m4trace:configure.ac:339: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_VOID_P])
m4trace:configure.ac:339: -1- m4_pattern_allow([^SIZEOF_VOID_P$])
m4trace:configure.ac:339: -1- AH_OUTPUT([SIZEOF_VOID_P], [/* The size
of `void *`, as computed by sizeof. */
@%:@undef SIZEOF_VOID_P])
m4trace:configure.ac:340: -1-
AC_DEFINE_TRACE_LITERAL([SIZEOF_LONG_LONG])
m4trace:configure.ac:340: -1- m4_pattern_allow([^SIZEOF_LONG_LONG$])
m4trace:configure.ac:340: -1- AH_OUTPUT([SIZEOF_LONG_LONG], [/* The
size of `long long`, as computed by sizeof. */
@%:@undef SIZEOF_LONG_LONG])
m4trace:configure.ac:341: -1-
AC_DEFINE_TRACE_LITERAL([SIZEOF__INT64])
m4trace:configure.ac:341: -1- m4_pattern_allow([^SIZEOF__INT64$])
m4trace:configure.ac:341: -1- AH_OUTPUT([SIZEOF__INT64], [/* The size
of `__int64`, as computed by sizeof. */
@%:@undef SIZEOF__INT64])
m4trace:configure.ac:386: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_INT64_PRINTF_MODIFIER])
m4trace:configure.ac:386: -1-
m4_pattern_allow([^DBUS_INT64_PRINTF_MODIFIER$])
m4trace:configure.ac:386: -1- AH_OUTPUT([DBUS_INT64_PRINTF_MODIFIER],
[/* Define to printf modifier for 64 bit integer type */
@%:@undef DBUS_INT64_PRINTF_MODIFIER])
m4trace:configure.ac:422: -1- AC_SUBST([DBUS_INT64_TYPE])
m4trace:configure.ac:422: -1- AC_SUBST_TRACE([DBUS_INT64_TYPE])
m4trace:configure.ac:422: -1- m4_pattern_allow([^DBUS_INT64_TYPE$])
m4trace:configure.ac:423: -1- AC_SUBST([DBUS_INT64_CONSTANT])
m4trace:configure.ac:423: -1- AC_SUBST_TRACE([DBUS_INT64_CONSTANT])
m4trace:configure.ac:423: -1-
m4_pattern_allow([^DBUS_INT64_CONSTANT$])
m4trace:configure.ac:424: -1- AC_SUBST([DBUS_UINT64_CONSTANT])
m4trace:configure.ac:424: -1- AC_SUBST_TRACE([DBUS_UINT64_CONSTANT])

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m4trace:configure.ac:424: -1-
m4_pattern_allow([^DBUS_UINT64_CONSTANT$])
m4trace:configure.ac:425: -1- AC_SUBST([DBUS_HAVE_INT64])
m4trace:configure.ac:425: -1- AC_SUBST_TRACE([DBUS_HAVE_INT64])
m4trace:configure.ac:425: -1- m4_pattern_allow([^DBUS_HAVE_INT64$])
m4trace:configure.ac:450: -1- AC_SUBST([DBUS_INT32_TYPE])
m4trace:configure.ac:450: -1- AC_SUBST_TRACE([DBUS_INT32_TYPE])
m4trace:configure.ac:450: -1- m4_pattern_allow([^DBUS_INT32_TYPE$])
m4trace:configure.ac:472: -1- AC_SUBST([DBUS_INT16_TYPE])
m4trace:configure.ac:472: -1- AC_SUBST_TRACE([DBUS_INT16_TYPE])
m4trace:configure.ac:472: -1- m4_pattern_allow([^DBUS_INT16_TYPE$])
m4trace:configure.ac:479: -1- AH_OUTPUT([WORDS_BIGENDIAN_DARWIN], [
/* Use the compiler-provided endianness defines to
allow universal compiling. */
#ifdef __BIG_ENDIAN__
#define WORDS_BIGENDIAN 1
#endif
])
m4trace:configure.ac:487: -1- AH_OUTPUT([WORDS_BIGENDIAN], [/* Define
WORDS_BIGENDIAN to 1 if your processor stores words with the most
significant byte first (like Motorola and SPARC, unlike Intel). */
#ifdef AC_APPLE_UNIVERSAL_BUILD
# if defined __BIG_ENDIAN__
# define WORDS_BIGENDIAN 1
# endif
#else
# ifndef WORDS_BIGENDIAN
# undef WORDS_BIGENDIAN
# endif
#endif])
m4trace:configure.ac:487: -1-
AC_DEFINE_TRACE_LITERAL([WORDS_BIGENDIAN])
m4trace:configure.ac:487: -1- m4_pattern_allow([^WORDS_BIGENDIAN$])
m4trace:configure.ac:487: -1-
AC_DEFINE_TRACE_LITERAL([AC_APPLE_UNIVERSAL_BUILD])
m4trace:configure.ac:487: -1-
m4_pattern_allow([^AC_APPLE_UNIVERSAL_BUILD$])
m4trace:configure.ac:487: -1- AH_OUTPUT([AC_APPLE_UNIVERSAL_BUILD],
[/* Define if building universal (internal helper macro) */
@%:@undef AC_APPLE_UNIVERSAL_BUILD])
m4trace:configure.ac:541: -1- AC_DEFINE_TRACE_LITERAL([DBUS_VA_COPY])
m4trace:configure.ac:541: -1- m4_pattern_allow([^DBUS_VA_COPY$])
m4trace:configure.ac:541: -1- AH_OUTPUT([DBUS_VA_COPY], [/* A
\'va_copy\' style function */
@%:@undef DBUS_VA_COPY])
m4trace:configure.ac:573: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_VA_COPY_AS_ARRAY])
m4trace:configure.ac:573: -1-
m4_pattern_allow([^DBUS_VA_COPY_AS_ARRAY$])
m4trace:configure.ac:573: -1- AH_OUTPUT([DBUS_VA_COPY_AS_ARRAY], [/*
\'va_lists\' cannot be copied as values */
@%:@undef DBUS_VA_COPY_AS_ARRAY])

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m4trace:configure.ac:593: -1- AC_DEFINE_TRACE_LITERAL([DBUS_USE_SYNC])
m4trace:configure.ac:593: -1- m4_pattern_allow([^DBUS_USE_SYNC^])
m4trace:configure.ac:593: -1- AH_OUTPUT([DBUS_USE_SYNC], [/* Use the
gcc __sync extension */
@%:@undef DBUS_USE_SYNC])
m4trace:configure.ac:597: -1- AH_OUTPUT([HAVE_LIBNSL], [/* Define to 1
if you have the `nsl` library (-lnsl). */
@%:@undef HAVE_LIBNSL])
m4trace:configure.ac:597: -1- AC_DEFINE_TRACE_LITERAL([HAVE_LIBNSL])
m4trace:configure.ac:597: -1- m4_pattern_allow([^HAVE_LIBNSL^])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_VSNPRINTF], [/* Define
to 1 if you have the `vsnprintf` function. */
@%:@undef HAVE_VSNPRINTF])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_VASPRINTF], [/* Define
to 1 if you have the `vasprintf` function. */
@%:@undef HAVE_VASPRINTF])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_NANOSLEEP], [/* Define
to 1 if you have the `nanosleep` function. */
@%:@undef HAVE_NANOSLEEP])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_USLEEP], [/* Define to 1
if you have the `usleep` function. */
@%:@undef HAVE_USLEEP])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_SETENV], [/* Define to 1
if you have the `setenv` function. */
@%:@undef HAVE_SETENV])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_CLEARENV], [/* Define to
1 if you have the `clearenv` function. */
@%:@undef HAVE_CLEARENV])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_UNSETENV], [/* Define to
1 if you have the `unsetenv` function. */
@%:@undef HAVE_UNSETENV])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_SOCKETPAIR], [/* Define
to 1 if you have the `socketpair` function. */
@%:@undef HAVE_SOCKETPAIR])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_GETGROUPLIST], [/*
Define to 1 if you have the `getgrouplist` function. */
@%:@undef HAVE_GETGROUPLIST])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_FPATHCONF], [/* Define
to 1 if you have the `fpathconf` function. */
@%:@undef HAVE_FPATHCONF])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_SETRLIMIT], [/* Define
to 1 if you have the `setrlimit` function. */
@%:@undef HAVE_SETRLIMIT])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_POLL], [/* Define to 1
if you have the `poll` function. */
@%:@undef HAVE_POLL])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_SETLOCALE], [/* Define
to 1 if you have the `setlocale` function. */
@%:@undef HAVE_SETLOCALE])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_LOCALECONV], [/* Define
to 1 if you have the `localeconv` function. */
@%:@undef HAVE_LOCALECONV])
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m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_STRTOLL], [/* Define to
1 if you have the `strtoll` function. */
@%:@undef HAVE_STRTOLL])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_STRTOULL], [/* Define to
1 if you have the `strtoull` function. */
@%:@undef HAVE_STRTOULL])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_ISSETUGID], [/* Define
to 1 if you have the `issetugid` function. */
@%:@undef HAVE_ISSETUGID])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_GETRESUID], [/* Define
to 1 if you have the `getresuid` function. */
@%:@undef HAVE_GETRESUID])
m4trace:configure.ac:601: -1- AH_OUTPUT([HAVE_SYSLOG_H], [/* Define to
1 if you have the <syslog.h> header file. */
@%:@undef HAVE_SYSLOG_H])
m4trace:configure.ac:601: -1- AC_DEFINE_TRACE_LITERAL([HAVE_SYSLOG_H])
m4trace:configure.ac:601: -1- m4_pattern_allow([^HAVE_SYSLOG_H$])
m4trace:configure.ac:603: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_DECL_LOG_PERROR])
m4trace:configure.ac:603: -1-
m4_pattern_allow([^HAVE_DECL_LOG_PERROR$])
m4trace:configure.ac:603: -1- AH_OUTPUT([HAVE_DECL_LOG_PERROR], [/*
Define to 1 if you have the declaration of `LOG_PERROR`, and to 0 if
you
don't. */
@%:@undef HAVE_DECL_LOG_PERROR])
m4trace:configure.ac:609: -1- AC_DEFINE_TRACE_LITERAL([BROKEN_POLL])
m4trace:configure.ac:609: -1- m4_pattern_allow([^BROKEN_POLL$])
m4trace:configure.ac:609: -1- AH_OUTPUT([BROKEN_POLL], [/* poll
doesn't work on devices */
@%:@undef BROKEN_POLL])
m4trace:configure.ac:648: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DIRFD])
m4trace:configure.ac:648: -1- m4_pattern_allow([^HAVE_DIRFD$])
m4trace:configure.ac:648: -1- AH_OUTPUT([HAVE_DIRFD], [/* Have dirfd
function */
@%:@undef HAVE_DIRFD])
m4trace:configure.ac:665: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DDFD])
m4trace:configure.ac:665: -1- m4_pattern_allow([^HAVE_DDFD$])
m4trace:configure.ac:665: -1- AH_OUTPUT([HAVE_DDFD], [/* Have the ddfd
member of DIR */
@%:@undef HAVE_DDFD])
m4trace:configure.ac:669: -1- AH_OUTPUT([HAVE_SYS_RESOURCE_H], [/*
Define to 1 if you have the <sys/resource.h> header file. */
@%:@undef HAVE_SYS_RESOURCE_H])
m4trace:configure.ac:669: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SYS_RESOURCE_H])
m4trace:configure.ac:669: -1-
m4_pattern_allow([^HAVE_SYS_RESOURCE_H$])
m4trace:configure.ac:671: -1- AH_OUTPUT([HAVE_DIRENT_H], [/* Define to
1 if you have the <dirent.h> header file. */
@%:@undef HAVE_DIRENT_H])
m4trace:configure.ac:671: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DIRENT_H])

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m4trace:configure.ac:671: -1- m4_pattern_allow([HHAVE_DIRENT_H$])
m4trace:configure.ac:673: -1- AH_OUTPUT([HHAVE_EXECINFO_H], [/* Define
to 1 if you have the <execinfo.h> header file. */
@%:@undef HAVE_EXECINFO_H])
m4trace:configure.ac:673: -1-
AC_DEFINE_TRACE_LITERAL([HHAVE_EXECINFO_H])
m4trace:configure.ac:673: -1- m4_pattern_allow([HHAVE_EXECINFO_H$])
m4trace:configure.ac:673: -1- AH_OUTPUT([HHAVE_BACKTRACE], [/* Define
to 1 if you have the `backtrace` function. */
@%:@undef HAVE_BACKTRACE])
m4trace:configure.ac:673: -1-
AC_DEFINE_TRACE_LITERAL([HHAVE_BACKTRACE])
m4trace:configure.ac:673: -1- m4_pattern_allow([HHAVE_BACKTRACE$])
m4trace:configure.ac:675: -1- AH_OUTPUT([HHAVE_ERRNO_H], [/* Define to
1 if you have the <errno.h> header file. */
@%:@undef HAVE_ERRNO_H])
m4trace:configure.ac:675: -1- AC_DEFINE_TRACE_LITERAL([HHAVE_ERRNO_H])
m4trace:configure.ac:675: -1- m4_pattern_allow([HHAVE_ERRNO_H$])
m4trace:configure.ac:677: -1- AH_OUTPUT([HHAVE_SIGNAL_H], [/* Define to
1 if you have the <signal.h> header file. */
@%:@undef HAVE_SIGNAL_H])
m4trace:configure.ac:677: -1- AC_DEFINE_TRACE_LITERAL([HHAVE_SIGNAL_H])
m4trace:configure.ac:677: -1- m4_pattern_allow([HHAVE_SIGNAL_H$])
m4trace:configure.ac:679: -1- AH_OUTPUT([HHAVE_LOCALE_H], [/* Define to
1 if you have the <locale.h> header file. */
@%:@undef HAVE_LOCALE_H])
m4trace:configure.ac:679: -1- AC_DEFINE_TRACE_LITERAL([HHAVE_LOCALE_H])
m4trace:configure.ac:679: -1- m4_pattern_allow([HHAVE_LOCALE_H$])
m4trace:configure.ac:681: -1- AH_OUTPUT([HHAVE_BYTESWAP_H], [/* Define
to 1 if you have the <byteswap.h> header file. */
@%:@undef HAVE_BYTESWAP_H])
m4trace:configure.ac:681: -1-
AC_DEFINE_TRACE_LITERAL([HHAVE_BYTESWAP_H])
m4trace:configure.ac:681: -1- m4_pattern_allow([HHAVE_BYTESWAP_H$])
m4trace:configure.ac:683: -1- AH_OUTPUT([HHAVE_UNISTD_H], [/* Define to
1 if you have the <unistd.h> header file. */
@%:@undef HAVE_UNISTD_H])
m4trace:configure.ac:683: -1- AC_DEFINE_TRACE_LITERAL([HHAVE_UNISTD_H])
m4trace:configure.ac:683: -1- m4_pattern_allow([HHAVE_UNISTD_H$])
m4trace:configure.ac:685: -1- AH_OUTPUT([HHAVE_WS2TCPIP_H], [/* Define
to 1 if you have the <ws2tcpip.h> header file. */
@%:@undef HAVE_WS2TCPIP_H])
m4trace:configure.ac:685: -1-
AC_DEFINE_TRACE_LITERAL([HHAVE_WS2TCPIP_H])
m4trace:configure.ac:685: -1- m4_pattern_allow([HHAVE_WS2TCPIP_H$])
m4trace:configure.ac:687: -1- AH_OUTPUT([HHAVE_WSPIAPI_H], [/* Define
to 1 if you have the <wspiapi.h> header file. */
@%:@undef HAVE_WSPIAPI_H])
m4trace:configure.ac:687: -1-
AC_DEFINE_TRACE_LITERAL([HHAVE_WSPIAPI_H])
m4trace:configure.ac:687: -1- m4_pattern_allow([HHAVE_WSPIAPI_H$])
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m4trace:configure.ac:726: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_POSIX_GETPWNAM_R])
m4trace:configure.ac:726: -1-
m4_pattern_allow([^HAVE_POSIX_GETPWNAM_R$])
m4trace:configure.ac:726: -1- AH_OUTPUT([HAVE_POSIX_GETPWNAM_R], [/*
Have POSIX function getpwnam_r */
@%:@undef HAVE_POSIX_GETPWNAM_R])
m4trace:configure.ac:738: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_NONPOSIX_GETPWNAM_R])
m4trace:configure.ac:738: -1-
m4_pattern_allow([^HAVE_NONPOSIX_GETPWNAM_R$])
m4trace:configure.ac:738: -1- AH_OUTPUT([HAVE_NONPOSIX_GETPWNAM_R],
[/* Have non-POSIX function getpwnam_r */
@%:@undef HAVE_NONPOSIX_GETPWNAM_R])
m4trace:configure.ac:758: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SOCKLEN_T])
m4trace:configure.ac:758: -1- m4_pattern_allow([^HAVE_SOCKLEN_T$])
m4trace:configure.ac:758: -1- AH_OUTPUT([HAVE_SOCKLEN_T], [/* Have
socklen_t type */
@%:@undef HAVE_SOCKLEN_T])
m4trace:configure.ac:763: -1- AH_OUTPUT([HAVE_SYS_UIO_H], [/* Define
to 1 if you have the <sys/uio.h> header file. */
@%:@undef HAVE_SYS_UIO_H])
m4trace:configure.ac:763: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SYS_UIO_H])
m4trace:configure.ac:763: -1- m4_pattern_allow([^HAVE_SYS_UIO_H$])
m4trace:configure.ac:763: -1- AH_OUTPUT([HAVE_WRITEV], [/* Define to 1
if you have the `writev` function. */
@%:@undef HAVE_WRITEV])
m4trace:configure.ac:763: -1- AC_DEFINE_TRACE_LITERAL([HAVE_WRITEV])
m4trace:configure.ac:763: -1- m4_pattern_allow([^HAVE_WRITEV$])
m4trace:configure.ac:766: -1- AH_OUTPUT([HAVE_SYS_SYSLIMITS_H], [/*
Define to 1 if you have the <sys/syslimits.h> header file. */
@%:@undef HAVE_SYS_SYSLIMITS_H])
m4trace:configure.ac:766: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SYS_SYSLIMITS_H])
m4trace:configure.ac:766: -1-
m4_pattern_allow([^HAVE_SYS_SYSLIMITS_H$])
m4trace:configure.ac:769: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_DECL_MSG_NOSIGNAL])
m4trace:configure.ac:769: -1-
m4_pattern_allow([^HAVE_DECL_MSG_NOSIGNAL$])
m4trace:configure.ac:769: -1- AH_OUTPUT([HAVE_DECL_MSG_NOSIGNAL], [/*
Define to 1 if you have the declaration of `MSG_NOSIGNAL`, and to 0
if you
don't. */
@%:@undef HAVE_DECL_MSG_NOSIGNAL])
m4trace:configure.ac:795: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_ISO_VARARGS])
m4trace:configure.ac:795: -1- m4_pattern_allow([^HAVE_ISO_VARARGS$])
m4trace:configure.ac:795: -1- AH_OUTPUT([HAVE_ISO_VARARGS], [/* Have
ISO C99 varargs macros */

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@%:@undef HAVE_ISO_VARARGS])
m4trace:configure.ac:798: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_GNUC_VARARGS])
m4trace:configure.ac:798: -1- m4_pattern_allow([HAVE_GNUC_VARARGS$])
m4trace:configure.ac:798: -1- AH_OUTPUT([HAVE_GNUC_VARARGS], [/* Have
GNU-style varargs macros */
@%:@undef HAVE_GNUC_VARARGS])
m4trace:configure.ac:816: -1- AC_DEFINE_TRACE_LITERAL([HAVE_CMSGCRED])
m4trace:configure.ac:816: -1- m4_pattern_allow([HAVE_CMSGCRED$])
m4trace:configure.ac:816: -1- AH_OUTPUT([HAVE_CMSGCRED], [/* Have
cmsgcred structure */
@%:@undef HAVE_CMSGCRED])
m4trace:configure.ac:819: -1- AH_OUTPUT([HAVE_GETPEERUCRED], [/*
Define to 1 if you have the `getpeerucred` function. */
@%:@undef HAVE_GETPEERUCRED])
m4trace:configure.ac:819: -1- AH_OUTPUT([HAVE_GETPEEREID], [/* Define
to 1 if you have the `getpeereid` function. */
@%:@undef HAVE_GETPEEREID])
m4trace:configure.ac:821: -1- AH_OUTPUT([HAVE_PIPE2], [/* Define to 1
if you have the `pipe2` function. */
@%:@undef HAVE_PIPE2])
m4trace:configure.ac:821: -1- AH_OUTPUT([HAVE_ACCEPT4], [/* Define to
1 if you have the `accept4` function. */
@%:@undef HAVE_ACCEPT4])
m4trace:configure.ac:896: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_ABSTRACT_SOCKETS])
m4trace:configure.ac:896: -1-
m4_pattern_allow([HAVE_ABSTRACT_SOCKETS$])
m4trace:configure.ac:896: -1- AH_OUTPUT([HAVE_ABSTRACT_SOCKETS], [/*
Have abstract socket namespace */
@%:@undef HAVE_ABSTRACT_SOCKETS])
m4trace:configure.ac:903: -1- AC_SUBST([DBUS_PATH_OR_ABSTRACT])
m4trace:configure.ac:903: -1- AC_SUBST_TRACE([DBUS_PATH_OR_ABSTRACT])
m4trace:configure.ac:903: -1-
m4_pattern_allow([DBUS_PATH_OR_ABSTRACT$])
m4trace:configure.ac:905: -1- m4_pattern_forbid([^?PKG_[A-Z_]+$])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
m4trace:configure.ac:905: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:905: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:905: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:905: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:910: -1- AH_OUTPUT([HAVE_EXPAT_H], [/* Define to
1 if you have the <expat.h> header file. */
@%:@undef HAVE_EXPAT_H])
m4trace:configure.ac:910: -1- AC_DEFINE_TRACE_LITERAL([HAVE_EXPAT_H])
m4trace:configure.ac:910: -1- m4_pattern_allow([HAVE_EXPAT_H$])
m4trace:configure.ac:923: -1- AC_SUBST([LIBXML_CFLAGS])
m4trace:configure.ac:923: -1- AC_SUBST_TRACE([LIBXML_CFLAGS])
m4trace:configure.ac:923: -1- m4_pattern_allow([LIBXML_CFLAGS$])
m4trace:configure.ac:923: -1- AC_SUBST([LIBXML_LIBS])

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m4trace:configure.ac:923: -1- AC_SUBST_TRACE([LIBXML_LIBS])
m4trace:configure.ac:923: -1- m4_pattern_allow([^LIBXML_LIBS$])
m4trace:configure.ac:941: -1- AM_CONDITIONAL([DBUS_USE_EXPAT],
[$dbus_use_expat])
m4trace:configure.ac:941: -1- AC_SUBST([DBUS_USE_EXPAT_TRUE])
m4trace:configure.ac:941: -1- AC_SUBST_TRACE([DBUS_USE_EXPAT_TRUE])
m4trace:configure.ac:941: -1-
m4_pattern_allow([^DBUS_USE_EXPAT_TRUE$])
m4trace:configure.ac:941: -1- AC_SUBST([DBUS_USE_EXPAT_FALSE])
m4trace:configure.ac:941: -1- AC_SUBST_TRACE([DBUS_USE_EXPAT_FALSE])
m4trace:configure.ac:941: -1-
m4_pattern_allow([^DBUS_USE_EXPAT_FALSE$])
m4trace:configure.ac:941: -1- _AM_SUBST_NOTMAKE([DBUS_USE_EXPAT_TRUE])
m4trace:configure.ac:941: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_EXPAT_FALSE])
m4trace:configure.ac:942: -1- AM_CONDITIONAL([DBUS_USE_LIBXML],
[$dbus_use_libxml])
m4trace:configure.ac:942: -1- AC_SUBST([DBUS_USE_LIBXML_TRUE])
m4trace:configure.ac:942: -1- AC_SUBST_TRACE([DBUS_USE_LIBXML_TRUE])
m4trace:configure.ac:942: -1-
m4_pattern_allow([^DBUS_USE_LIBXML_TRUE$])
m4trace:configure.ac:942: -1- AC_SUBST([DBUS_USE_LIBXML_FALSE])
m4trace:configure.ac:942: -1- AC_SUBST_TRACE([DBUS_USE_LIBXML_FALSE])
m4trace:configure.ac:942: -1-
m4_pattern_allow([^DBUS_USE_LIBXML_FALSE$])
m4trace:configure.ac:942: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_LIBXML_TRUE])
m4trace:configure.ac:942: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_LIBXML_FALSE])
m4trace:configure.ac:952: -1- AC_SUBST([XML_CFLAGS])
m4trace:configure.ac:952: -1- AC_SUBST_TRACE([XML_CFLAGS])
m4trace:configure.ac:952: -1- m4_pattern_allow([^XML_CFLAGS$])
m4trace:configure.ac:953: -1- AC_SUBST([XML_LIBS])
m4trace:configure.ac:953: -1- AC_SUBST_TRACE([XML_LIBS])
m4trace:configure.ac:953: -1- m4_pattern_allow([^XML_LIBS$])
m4trace:configure.ac:977: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_MONOTONIC_CLOCK])
m4trace:configure.ac:977: -1-
m4_pattern_allow([^HAVE_MONOTONIC_CLOCK$])
m4trace:configure.ac:977: -1- AH_OUTPUT([HAVE_MONOTONIC_CLOCK], [/*
Define if we have CLOCK_MONOTONIC */
@%:@undef HAVE_MONOTONIC_CLOCK])
m4trace:configure.ac:984: -1- AC_SUBST([THREAD_LIBS])
m4trace:configure.ac:984: -1- AC_SUBST_TRACE([THREAD_LIBS])
m4trace:configure.ac:984: -1- m4_pattern_allow([^THREAD_LIBS$])
m4trace:configure.ac:1018: -1- AM_CONDITIONAL([HAVE_SELINUX], [test
x$have_selinux = yes])
m4trace:configure.ac:1018: -1- AC_SUBST([HAVE_SELINUX_TRUE])
m4trace:configure.ac:1018: -1- AC_SUBST_TRACE([HAVE_SELINUX_TRUE])
m4trace:configure.ac:1018: -1- m4_pattern_allow([^HAVE_SELINUX_TRUE$])
m4trace:configure.ac:1018: -1- AC_SUBST([HAVE_SELINUX_FALSE])
m4trace:configure.ac:1018: -1- AC_SUBST_TRACE([HAVE_SELINUX_FALSE])

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m4trace:configure.ac:1018: -1-
m4_pattern_allow([^HAVE_SELINUX_FALSE$])
m4trace:configure.ac:1018: -1- _AM_SUBST_NOTMAKE([HAVE_SELINUX_TRUE])
m4trace:configure.ac:1018: -1- _AM_SUBST_NOTMAKE([HAVE_SELINUX_FALSE])
m4trace:configure.ac:1027: -1- AC_DEFINE_TRACE_LITERAL([HAVE_SELINUX])
m4trace:configure.ac:1027: -1- m4_pattern_allow([^HAVE_SELINUX$])
m4trace:configure.ac:1027: -1- AH_OUTPUT([HAVE_SELINUX], [/* SELinux
support */
@%:@undef HAVE_SELINUX])
m4trace:configure.ac:1036: -1- AH_OUTPUT([HAVE_SYS_INOTIFY_H], [/*
Define to 1 if you have the <sys/inotify.h> header file. */
@%:@undef HAVE_SYS_INOTIFY_H])
m4trace:configure.ac:1036: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SYS_INOTIFY_H])
m4trace:configure.ac:1036: -1-
m4_pattern_allow([^HAVE_SYS_INOTIFY_H$])
m4trace:configure.ac:1041: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUS_ENABLE_INOTIFY])
m4trace:configure.ac:1041: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_INOTIFY$])
m4trace:configure.ac:1041: -1- AH_OUTPUT([DBUS_BUS_ENABLE_INOTIFY],
[/* Use inotify */
@%:@undef DBUS_BUS_ENABLE_INOTIFY])
m4trace:configure.ac:1042: -1- AH_OUTPUT([HAVE_INOTIFY_INIT1], [/*
Define to 1 if you have the `inotify_init1\` function. */
@%:@undef HAVE_INOTIFY_INIT1])
m4trace:configure.ac:1042: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_INOTIFY_INIT1])
m4trace:configure.ac:1042: -1-
m4_pattern_allow([^HAVE_INOTIFY_INIT1$])
m4trace:configure.ac:1045: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_INOTIFY], [test x$have_inotify =
xyes])
m4trace:configure.ac:1045: -1-
AC_SUBST([DBUS_BUS_ENABLE_INOTIFY_TRUE])
m4trace:configure.ac:1045: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_INOTIFY_TRUE])
m4trace:configure.ac:1045: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_INOTIFY_TRUE$])
m4trace:configure.ac:1045: -1-
AC_SUBST([DBUS_BUS_ENABLE_INOTIFY_FALSE])
m4trace:configure.ac:1045: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_INOTIFY_FALSE])
m4trace:configure.ac:1045: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_INOTIFY_FALSE$])
m4trace:configure.ac:1045: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_INOTIFY_TRUE])
m4trace:configure.ac:1045: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_INOTIFY_FALSE])
m4trace:configure.ac:1060: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX])

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m4trace:configure.ac:1060: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX$])
m4trace:configure.ac:1060: -1-
AH_OUTPUT([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX], [/* Use dnotify on Linux
*/
@%:@undef DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX])
m4trace:configure.ac:1063: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX], [test
x$have_dnotify = xyes])
m4trace:configure.ac:1063: -1-
AC_SUBST([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE])
m4trace:configure.ac:1063: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE])
m4trace:configure.ac:1063: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE$])
m4trace:configure.ac:1063: -1-
AC_SUBST([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE])
m4trace:configure.ac:1063: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE])
m4trace:configure.ac:1063: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE$])
m4trace:configure.ac:1063: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE])
m4trace:configure.ac:1063: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE])
m4trace:configure.ac:1091: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_HAVE_LINUX_EPOLL])
m4trace:configure.ac:1091: -1-
m4_pattern_allow([^DBUS_HAVE_LINUX_EPOLL$])
m4trace:configure.ac:1091: -1- AH_OUTPUT([DBUS_HAVE_LINUX_EPOLL], [/*
Define to use epoll(4) on Linux */
@%:@undef DBUS_HAVE_LINUX_EPOLL])
m4trace:configure.ac:1093: -1- AM_CONDITIONAL([HAVE_LINUX_EPOLL],
[test x$have_linux_epoll = xyes])
m4trace:configure.ac:1093: -1- AC_SUBST([HAVE_LINUX_EPOLL_TRUE])
m4trace:configure.ac:1093: -1- AC_SUBST_TRACE([HAVE_LINUX_EPOLL_TRUE])
m4trace:configure.ac:1093: -1-
m4_pattern_allow([^HAVE_LINUX_EPOLL_TRUE$])
m4trace:configure.ac:1093: -1- AC_SUBST([HAVE_LINUX_EPOLL_FALSE])
m4trace:configure.ac:1093: -1-
AC_SUBST_TRACE([HAVE_LINUX_EPOLL_FALSE])
m4trace:configure.ac:1093: -1-
m4_pattern_allow([^HAVE_LINUX_EPOLL_FALSE$])
m4trace:configure.ac:1093: -1-
_AM_SUBST_NOTMAKE([HAVE_LINUX_EPOLL_TRUE])
m4trace:configure.ac:1093: -1-
_AM_SUBST_NOTMAKE([HAVE_LINUX_EPOLL_FALSE])
m4trace:configure.ac:1110: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUS_ENABLE_KQUEUE])
m4trace:configure.ac:1110: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_KQUEUE$])

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m4trace:configure.ac:1110: -1- AH_OUTPUT([DBUS_BUS_ENABLE_KQUEUE], [/*
Use kqueue */
@%:@undef DBUS_BUS_ENABLE_KQUEUE])
m4trace:configure.ac:1113: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_KQUEUE], [test x$have_kqueue = xyes])
m4trace:configure.ac:1113: -1- AC_SUBST([DBUS_BUS_ENABLE_KQUEUE_TRUE])
m4trace:configure.ac:1113: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_KQUEUE_TRUE])
m4trace:configure.ac:1113: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_KQUEUE_TRUE$])
m4trace:configure.ac:1113: -1-
AC_SUBST([DBUS_BUS_ENABLE_KQUEUE_FALSE])
m4trace:configure.ac:1113: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_KQUEUE_FALSE])
m4trace:configure.ac:1113: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_KQUEUE_FALSE$])
m4trace:configure.ac:1113: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_KQUEUE_TRUE])
m4trace:configure.ac:1113: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_KQUEUE_FALSE])
m4trace:configure.ac:1121: -1- AC_SUBST([LAUNCHCTL])
m4trace:configure.ac:1121: -1- AC_SUBST_TRACE([LAUNCHCTL])
m4trace:configure.ac:1121: -1- m4_pattern_allow([^LAUNCHCTL$])
m4trace:configure.ac:1133: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_LAUNCHD])
m4trace:configure.ac:1133: -1-
m4_pattern_allow([^DBUS_ENABLE_LAUNCHD$])
m4trace:configure.ac:1133: -1- AH_OUTPUT([DBUS_ENABLE_LAUNCHD], [/*
Use launchd autolaunch */
@%:@undef DBUS_ENABLE_LAUNCHD])
m4trace:configure.ac:1136: -1- AM_CONDITIONAL([DBUS_ENABLE_LAUNCHD],
[test x$have_launchd = xyes])
m4trace:configure.ac:1136: -1- AC_SUBST([DBUS_ENABLE_LAUNCHD_TRUE])
m4trace:configure.ac:1136: -1-
AC_SUBST_TRACE([DBUS_ENABLE_LAUNCHD_TRUE])
m4trace:configure.ac:1136: -1-
m4_pattern_allow([^DBUS_ENABLE_LAUNCHD_TRUE$])
m4trace:configure.ac:1136: -1- AC_SUBST([DBUS_ENABLE_LAUNCHD_FALSE])
m4trace:configure.ac:1136: -1-
AC_SUBST_TRACE([DBUS_ENABLE_LAUNCHD_FALSE])
m4trace:configure.ac:1136: -1-
m4_pattern_allow([^DBUS_ENABLE_LAUNCHD_FALSE$])
m4trace:configure.ac:1136: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_LAUNCHD_TRUE])
m4trace:configure.ac:1136: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_LAUNCHD_FALSE])
m4trace:configure.ac:1145: -1- AC_SUBST([LAUNCHD_AGENT_DIR])
m4trace:configure.ac:1145: -1- AC_SUBST_TRACE([LAUNCHD_AGENT_DIR])
m4trace:configure.ac:1145: -1- m4_pattern_allow([^LAUNCHD_AGENT_DIR$])
m4trace:configure.ac:1154: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_CONSOLE_OWNER_FILE])
```

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m4trace:configure.ac:1154: -1-
m4_pattern_allow([HAVE_CONSOLE_OWNER_FILE$])
m4trace:configure.ac:1154: -1- AH_OUTPUT([HAVE_CONSOLE_OWNER_FILE],
[/ * Have console owner file */
@%:@undef HAVE_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1161: -1-
AM_CONDITIONAL([HAVE_CONSOLE_OWNER_FILE], [test
x$have_console_owner_file = xyes])
m4trace:configure.ac:1161: -1-
AC_SUBST([HAVE_CONSOLE_OWNER_FILE_TRUE])
m4trace:configure.ac:1161: -1-
AC_SUBST_TRACE([HAVE_CONSOLE_OWNER_FILE_TRUE])
m4trace:configure.ac:1161: -1-
m4_pattern_allow([HAVE_CONSOLE_OWNER_FILE_TRUE$])
m4trace:configure.ac:1161: -1-
AC_SUBST([HAVE_CONSOLE_OWNER_FILE_FALSE])
m4trace:configure.ac:1161: -1-
AC_SUBST_TRACE([HAVE_CONSOLE_OWNER_FILE_FALSE])
m4trace:configure.ac:1161: -1-
m4_pattern_allow([HAVE_CONSOLE_OWNER_FILE_FALSE$])
m4trace:configure.ac:1161: -1-
_AM_SUBST_NOTMAKE([HAVE_CONSOLE_OWNER_FILE_TRUE])
m4trace:configure.ac:1161: -1-
_AM_SUBST_NOTMAKE([HAVE_CONSOLE_OWNER_FILE_FALSE])
m4trace:configure.ac:1167: -1- AC_SUBST([SYSTEMD_CFLAGS])
m4trace:configure.ac:1167: -1- AC_SUBST_TRACE([SYSTEMD_CFLAGS])
m4trace:configure.ac:1167: -1- m4_pattern_allow([SYSTEMD_CFLAGS$])
m4trace:configure.ac:1167: -1- AC_SUBST([SYSTEMD_LIBS])
m4trace:configure.ac:1167: -1- AC_SUBST_TRACE([SYSTEMD_LIBS])
m4trace:configure.ac:1167: -1- m4_pattern_allow([SYSTEMD_LIBS$])
m4trace:configure.ac:1174: -1- AC_DEFINE_TRACE_LITERAL([HAVE_SYSTEMD])
m4trace:configure.ac:1174: -1- m4_pattern_allow([HAVE_SYSTEMD$])
m4trace:configure.ac:1174: -1- AH_OUTPUT([HAVE_SYSTEMD], [/ * Have
systemd */
@%:@undef HAVE_SYSTEMD])
m4trace:configure.ac:1194: -1- AM_CONDITIONAL([HAVE_LIBAUDIT], [test
x$have_libaudit = xyes])
m4trace:configure.ac:1194: -1- AC_SUBST([HAVE_LIBAUDIT_TRUE])
m4trace:configure.ac:1194: -1- AC_SUBST_TRACE([HAVE_LIBAUDIT_TRUE])
m4trace:configure.ac:1194: -1-
m4_pattern_allow([HAVE_LIBAUDIT_TRUE$])
m4trace:configure.ac:1194: -1- AC_SUBST([HAVE_LIBAUDIT_FALSE])
m4trace:configure.ac:1194: -1- AC_SUBST_TRACE([HAVE_LIBAUDIT_FALSE])
m4trace:configure.ac:1194: -1-
m4_pattern_allow([HAVE_LIBAUDIT_FALSE$])
m4trace:configure.ac:1194: -1- _AM_SUBST_NOTMAKE([HAVE_LIBAUDIT_TRUE])
m4trace:configure.ac:1194: -1-
_AM_SUBST_NOTMAKE([HAVE_LIBAUDIT_FALSE])
m4trace:configure.ac:1198: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_LIBAUDIT])
m4trace:configure.ac:1198: -1- m4_pattern_allow([HAVE_LIBAUDIT$])
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m4trace:configure.ac:1198: -1- AH_OUTPUT([HAVE_LIBAUDIT], [/* audit
daemon SELinux support */
@%:@undef HAVE_LIBAUDIT])
m4trace:configure.ac:1201: -1- AC_SUBST([SELINUX_LIBS])
m4trace:configure.ac:1201: -1- AC_SUBST_TRACE([SELINUX_LIBS])
m4trace:configure.ac:1201: -1- m4_pattern_allow([SELINUX_LIBS$])
m4trace:configure.ac:1212: -1- AC_DEFINE_TRACE_LITERAL([HAVE_ADT])
m4trace:configure.ac:1212: -1- m4_pattern_allow([HAVE_ADT$])
m4trace:configure.ac:1212: -1- AH_OUTPUT([HAVE_ADT], [/* Adt audit API
*/
@%:@undef HAVE_ADT])
m4trace:configure.ac:1219: -1- AC_SUBST([ADT_LIBS])
m4trace:configure.ac:1219: -1- AC_SUBST_TRACE([ADT_LIBS])
m4trace:configure.ac:1219: -1- m4_pattern_allow([ADT_LIBS$])
m4trace:configure.ac:1223: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_UNIX_FD_PASSING])
m4trace:configure.ac:1223: -1-
m4_pattern_allow([HAVE_UNIX_FD_PASSING$])
m4trace:configure.ac:1223: -1- AH_OUTPUT([HAVE_UNIX_FD_PASSING], [/*
Supports sending UNIX file descriptors */
@%:@undef HAVE_UNIX_FD_PASSING])
m4trace:configure.ac:1242: -1- AC_SUBST([NETWORK_libs])
m4trace:configure.ac:1242: -1- AC_SUBST_TRACE([NETWORK_libs])
m4trace:configure.ac:1242: -1- m4_pattern_allow([NETWORK_libs$])
m4trace:configure.ac:1251: -1- AC_SUBST([VALGRIND_CFLAGS])
m4trace:configure.ac:1251: -1- AC_SUBST_TRACE([VALGRIND_CFLAGS])
m4trace:configure.ac:1251: -1- m4_pattern_allow([VALGRIND_CFLAGS$])
m4trace:configure.ac:1251: -1- AC_SUBST([VALGRIND_LIBS])
m4trace:configure.ac:1251: -1- AC_SUBST_TRACE([VALGRIND_LIBS])
m4trace:configure.ac:1251: -1- m4_pattern_allow([VALGRIND_LIBS$])
m4trace:configure.ac:1252: -1-
AC_DEFINE_TRACE_LITERAL([WITH_VALGRIND])
m4trace:configure.ac:1252: -1- m4_pattern_allow([WITH_VALGRIND$])
m4trace:configure.ac:1252: -1- AH_OUTPUT([WITH_VALGRIND], [/* Define
to add Valgrind instrumentation */
@%:@undef WITH_VALGRIND])
m4trace:configure.ac:1257: -1- AC_SUBST([LIBDBUS_LIBS])
m4trace:configure.ac:1257: -1- AC_SUBST_TRACE([LIBDBUS_LIBS])
m4trace:configure.ac:1257: -1- m4_pattern_allow([LIBDBUS_LIBS$])
m4trace:configure.ac:1275: -1-
AC_DEFINE_TRACE_LITERAL([X_DISPLAY_MISSING])
m4trace:configure.ac:1275: -1- m4_pattern_allow([X_DISPLAY_MISSING$])
m4trace:configure.ac:1275: -1- AH_OUTPUT([X_DISPLAY_MISSING], [/*
Define to 1 if the X Window System is missing or not being used. */
@%:@undef X_DISPLAY_MISSING])
m4trace:configure.ac:1275: -1- AC_SUBST([X_CFLAGS])
m4trace:configure.ac:1275: -1- AC_SUBST_TRACE([X_CFLAGS])
m4trace:configure.ac:1275: -1- m4_pattern_allow([X_CFLAGS$])
m4trace:configure.ac:1275: -1- AC_SUBST([X_PRE_LIBS])
m4trace:configure.ac:1275: -1- AC_SUBST_TRACE([X_PRE_LIBS])
m4trace:configure.ac:1275: -1- m4_pattern_allow([X_PRE_LIBS$])
m4trace:configure.ac:1275: -1- AC_SUBST([X_LIBS])

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m4trace:configure.ac:1275: -1- AC_SUBST_TRACE([X_LIBS])
m4trace:configure.ac:1275: -1- m4_pattern_allow([X_LIBS$])
m4trace:configure.ac:1275: -1- AC_SUBST([X_EXTRA_LIBS])
m4trace:configure.ac:1275: -1- AC_SUBST_TRACE([X_EXTRA_LIBS])
m4trace:configure.ac:1275: -1- m4_pattern_allow([X_EXTRA_LIBS$])
m4trace:configure.ac:1296: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUILD_X11])
m4trace:configure.ac:1296: -1- m4_pattern_allow([DBUS_BUILD_X11$])
m4trace:configure.ac:1296: -1- AH_OUTPUT([DBUS_BUILD_X11], [/* Define
to build X11 functionality */
@%:@undef DBUS_BUILD_X11])
m4trace:configure.ac:1300: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_X11_AUTOLAUNCH])
m4trace:configure.ac:1300: -1-
m4_pattern_allow([DBUS_ENABLE_X11_AUTOLAUNCH$])
m4trace:configure.ac:1300: -1- AH_OUTPUT([DBUS_ENABLE_X11_AUTOLAUNCH],
[/* Define to enable X11 auto-launch */
@%:@undef DBUS_ENABLE_X11_AUTOLAUNCH])
m4trace:configure.ac:1303: -1- AC_SUBST([DBUS_X_CFLAGS])
m4trace:configure.ac:1303: -1- AC_SUBST_TRACE([DBUS_X_CFLAGS])
m4trace:configure.ac:1303: -1- m4_pattern_allow([DBUS_X_CFLAGS$])
m4trace:configure.ac:1304: -1- AC_SUBST([DBUS_X_LIBS])
m4trace:configure.ac:1304: -1- AC_SUBST_TRACE([DBUS_X_LIBS])
m4trace:configure.ac:1304: -1- m4_pattern_allow([DBUS_X_LIBS$])
m4trace:configure.ac:1312: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
configure.ac:1312: the top level])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_HELP_STRING' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:207:
AC_HELP_STRING is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.

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You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1318: -2- _m4_warn([obsolete], [The macro
`AC_HELP_STRING' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:207:
AC_HELP_STRING is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level])
m4trace:configure.ac:1363: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10231: TP_ADD_COMPILER_FLAG is expanded from...
configure.ac:1363: the top level])
m4trace:configure.ac:1366: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10231: TP_ADD_COMPILER_FLAG is expanded from...
configure.ac:1366: the top level])
m4trace:configure.ac:1369: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10231: TP_ADD_COMPILER_FLAG is expanded from...
configure.ac:1369: the top level])
m4trace:configure.ac:1393: -1- AC_SUBST([DOXYGEN])
m4trace:configure.ac:1393: -1- AC_SUBST_TRACE([DOXYGEN])
m4trace:configure.ac:1393: -1- m4_pattern_allow([DOXYGEN$])
m4trace:configure.ac:1417: -1-
AM_CONDITIONAL([DBUS_DOXYGEN_DOCS_ENABLED], [test
x$enable_doxygen_docs = xyes])
```

```
m4trace:configure.ac:1417: -1-
AC_SUBST([DBUS_DOXYGEN_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1417: -1-
AC_SUBST_TRACE([DBUS_DOXYGEN_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1417: -1-
m4_pattern_allow([DBUS_DOXYGEN_DOCS_ENABLED_TRUE$])
m4trace:configure.ac:1417: -1-
AC_SUBST([DBUS_DOXYGEN_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1417: -1-
AC_SUBST_TRACE([DBUS_DOXYGEN_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1417: -1-
m4_pattern_allow([DBUS_DOXYGEN_DOCS_ENABLED_FALSE$])
m4trace:configure.ac:1417: -1-
_AM_SUBST_NOTMAKE([DBUS_DOXYGEN_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1417: -1-
_AM_SUBST_NOTMAKE([DBUS_DOXYGEN_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1420: -1- AC_SUBST([XSLTPROC])
m4trace:configure.ac:1420: -1- AC_SUBST_TRACE([XSLTPROC])
m4trace:configure.ac:1420: -1- m4_pattern_allow([XSLTPROC$])
m4trace:configure.ac:1421: -1- AM_CONDITIONAL([DBUS_HAVE_XSLTPROC],
[test "x$XSLTPROC" != "x"])
m4trace:configure.ac:1421: -1- AC_SUBST([DBUS_HAVE_XSLTPROC_TRUE])
m4trace:configure.ac:1421: -1-
AC_SUBST_TRACE([DBUS_HAVE_XSLTPROC_TRUE])
m4trace:configure.ac:1421: -1-
m4_pattern_allow([DBUS_HAVE_XSLTPROC_TRUE$])
m4trace:configure.ac:1421: -1- AC_SUBST([DBUS_HAVE_XSLTPROC_FALSE])
m4trace:configure.ac:1421: -1-
AC_SUBST_TRACE([DBUS_HAVE_XSLTPROC_FALSE])
m4trace:configure.ac:1421: -1-
m4_pattern_allow([DBUS_HAVE_XSLTPROC_FALSE$])
m4trace:configure.ac:1421: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_XSLTPROC_TRUE])
m4trace:configure.ac:1421: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_XSLTPROC_FALSE])
m4trace:configure.ac:1425: -1- AC_SUBST([XMLTO])
m4trace:configure.ac:1425: -1- AC_SUBST_TRACE([XMLTO])
m4trace:configure.ac:1425: -1- m4_pattern_allow([XMLTO$])
m4trace:configure.ac:1449: -1- AM_CONDITIONAL([DBUS_XML_DOCS_ENABLED],
[test x$enable_xml_docs = xyes])
m4trace:configure.ac:1449: -1- AC_SUBST([DBUS_XML_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1449: -1-
AC_SUBST_TRACE([DBUS_XML_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1449: -1-
m4_pattern_allow([DBUS_XML_DOCS_ENABLED_TRUE$])
m4trace:configure.ac:1449: -1- AC_SUBST([DBUS_XML_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1449: -1-
AC_SUBST_TRACE([DBUS_XML_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1449: -1-
m4_pattern_allow([DBUS_XML_DOCS_ENABLED_FALSE$])
m4trace:configure.ac:1449: -1-
_AM_SUBST_NOTMAKE([DBUS_XML_DOCS_ENABLED_TRUE])
```

```
m4trace:configure.ac:1449: -1-
_AM_SUBST_NOTMAKE([DBUS_XML_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1452: -1- AC_SUBST([MAN2HTML])
m4trace:configure.ac:1452: -1- AC_SUBST_TRACE([MAN2HTML])
m4trace:configure.ac:1452: -1- m4_pattern_allow([^MAN2HTML$])
m4trace:configure.ac:1453: -1- AC_SUBST([MAN2HTML])
m4trace:configure.ac:1453: -1- AC_SUBST_TRACE([MAN2HTML])
m4trace:configure.ac:1453: -1- m4_pattern_allow([^MAN2HTML$])
m4trace:configure.ac:1454: -1- AM_CONDITIONAL([DBUS_HAVE_MAN2HTML],
[test x$MAN2HTML != x])
m4trace:configure.ac:1454: -1- AC_SUBST([DBUS_HAVE_MAN2HTML_TRUE])
m4trace:configure.ac:1454: -1-
AC_SUBST_TRACE([DBUS_HAVE_MAN2HTML_TRUE])
m4trace:configure.ac:1454: -1-
m4_pattern_allow([^DBUS_HAVE_MAN2HTML_TRUE$])
m4trace:configure.ac:1454: -1- AC_SUBST([DBUS_HAVE_MAN2HTML_FALSE])
m4trace:configure.ac:1454: -1-
AC_SUBST_TRACE([DBUS_HAVE_MAN2HTML_FALSE])
m4trace:configure.ac:1454: -1-
m4_pattern_allow([^DBUS_HAVE_MAN2HTML_FALSE$])
m4trace:configure.ac:1454: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_MAN2HTML_TRUE])
m4trace:configure.ac:1454: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_MAN2HTML_FALSE])
m4trace:configure.ac:1456: -1- AM_CONDITIONAL([DBUS_CAN_UPLOAD_DOCS],
[test x$enable_doxygen_docs = xyes -a x$enable_xml_docs = xyes -a \
x$MAN2HTML != x])
m4trace:configure.ac:1456: -1- AC_SUBST([DBUS_CAN_UPLOAD_DOCS_TRUE])
m4trace:configure.ac:1456: -1-
AC_SUBST_TRACE([DBUS_CAN_UPLOAD_DOCS_TRUE])
m4trace:configure.ac:1456: -1-
m4_pattern_allow([^DBUS_CAN_UPLOAD_DOCS_TRUE$])
m4trace:configure.ac:1456: -1- AC_SUBST([DBUS_CAN_UPLOAD_DOCS_FALSE])
m4trace:configure.ac:1456: -1-
AC_SUBST_TRACE([DBUS_CAN_UPLOAD_DOCS_FALSE])
m4trace:configure.ac:1456: -1-
m4_pattern_allow([^DBUS_CAN_UPLOAD_DOCS_FALSE$])
m4trace:configure.ac:1456: -1-
_AM_SUBST_NOTMAKE([DBUS_CAN_UPLOAD_DOCS_TRUE])
m4trace:configure.ac:1456: -1-
_AM_SUBST_NOTMAKE([DBUS_CAN_UPLOAD_DOCS_FALSE])
m4trace:configure.ac:1465: -1- AC_SUBST([EXPANDED_PREFIX],
["$full_var"])
m4trace:configure.ac:1465: -1- AC_SUBST_TRACE([EXPANDED_PREFIX])
m4trace:configure.ac:1465: -1- m4_pattern_allow([^EXPANDED_PREFIX$])
m4trace:configure.ac:1466: -1- AC_SUBST([EXPANDED_LOCALSTATEDIR],
["$full_var"])
m4trace:configure.ac:1466: -1-
AC_SUBST_TRACE([EXPANDED_LOCALSTATEDIR])
m4trace:configure.ac:1466: -1-
m4_pattern_allow([^EXPANDED_LOCALSTATEDIR$])
```



```
m4trace:configure.ac:1467: -1- AC_SUBST([EXPANDED_SYSCONFDIR],
["$full_var"])
m4trace:configure.ac:1467: -1- AC_SUBST_TRACE([EXPANDED_SYSCONFDIR])
m4trace:configure.ac:1467: -1-
m4_pattern_allow([EXPANDED_SYSCONFDIR$])
m4trace:configure.ac:1468: -1- AC_SUBST([EXPANDED_BINDIR],
["$full_var"])
m4trace:configure.ac:1468: -1- AC_SUBST_TRACE([EXPANDED_BINDIR])
m4trace:configure.ac:1468: -1- m4_pattern_allow([EXPANDED_BINDIR$])
m4trace:configure.ac:1469: -1- AC_SUBST([EXPANDED_LIBDIR],
["$full_var"])
m4trace:configure.ac:1469: -1- AC_SUBST_TRACE([EXPANDED_LIBDIR])
m4trace:configure.ac:1469: -1- m4_pattern_allow([EXPANDED_LIBDIR$])
m4trace:configure.ac:1470: -1- AC_SUBST([EXPANDED_LIBEXECDIR],
["$full_var"])
m4trace:configure.ac:1470: -1- AC_SUBST_TRACE([EXPANDED_LIBEXECDIR])
m4trace:configure.ac:1470: -1-
m4_pattern_allow([EXPANDED_LIBEXECDIR$])
m4trace:configure.ac:1471: -1- AC_SUBST([EXPANDED_DATADIR],
["$full_var"])
m4trace:configure.ac:1471: -1- AC_SUBST_TRACE([EXPANDED_DATADIR])
m4trace:configure.ac:1471: -1- m4_pattern_allow([EXPANDED_DATADIR$])
m4trace:configure.ac:1498: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_RED_HAT], [test x$with_init_scripts
= xredhat])
m4trace:configure.ac:1498: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_RED_HAT_TRUE])
m4trace:configure.ac:1498: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_RED_HAT_TRUE])
m4trace:configure.ac:1498: -1-
m4_pattern_allow([DBUS_INIT_SCRIPTS_RED_HAT_TRUE$])
m4trace:configure.ac:1498: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_RED_HAT_FALSE])
m4trace:configure.ac:1498: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_RED_HAT_FALSE])
m4trace:configure.ac:1498: -1-
m4_pattern_allow([DBUS_INIT_SCRIPTS_RED_HAT_FALSE$])
m4trace:configure.ac:1498: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_RED_HAT_TRUE])
m4trace:configure.ac:1498: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_RED_HAT_FALSE])
m4trace:configure.ac:1499: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_SLACKWARE], [test
x$with_init_scripts = xslackware])
m4trace:configure.ac:1499: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_SLACKWARE_TRUE])
m4trace:configure.ac:1499: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_SLACKWARE_TRUE])
m4trace:configure.ac:1499: -1-
m4_pattern_allow([DBUS_INIT_SCRIPTS_SLACKWARE_TRUE$])
m4trace:configure.ac:1499: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_SLACKWARE_FALSE])
```

```
m4trace:configure.ac:1499: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_SLACKWARE_FALSE])
m4trace:configure.ac:1499: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_SLACKWARE_FALSE$])
m4trace:configure.ac:1499: -1-
  _AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_SLACKWARE_TRUE])
m4trace:configure.ac:1499: -1-
  _AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_SLACKWARE_FALSE])
m4trace:configure.ac:1500: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_CYGWIN], [test x$with_init_scripts =
xcygwin])
m4trace:configure.ac:1500: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_CYGWIN_TRUE])
m4trace:configure.ac:1500: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_CYGWIN_TRUE])
m4trace:configure.ac:1500: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_CYGWIN_TRUE$])
m4trace:configure.ac:1500: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_CYGWIN_FALSE])
m4trace:configure.ac:1500: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_CYGWIN_FALSE])
m4trace:configure.ac:1500: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_CYGWIN_FALSE$])
m4trace:configure.ac:1500: -1-
  _AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_CYGWIN_TRUE])
m4trace:configure.ac:1500: -1-
  _AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_CYGWIN_FALSE])
m4trace:configure.ac:1512: -1- AC_SUBST([systemdsystemunitdir],
[$with_systemdsystemunitdir])
m4trace:configure.ac:1512: -1- AC_SUBST_TRACE([systemdsystemunitdir])
m4trace:configure.ac:1512: -1-
m4_pattern_allow([^systemdsystemunitdir$])
m4trace:configure.ac:1514: -1- AM_CONDITIONAL([HAVE_SYSTEMD], [test -n
"$with_systemdsystemunitdir" -a "x$with_systemdsystemunitdir" != xno
])
m4trace:configure.ac:1514: -1- AC_SUBST([HAVE_SYSTEMD_TRUE])
m4trace:configure.ac:1514: -1- AC_SUBST_TRACE([HAVE_SYSTEMD_TRUE])
m4trace:configure.ac:1514: -1- m4_pattern_allow([^HAVE_SYSTEMD_TRUE$])
m4trace:configure.ac:1514: -1- AC_SUBST([HAVE_SYSTEMD_FALSE])
m4trace:configure.ac:1514: -1- AC_SUBST_TRACE([HAVE_SYSTEMD_FALSE])
m4trace:configure.ac:1514: -1-
m4_pattern_allow([^HAVE_SYSTEMD_FALSE$])
m4trace:configure.ac:1514: -1-  _AM_SUBST_NOTMAKE([HAVE_SYSTEMD_TRUE])
m4trace:configure.ac:1514: -1-  _AM_SUBST_NOTMAKE([HAVE_SYSTEMD_FALSE])
m4trace:configure.ac:1523: -1- AC_SUBST([DBUS_SYSTEM_SOCKET])
m4trace:configure.ac:1523: -1- AC_SUBST_TRACE([DBUS_SYSTEM_SOCKET])
m4trace:configure.ac:1523: -1-
m4_pattern_allow([^DBUS_SYSTEM_SOCKET$])
m4trace:configure.ac:1524: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_SYSTEM_SOCKET])
m4trace:configure.ac:1524: -1-
m4_pattern_allow([^DBUS_SYSTEM_SOCKET$])
```

```
m4trace:configure.ac:1524: -1- AH_OUTPUT([DBUS_SYSTEM_SOCKET], [/* The
name of the socket the system bus listens on by default */
@%:@undef DBUS_SYSTEM_SOCKET])
m4trace:configure.ac:1529: -1-
AC_SUBST([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1529: -1-
AC_SUBST_TRACE([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1529: -1-
m4_pattern_allow([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1530: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1530: -1-
m4_pattern_allow([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1530: -1-
AH_OUTPUT([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS], [/* The default D-Bus
address of the system bus */
@%:@undef DBUS_SYSTEM_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1541: -1- AC_SUBST([DBUS_SYSTEM_PID_FILE])
m4trace:configure.ac:1541: -1- AC_SUBST_TRACE([DBUS_SYSTEM_PID_FILE])
m4trace:configure.ac:1541: -1-
m4_pattern_allow([DBUS_SYSTEM_PID_FILE$])
m4trace:configure.ac:1550: -1- AC_SUBST([DBUS_CONSOLE_AUTH_DIR])
m4trace:configure.ac:1550: -1- AC_SUBST_TRACE([DBUS_CONSOLE_AUTH_DIR])
m4trace:configure.ac:1550: -1-
m4_pattern_allow([DBUS_CONSOLE_AUTH_DIR$])
m4trace:configure.ac:1551: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_CONSOLE_AUTH_DIR])
m4trace:configure.ac:1551: -1-
m4_pattern_allow([DBUS_CONSOLE_AUTH_DIR$])
m4trace:configure.ac:1551: -1- AH_OUTPUT([DBUS_CONSOLE_AUTH_DIR], [/*
Directory to check for console ownership */
@%:@undef DBUS_CONSOLE_AUTH_DIR])
m4trace:configure.ac:1564: -1- AC_SUBST([DBUS_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1564: -1-
AC_SUBST_TRACE([DBUS_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1564: -1-
m4_pattern_allow([DBUS_CONSOLE_OWNER_FILE$])
m4trace:configure.ac:1565: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1565: -1-
m4_pattern_allow([DBUS_CONSOLE_OWNER_FILE$])
m4trace:configure.ac:1565: -1- AH_OUTPUT([DBUS_CONSOLE_OWNER_FILE],
[/* File to check for console ownership */
@%:@undef DBUS_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1573: -1- AC_SUBST([DBUS_USER])
m4trace:configure.ac:1573: -1- AC_SUBST_TRACE([DBUS_USER])
m4trace:configure.ac:1573: -1- m4_pattern_allow([DBUS_USER$])
m4trace:configure.ac:1574: -1- AC_DEFINE_TRACE_LITERAL([DBUS_USER])
m4trace:configure.ac:1574: -1- m4_pattern_allow([DBUS_USER$])
m4trace:configure.ac:1574: -1- AH_OUTPUT([DBUS_USER], [/* User for
running the system BUS daemon */
@%:@undef DBUS_USER])
```

```
m4trace:configure.ac:1578: -1- AC_SUBST([DBUS_PREFIX])
m4trace:configure.ac:1578: -1- AC_SUBST_TRACE([DBUS_PREFIX])
m4trace:configure.ac:1578: -1- m4_pattern_allow([^DBUS_PREFIX$])
m4trace:configure.ac:1579: -1- AC_DEFINE_TRACE_LITERAL([DBUS_PREFIX])
m4trace:configure.ac:1579: -1- m4_pattern_allow([^DBUS_PREFIX$])
m4trace:configure.ac:1579: -1- AH_OUTPUT([DBUS_PREFIX], [/* Prefix for
installing DBUS */
@%:@undef DBUS_PREFIX])
m4trace:configure.ac:1583: -1- AC_SUBST([DBUS_DATADIR])
m4trace:configure.ac:1583: -1- AC_SUBST_TRACE([DBUS_DATADIR])
m4trace:configure.ac:1583: -1- m4_pattern_allow([^DBUS_DATADIR$])
m4trace:configure.ac:1584: -1- AC_DEFINE_TRACE_LITERAL([DBUS_DATADIR])
m4trace:configure.ac:1584: -1- m4_pattern_allow([^DBUS_DATADIR$])
m4trace:configure.ac:1584: -1- AH_OUTPUT([DBUS_DATADIR], [/* Directory
for installing DBUS data files */
@%:@undef DBUS_DATADIR])
m4trace:configure.ac:1592: -1- AC_SUBST([DBUS_DAEMONDIR])
m4trace:configure.ac:1592: -1- AC_SUBST_TRACE([DBUS_DAEMONDIR])
m4trace:configure.ac:1592: -1- m4_pattern_allow([^DBUS_DAEMONDIR$])
m4trace:configure.ac:1593: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DAEMONDIR])
m4trace:configure.ac:1593: -1- m4_pattern_allow([^DBUS_DAEMONDIR$])
m4trace:configure.ac:1593: -1- AH_OUTPUT([DBUS_DAEMONDIR], [/*
Directory for installing the DBUS daemon */
@%:@undef DBUS_DAEMONDIR])
m4trace:configure.ac:1597: -1- AC_SUBST([DBUS_BINDIR])
m4trace:configure.ac:1597: -1- AC_SUBST_TRACE([DBUS_BINDIR])
m4trace:configure.ac:1597: -1- m4_pattern_allow([^DBUS_BINDIR$])
m4trace:configure.ac:1598: -1- AC_DEFINE_TRACE_LITERAL([DBUS_BINDIR])
m4trace:configure.ac:1598: -1- m4_pattern_allow([^DBUS_BINDIR$])
m4trace:configure.ac:1598: -1- AH_OUTPUT([DBUS_BINDIR], [/* Directory
for installing the binaries */
@%:@undef DBUS_BINDIR])
m4trace:configure.ac:1602: -1- AC_SUBST([DBUS_LIBEXECDIR])
m4trace:configure.ac:1602: -1- AC_SUBST_TRACE([DBUS_LIBEXECDIR])
m4trace:configure.ac:1602: -1- m4_pattern_allow([^DBUS_LIBEXECDIR$])
m4trace:configure.ac:1603: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_LIBEXECDIR])
m4trace:configure.ac:1603: -1- m4_pattern_allow([^DBUS_LIBEXECDIR$])
m4trace:configure.ac:1603: -1- AH_OUTPUT([DBUS_LIBEXECDIR], [/*
Directory for installing the libexec binaries */
@%:@undef DBUS_LIBEXECDIR])
m4trace:configure.ac:1615: -1- AC_SUBST([DBUS_TEST_DATA])
m4trace:configure.ac:1615: -1- AC_SUBST_TRACE([DBUS_TEST_DATA])
m4trace:configure.ac:1615: -1- m4_pattern_allow([^DBUS_TEST_DATA$])
m4trace:configure.ac:1616: -1- AC_SUBST([DBUS_TEST_EXEC])
m4trace:configure.ac:1616: -1- AC_SUBST_TRACE([DBUS_TEST_EXEC])
m4trace:configure.ac:1616: -1- m4_pattern_allow([^DBUS_TEST_EXEC$])
m4trace:configure.ac:1618: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_TEST_EXEC])
m4trace:configure.ac:1618: -1- m4_pattern_allow([^DBUS_TEST_EXEC$])
```

```
m4trace:configure.ac:1618: -1- AH_OUTPUT([DBUS_TEST_EXEC], [/* Full
path to the daemon in the builddir */
@%:@undef DBUS_TEST_EXEC])
m4trace:configure.ac:1620: -1- AC_DEFINE_TRACE_LITERAL([DBUS_EXEEXT])
m4trace:configure.ac:1620: -1- m4_pattern_allow([DBUS_EXEEXT$])
m4trace:configure.ac:1620: -1- AH_OUTPUT([DBUS_EXEEXT], [/* Extension
for executables, typically empty or .exe */
@%:@undef DBUS_EXEEXT])
m4trace:configure.ac:1623: -1-
AC_DEFINE_TRACE_LITERAL([TEST_BUS_BINARY])
m4trace:configure.ac:1623: -1- m4_pattern_allow([TEST_BUS_BINARY$])
m4trace:configure.ac:1623: -1- AH_OUTPUT([TEST_BUS_BINARY], [/* Full
path to the daemon in the builddir */
@%:@undef TEST_BUS_BINARY])
m4trace:configure.ac:1625: -1- AC_SUBST([TEST_BUS_BINARY])
m4trace:configure.ac:1625: -1- AC_SUBST_TRACE([TEST_BUS_BINARY])
m4trace:configure.ac:1625: -1- m4_pattern_allow([TEST_BUS_BINARY$])
m4trace:configure.ac:1629: -1- AC_SUBST([TEST_LAUNCH_HELPER_BINARY])
m4trace:configure.ac:1629: -1-
AC_SUBST_TRACE([TEST_LAUNCH_HELPER_BINARY])
m4trace:configure.ac:1629: -1-
m4_pattern_allow([TEST_LAUNCH_HELPER_BINARY$])
m4trace:configure.ac:1630: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_TEST_LAUNCH_HELPER_BINARY])
m4trace:configure.ac:1630: -1-
m4_pattern_allow([DBUS_TEST_LAUNCH_HELPER_BINARY$])
m4trace:configure.ac:1630: -1-
AH_OUTPUT([DBUS_TEST_LAUNCH_HELPER_BINARY], [/* Full path to the
launch helper test program in the builddir */
@%:@undef DBUS_TEST_LAUNCH_HELPER_BINARY])
m4trace:configure.ac:1642: -1- AC_SUBST([TEST_SOCKET_DIR])
m4trace:configure.ac:1642: -1- AC_SUBST_TRACE([TEST_SOCKET_DIR])
m4trace:configure.ac:1642: -1- m4_pattern_allow([TEST_SOCKET_DIR$])
m4trace:configure.ac:1643: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_TEST_SOCKET_DIR])
m4trace:configure.ac:1643: -1-
m4_pattern_allow([DBUS_TEST_SOCKET_DIR$])
m4trace:configure.ac:1643: -1- AH_OUTPUT([DBUS_TEST_SOCKET_DIR], [/*
Where to put test sockets */
@%:@undef DBUS_TEST_SOCKET_DIR])
m4trace:configure.ac:1650: -1- AC_SUBST([TEST_LISTEN])
m4trace:configure.ac:1650: -1- AC_SUBST_TRACE([TEST_LISTEN])
m4trace:configure.ac:1650: -1- m4_pattern_allow([TEST_LISTEN$])
m4trace:configure.ac:1651: -1- AC_DEFINE_TRACE_LITERAL([TEST_LISTEN])
m4trace:configure.ac:1651: -1- m4_pattern_allow([TEST_LISTEN$])
m4trace:configure.ac:1651: -1- AH_OUTPUT([TEST_LISTEN], [/* Listening
address for regression tests */
@%:@undef TEST_LISTEN])
m4trace:configure.ac:1659: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_SESSION_SOCKET_DIR])
m4trace:configure.ac:1659: -1-
m4_pattern_allow([DBUS_SESSION_SOCKET_DIR$])
```

```

m4trace:configure.ac:1659: -1- AH_OUTPUT([DBUS_SESSION_SOCKET_DIR],
[/* Where per-session bus puts its sockets */
@%:@undef DBUS_SESSION_SOCKET_DIR])
m4trace:configure.ac:1660: -1- AC_SUBST([DBUS_SESSION_SOCKET_DIR])
m4trace:configure.ac:1660: -1-
AC_SUBST_TRACE([DBUS_SESSION_SOCKET_DIR])
m4trace:configure.ac:1660: -1-
m4_pattern_allow([^DBUS_SESSION_SOCKET_DIR$])
m4trace:configure.ac:1669: -1-
AC_SUBST([DBUS_SESSION_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1669: -1-
AC_SUBST_TRACE([DBUS_SESSION_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1669: -1-
m4_pattern_allow([^DBUS_SESSION_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1672: -1- AH_OUTPUT([HAVE_CRT_EXTERNS_H], [/*
Define to 1 if you have the <crt_externs.h> header file. */
@%:@undef HAVE_CRT_EXTERNS_H])
m4trace:configure.ac:1672: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_CRT_EXTERNS_H])
m4trace:configure.ac:1672: -1-
m4_pattern_allow([^HAVE_CRT_EXTERNS_H$])
m4trace:configure.ac:1673: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_NSGETENVIRON])
m4trace:configure.ac:1673: -1- m4_pattern_allow([^HAVE_NSGETENVIRON$])
m4trace:configure.ac:1673: -1- AH_OUTPUT([HAVE_NSGETENVIRON], [/*
Define if your system needs _NSGetEnviron to set up the environment */
@%:@undef HAVE_NSGETENVIRON])
m4trace:configure.ac:1674: -1- AH_OUTPUT([_DARWIN_ENVIRON], [
#if defined(HAVE_NSGETENVIRON) && defined(HAVE_CRT_EXTERNS_H)
# include <sys/time.h>
# include <crt_externs.h>
# define environ (*_NSGetEnviron())
#endif
])
m4trace:configure.ac:1688: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_STATS])
m4trace:configure.ac:1688: -1- m4_pattern_allow([^DBUS_ENABLE_STATS$])
m4trace:configure.ac:1688: -1- AH_OUTPUT([DBUS_ENABLE_STATS], [/*
Define to enable bus daemon usage statistics */
@%:@undef DBUS_ENABLE_STATS])
m4trace:configure.ac:1692: -1- AC_CONFIG_FILES([
Doxyfile
dbus/versioninfo.rc
dbus/dbus-arch-deps.h
bus/system.conf
bus/session.conf
bus/messagebus
bus/messagebus-config
bus/org.freedesktop.dbus-session.plist
bus/rc.messagebus
bus/dbus.service
bus/dbus.socket

```

```
Makefile
dbus/Makefile
bus/Makefile
tools/Makefile
test/Makefile
test/name-test/Makefile
doc/Makefile
doc/dbus-daemon.1
dbus-1.pc
dbus-1-uninstalled.pc
test/data/valid-config-files/debug-allow-all.conf
test/data/valid-config-files/debug-allow-all-sha1.conf
test/data/valid-config-files-system/debug-allow-all-pass.conf
test/data/valid-config-files-system/debug-allow-all-fail.conf
test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service
])
m4trace:configure.ac:1732: -1- AC_SUBST([LIB@&t@OBS], [$ac_libobjs])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([LIB@&t@OBS])
m4trace:configure.ac:1732: -1- m4_pattern_allow([LIB@&t@OBS])
m4trace:configure.ac:1732: -1- AC_SUBST([LTLIBOBS], [$ac_ltlibobjs])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([LTLIBOBS])
m4trace:configure.ac:1732: -1- m4_pattern_allow([LTLIBOBS])
m4trace:configure.ac:1732: -1- AM_CONDITIONAL([am__EXEEXT], [test -n
"$EXEEXT"])
m4trace:configure.ac:1732: -1- AC_SUBST([am__EXEEXT_TRUE])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([am__EXEEXT_TRUE])
m4trace:configure.ac:1732: -1- m4_pattern_allow([am__EXEEXT_TRUE])
```

```
m4trace:configure.ac:1732: -1- AC_SUBST([am_EXEEXT_FALSE])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([am_EXEEXT_FALSE])
m4trace:configure.ac:1732: -1- m4_pattern_allow([^am_EXEEXT_FALSE$])
m4trace:configure.ac:1732: -1- _AM_SUBST_NOTMAKE([am_EXEEXT_TRUE])
m4trace:configure.ac:1732: -1- _AM_SUBST_NOTMAKE([am_EXEEXT_FALSE])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([top_buildddir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([top_build_prefix])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([srcdir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([abs_srcdir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([top_srcdir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([abs_top_srcdir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([builddir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([abs_builddir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([abs_top_builddir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([INSTALL])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([MKDIR_P])
m4trace:configure.ac:1732: -1- AC_REQUIRE_AUX_FILE([ltmain.sh])
```

File = traces.2

```
m4trace:configure.ac:4: -1- AC_INIT([dbus-glib], [0.100.2],
[https://bugs.freedesktop.org/enter_bug.cgi?product=dbus&component=GLi
b])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^?A[CHUM]_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([_AC_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^LIBOBJ$], [do not use
LIBOBJ directly, use AC_LIBOBJ (see section `AC_LIBOBJ vs LIBOBJ')]
m4trace:configure.ac:4: -1- m4_pattern_allow([^AS_FLAGS$])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^?m4_])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^dn1$])
m4trace:configure.ac:4: -1- m4_pattern_forbid([^?AS_])
m4trace:configure.ac:4: -1- AC_SUBST([SHELL])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([SHELL])
m4trace:configure.ac:4: -1- m4_pattern_allow([^SHELL$])
m4trace:configure.ac:4: -1- AC_SUBST([PATH_SEPARATOR])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PATH_SEPARATOR])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PATH_SEPARATOR$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_NAME],
[m4_ifdef([AC_PACKAGE_NAME], ['AC_PACKAGE_NAME'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_NAME])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_TARNAME],
[m4_ifdef([AC_PACKAGE_TARNAME], ['AC_PACKAGE_TARNAME'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_TARNAME])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_VERSION],
[m4_ifdef([AC_PACKAGE_VERSION], ['AC_PACKAGE_VERSION'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_VERSION])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_VERSION$])
```



```
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_STRING],
[m4_ifdef([AC_PACKAGE_STRING],      ['AC_PACKAGE_STRING'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_STRING])
m4trace:configure.ac:4: -1- m4_pattern_allow([PACKAGE_STRING$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_BUGREPORT],
[m4_ifdef([AC_PACKAGE_BUGREPORT],  ['AC_PACKAGE_BUGREPORT'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_BUGREPORT])
m4trace:configure.ac:4: -1- m4_pattern_allow([PACKAGE_BUGREPORT$])
m4trace:configure.ac:4: -1- AC_SUBST([PACKAGE_URL],
[m4_ifdef([AC_PACKAGE_URL],        ['AC_PACKAGE_URL'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([PACKAGE_URL])
m4trace:configure.ac:4: -1- m4_pattern_allow([PACKAGE_URL$])
m4trace:configure.ac:4: -1- AC_SUBST([exec_prefix], [NONE])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([exec_prefix])
m4trace:configure.ac:4: -1- m4_pattern_allow([exec_prefix$])
m4trace:configure.ac:4: -1- AC_SUBST([prefix], [NONE])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([prefix])
m4trace:configure.ac:4: -1- m4_pattern_allow([prefix$])
m4trace:configure.ac:4: -1- AC_SUBST([program_transform_name],
[s,x,x,])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([program_transform_name])
m4trace:configure.ac:4: -1-
m4_pattern_allow([program_transform_name$])
m4trace:configure.ac:4: -1- AC_SUBST([bindir], ['${exec_prefix}/bin'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([bindir])
m4trace:configure.ac:4: -1- m4_pattern_allow([bindir$])
m4trace:configure.ac:4: -1- AC_SUBST([sbindir],
['${exec_prefix}/sbin'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([sbindir])
m4trace:configure.ac:4: -1- m4_pattern_allow([sbindir$])
m4trace:configure.ac:4: -1- AC_SUBST([libexecdir],
['${exec_prefix}/libexec'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([libexecdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([libexecdir$])
m4trace:configure.ac:4: -1- AC_SUBST([datarootdir],
['${prefix}/share'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([datarootdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([datarootdir$])
m4trace:configure.ac:4: -1- AC_SUBST([datadir], ['${datarootdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([datadir])
m4trace:configure.ac:4: -1- m4_pattern_allow([datadir$])
m4trace:configure.ac:4: -1- AC_SUBST([sysconfdir], ['${prefix}/etc'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([sysconfdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([sysconfdir$])
m4trace:configure.ac:4: -1- AC_SUBST([sharedstatedir],
['${prefix}/com'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([sharedstatedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([sharedstatedir$])
m4trace:configure.ac:4: -1- AC_SUBST([localstatedir],
['${prefix}/var'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([localstatedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([localstatedir$])
```

```

m4trace:configure.ac:4: -1- AC_SUBST([includedir],
['${prefix}/include'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([includedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^includedir$])
m4trace:configure.ac:4: -1- AC_SUBST([oldincludedir],
['/usr/include'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([oldincludedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^oldincludedir$])
m4trace:configure.ac:4: -1- AC_SUBST([docdir],
[m4_ifset([AC_PACKAGE_TARNAME],
          ['${datarootdir}/doc/${PACKAGE_TARNAME}'],
          ['${datarootdir}/doc/${PACKAGE}'])])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([docdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^docdir$])
m4trace:configure.ac:4: -1- AC_SUBST([infodir],
['${datarootdir}/info'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([infodir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^infodir$])
m4trace:configure.ac:4: -1- AC_SUBST([htmldir], ['${docdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([htmldir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^htmldir$])
m4trace:configure.ac:4: -1- AC_SUBST([dvidir], ['${docdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([dvidir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^dvidir$])
m4trace:configure.ac:4: -1- AC_SUBST([pdfdir], ['${docdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([pdfdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^pdfdir$])
m4trace:configure.ac:4: -1- AC_SUBST([psdir], ['${docdir}'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([psdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^psdir$])
m4trace:configure.ac:4: -1- AC_SUBST([libdir], ['${exec_prefix}/lib'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([libdir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^libdir$])
m4trace:configure.ac:4: -1- AC_SUBST([localedir],
['${datarootdir}/locale'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([localedir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^localedir$])
m4trace:configure.ac:4: -1- AC_SUBST([mandir], ['${datarootdir}/man'])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([mandir])
m4trace:configure.ac:4: -1- m4_pattern_allow([^mandir$])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_NAME])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_NAME], [/* Define to
the full name of this package. */
@%:@undef PACKAGE_NAME])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_TARNAME])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_TARNAME], [/* Define to
the one symbol short name of this package. */
@%:@undef PACKAGE_TARNAME])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_VERSION])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_VERSION$])

```

```

m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_VERSION], [/* Define to
the version of this package. */
@%:@undef PACKAGE_VERSION])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_STRING])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_STRING$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_STRING], [/* Define to
the full name and version of this package. */
@%:@undef PACKAGE_STRING])
m4trace:configure.ac:4: -1-
AC_DEFINE_TRACE_LITERAL([PACKAGE_BUGREPORT])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_BUGREPORT$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_BUGREPORT], [/* Define
to the address where bug reports for this package should be sent. */
@%:@undef PACKAGE_BUGREPORT])
m4trace:configure.ac:4: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_URL])
m4trace:configure.ac:4: -1- m4_pattern_allow([^PACKAGE_URL$])
m4trace:configure.ac:4: -1- AH_OUTPUT([PACKAGE_URL], [/* Define to the
home page for this package. */
@%:@undef PACKAGE_URL])
m4trace:configure.ac:4: -1- AC_SUBST([DEFS])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([DEFS])
m4trace:configure.ac:4: -1- m4_pattern_allow([^DEFS$])
m4trace:configure.ac:4: -1- AC_SUBST([ECHO_C])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([ECHO_C])
m4trace:configure.ac:4: -1- m4_pattern_allow([^ECHO_C$])
m4trace:configure.ac:4: -1- AC_SUBST([ECHO_N])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([ECHO_N])
m4trace:configure.ac:4: -1- m4_pattern_allow([^ECHO_N$])
m4trace:configure.ac:4: -1- AC_SUBST([ECHO_T])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([ECHO_T])
m4trace:configure.ac:4: -1- m4_pattern_allow([^ECHO_T$])
m4trace:configure.ac:4: -1- AC_SUBST([LIBS])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:4: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:4: -1- AC_SUBST([build_alias])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([build_alias])
m4trace:configure.ac:4: -1- m4_pattern_allow([^build_alias$])
m4trace:configure.ac:4: -1- AC_SUBST([host_alias])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([host_alias])
m4trace:configure.ac:4: -1- m4_pattern_allow([^host_alias$])
m4trace:configure.ac:4: -1- AC_SUBST([target_alias])
m4trace:configure.ac:4: -1- AC_SUBST_TRACE([target_alias])
m4trace:configure.ac:4: -1- m4_pattern_allow([^target_alias$])
m4trace:configure.ac:7: -1- AC_CANONICAL_HOST
m4trace:configure.ac:7: -1- AC_CANONICAL_BUILD
m4trace:configure.ac:7: -1- AC_REQUIRE_AUX_FILE([config.sub])
m4trace:configure.ac:7: -1- AC_REQUIRE_AUX_FILE([config.guess])
m4trace:configure.ac:7: -1- AC_SUBST([build], [$ac_cv_build])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([build])
m4trace:configure.ac:7: -1- m4_pattern_allow([^build$])
m4trace:configure.ac:7: -1- AC_SUBST([build_cpu], [${1}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([build_cpu])

```

```

m4trace:configure.ac:7: -1- m4_pattern_allow([build_cpu$])
m4trace:configure.ac:7: -1- AC_SUBST([build_vendor], [${2}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([build_vendor])
m4trace:configure.ac:7: -1- m4_pattern_allow([build_vendor$])
m4trace:configure.ac:7: -1- AC_SUBST([build_os])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([build_os])
m4trace:configure.ac:7: -1- m4_pattern_allow([build_os$])
m4trace:configure.ac:7: -1- AC_SUBST([host], [${ac_cv_host}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([host])
m4trace:configure.ac:7: -1- m4_pattern_allow([host$])
m4trace:configure.ac:7: -1- AC_SUBST([host_cpu], [${1}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([host_cpu])
m4trace:configure.ac:7: -1- m4_pattern_allow([host_cpu$])
m4trace:configure.ac:7: -1- AC_SUBST([host_vendor], [${2}])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([host_vendor])
m4trace:configure.ac:7: -1- m4_pattern_allow([host_vendor$])
m4trace:configure.ac:7: -1- AC_SUBST([host_os])
m4trace:configure.ac:7: -1- AC_SUBST_TRACE([host_os])
m4trace:configure.ac:7: -1- m4_pattern_allow([host_os$])
m4trace:configure.ac:9: -1- AM_INIT_AUTOMAKE([1.9])
m4trace:configure.ac:9: -1- m4_pattern_allow([AM_[A-Z]+FLAGS$])
m4trace:configure.ac:9: -1- AM_AUTOMAKE_VERSION([1.12.6])
m4trace:configure.ac:9: -1- AC_REQUIRE_AUX_FILE([install-sh])
m4trace:configure.ac:9: -1- AC_SUBST([INSTALL_PROGRAM])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([INSTALL_PROGRAM])
m4trace:configure.ac:9: -1- m4_pattern_allow([INSTALL_PROGRAM$])
m4trace:configure.ac:9: -1- AC_SUBST([INSTALL_SCRIPT])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([INSTALL_SCRIPT])
m4trace:configure.ac:9: -1- m4_pattern_allow([INSTALL_SCRIPT$])
m4trace:configure.ac:9: -1- AC_SUBST([INSTALL_DATA])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([INSTALL_DATA])
m4trace:configure.ac:9: -1- m4_pattern_allow([INSTALL_DATA$])
m4trace:configure.ac:9: -1- AC_SUBST([am_isrc], [' -I${srcdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([am_isrc])
m4trace:configure.ac:9: -1- m4_pattern_allow([am_isrc$])
m4trace:configure.ac:9: -1- _AM_SUBST_NOTMAKE([am_isrc])
m4trace:configure.ac:9: -1- AC_SUBST([CYGPATH_W])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([CYGPATH_W])
m4trace:configure.ac:9: -1- m4_pattern_allow([CYGPATH_W$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE],
['AC_PACKAGE_TARNAME'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE$])
m4trace:configure.ac:9: -1- AC_SUBST([VERSION],
['AC_PACKAGE_VERSION'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([VERSION])
m4trace:configure.ac:9: -1- m4_pattern_allow([VERSION$])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE], [/* Name of package
*/
@%:@undef PACKAGE])

```

```
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([VERSION])
m4trace:configure.ac:9: -1- m4_pattern_allow([VERSION$])
m4trace:configure.ac:9: -1- AH_OUTPUT([VERSION], [/* Version number of
package */
@%:@undef VERSION])
m4trace:configure.ac:9: -1- AC_REQUIRE_AUX_FILE([missing])
m4trace:configure.ac:9: -1- AC_SUBST([ACLOCAL])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([ACLOCAL])
m4trace:configure.ac:9: -1- m4_pattern_allow([ACLOCAL$])
m4trace:configure.ac:9: -1- AC_SUBST([AUTOCONF])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AUTOCONF])
m4trace:configure.ac:9: -1- m4_pattern_allow([AUTOCONF$])
m4trace:configure.ac:9: -1- AC_SUBST([AUTOMAKE])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AUTOMAKE])
m4trace:configure.ac:9: -1- m4_pattern_allow([AUTOMAKE$])
m4trace:configure.ac:9: -1- AC_SUBST([AUTOHEADER])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AUTOHEADER])
m4trace:configure.ac:9: -1- m4_pattern_allow([AUTOHEADER$])
m4trace:configure.ac:9: -1- AC_SUBST([MAKEINFO])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([MAKEINFO])
m4trace:configure.ac:9: -1- m4_pattern_allow([MAKEINFO$])
m4trace:configure.ac:9: -1- AC_SUBST([install_sh])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([install_sh])
m4trace:configure.ac:9: -1- m4_pattern_allow([install_sh$])
m4trace:configure.ac:9: -1- AC_SUBST([STRIP])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([STRIP])
m4trace:configure.ac:9: -1- m4_pattern_allow([STRIP$])
m4trace:configure.ac:9: -1- AC_SUBST([INSTALL_STRIP_PROGRAM])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([INSTALL_STRIP_PROGRAM])
m4trace:configure.ac:9: -1-
m4trace:configure.ac:9: -1- m4_pattern_allow([INSTALL_STRIP_PROGRAM$])
m4trace:configure.ac:9: -1- AC_REQUIRE_AUX_FILE([install-sh])
m4trace:configure.ac:9: -1- AC_SUBST([MKDIR_P])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([MKDIR_P])
m4trace:configure.ac:9: -1- m4_pattern_allow([MKDIR_P$])
m4trace:configure.ac:9: -1- AC_SUBST([mkdir_p], ['$(MKDIR_P)'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([mkdir_p])
m4trace:configure.ac:9: -1- m4_pattern_allow([mkdir_p$])
m4trace:configure.ac:9: -1- AC_SUBST([AWK])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AWK])
m4trace:configure.ac:9: -1- m4_pattern_allow([AWK$])
m4trace:configure.ac:9: -1- AC_SUBST([SET_MAKE])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([SET_MAKE])
m4trace:configure.ac:9: -1- m4_pattern_allow([SET_MAKE$])
m4trace:configure.ac:9: -1- AC_SUBST([am__leading_dot])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([am__leading_dot])
m4trace:configure.ac:9: -1- m4_pattern_allow([am__leading_dot$])
m4trace:configure.ac:9: -1- AC_SUBST([AMTAR], ['${TAR-tar}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([AMTAR])
m4trace:configure.ac:9: -1- m4_pattern_allow([AMTAR$])
m4trace:configure.ac:9: -1- AC_SUBST([am__tar])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([am__tar])
```

```
m4trace:configure.ac:9: -1- m4_pattern_allow([^am__tar$])
m4trace:configure.ac:9: -1- AC_SUBST([am__untar])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([am__untar])
m4trace:configure.ac:9: -1- m4_pattern_allow([^am__untar$])
m4trace:configure.ac:11: -1- AC_CONFIG_HEADERS([config.h])
m4trace:configure.ac:18: -1- AM_MAINTAINER_MODE
m4trace:configure.ac:18: -1- AM_CONDITIONAL([MAINTAINER_MODE], [test
$USE_MAINTAINER_MODE = yes])
m4trace:configure.ac:18: -1- AC_SUBST([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:18: -1- AC_SUBST_TRACE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:18: -1-
m4_pattern_allow([^MAINTAINER_MODE_TRUE$])
m4trace:configure.ac:18: -1- AC_SUBST([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:18: -1- AC_SUBST_TRACE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:18: -1-
m4_pattern_allow([^MAINTAINER_MODE_FALSE$])
m4trace:configure.ac:18: -1- _AM_SUBST_NOTMAKE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:18: -1-
_AM_SUBST_NOTMAKE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:18: -1- AC_SUBST([MAINT])
m4trace:configure.ac:18: -1- AC_SUBST_TRACE([MAINT])
m4trace:configure.ac:18: -1- m4_pattern_allow([^MAINT$])
m4trace:configure.ac:20: -1- AM_SILENT_RULES([yes])
m4trace:configure.ac:20: -1- AC_SUBST([AM_V])
m4trace:configure.ac:20: -1- AC_SUBST_TRACE([AM_V])
m4trace:configure.ac:20: -1- m4_pattern_allow([^AM_V$])
m4trace:configure.ac:20: -1- _AM_SUBST_NOTMAKE([AM_V])
m4trace:configure.ac:20: -1- AC_SUBST([AM_DEFAULT_V])
m4trace:configure.ac:20: -1- AC_SUBST_TRACE([AM_DEFAULT_V])
m4trace:configure.ac:20: -1- m4_pattern_allow([^AM_DEFAULT_V$])
m4trace:configure.ac:20: -1- _AM_SUBST_NOTMAKE([AM_DEFAULT_V])
m4trace:configure.ac:20: -1- AC_SUBST([AM_DEFAULT_VERBOSITY])
m4trace:configure.ac:20: -1- AC_SUBST_TRACE([AM_DEFAULT_VERBOSITY])
m4trace:configure.ac:20: -1-
m4_pattern_allow([^AM_DEFAULT_VERBOSITY$])
m4trace:configure.ac:20: -1- AC_SUBST([AM_BACKSLASH])
m4trace:configure.ac:20: -1- AC_SUBST_TRACE([AM_BACKSLASH])
m4trace:configure.ac:20: -1- m4_pattern_allow([^AM_BACKSLASH$])
m4trace:configure.ac:20: -1- _AM_SUBST_NOTMAKE([AM_BACKSLASH])
m4trace:configure.ac:39: -1- AC_SUBST([LT_CURRENT])
m4trace:configure.ac:39: -1- AC_SUBST_TRACE([LT_CURRENT])
m4trace:configure.ac:39: -1- m4_pattern_allow([^LT_CURRENT$])
m4trace:configure.ac:40: -1- AC_SUBST([LT_REVISION])
m4trace:configure.ac:40: -1- AC_SUBST_TRACE([LT_REVISION])
m4trace:configure.ac:40: -1- m4_pattern_allow([^LT_REVISION$])
m4trace:configure.ac:41: -1- AC_SUBST([LT_AGE])
m4trace:configure.ac:41: -1- AC_SUBST_TRACE([LT_AGE])
m4trace:configure.ac:41: -1- m4_pattern_allow([^LT_AGE$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:44: -1- AC_SUBST([CFLAGS])
```

```

m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CFLAGS])
m4trace:configure.ac:44: -1- m4_pattern_allow([CFLAGS$])
m4trace:configure.ac:44: -1- AC_SUBST([LDFLAGS])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([LDFLAGS])
m4trace:configure.ac:44: -1- m4_pattern_allow([LDFLAGS$])
m4trace:configure.ac:44: -1- AC_SUBST([LIBS])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:44: -1- m4_pattern_allow([LIBS$])
m4trace:configure.ac:44: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:44: -1- m4_pattern_allow([CPPFLAGS$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([CC$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([CC$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([CC$])
m4trace:configure.ac:44: -1- AC_SUBST([CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([CC$])
m4trace:configure.ac:44: -1- AC_SUBST([ac_ct_CC])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([ac_ct_CC])
m4trace:configure.ac:44: -1- m4_pattern_allow([ac_ct_CC$])
m4trace:configure.ac:44: -1- AC_SUBST([EXEEXT], [$ac_cv_exeext])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([EXEEXT])
m4trace:configure.ac:44: -1- m4_pattern_allow([EXEEXT$])
m4trace:configure.ac:44: -1- AC_SUBST([OBJEXT], [$ac_cv_objext])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([OBJEXT])
m4trace:configure.ac:44: -1- m4_pattern_allow([OBJEXT$])
m4trace:configure.ac:44: -1- AC_SUBST([DEPDIR],
["${am__leading_dot}deps"])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([DEPDIR])
m4trace:configure.ac:44: -1- m4_pattern_allow([DEPDIR$])
m4trace:configure.ac:44: -1- AC_SUBST([am__include])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__include])
m4trace:configure.ac:44: -1- m4_pattern_allow([am__include$])
m4trace:configure.ac:44: -1- AC_SUBST([am__quote])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__quote])
m4trace:configure.ac:44: -1- m4_pattern_allow([am__quote$])
m4trace:configure.ac:44: -1- AM_CONDITIONAL([AMDEP], [test
"x$enable_dependency_tracking" != xno])
m4trace:configure.ac:44: -1- AC_SUBST([AMDEP_TRUE])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([AMDEP_TRUE])
m4trace:configure.ac:44: -1- m4_pattern_allow([AMDEP_TRUE$])
m4trace:configure.ac:44: -1- AC_SUBST([AMDEP_FALSE])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([AMDEP_FALSE])
m4trace:configure.ac:44: -1- m4_pattern_allow([AMDEP_FALSE$])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([AMDEP_TRUE])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([AMDEP_FALSE])

```

```

m4trace:configure.ac:44: -1- AC_SUBST([AMDEPBACKSLASH])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([AMDEPBACKSLASH])
m4trace:configure.ac:44: -1- m4_pattern_allow([^AMDEPBACKSLASH$])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([AMDEPBACKSLASH])
m4trace:configure.ac:44: -1- AC_SUBST([am__nodep])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__nodep])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__nodep$])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([am__nodep])
m4trace:configure.ac:44: -1- AC_SUBST([CCDEPMODE],
[depmode=$am_cv_CC_dependencies_compiler_type])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([CCDEPMODE])
m4trace:configure.ac:44: -1- m4_pattern_allow([^CCDEPMODE$])
m4trace:configure.ac:44: -1- AM_CONDITIONAL([am__fastdepCC], [
  test "x$enable_dependency_tracking" != xno \
  && test "$am_cv_CC_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:44: -1- AC_SUBST([am__fastdepCC_TRUE])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__fastdepCC_TRUE])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__fastdepCC_TRUE$])
m4trace:configure.ac:44: -1- AC_SUBST([am__fastdepCC_FALSE])
m4trace:configure.ac:44: -1- AC_SUBST_TRACE([am__fastdepCC_FALSE])
m4trace:configure.ac:44: -1- m4_pattern_allow([^am__fastdepCC_FALSE$])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_TRUE])
m4trace:configure.ac:44: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_FALSE])
m4trace:configure.ac:45: -1- _m4_warn([obsolete], [The macro
`AC_ISC_POSIX' is obsolete.
You should run autoupdate.], [../../lib/autoconf/specific.m4:446:
AC_ISC_POSIX is expanded from...
configure.ac:45: the top level])
m4trace:configure.ac:46: -1- AC_SUBST([CPP])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([CPP])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:46: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:46: -1- AC_SUBST([CPP])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([CPP])
m4trace:configure.ac:46: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:46: -1- AC_SUBST([GREP])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([GREP])
m4trace:configure.ac:46: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:46: -1- AC_SUBST([EGREP])
m4trace:configure.ac:46: -1- AC_SUBST_TRACE([EGREP])
m4trace:configure.ac:46: -1- m4_pattern_allow([^EGREP$])
m4trace:configure.ac:46: -1- AC_DEFINE_TRACE_LITERAL([STDC_HEADERS])
m4trace:configure.ac:46: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:46: -1- AH_OUTPUT([STDC_HEADERS], [/* Define to 1
if you have the ANSI C header files. */
@%:@undef STDC_HEADERS])
m4trace:configure.ac:61: -1- AM_CONDITIONAL([DBUS_BASH_COMPLETION],
[test x$enable_bash_completion = xyes])
m4trace:configure.ac:61: -1- AC_SUBST([DBUS_BASH_COMPLETION_TRUE])

```



```

m4trace:configure.ac:61: -1-
AC_SUBST_TRACE([DBUS_BASH_COMPLETION_TRUE])
m4trace:configure.ac:61: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION_TRUE$])
m4trace:configure.ac:61: -1- AC_SUBST([DBUS_BASH_COMPLETION_FALSE])
m4trace:configure.ac:61: -1-
AC_SUBST_TRACE([DBUS_BASH_COMPLETION_FALSE])
m4trace:configure.ac:61: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION_FALSE$])
m4trace:configure.ac:61: -1-
_AM_SUBST_NOTMAKE([DBUS_BASH_COMPLETION_TRUE])
m4trace:configure.ac:61: -1-
_AM_SUBST_NOTMAKE([DBUS_BASH_COMPLETION_FALSE])
m4trace:configure.ac:63: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BASH_COMPLETION])
m4trace:configure.ac:63: -1-
m4_pattern_allow([^DBUS_BASH_COMPLETION$])
m4trace:configure.ac:63: -1- AH_OUTPUT([DBUS_BASH_COMPLETION], [/*
Enable bash completion */
@%:@undef DBUS_BASH_COMPLETION])
m4trace:configure.ac:67: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:67: -1-
m4_pattern_allow([^DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:67: -1- AH_OUTPUT([DBUS_ENABLE_VERBOSE_MODE], [/*
Support a verbose mode */
@%:@undef DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:73: -1- AC_SUBST([DBUS_BINDING_TOOL])
m4trace:configure.ac:73: -1- AC_SUBST_TRACE([DBUS_BINDING_TOOL])
m4trace:configure.ac:73: -1- m4_pattern_allow([^DBUS_BINDING_TOOL$])
m4trace:configure.ac:78: -1- AM_CONDITIONAL([DBUS_BUILD_TESTS], [test
x$enable_tests = xyes])
m4trace:configure.ac:78: -1- AC_SUBST([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:78: -1- AC_SUBST_TRACE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:78: -1-
m4_pattern_allow([^DBUS_BUILD_TESTS_TRUE$])
m4trace:configure.ac:78: -1- AC_SUBST([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:78: -1- AC_SUBST_TRACE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:78: -1-
m4_pattern_allow([^DBUS_BUILD_TESTS_FALSE$])
m4trace:configure.ac:78: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:78: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:80: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUILD_TESTS])
m4trace:configure.ac:80: -1- m4_pattern_allow([^DBUS_BUILD_TESTS$])
m4trace:configure.ac:80: -1- AH_OUTPUT([DBUS_BUILD_TESTS], [/* Build
test code */
@%:@undef DBUS_BUILD_TESTS])
m4trace:configure.ac:84: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_VERBOSE_MODE])

```

```

m4trace:configure.ac:84: -1-
m4_pattern_allow([^DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:84: -1- AH_OUTPUT([DBUS_ENABLE_VERBOSE_MODE], [/*
Support a verbose mode */
@%:@undef DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:87: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DISABLE_ASSERT])
m4trace:configure.ac:87: -1- m4_pattern_allow([^DBUS_DISABLE_ASSERT$])
m4trace:configure.ac:87: -1- AH_OUTPUT([DBUS_DISABLE_ASSERT], [/*
Disable assertion checking */
@%:@undef DBUS_DISABLE_ASSERT])
m4trace:configure.ac:88: -1-
AC_DEFINE_TRACE_LITERAL([G_DISABLE_ASSERT])
m4trace:configure.ac:88: -1- m4_pattern_allow([^G_DISABLE_ASSERT$])
m4trace:configure.ac:88: -1- AH_OUTPUT([G_DISABLE_ASSERT], [/* Disable
GLib assertion macros */
@%:@undef G_DISABLE_ASSERT])
m4trace:configure.ac:91: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DISABLE_CHECKS])
m4trace:configure.ac:91: -1- m4_pattern_allow([^DBUS_DISABLE_CHECKS$])
m4trace:configure.ac:91: -1- AH_OUTPUT([DBUS_DISABLE_CHECKS], [/*
Disable public API sanity checking */
@%:@undef DBUS_DISABLE_CHECKS])
m4trace:configure.ac:92: -1-
AC_DEFINE_TRACE_LITERAL([G_DISABLE_CHECKS])
m4trace:configure.ac:92: -1- m4_pattern_allow([^G_DISABLE_CHECKS$])
m4trace:configure.ac:92: -1- AH_OUTPUT([G_DISABLE_CHECKS], [/* Disable
GLib public API sanity checking */
@%:@undef G_DISABLE_CHECKS])
m4trace:configure.ac:115: -1- _m4_warn([syntax], [AC_LANG_CONFTEST: no
AC_LANG_SOURCE call detected in body],
[./././lib/autoconf/lang.m4:193: AC_LANG_CONFTEST is expanded from...
./././lib/autoconf/general.m4:2584: _AC_COMPILE_IFELSE is expanded
from...
./././lib/autoconf/general.m4:2600: AC_COMPILE_IFELSE is expanded
from...
configure.ac:97: AC_CC_TRY_FLAG is expanded from...
configure.ac:115: the top level])
m4trace:configure.ac:216: -1- _m4_warn([obsolete], [The macro
`AM_PROG_LIBTOOL' is obsolete.
You should run autoupdate.], [aclocal.m4:1377: AM_PROG_LIBTOOL is
expanded from...
configure.ac:216: the top level])
m4trace:configure.ac:216: -1- LT_INIT
m4trace:configure.ac:216: -1- m4_pattern_forbid([^?LT_[A-Z]+$])
m4trace:configure.ac:216: -1-
m4_pattern_allow([^( _LT_EOF|LT_DLGLOBAL|LT_DLLAZY_OR_NOW|LT_MULTI_MODU
LE)$])
m4trace:configure.ac:216: -1- AC_REQUIRE_AUX_FILE([ltmain.sh])
m4trace:configure.ac:216: -1- AC_SUBST([LIBTOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([LIBTOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([^LIBTOOL$])

```

```
m4trace:configure.ac:216: -1- AC_SUBST([SED])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([SED])
m4trace:configure.ac:216: -1- m4_pattern_allow([^SED$])
m4trace:configure.ac:216: -1- AC_SUBST([FGREP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([FGREP])
m4trace:configure.ac:216: -1- m4_pattern_allow([^FGREP$])
m4trace:configure.ac:216: -1- AC_SUBST([GREP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([GREP])
m4trace:configure.ac:216: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:216: -1- AC_SUBST([LD])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([LD])
m4trace:configure.ac:216: -1- m4_pattern_allow([^LD$])
m4trace:configure.ac:216: -1- AC_SUBST([DUMPBIN])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DUMPBIN])
m4trace:configure.ac:216: -1- m4_pattern_allow([^DUMPBIN$])
m4trace:configure.ac:216: -1- AC_SUBST([ac_ct_DUMPBIN])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([ac_ct_DUMPBIN])
m4trace:configure.ac:216: -1- m4_pattern_allow([^ac_ct_DUMPBIN$])
m4trace:configure.ac:216: -1- AC_SUBST([DUMPBIN])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DUMPBIN])
m4trace:configure.ac:216: -1- m4_pattern_allow([^DUMPBIN$])
m4trace:configure.ac:216: -1- AC_SUBST([NM])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([NM])
m4trace:configure.ac:216: -1- m4_pattern_allow([^NM$])
m4trace:configure.ac:216: -1- AC_SUBST([LN_S], [$as_ln_s])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([LN_S])
m4trace:configure.ac:216: -1- m4_pattern_allow([^LN_S$])
m4trace:configure.ac:216: -1- AC_SUBST([OBJDUMP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([OBJDUMP])
m4trace:configure.ac:216: -1- m4_pattern_allow([^OBJDUMP$])
m4trace:configure.ac:216: -1- AC_SUBST([OBJDUMP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([OBJDUMP])
m4trace:configure.ac:216: -1- m4_pattern_allow([^OBJDUMP$])
m4trace:configure.ac:216: -1- AC_SUBST([DLLTOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DLLTOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([^DLLTOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([DLLTOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DLLTOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([^DLLTOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([AR])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([AR])
m4trace:configure.ac:216: -1- m4_pattern_allow([^AR$])
m4trace:configure.ac:216: -1- AC_SUBST([ac_ct_AR])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([ac_ct_AR])
m4trace:configure.ac:216: -1- m4_pattern_allow([^ac_ct_AR$])
m4trace:configure.ac:216: -1- AC_SUBST([STRIP])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([STRIP])
m4trace:configure.ac:216: -1- m4_pattern_allow([^STRIP$])
m4trace:configure.ac:216: -1- AC_SUBST([RANLIB])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([RANLIB])
m4trace:configure.ac:216: -1- m4_pattern_allow([^RANLIB$])
m4trace:configure.ac:216: -1- m4_pattern_allow([LT_OBJDIR])
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m4trace:configure.ac:216: -1- AC_DEFINE_TRACE_LITERAL([LT_OBJDIR])
m4trace:configure.ac:216: -1- m4_pattern_allow([^LT_OBJDIR$])
m4trace:configure.ac:216: -1- AH_OUTPUT([LT_OBJDIR], [/* Define to the
sub-directory in which libtool stores uninstalled libraries.
*/
@%:@undef LT_OBJDIR])
m4trace:configure.ac:216: -1- LT_SUPPORTED_TAG([CC])
m4trace:configure.ac:216: -1- AC_SUBST([MANIFEST_TOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([MANIFEST_TOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([^MANIFEST_TOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([DSYMUTIL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([DSYMUTIL])
m4trace:configure.ac:216: -1- m4_pattern_allow([^DSYMUTIL$])
m4trace:configure.ac:216: -1- AC_SUBST([NMEDIT])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([NMEDIT])
m4trace:configure.ac:216: -1- m4_pattern_allow([^NMEDIT$])
m4trace:configure.ac:216: -1- AC_SUBST([LIPO])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([LIPO])
m4trace:configure.ac:216: -1- m4_pattern_allow([^LIPO$])
m4trace:configure.ac:216: -1- AC_SUBST([OTOOL])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([OTOOL])
m4trace:configure.ac:216: -1- m4_pattern_allow([^OTOOL$])
m4trace:configure.ac:216: -1- AC_SUBST([OTOOL64])
m4trace:configure.ac:216: -1- AC_SUBST_TRACE([OTOOL64])
m4trace:configure.ac:216: -1- m4_pattern_allow([^OTOOL64$])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_DLFCN_H], [/* Define to
1 if you have the <dlfcn.h> header file. */
@%:@undef HAVE_DLFCN_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_SYS_TYPES_H], [/* Define
to 1 if you have the <sys/types.h> header file. */
@%:@undef HAVE_SYS_TYPES_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_SYS_STAT_H], [/* Define
to 1 if you have the <sys/stat.h> header file. */
@%:@undef HAVE_SYS_STAT_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_STDLIB_H], [/* Define to
1 if you have the <stdlib.h> header file. */
@%:@undef HAVE_STDLIB_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_STRING_H], [/* Define to
1 if you have the <string.h> header file. */
@%:@undef HAVE_STRING_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_MEMORY_H], [/* Define to
1 if you have the <memory.h> header file. */
@%:@undef HAVE_MEMORY_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_STRINGS_H], [/* Define
to 1 if you have the <strings.h> header file. */
@%:@undef HAVE_STRINGS_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_INTTYPES_H], [/* Define
to 1 if you have the <inttypes.h> header file. */
@%:@undef HAVE_INTTYPES_H])
m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_STDINT_H], [/* Define to
1 if you have the <stdint.h> header file. */
@%:@undef HAVE_STDINT_H])

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m4trace:configure.ac:216: -1- AH_OUTPUT([HAVE_UNISTD_H], [/* Define to
1 if you have the <unistd.h> header file. */
@%:@undef HAVE_UNISTD_H])
m4trace:configure.ac:216: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DLFCN_H])
m4trace:configure.ac:216: -1- m4_pattern_allow([HAVE_DLFCN_H$])
m4trace:configure.ac:226: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_GCOV_ENABLED])
m4trace:configure.ac:226: -1- m4_pattern_allow([DBUS_GCOV_ENABLED$])
m4trace:configure.ac:226: -1- AH_OUTPUT([DBUS_GCOV_ENABLED], [/*
Defined to the gcc version if gcov is enabled, to force a rebuild due
to
    config.h changing */
@%:@undef DBUS_GCOV_ENABLED])
m4trace:configure.ac:236: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
configure.ac:236: the top level])
m4trace:configure.ac:247: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SOCKLEN_T])
m4trace:configure.ac:247: -1- m4_pattern_allow([HAVE_SOCKLEN_T$])
m4trace:configure.ac:247: -1- AH_OUTPUT([HAVE_SOCKLEN_T], [/* Have
socklen_t type */
@%:@undef HAVE_SOCKLEN_T])
m4trace:configure.ac:253: -1- _m4_warn([cross], [AC_RUN_IFELSE called
without default to allow cross compiling],
[../../lib/autoconf/general.m4:2742: AC_RUN_IFELSE is expanded from...
../../lib/m4sugar/m4sh.m4:639: AS_IF is expanded from...
../../lib/autoconf/general.m4:2025: AC_CACHE_VAL is expanded from...
../../lib/autoconf/general.m4:2046: AC_CACHE_CHECK is expanded from...
configure.ac:253: the top level])
m4trace:configure.ac:308: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_ABSTRACT_SOCKETS])
m4trace:configure.ac:308: -1-
m4_pattern_allow([HAVE_ABSTRACT_SOCKETS$])
m4trace:configure.ac:308: -1- AH_OUTPUT([HAVE_ABSTRACT_SOCKETS], [/*
Have abstract socket namespace */
@%:@undef HAVE_ABSTRACT_SOCKETS])
m4trace:configure.ac:315: -1- AC_SUBST([DBUS_PATH_OR_ABSTRACT])
m4trace:configure.ac:315: -1- AC_SUBST_TRACE([DBUS_PATH_OR_ABSTRACT])
m4trace:configure.ac:315: -1-
m4_pattern_allow([DBUS_PATH_OR_ABSTRACT$])
m4trace:configure.ac:320: -1- AH_OUTPUT([HAVE_EXPAT_H], [/* Define to
1 if you have the <expat.h> header file. */
@%:@undef HAVE_EXPAT_H])
m4trace:configure.ac:320: -1- AC_DEFINE_TRACE_LITERAL([HAVE_EXPAT_H])
m4trace:configure.ac:320: -1- m4_pattern_allow([HAVE_EXPAT_H$])
m4trace:configure.ac:334: -1- m4_pattern_forbid([^?PKG_[A-Z_]+$])
m4trace:configure.ac:334: -1- m4_pattern_allow([PKG_CONFIG(_PATH)?$])
m4trace:configure.ac:334: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:334: -1- m4_pattern_allow([PKG_CONFIG$])

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m4trace:configure.ac:334: -1- AC_SUBST([PKG_CONFIG_PATH])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([PKG_CONFIG_PATH])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG_PATH$])
m4trace:configure.ac:334: -1- AC_SUBST([PKG_CONFIG_LIBDIR])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([PKG_CONFIG_LIBDIR])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG_LIBDIR$])
m4trace:configure.ac:334: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:334: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:334: -1- AC_SUBST([DBUS_CFLAGS])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([DBUS_CFLAGS])
m4trace:configure.ac:334: -1- m4_pattern_allow([^DBUS_CFLAGS$])
m4trace:configure.ac:334: -1- AC_SUBST([DBUS_LIBS])
m4trace:configure.ac:334: -1- AC_SUBST_TRACE([DBUS_LIBS])
m4trace:configure.ac:334: -1- m4_pattern_allow([^DBUS_LIBS$])
m4trace:configure.ac:335: -1- AC_SUBST([DBUS_CFLAGS])
m4trace:configure.ac:335: -1- AC_SUBST_TRACE([DBUS_CFLAGS])
m4trace:configure.ac:335: -1- m4_pattern_allow([^DBUS_CFLAGS$])
m4trace:configure.ac:336: -1- AC_SUBST([DBUS_LIBS])
m4trace:configure.ac:336: -1- AC_SUBST_TRACE([DBUS_LIBS])
m4trace:configure.ac:336: -1- m4_pattern_allow([^DBUS_LIBS$])
m4trace:configure.ac:339: -1- AC_SUBST([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:339: -1- AC_SUBST_TRACE([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:339: -1- m4_pattern_allow([^DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:339: -1- AC_SUBST([DBUS_GLIB_LIBS])
m4trace:configure.ac:339: -1- AC_SUBST_TRACE([DBUS_GLIB_LIBS])
m4trace:configure.ac:339: -1- m4_pattern_allow([^DBUS_GLIB_LIBS$])
m4trace:configure.ac:340: -1- AC_SUBST([DBUS_GLIB_THREADS_CFLAGS])
m4trace:configure.ac:340: -1-
AC_SUBST_TRACE([DBUS_GLIB_THREADS_CFLAGS])
m4trace:configure.ac:340: -1-
m4_pattern_allow([^DBUS_GLIB_THREADS_CFLAGS$])
m4trace:configure.ac:340: -1- AC_SUBST([DBUS_GLIB_THREADS_LIBS])
m4trace:configure.ac:340: -1- AC_SUBST_TRACE([DBUS_GLIB_THREADS_LIBS])
m4trace:configure.ac:340: -1-
m4_pattern_allow([^DBUS_GLIB_THREADS_LIBS$])
m4trace:configure.ac:342: -1- AM_CONDITIONAL([HAVE_GLIB_THREADS],
[test x$have_glib_threads = xyes])
m4trace:configure.ac:342: -1- AC_SUBST([HAVE_GLIB_THREADS_TRUE])
m4trace:configure.ac:342: -1- AC_SUBST_TRACE([HAVE_GLIB_THREADS_TRUE])
m4trace:configure.ac:342: -1-
m4_pattern_allow([^HAVE_GLIB_THREADS_TRUE$])
m4trace:configure.ac:342: -1- AC_SUBST([HAVE_GLIB_THREADS_FALSE])
m4trace:configure.ac:342: -1-
AC_SUBST_TRACE([HAVE_GLIB_THREADS_FALSE])
m4trace:configure.ac:342: -1-
m4_pattern_allow([^HAVE_GLIB_THREADS_FALSE$])
m4trace:configure.ac:342: -1-
_AM_SUBST_NOTMAKE([HAVE_GLIB_THREADS_TRUE])
m4trace:configure.ac:342: -1-
_AM_SUBST_NOTMAKE([HAVE_GLIB_THREADS_FALSE])
m4trace:configure.ac:345: -1- AC_SUBST([GLIB_GENMARSHAL])

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m4trace:configure.ac:345: -1- AC_SUBST_TRACE([GLIB_GENMARSHAL])
m4trace:configure.ac:345: -1- m4_pattern_allow([GLIB_GENMARSHAL$])
m4trace:configure.ac:348: -1- AC_SUBST([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:348: -1- AC_SUBST_TRACE([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:348: -1- m4_pattern_allow([DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:349: -1- AC_SUBST([DBUS_GLIB_LIBS])
m4trace:configure.ac:349: -1- AC_SUBST_TRACE([DBUS_GLIB_LIBS])
m4trace:configure.ac:349: -1- m4_pattern_allow([DBUS_GLIB_LIBS$])
m4trace:configure.ac:350: -1- AC_SUBST([DBUS_GLIB_THREADS_LIBS])
m4trace:configure.ac:350: -1- AC_SUBST_TRACE([DBUS_GLIB_THREADS_LIBS])
m4trace:configure.ac:350: -1-
m4_pattern_allow([DBUS_GLIB_THREADS_LIBS$])
m4trace:configure.ac:354: -1- AC_SUBST([DBUS_GLIB_TOOL_CFLAGS])
m4trace:configure.ac:354: -1- AC_SUBST_TRACE([DBUS_GLIB_TOOL_CFLAGS])
m4trace:configure.ac:354: -1-
m4_pattern_allow([DBUS_GLIB_TOOL_CFLAGS$])
m4trace:configure.ac:355: -1- AC_SUBST([DBUS_GLIB_TOOL_LIBS])
m4trace:configure.ac:355: -1- AC_SUBST_TRACE([DBUS_GLIB_TOOL_LIBS])
m4trace:configure.ac:355: -1-
m4_pattern_allow([DBUS_GLIB_TOOL_LIBS$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_CHECK])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_CHECK])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_CHECK$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_REBASE])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_REBASE])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_REBASE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_MKPDF])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_MKPDF])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_MKPDF$])
m4trace:configure.ac:358: -1- AC_SUBST([HTML_DIR])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([HTML_DIR])
m4trace:configure.ac:358: -1- m4_pattern_allow([HTML_DIR$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_DEPS_CFLAGS])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_DEPS_CFLAGS])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_DEPS_CFLAGS$])
m4trace:configure.ac:358: -1- AC_SUBST([GTKDOC_DEPS_LIBS])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTKDOC_DEPS_LIBS])
m4trace:configure.ac:358: -1- m4_pattern_allow([GTKDOC_DEPS_LIBS$])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([ENABLE_GTK_DOC], [test
x$enable_gtk_doc = xyes])
m4trace:configure.ac:358: -1- AC_SUBST([ENABLE_GTK_DOC_TRUE])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([ENABLE_GTK_DOC_TRUE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ENABLE_GTK_DOC_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([ENABLE_GTK_DOC_FALSE])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([ENABLE_GTK_DOC_FALSE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([ENABLE_GTK_DOC_FALSE$])
m4trace:configure.ac:358: -1- _AM_SUBST_NOTMAKE([ENABLE_GTK_DOC_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([ENABLE_GTK_DOC_FALSE])
```

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m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_BUILD_HTML],
[test x$enable_gtk_doc_html = xyes])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_BUILD_HTML_TRUE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_BUILD_HTML_TRUE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_BUILD_HTML_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_BUILD_HTML_FALSE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_BUILD_HTML_FALSE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_BUILD_HTML_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_HTML_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_HTML_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_BUILD_PDF],
[test x$enable_gtk_doc_pdf = xyes])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_BUILD_PDF_TRUE])
m4trace:configure.ac:358: -1- AC_SUBST_TRACE([GTK_DOC_BUILD_PDF_TRUE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_BUILD_PDF_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_BUILD_PDF_FALSE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_BUILD_PDF_FALSE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_BUILD_PDF_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_PDF_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_BUILD_PDF_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_USE_LIBTOOL],
[test -n "$LIBTOOL"])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_USE_LIBTOOL_TRUE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_USE_LIBTOOL_TRUE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_USE_LIBTOOL_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_USE_LIBTOOL_FALSE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_USE_LIBTOOL_FALSE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_USE_LIBTOOL_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_LIBTOOL_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_LIBTOOL_FALSE])
m4trace:configure.ac:358: -1- AM_CONDITIONAL([GTK_DOC_USE_REBASE],
[test -n "$GTKDOC_REBASE"])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_USE_REBASE_TRUE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_USE_REBASE_TRUE])
```



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m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_USE_REBASE_TRUE$])
m4trace:configure.ac:358: -1- AC_SUBST([GTK_DOC_USE_REBASE_FALSE])
m4trace:configure.ac:358: -1-
AC_SUBST_TRACE([GTK_DOC_USE_REBASE_FALSE])
m4trace:configure.ac:358: -1-
m4_pattern_allow([GTK_DOC_USE_REBASE_FALSE$])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_REBASE_TRUE])
m4trace:configure.ac:358: -1-
_AM_SUBST_NOTMAKE([GTK_DOC_USE_REBASE_FALSE])
m4trace:configure.ac:388: -1- AC_SUBST([EXPANDED_LOCALSTATEDIR])
m4trace:configure.ac:388: -1- AC_SUBST_TRACE([EXPANDED_LOCALSTATEDIR])
m4trace:configure.ac:388: -1-
m4_pattern_allow([EXPANDED_LOCALSTATEDIR$])
m4trace:configure.ac:392: -1- AC_SUBST([EXPANDED_SYSCONFDIR])
m4trace:configure.ac:392: -1- AC_SUBST_TRACE([EXPANDED_SYSCONFDIR])
m4trace:configure.ac:392: -1-
m4_pattern_allow([EXPANDED_SYSCONFDIR$])
m4trace:configure.ac:396: -1- AC_SUBST([EXPANDED_BINDIR])
m4trace:configure.ac:396: -1- AC_SUBST_TRACE([EXPANDED_BINDIR])
m4trace:configure.ac:396: -1- m4_pattern_allow([EXPANDED_BINDIR$])
m4trace:configure.ac:400: -1- AC_SUBST([EXPANDED_LIBDIR])
m4trace:configure.ac:400: -1- AC_SUBST_TRACE([EXPANDED_LIBDIR])
m4trace:configure.ac:400: -1- m4_pattern_allow([EXPANDED_LIBDIR$])
m4trace:configure.ac:404: -1- AC_SUBST([EXPANDED_DATADIR])
m4trace:configure.ac:404: -1- AC_SUBST_TRACE([EXPANDED_DATADIR])
m4trace:configure.ac:404: -1- m4_pattern_allow([EXPANDED_DATADIR$])
m4trace:configure.ac:420: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SERVICE_DIR])
m4trace:configure.ac:420: -1- m4_pattern_allow([TEST_SERVICE_DIR$])
m4trace:configure.ac:420: -1- AH_OUTPUT([TEST_SERVICE_DIR], [/* Full
path to test file test/data/valid-service-files in builddir */
@%:@undef TEST_SERVICE_DIR])
m4trace:configure.ac:420: -1- AC_SUBST([TEST_SERVICE_DIR])
m4trace:configure.ac:420: -1- AC_SUBST_TRACE([TEST_SERVICE_DIR])
m4trace:configure.ac:420: -1- m4_pattern_allow([TEST_SERVICE_DIR$])
m4trace:configure.ac:421: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SERVICE_BINARY])
m4trace:configure.ac:421: -1-
m4_pattern_allow([TEST_SERVICE_BINARY$])
m4trace:configure.ac:421: -1- AH_OUTPUT([TEST_SERVICE_BINARY], [/*
Full path to test file test/test-service in builddir */
@%:@undef TEST_SERVICE_BINARY])
m4trace:configure.ac:421: -1- AC_SUBST([TEST_SERVICE_BINARY])
m4trace:configure.ac:421: -1- AC_SUBST_TRACE([TEST_SERVICE_BINARY])
m4trace:configure.ac:421: -1-
m4_pattern_allow([TEST_SERVICE_BINARY$])
m4trace:configure.ac:422: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SHELL_SERVICE_BINARY])
m4trace:configure.ac:422: -1-
m4_pattern_allow([TEST_SHELL_SERVICE_BINARY$])
```

```
m4trace:configure.ac:422: -1- AH_OUTPUT([TEST_SHELL_SERVICE_BINARY],
[/ * Full path to test file test/test-shell-service in builddir */
@%:@undef TEST_SHELL_SERVICE_BINARY])
m4trace:configure.ac:422: -1- AC_SUBST([TEST_SHELL_SERVICE_BINARY])
m4trace:configure.ac:422: -1-
AC_SUBST_TRACE([TEST_SHELL_SERVICE_BINARY])
m4trace:configure.ac:422: -1-
m4_pattern_allow([ ^TEST_SHELL_SERVICE_BINARY$])
m4trace:configure.ac:423: -1-
AC_DEFINE_TRACE_LITERAL([TEST_CORE_SERVICE_BINARY])
m4trace:configure.ac:423: -1-
m4_pattern_allow([ ^TEST_CORE_SERVICE_BINARY$])
m4trace:configure.ac:423: -1- AH_OUTPUT([TEST_CORE_SERVICE_BINARY],
[/ * Full path to test file test/core/test-service-glib in builddir */
@%:@undef TEST_CORE_SERVICE_BINARY])
m4trace:configure.ac:423: -1- AC_SUBST([TEST_CORE_SERVICE_BINARY])
m4trace:configure.ac:423: -1-
AC_SUBST_TRACE([TEST_CORE_SERVICE_BINARY])
m4trace:configure.ac:423: -1-
m4_pattern_allow([ ^TEST_CORE_SERVICE_BINARY$])
m4trace:configure.ac:424: -1-
AC_DEFINE_TRACE_LITERAL([TEST_INTERFACES_SERVICE_BINARY])
m4trace:configure.ac:424: -1-
m4_pattern_allow([ ^TEST_INTERFACES_SERVICE_BINARY$])
m4trace:configure.ac:424: -1-
AH_OUTPUT([TEST_INTERFACES_SERVICE_BINARY], [/ * Full path to test file
test/interfaces/test-service in builddir */
@%:@undef TEST_INTERFACES_SERVICE_BINARY])
m4trace:configure.ac:424: -1-
AC_SUBST([TEST_INTERFACES_SERVICE_BINARY])
m4trace:configure.ac:424: -1-
AC_SUBST_TRACE([TEST_INTERFACES_SERVICE_BINARY])
m4trace:configure.ac:424: -1-
m4_pattern_allow([ ^TEST_INTERFACES_SERVICE_BINARY$])
m4trace:configure.ac:425: -1-
AC_DEFINE_TRACE_LITERAL([TEST_EXIT_BINARY])
m4trace:configure.ac:425: -1- m4_pattern_allow([ ^TEST_EXIT_BINARY$])
m4trace:configure.ac:425: -1- AH_OUTPUT([TEST_EXIT_BINARY], [/ * Full
path to test file test/test-exit in builddir */
@%:@undef TEST_EXIT_BINARY])
m4trace:configure.ac:425: -1- AC_SUBST([TEST_EXIT_BINARY])
m4trace:configure.ac:425: -1- AC_SUBST_TRACE([TEST_EXIT_BINARY])
m4trace:configure.ac:425: -1- m4_pattern_allow([ ^TEST_EXIT_BINARY$])
m4trace:configure.ac:426: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SEGFAULT_BINARY])
m4trace:configure.ac:426: -1-
m4_pattern_allow([ ^TEST_SEGFAULT_BINARY$])
m4trace:configure.ac:426: -1- AH_OUTPUT([TEST_SEGFAULT_BINARY], [/ *
Full path to test file test/test-segfault in builddir */
@%:@undef TEST_SEGFAULT_BINARY])
m4trace:configure.ac:426: -1- AC_SUBST([TEST_SEGFAULT_BINARY])
m4trace:configure.ac:426: -1- AC_SUBST_TRACE([TEST_SEGFAULT_BINARY])
```

```

m4trace:configure.ac:426: -1-
m4_pattern_allow([ ^TEST_SEGFAULT_BINARY$])
m4trace:configure.ac:427: -1-
AC_DEFINE_TRACE_LITERAL([TEST_SLEEP_FOREVER_BINARY])
m4trace:configure.ac:427: -1-
m4_pattern_allow([ ^TEST_SLEEP_FOREVER_BINARY$])
m4trace:configure.ac:427: -1- AH_OUTPUT([TEST_SLEEP_FOREVER_BINARY],
[/ * Full path to test file test/test-sleep-forever in builddir */
@%:@undef TEST_SLEEP_FOREVER_BINARY])
m4trace:configure.ac:427: -1- AC_SUBST([TEST_SLEEP_FOREVER_BINARY])
m4trace:configure.ac:427: -1-
AC_SUBST_TRACE([TEST_SLEEP_FOREVER_BINARY])
m4trace:configure.ac:427: -1-
m4_pattern_allow([ ^TEST_SLEEP_FOREVER_BINARY$])
m4trace:configure.ac:428: -1- AC_SUBST([ABSOLUTE_TOP_BUILDDIR])
m4trace:configure.ac:428: -1- AC_SUBST_TRACE([ABSOLUTE_TOP_BUILDDIR])
m4trace:configure.ac:428: -1-
m4_pattern_allow([ ^ABSOLUTE_TOP_BUILDDIR$])
m4trace:configure.ac:435: -1- AC_SUBST([TEST_SOCKET_DIR])
m4trace:configure.ac:435: -1- AC_SUBST_TRACE([TEST_SOCKET_DIR])
m4trace:configure.ac:435: -1- m4_pattern_allow([ ^TEST_SOCKET_DIR$])
m4trace:configure.ac:436: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_TEST_SOCKET_DIR])
m4trace:configure.ac:436: -1-
m4_pattern_allow([ ^DBUS_TEST_SOCKET_DIR$])
m4trace:configure.ac:436: -1- AH_OUTPUT([DBUS_TEST_SOCKET_DIR], [/ *
Where to put test sockets */
@%:@undef DBUS_TEST_SOCKET_DIR])
m4trace:configure.ac:438: -1- AC_CONFIG_FILES([
Makefile
m4/Makefile
doc/Makefile
doc/reference/Makefile
doc/reference/version.xml
dbus/Makefile
dbus/examples/Makefile
dbus/examples/statemachine/Makefile
test/Makefile
test/core/Makefile
test/interfaces/Makefile
test/data/valid-service-files/debug-glib.service
test/data/valid-service-files/debug-echo.service
test/data/valid-service-files/interfaces-test.service
test/lib/Makefile
test/manual/Makefile
tools/Makefile
dbus-glib-1.pc
dbus-glib-1-uninstalled.pc
])
m4trace:configure.ac:438: -1- _m4_warn([obsolete], [AC_OUTPUT should
be used without arguments.
You should run autoupdate.], [])

```

```

m4trace:configure.ac:438: -1- AC_SUBST([LIB@&t@OBS], [$ac_libobjs])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([LIB@&t@OBS])
m4trace:configure.ac:438: -1- m4_pattern_allow([^LIB@&t@OBS$])
m4trace:configure.ac:438: -1- AC_SUBST([LTLIBOBS], [$ac_ltlibobjs])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([LTLIBOBS])
m4trace:configure.ac:438: -1- m4_pattern_allow([^LTLIBOBS$])
m4trace:configure.ac:438: -1- AM_CONDITIONAL([am__EXEEXT], [test -n
"$EXEEXT"])
m4trace:configure.ac:438: -1- AC_SUBST([am__EXEEXT_TRUE])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([am__EXEEXT_TRUE])
m4trace:configure.ac:438: -1- m4_pattern_allow([^am__EXEEXT_TRUE$])
m4trace:configure.ac:438: -1- AC_SUBST([am__EXEEXT_FALSE])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([am__EXEEXT_FALSE])
m4trace:configure.ac:438: -1- m4_pattern_allow([^am__EXEEXT_FALSE$])
m4trace:configure.ac:438: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_TRUE])
m4trace:configure.ac:438: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_FALSE])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([top_builddir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([top_build_prefix])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([srcdir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([abs_srcdir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([top_srcdir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([abs_top_srcdir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([builddir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([abs_builddir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([abs_top_builddir])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([INSTALL])
m4trace:configure.ac:438: -1- AC_SUBST_TRACE([MKDIR_P])
m4trace:configure.ac:438: -1- AC_REQUIRE_AUX_FILE([ltmain.sh])

```

File = traces.2.~1~

```

m4trace:configure.ac:9: -1- AC_INIT([dbus], [dbus_version],
[https://bugs.freedesktop.org/enter_bug.cgi?product=dbus], [dbus])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^?A[CHUM]_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([_AC_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^LIBOBS$], [do not use
LIBOBS directly, use AC_LIBOBJ (see section `AC_LIBOBJ vs LIBOBS')]
m4trace:configure.ac:9: -1- m4_pattern_allow([^AS_FLAGS$])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^?m4_])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^dnl$])
m4trace:configure.ac:9: -1- m4_pattern_forbid([^?AS_])
m4trace:configure.ac:9: -1- AC_SUBST([SHELL])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([SHELL])
m4trace:configure.ac:9: -1- m4_pattern_allow([^SHELL$])
m4trace:configure.ac:9: -1- AC_SUBST([PATH_SEPARATOR])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PATH_SEPARATOR])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PATH_SEPARATOR$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_NAME],
[m4_ifdef([AC_PACKAGE_NAME], ['AC_PACKAGE_NAME'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_NAME])

```

```
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_NAME$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_TARNAME],
[m4_ifdef([AC_PACKAGE_TARNAME], ['AC_PACKAGE_TARNAME'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_TARNAME])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_TARNAME$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_VERSION],
[m4_ifdef([AC_PACKAGE_VERSION], ['AC_PACKAGE_VERSION'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_VERSION])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_VERSION$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_STRING],
[m4_ifdef([AC_PACKAGE_STRING], ['AC_PACKAGE_STRING'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_STRING])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_STRING$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_BUGREPORT],
[m4_ifdef([AC_PACKAGE_BUGREPORT], ['AC_PACKAGE_BUGREPORT'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_BUGREPORT])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_BUGREPORT$])
m4trace:configure.ac:9: -1- AC_SUBST([PACKAGE_URL],
[m4_ifdef([AC_PACKAGE_URL], ['AC_PACKAGE_URL'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([PACKAGE_URL])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_URL$])
m4trace:configure.ac:9: -1- AC_SUBST([exec_prefix], [NONE])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([exec_prefix])
m4trace:configure.ac:9: -1- m4_pattern_allow([^exec_prefix$])
m4trace:configure.ac:9: -1- AC_SUBST([prefix], [NONE])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([prefix])
m4trace:configure.ac:9: -1- m4_pattern_allow([^prefix$])
m4trace:configure.ac:9: -1- AC_SUBST([program_transform_name],
[s,x,x,])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([program_transform_name])
m4trace:configure.ac:9: -1-
m4_pattern_allow([^program_transform_name$])
m4trace:configure.ac:9: -1- AC_SUBST([bindir], ['${exec_prefix}/bin'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([bindir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^bindir$])
m4trace:configure.ac:9: -1- AC_SUBST([sbindir],
['${exec_prefix}/sbin'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([sbindir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^sbindir$])
m4trace:configure.ac:9: -1- AC_SUBST([libexecdir],
['${exec_prefix}/libexec'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([libexecdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^libexecdir$])
m4trace:configure.ac:9: -1- AC_SUBST([datarootdir],
['${prefix}/share'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([datarootdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^datarootdir$])
m4trace:configure.ac:9: -1- AC_SUBST([datadir], ['${datarootdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([datadir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^datadir$])
m4trace:configure.ac:9: -1- AC_SUBST([sysconfdir], ['${prefix}/etc'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([sysconfdir])
```

```

m4trace:configure.ac:9: -1- m4_pattern_allow([^sysconfdir$])
m4trace:configure.ac:9: -1- AC_SUBST([sharedstatedir],
['${prefix}/com'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([sharedstatedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^sharedstatedir$])
m4trace:configure.ac:9: -1- AC_SUBST([localstatedir],
['${prefix}/var'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([localstatedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^localstatedir$])
m4trace:configure.ac:9: -1- AC_SUBST([includedir],
['${prefix}/include'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([includedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^includedir$])
m4trace:configure.ac:9: -1- AC_SUBST([oldincludedir],
['/usr/include'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([oldincludedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^oldincludedir$])
m4trace:configure.ac:9: -1- AC_SUBST([docdir],
[m4_ifset([AC_PACKAGE_TARNAME],
          ['${datarootdir}/doc/${PACKAGE_TARNAME}'],
          ['${datarootdir}/doc/${PACKAGE}'])])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([docdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^docdir$])
m4trace:configure.ac:9: -1- AC_SUBST([infodir],
['${datarootdir}/info'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([infodir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^infodir$])
m4trace:configure.ac:9: -1- AC_SUBST([htmldir], ['${docdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([htmldir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^htmldir$])
m4trace:configure.ac:9: -1- AC_SUBST([dvidir], ['${docdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([dvidir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^dvidir$])
m4trace:configure.ac:9: -1- AC_SUBST([pdfdir], ['${docdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([pdfdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^pdfdir$])
m4trace:configure.ac:9: -1- AC_SUBST([psdir], ['${docdir}'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([psdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^psdir$])
m4trace:configure.ac:9: -1- AC_SUBST([libdir], ['${exec_prefix}/lib'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([libdir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^libdir$])
m4trace:configure.ac:9: -1- AC_SUBST([localedir],
['${datarootdir}/locale'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([localedir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^localedir$])
m4trace:configure.ac:9: -1- AC_SUBST([mandir], ['${datarootdir}/man'])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([mandir])
m4trace:configure.ac:9: -1- m4_pattern_allow([^mandir$])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_NAME])
m4trace:configure.ac:9: -1- m4_pattern_allow([^PACKAGE_NAME$])

```

```

m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_NAME], [/* Define to
the full name of this package. */
@%:@undef PACKAGE_NAME])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_TARNAME])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE_TARNAME$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_TARNAME], [/* Define to
the one symbol short name of this package. */
@%:@undef PACKAGE_TARNAME])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_VERSION])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE_VERSION$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_VERSION], [/* Define to
the version of this package. */
@%:@undef PACKAGE_VERSION])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_STRING])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE_STRING$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_STRING], [/* Define to
the full name and version of this package. */
@%:@undef PACKAGE_STRING])
m4trace:configure.ac:9: -1-
AC_DEFINE_TRACE_LITERAL([PACKAGE_BUGREPORT])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE_BUGREPORT$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_BUGREPORT], [/* Define
to the address where bug reports for this package should be sent. */
@%:@undef PACKAGE_BUGREPORT])
m4trace:configure.ac:9: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE_URL])
m4trace:configure.ac:9: -1- m4_pattern_allow([PACKAGE_URL$])
m4trace:configure.ac:9: -1- AH_OUTPUT([PACKAGE_URL], [/* Define to the
home page for this package. */
@%:@undef PACKAGE_URL])
m4trace:configure.ac:9: -1- AC_SUBST([DEFS])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([DEFS])
m4trace:configure.ac:9: -1- m4_pattern_allow([DEFS$])
m4trace:configure.ac:9: -1- AC_SUBST([ECHO_C])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([ECHO_C])
m4trace:configure.ac:9: -1- m4_pattern_allow([ECHO_C$])
m4trace:configure.ac:9: -1- AC_SUBST([ECHO_N])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([ECHO_N])
m4trace:configure.ac:9: -1- m4_pattern_allow([ECHO_N$])
m4trace:configure.ac:9: -1- AC_SUBST([ECHO_T])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([ECHO_T])
m4trace:configure.ac:9: -1- m4_pattern_allow([ECHO_T$])
m4trace:configure.ac:9: -1- AC_SUBST([LIBS])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:9: -1- m4_pattern_allow([LIBS$])
m4trace:configure.ac:9: -1- AC_SUBST([build_alias])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([build_alias])
m4trace:configure.ac:9: -1- m4_pattern_allow([build_alias$])
m4trace:configure.ac:9: -1- AC_SUBST([host_alias])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([host_alias])
m4trace:configure.ac:9: -1- m4_pattern_allow([host_alias$])
m4trace:configure.ac:9: -1- AC_SUBST([target_alias])
m4trace:configure.ac:9: -1- AC_SUBST_TRACE([target_alias])

```

```
m4trace:configure.ac:9: -1- m4_pattern_allow([^target_alias$])
m4trace:configure.ac:11: -1- AC_CANONICAL_HOST
m4trace:configure.ac:11: -1- AC_CANONICAL_BUILD
m4trace:configure.ac:11: -1- AC_REQUIRE_AUX_FILE([config.sub])
m4trace:configure.ac:11: -1- AC_REQUIRE_AUX_FILE([config.guess])
m4trace:configure.ac:11: -1- AC_SUBST([build], [$ac_cv_build])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([build])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build$])
m4trace:configure.ac:11: -1- AC_SUBST([build_cpu], [${1}])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([build_cpu])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_cpu$])
m4trace:configure.ac:11: -1- AC_SUBST([build_vendor], [${2}])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([build_vendor])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_vendor$])
m4trace:configure.ac:11: -1- AC_SUBST([build_os])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([build_os])
m4trace:configure.ac:11: -1- m4_pattern_allow([^build_os$])
m4trace:configure.ac:11: -1- AC_SUBST([host], [$ac_cv_host])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([host])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host$])
m4trace:configure.ac:11: -1- AC_SUBST([host_cpu], [${1}])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([host_cpu])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_cpu$])
m4trace:configure.ac:11: -1- AC_SUBST([host_vendor], [${2}])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([host_vendor])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_vendor$])
m4trace:configure.ac:11: -1- AC_SUBST([host_os])
m4trace:configure.ac:11: -1- AC_SUBST_TRACE([host_os])
m4trace:configure.ac:11: -1- m4_pattern_allow([^host_os$])
m4trace:configure.ac:13: -1- AC_CONFIG_HEADERS([config.h])
m4trace:configure.ac:16: -1- AM_INIT_AUTOMAKE([1.10 tar-ustar -Wno-
portability])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AM_[A-Z]+FLAGS$])
m4trace:configure.ac:16: -1- AM_AUTOMAKE_VERSION([1.12.6])
m4trace:configure.ac:16: -1- AC_REQUIRE_AUX_FILE([install-sh])
m4trace:configure.ac:16: -1- AC_SUBST([INSTALL_PROGRAM])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([INSTALL_PROGRAM])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_PROGRAM$])
m4trace:configure.ac:16: -1- AC_SUBST([INSTALL_SCRIPT])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([INSTALL_SCRIPT])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_SCRIPT$])
m4trace:configure.ac:16: -1- AC_SUBST([INSTALL_DATA])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([INSTALL_DATA])
m4trace:configure.ac:16: -1- m4_pattern_allow([^INSTALL_DATA$])
m4trace:configure.ac:16: -1- AC_SUBST([am_isrc], ['-I${srcdir}'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([am_isrc])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am_isrc$])
m4trace:configure.ac:16: -1- _AM_SUBST_NOTMAKE([am_isrc])
m4trace:configure.ac:16: -1- AC_SUBST([CYGPATH_W])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([CYGPATH_W])
m4trace:configure.ac:16: -1- m4_pattern_allow([^CYGPATH_W$])
```



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m4trace:configure.ac:16: -1- AC_SUBST([PACKAGE],
['AC_PACKAGE_TARNAME'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([PACKAGE])
m4trace:configure.ac:16: -1- m4_pattern_allow([^PACKAGE$])
m4trace:configure.ac:16: -1- AC_SUBST([VERSION],
['AC_PACKAGE_VERSION'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([VERSION])
m4trace:configure.ac:16: -1- m4_pattern_allow([^VERSION$])
m4trace:configure.ac:16: -1- AC_DEFINE_TRACE_LITERAL([PACKAGE])
m4trace:configure.ac:16: -1- m4_pattern_allow([^PACKAGE$])
m4trace:configure.ac:16: -1- AH_OUTPUT([PACKAGE], [/* Name of package
*/
@%:@undef PACKAGE])
m4trace:configure.ac:16: -1- AC_DEFINE_TRACE_LITERAL([VERSION])
m4trace:configure.ac:16: -1- m4_pattern_allow([^VERSION$])
m4trace:configure.ac:16: -1- AH_OUTPUT([VERSION], [/* Version number
of package */
@%:@undef VERSION])
m4trace:configure.ac:16: -1- AC_REQUIRE_AUX_FILE([missing])
m4trace:configure.ac:16: -1- AC_SUBST([ACLOCAL])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([ACLOCAL])
m4trace:configure.ac:16: -1- m4_pattern_allow([^ACLOCAL$])
m4trace:configure.ac:16: -1- AC_SUBST([AUTOCONF])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AUTOCONF])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOCONF$])
m4trace:configure.ac:16: -1- AC_SUBST([AUTOMAKE])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AUTOMAKE])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOMAKE$])
m4trace:configure.ac:16: -1- AC_SUBST([AUTOHEADER])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AUTOHEADER])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AUTOHEADER$])
m4trace:configure.ac:16: -1- AC_SUBST([MAKEINFO])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([MAKEINFO])
m4trace:configure.ac:16: -1- m4_pattern_allow([^MAKEINFO$])
m4trace:configure.ac:16: -1- AC_SUBST([install_sh])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([install_sh])
m4trace:configure.ac:16: -1- m4_pattern_allow([^install_sh$])
m4trace:configure.ac:16: -1- AC_SUBST([STRIP])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([STRIP])
m4trace:configure.ac:16: -1- m4_pattern_allow([^STRIP$])
m4trace:configure.ac:16: -1- AC_SUBST([INSTALL_STRIP_PROGRAM])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([INSTALL_STRIP_PROGRAM])
m4trace:configure.ac:16: -1-
m4_pattern_allow([^INSTALL_STRIP_PROGRAM$])
m4trace:configure.ac:16: -1- AC_REQUIRE_AUX_FILE([install-sh])
m4trace:configure.ac:16: -1- AC_SUBST([MKDIR_P])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([MKDIR_P])
m4trace:configure.ac:16: -1- m4_pattern_allow([^MKDIR_P$])
m4trace:configure.ac:16: -1- AC_SUBST([mkdir_p], ['$(MKDIR_P)'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([mkdir_p])
m4trace:configure.ac:16: -1- m4_pattern_allow([^mkdir_p$])
m4trace:configure.ac:16: -1- AC_SUBST([AWK])

```

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m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AWK])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AWK$])
m4trace:configure.ac:16: -1- AC_SUBST([SET_MAKE])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([SET_MAKE])
m4trace:configure.ac:16: -1- m4_pattern_allow([^SET_MAKE$])
m4trace:configure.ac:16: -1- AC_SUBST([am__leading_dot])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([am__leading_dot])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__leading_dot$])
m4trace:configure.ac:16: -1- AC_SUBST([AMTAR], ['${TAR-tar}'])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([AMTAR])
m4trace:configure.ac:16: -1- m4_pattern_allow([^AMTAR$])
m4trace:configure.ac:16: -1- AC_SUBST([am__tar])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([am__tar])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__tar$])
m4trace:configure.ac:16: -1- AC_SUBST([am__untar])
m4trace:configure.ac:16: -1- AC_SUBST_TRACE([am__untar])
m4trace:configure.ac:16: -1- m4_pattern_allow([^am__untar$])
m4trace:configure.ac:19: -1- AC_SUBST([GETTEXT_PACKAGE])
m4trace:configure.ac:19: -1- AC_SUBST_TRACE([GETTEXT_PACKAGE])
m4trace:configure.ac:19: -1- m4_pattern_allow([^GETTEXT_PACKAGE$])
m4trace:configure.ac:20: -1-
AC_DEFINE_TRACE_LITERAL([GETTEXT_PACKAGE])
m4trace:configure.ac:20: -1- m4_pattern_allow([^GETTEXT_PACKAGE$])
m4trace:configure.ac:20: -1- AH_OUTPUT([GETTEXT_PACKAGE], [/* The name
of the gettext domain */
@%:@undef GETTEXT_PACKAGE])
m4trace:configure.ac:24: -1- AM_MAINTAINER_MODE([enable])
m4trace:configure.ac:24: -1- AM_CONDITIONAL([MAINTAINER_MODE], [test
$USE_MAINTAINER_MODE = yes])
m4trace:configure.ac:24: -1- AC_SUBST([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:24: -1- AC_SUBST_TRACE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:24: -1-
m4_pattern_allow([^MAINTAINER_MODE_TRUE$])
m4trace:configure.ac:24: -1- AC_SUBST([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:24: -1- AC_SUBST_TRACE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:24: -1-
m4_pattern_allow([^MAINTAINER_MODE_FALSE$])
m4trace:configure.ac:24: -1- _AM_SUBST_NOTMAKE([MAINTAINER_MODE_TRUE])
m4trace:configure.ac:24: -1-
_AM_SUBST_NOTMAKE([MAINTAINER_MODE_FALSE])
m4trace:configure.ac:24: -1- AC_SUBST([MAINT])
m4trace:configure.ac:24: -1- AC_SUBST_TRACE([MAINT])
m4trace:configure.ac:24: -1- m4_pattern_allow([^MAINT$])
m4trace:configure.ac:26: -1- AM_SILENT_RULES([yes])
m4trace:configure.ac:26: -1- AC_SUBST([AM_V])
m4trace:configure.ac:26: -1- AC_SUBST_TRACE([AM_V])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_V$])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_V])
m4trace:configure.ac:26: -1- AC_SUBST([AM_DEFAULT_V])
m4trace:configure.ac:26: -1- AC_SUBST_TRACE([AM_DEFAULT_V])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_DEFAULT_V$])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_DEFAULT_V])

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m4trace:configure.ac:26: -1- AC_SUBST([AM_DEFAULT_VERBOSITY])
m4trace:configure.ac:26: -1- AC_SUBST_TRACE([AM_DEFAULT_VERBOSITY])
m4trace:configure.ac:26: -1-
m4_pattern_allow([^AM_DEFAULT_VERBOSITY$])
m4trace:configure.ac:26: -1- AC_SUBST([AM_BACKSLASH])
m4trace:configure.ac:26: -1- AC_SUBST_TRACE([AM_BACKSLASH])
m4trace:configure.ac:26: -1- m4_pattern_allow([^AM_BACKSLASH$])
m4trace:configure.ac:26: -1- _AM_SUBST_NOTMAKE([AM_BACKSLASH])
m4trace:configure.ac:28: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DAEMON_NAME])
m4trace:configure.ac:28: -1- m4_pattern_allow([^DBUS_DAEMON_NAME$])
m4trace:configure.ac:28: -1- AH_OUTPUT([DBUS_DAEMON_NAME], [/* Name of
executable */
@%:@undef DBUS_DAEMON_NAME])
m4trace:configure.ac:47: -1- AC_SUBST([LT_CURRENT])
m4trace:configure.ac:47: -1- AC_SUBST_TRACE([LT_CURRENT])
m4trace:configure.ac:47: -1- m4_pattern_allow([^LT_CURRENT$])
m4trace:configure.ac:48: -1- AC_SUBST([LT_REVISION])
m4trace:configure.ac:48: -1- AC_SUBST_TRACE([LT_REVISION])
m4trace:configure.ac:48: -1- m4_pattern_allow([^LT_REVISION$])
m4trace:configure.ac:49: -1- AC_SUBST([LT_AGE])
m4trace:configure.ac:49: -1- AC_SUBST_TRACE([LT_AGE])
m4trace:configure.ac:49: -1- m4_pattern_allow([^LT_AGE$])
m4trace:configure.ac:56: -1- AC_SUBST([DBUS_MAJOR_VERSION])
m4trace:configure.ac:56: -1- AC_SUBST_TRACE([DBUS_MAJOR_VERSION])
m4trace:configure.ac:56: -1- m4_pattern_allow([^DBUS_MAJOR_VERSION$])
m4trace:configure.ac:57: -1- AC_SUBST([DBUS_MINOR_VERSION])
m4trace:configure.ac:57: -1- AC_SUBST_TRACE([DBUS_MINOR_VERSION])
m4trace:configure.ac:57: -1- m4_pattern_allow([^DBUS_MINOR_VERSION$])
m4trace:configure.ac:58: -1- AC_SUBST([DBUS_MICRO_VERSION])
m4trace:configure.ac:58: -1- AC_SUBST_TRACE([DBUS_MICRO_VERSION])
m4trace:configure.ac:58: -1- m4_pattern_allow([^DBUS_MICRO_VERSION$])
m4trace:configure.ac:59: -1- AC_SUBST([DBUS_VERSION])
m4trace:configure.ac:59: -1- AC_SUBST_TRACE([DBUS_VERSION])
m4trace:configure.ac:59: -1- m4_pattern_allow([^DBUS_VERSION$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([CFLAGS])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CFLAGS])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CFLAGS$])
m4trace:configure.ac:61: -1- AC_SUBST([LDFLAGS])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([LDFLAGS])
m4trace:configure.ac:61: -1- m4_pattern_allow([^LDFLAGS$])
m4trace:configure.ac:61: -1- AC_SUBST([LIBS])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:61: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:61: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])

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m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CC$])
m4trace:configure.ac:61: -1- AC_SUBST([ac_ct_CC])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([ac_ct_CC])
m4trace:configure.ac:61: -1- m4_pattern_allow([^ac_ct_CC$])
m4trace:configure.ac:61: -1- AC_SUBST([EXEEXT], [$ac_cv_exeext])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([EXEEXT])
m4trace:configure.ac:61: -1- m4_pattern_allow([^EXEEXT$])
m4trace:configure.ac:61: -1- AC_SUBST([OBJEXT], [$ac_cv_objext])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([OBJEXT])
m4trace:configure.ac:61: -1- m4_pattern_allow([^OBJEXT$])
m4trace:configure.ac:61: -1- AC_SUBST([DEPDIR],
["${am__leading_dot}deps"])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([DEPDIR])
m4trace:configure.ac:61: -1- m4_pattern_allow([^DEPDIR$])
m4trace:configure.ac:61: -1- AC_SUBST([am__include])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__include])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__include$])
m4trace:configure.ac:61: -1- AC_SUBST([am__quote])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__quote])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__quote$])
m4trace:configure.ac:61: -1- AM_CONDITIONAL([AMDEP], [test
"x$enable_dependency_tracking" != xno])
m4trace:configure.ac:61: -1- AC_SUBST([AMDEP_TRUE])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([AMDEP_TRUE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^AMDEP_TRUE$])
m4trace:configure.ac:61: -1- AC_SUBST([AMDEP_FALSE])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([AMDEP_FALSE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^AMDEP_FALSE$])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEP_TRUE])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEP_FALSE])
m4trace:configure.ac:61: -1- AC_SUBST([AMDEPBACKSLASH])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([AMDEPBACKSLASH])
m4trace:configure.ac:61: -1- m4_pattern_allow([^AMDEPBACKSLASH$])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([AMDEPBACKSLASH])
m4trace:configure.ac:61: -1- AC_SUBST([am__nodep])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__nodep])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__nodep$])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__nodep])
m4trace:configure.ac:61: -1- AC_SUBST([CCDEPMODE],
[depmode=$am_cv_CC_dependencies_compiler_type])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([CCDEPMODE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^CCDEPMODE$])
m4trace:configure.ac:61: -1- AM_CONDITIONAL([am__fastdepCC], [

```

```

test "x$enable_dependency_tracking" != xno \
  && test "$am_cv_CC_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:61: -1- AC_SUBST([am__fastdepCC_TRUE])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__fastdepCC_TRUE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__fastdepCC_TRUE$])
m4trace:configure.ac:61: -1- AC_SUBST([am__fastdepCC_FALSE])
m4trace:configure.ac:61: -1- AC_SUBST_TRACE([am__fastdepCC_FALSE])
m4trace:configure.ac:61: -1- m4_pattern_allow([^am__fastdepCC_FALSE$])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_TRUE])
m4trace:configure.ac:61: -1- _AM_SUBST_NOTMAKE([am__fastdepCC_FALSE])
m4trace:configure.ac:62: -1- AM_PROG_CC_C_O
m4trace:configure.ac:62: -1-
AC_DEFINE_TRACE_LITERAL([NO_MINUS_C_MINUS_O])
m4trace:configure.ac:62: -1- m4_pattern_allow([^NO_MINUS_C_MINUS_O$])
m4trace:configure.ac:62: -1- AH_OUTPUT([NO_MINUS_C_MINUS_O], [/*
Define to 1 if your C compiler doesn't accept -c and -o together. */
@%:@undef NO_MINUS_C_MINUS_O])
m4trace:configure.ac:62: -1- AC_REQUIRE_AUX_FILE([compile])
m4trace:configure.ac:63: -1- AC_SUBST([CXX])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CXX])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CXX$])
m4trace:configure.ac:63: -1- AC_SUBST([CXXFLAGS])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CXXFLAGS])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CXXFLAGS$])
m4trace:configure.ac:63: -1- AC_SUBST([LDFLAGS])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([LDFLAGS])
m4trace:configure.ac:63: -1- m4_pattern_allow([^LDFLAGS$])
m4trace:configure.ac:63: -1- AC_SUBST([LIBS])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([LIBS])
m4trace:configure.ac:63: -1- m4_pattern_allow([^LIBS$])
m4trace:configure.ac:63: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:63: -1- AC_SUBST([CXX])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CXX])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CXX$])
m4trace:configure.ac:63: -1- AC_SUBST([ac_ct_CXX])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([ac_ct_CXX])
m4trace:configure.ac:63: -1- m4_pattern_allow([^ac_ct_CXX$])
m4trace:configure.ac:63: -1- AC_SUBST([CXXDEPMODE],
[depmode=$am_cv_CXX_dependencies_compiler_type])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([CXXDEPMODE])
m4trace:configure.ac:63: -1- m4_pattern_allow([^CXXDEPMODE$])
m4trace:configure.ac:63: -1- AM_CONDITIONAL([am__fastdepCXX], [
test "x$enable_dependency_tracking" != xno \
  && test "$am_cv_CXX_dependencies_compiler_type" = gcc3])
m4trace:configure.ac:63: -1- AC_SUBST([am__fastdepCXX_TRUE])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([am__fastdepCXX_TRUE])
m4trace:configure.ac:63: -1- m4_pattern_allow([^am__fastdepCXX_TRUE$])
m4trace:configure.ac:63: -1- AC_SUBST([am__fastdepCXX_FALSE])
m4trace:configure.ac:63: -1- AC_SUBST_TRACE([am__fastdepCXX_FALSE])

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m4trace:configure.ac:63: -1-
m4_pattern_allow([^am__fastdepCXX_FALSE$])
m4trace:configure.ac:63: -1- _AM_SUBST_NOTMAKE([am__fastdepCXX_TRUE])
m4trace:configure.ac:63: -1- _AM_SUBST_NOTMAKE([am__fastdepCXX_FALSE])
m4trace:configure.ac:64: -1- AC_SUBST([CPP])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([CPP])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:64: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:64: -1- AC_SUBST([CPP])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([CPP])
m4trace:configure.ac:64: -1- m4_pattern_allow([^CPP$])
m4trace:configure.ac:64: -1- AC_SUBST([GREP])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([GREP])
m4trace:configure.ac:64: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:64: -1- AC_SUBST([EGREP])
m4trace:configure.ac:64: -1- AC_SUBST_TRACE([EGREP])
m4trace:configure.ac:64: -1- m4_pattern_allow([^EGREP$])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([STDC_HEADERS])
m4trace:configure.ac:64: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:64: -1- AH_OUTPUT([STDC_HEADERS], [/* Define to 1
if you have the ANSI C header files. */
@%:@undef STDC_HEADERS])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_SYS_TYPES_H], [/* Define
to 1 if you have the <sys/types.h> header file. */
@%:@undef HAVE_SYS_TYPES_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_SYS_STAT_H], [/* Define
to 1 if you have the <sys/stat.h> header file. */
@%:@undef HAVE_SYS_STAT_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_STDLIB_H], [/* Define to
1 if you have the <stdlib.h> header file. */
@%:@undef HAVE_STDLIB_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_STRING_H], [/* Define to
1 if you have the <string.h> header file. */
@%:@undef HAVE_STRING_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_MEMORY_H], [/* Define to
1 if you have the <memory.h> header file. */
@%:@undef HAVE_MEMORY_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_STRINGS_H], [/* Define to
1 if you have the <strings.h> header file. */
@%:@undef HAVE_STRINGS_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_INTTYPES_H], [/* Define
to 1 if you have the <inttypes.h> header file. */
@%:@undef HAVE_INTTYPES_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_STDINT_H], [/* Define to
1 if you have the <stdint.h> header file. */
@%:@undef HAVE_STDINT_H])
m4trace:configure.ac:64: -1- AH_OUTPUT([HAVE_UNISTD_H], [/* Define to
1 if you have the <unistd.h> header file. */
@%:@undef HAVE_UNISTD_H])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_POSIX_SOURCE])

```

```

m4trace:configure.ac:64: -1- m4_pattern_allow([^_POSIX_SOURCE$])
m4trace:configure.ac:64: -1- AH_OUTPUT([_POSIX_SOURCE], [/* Define to
1 if you need to in order for `stat` and other things to work. */
@%:@undef _POSIX_SOURCE])
m4trace:configure.ac:64: -1-
AC_DEFINE_TRACE_LITERAL([_POSIX_1_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_POSIX_1_SOURCE$])
m4trace:configure.ac:64: -1- AH_OUTPUT([_POSIX_1_SOURCE], [/* Define
to 2 if the system does not provide POSIX.1 features except with
this defined. */
@%:@undef _POSIX_1_SOURCE])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_MINIX])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_MINIX$])
m4trace:configure.ac:64: -1- AH_OUTPUT([_MINIX], [/* Define to 1 if on
MINIX. */
@%:@undef _MINIX])
m4trace:configure.ac:64: -1- AH_OUTPUT([USE_SYSTEM_EXTENSIONS], [/*
Enable extensions on AIX 3, Interix. */
#ifdef _ALL_SOURCE
# undef _ALL_SOURCE
#endif
/* Enable GNU extensions on systems that have them. */
#ifdef _GNU_SOURCE
# undef _GNU_SOURCE
#endif
/* Enable threading extensions on Solaris. */
#ifdef _POSIX_PTHREAD_SEMANTICS
# undef _POSIX_PTHREAD_SEMANTICS
#endif
/* Enable extensions on HP NonStop. */
#ifdef _TANDEM_SOURCE
# undef _TANDEM_SOURCE
#endif
/* Enable general extensions on Solaris. */
#ifdef __EXTENSIONS__
# undef __EXTENSIONS__
#endif
])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([__EXTENSIONS__])
m4trace:configure.ac:64: -1- m4_pattern_allow([^__EXTENSIONS__$])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_ALL_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_ALL_SOURCE$])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_GNU_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_GNU_SOURCE$])
m4trace:configure.ac:64: -1-
AC_DEFINE_TRACE_LITERAL([_POSIX_PTHREAD_SEMANTICS])
m4trace:configure.ac:64: -1-
m4_pattern_allow([^_POSIX_PTHREAD_SEMANTICS$])
m4trace:configure.ac:64: -1- AC_DEFINE_TRACE_LITERAL([_TANDEM_SOURCE])
m4trace:configure.ac:64: -1- m4_pattern_allow([^_TANDEM_SOURCE$])
m4trace:configure.ac:65: -1- _m4_warn([obsolete], [The macro
`AC_ISC_POSIX' is obsolete.

```

```

You should run autoupdate.], [../../lib/autoconf/specific.m4:446:
AC_ISC_POSIX is expanded from...
configure.ac:65: the top level])
m4trace:configure.ac:66: -1- AC_DEFINE_TRACE_LITERAL([STDC_HEADERS])
m4trace:configure.ac:66: -1- m4_pattern_allow([^STDC_HEADERS$])
m4trace:configure.ac:66: -1- AH_OUTPUT([STDC_HEADERS], [/* Define to 1
if you have the ANSI C header files. */
@%:@undef STDC_HEADERS])
m4trace:configure.ac:67: -1- AH_OUTPUT([inline], [/* Define to
`__inline__' or `__inline' if that's what the C compiler
calls it, or to nothing if `inline' is not supported under any
name. */
#ifdef __cplusplus
#undef inline
#endif])
m4trace:configure.ac:68: -1- _m4_warn([obsolete], [The macro
`AM_PROG_LIBTOOL' is obsolete.
You should run autoupdate.], [aclocal.m4:1556: AM_PROG_LIBTOOL is
expanded from...
configure.ac:68: the top level])
m4trace:configure.ac:68: -1- LT_INIT
m4trace:configure.ac:68: -1- m4_pattern_forbid([^?LT_[A-Z_]+$])
m4trace:configure.ac:68: -1-
m4_pattern_allow([^(LT_EOF|LT_DLGLOBAL|LT_DLLAZY_OR_NOW|LT_MULTI_MODU
LE)$])
m4trace:configure.ac:68: -1- AC_REQUIRE_AUX_FILE([ltmain.sh])
m4trace:configure.ac:68: -1- AC_SUBST([LIBTOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LIBTOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([^LIBTOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([SED])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([SED])
m4trace:configure.ac:68: -1- m4_pattern_allow([^SED$])
m4trace:configure.ac:68: -1- AC_SUBST([FGREP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([FGREP])
m4trace:configure.ac:68: -1- m4_pattern_allow([^FGREP$])
m4trace:configure.ac:68: -1- AC_SUBST([GREP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([GREP])
m4trace:configure.ac:68: -1- m4_pattern_allow([^GREP$])
m4trace:configure.ac:68: -1- AC_SUBST([LD])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LD])
m4trace:configure.ac:68: -1- m4_pattern_allow([^LD$])
m4trace:configure.ac:68: -1- AC_SUBST([DUMPBIN])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DUMPBIN])
m4trace:configure.ac:68: -1- m4_pattern_allow([^DUMPBIN$])
m4trace:configure.ac:68: -1- AC_SUBST([ac_ct_DUMPBIN])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([ac_ct_DUMPBIN])
m4trace:configure.ac:68: -1- m4_pattern_allow([^ac_ct_DUMPBIN$])
m4trace:configure.ac:68: -1- AC_SUBST([DUMPBIN])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DUMPBIN])
m4trace:configure.ac:68: -1- m4_pattern_allow([^DUMPBIN$])
m4trace:configure.ac:68: -1- AC_SUBST([NM])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([NM])

```



```

m4trace:configure.ac:68: -1- m4_pattern_allow([^NM$])
m4trace:configure.ac:68: -1- AC_SUBST([LN_S], [$as_ln_s])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LN_S])
m4trace:configure.ac:68: -1- m4_pattern_allow([^LN_S$])
m4trace:configure.ac:68: -1- AC_SUBST([OBJDUMP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([OBJDUMP])
m4trace:configure.ac:68: -1- m4_pattern_allow([^OBJDUMP$])
m4trace:configure.ac:68: -1- AC_SUBST([OBJDUMP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([OBJDUMP])
m4trace:configure.ac:68: -1- m4_pattern_allow([^OBJDUMP$])
m4trace:configure.ac:68: -1- AC_SUBST([DLLTOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DLLTOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([^DLLTOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([DLLTOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DLLTOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([^DLLTOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([AR])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([AR])
m4trace:configure.ac:68: -1- m4_pattern_allow([^AR$])
m4trace:configure.ac:68: -1- AC_SUBST([ac_ct_AR])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([ac_ct_AR])
m4trace:configure.ac:68: -1- m4_pattern_allow([^ac_ct_AR$])
m4trace:configure.ac:68: -1- AC_SUBST([STRIP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([STRIP])
m4trace:configure.ac:68: -1- m4_pattern_allow([^STRIP$])
m4trace:configure.ac:68: -1- AC_SUBST([RANLIB])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([RANLIB])
m4trace:configure.ac:68: -1- m4_pattern_allow([^RANLIB$])
m4trace:configure.ac:68: -1- m4_pattern_allow([LT_OBJDIR])
m4trace:configure.ac:68: -1- AC_DEFINE_TRACE_LITERAL([LT_OBJDIR])
m4trace:configure.ac:68: -1- m4_pattern_allow([^LT_OBJDIR$])
m4trace:configure.ac:68: -1- AH_OUTPUT([LT_OBJDIR], [/* Define to the
sub-directory in which libtool stores uninstalled libraries.
*/
@%:@undef LT_OBJDIR])
m4trace:configure.ac:68: -1- LT_SUPPORTED_TAG([CC])
m4trace:configure.ac:68: -1- AC_SUBST([MANIFEST_TOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([MANIFEST_TOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([^MANIFEST_TOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([DSYMUTIL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([DSYMUTIL])
m4trace:configure.ac:68: -1- m4_pattern_allow([^DSYMUTIL$])
m4trace:configure.ac:68: -1- AC_SUBST([NMEDIT])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([NMEDIT])
m4trace:configure.ac:68: -1- m4_pattern_allow([^NMEDIT$])
m4trace:configure.ac:68: -1- AC_SUBST([LIPO])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LIPO])
m4trace:configure.ac:68: -1- m4_pattern_allow([^LIPO$])
m4trace:configure.ac:68: -1- AC_SUBST([OTOOL])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([OTOOL])
m4trace:configure.ac:68: -1- m4_pattern_allow([^OTOOL$])
m4trace:configure.ac:68: -1- AC_SUBST([OTOOL64])

```

```

m4trace:configure.ac:68: -1- AC_SUBST_TRACE([OTOOL64])
m4trace:configure.ac:68: -1- m4_pattern_allow([^OTOOL64$])
m4trace:configure.ac:68: -1- AH_OUTPUT([HAVE_DLFCN_H], [/* Define to 1
if you have the <dlfcn.h> header file. */
@%:@undef HAVE_DLFCN_H])
m4trace:configure.ac:68: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DLFCN_H])
m4trace:configure.ac:68: -1- m4_pattern_allow([^HAVE_DLFCN_H$])
m4trace:configure.ac:68: -1- LT_SUPPORTED_TAG([CXX])
m4trace:configure.ac:68: -1- AC_SUBST([CXXCPP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([CXXCPP])
m4trace:configure.ac:68: -1- m4_pattern_allow([^CXXCPP$])
m4trace:configure.ac:68: -1- AC_SUBST([CPPFLAGS])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([CPPFLAGS])
m4trace:configure.ac:68: -1- m4_pattern_allow([^CPPFLAGS$])
m4trace:configure.ac:68: -1- AC_SUBST([CXXCPP])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([CXXCPP])
m4trace:configure.ac:68: -1- m4_pattern_allow([^CXXCPP$])
m4trace:configure.ac:68: -1- AC_SUBST([LD])
m4trace:configure.ac:68: -1- AC_SUBST_TRACE([LD])
m4trace:configure.ac:68: -1- m4_pattern_allow([^LD$])
m4trace:configure.ac:72: -1- m4_pattern_forbid([^_?PKG_[A-Z]_+$])
m4trace:configure.ac:72: -1- m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
m4trace:configure.ac:72: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:72: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:72: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:72: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:72: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:72: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:75: -1- LT_INIT([win32-dll])
m4trace:configure.ac:76: -1- LT_SUPPORTED_TAG([RC])
m4trace:configure.ac:76: -1- AC_SUBST([RC])
m4trace:configure.ac:76: -1- AC_SUBST_TRACE([RC])
m4trace:configure.ac:76: -1- m4_pattern_allow([^RC$])
m4trace:configure.ac:76: -1- _m4_warn([obsolete], [The macro
`AC_LANG_SAVE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/lang.m4:125:
AC_LANG_SAVE is expanded from...
aclocal.m4:9000: _LT_LANG_RC_CONFIG is expanded from...
aclocal.m4:2261: _LT_LANG is expanded from...
aclocal.m4:2243: LT_LANG is expanded from...
configure.ac:76: the top level])
m4trace:configure.ac:76: -1- _m4_warn([obsolete], [The macro
`AC_LANG_RESTORE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/lang.m4:134:
AC_LANG_RESTORE is expanded from...
aclocal.m4:9000: _LT_LANG_RC_CONFIG is expanded from...
aclocal.m4:2261: _LT_LANG is expanded from...
aclocal.m4:2243: LT_LANG is expanded from...
configure.ac:76: the top level])
m4trace:configure.ac:101: -1- AC_DEFINE_TRACE_LITERAL([DBUS_WIN])
m4trace:configure.ac:101: -1- m4_pattern_allow([^DBUS_WIN$])

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```

m4trace:configure.ac:101: -1- AH_OUTPUT([DBUS_WIN], [/* Defined if we
run on a W32 API based system */
@%:@undef DBUS_WIN])
m4trace:configure.ac:103: -1- AC_SUBST([BUILD_TIMESTAMP])
m4trace:configure.ac:103: -1- AC_SUBST_TRACE([BUILD_TIMESTAMP])
m4trace:configure.ac:103: -1- m4_pattern_allow([^BUILD_TIMESTAMP$])
m4trace:configure.ac:106: -1- AC_SUBST([BUILD_FILEVERSION])
m4trace:configure.ac:106: -1- AC_SUBST_TRACE([BUILD_FILEVERSION])
m4trace:configure.ac:106: -1- m4_pattern_allow([^BUILD_FILEVERSION$])
m4trace:configure.ac:107: -1- AC_SUBST([WINDRES])
m4trace:configure.ac:107: -1- AC_SUBST_TRACE([WINDRES])
m4trace:configure.ac:107: -1- m4_pattern_allow([^WINDRES$])
m4trace:configure.ac:112: -1- AC_DEFINE_TRACE_LITERAL([DBUS_WINCE])
m4trace:configure.ac:112: -1- m4_pattern_allow([^DBUS_WINCE$])
m4trace:configure.ac:112: -1- AH_OUTPUT([DBUS_WINCE], [/* Defined if
we run on a W32 CE API based system */
@%:@undef DBUS_WINCE])
m4trace:configure.ac:113: -1- AC_DEFINE_TRACE_LITERAL([_WIN32_WCE])
m4trace:configure.ac:113: -1- m4_pattern_allow([^_WIN32_WCE$])
m4trace:configure.ac:113: -1- AH_OUTPUT([_WIN32_WCE], [/* Defined to
get newer W32 CE APIs */
@%:@undef _WIN32_WCE])
m4trace:configure.ac:116: -1- AC_DEFINE_TRACE_LITERAL([DBUS_UNIX])
m4trace:configure.ac:116: -1- m4_pattern_allow([^DBUS_UNIX$])
m4trace:configure.ac:116: -1- AH_OUTPUT([DBUS_UNIX], [/* Defined if we
run on a Unix-based system */
@%:@undef DBUS_UNIX])
m4trace:configure.ac:119: -1- AC_DEFINE_TRACE_LITERAL([DBUS_CYGWIN])
m4trace:configure.ac:119: -1- m4_pattern_allow([^DBUS_CYGWIN$])
m4trace:configure.ac:119: -1- AH_OUTPUT([DBUS_CYGWIN], [/* Defined if
we run on a cygwin API based system */
@%:@undef DBUS_CYGWIN])
m4trace:configure.ac:122: -1- AM_CONDITIONAL([DBUS_WIN], [test
"$dbus_win" = yes])
m4trace:configure.ac:122: -1- AC_SUBST([DBUS_WIN_TRUE])
m4trace:configure.ac:122: -1- AC_SUBST_TRACE([DBUS_WIN_TRUE])
m4trace:configure.ac:122: -1- m4_pattern_allow([^DBUS_WIN_TRUE$])
m4trace:configure.ac:122: -1- AC_SUBST([DBUS_WIN_FALSE])
m4trace:configure.ac:122: -1- AC_SUBST_TRACE([DBUS_WIN_FALSE])
m4trace:configure.ac:122: -1- m4_pattern_allow([^DBUS_WIN_FALSE$])
m4trace:configure.ac:122: -1- _AM_SUBST_NOTMAKE([DBUS_WIN_TRUE])
m4trace:configure.ac:122: -1- _AM_SUBST_NOTMAKE([DBUS_WIN_FALSE])
m4trace:configure.ac:123: -1- AM_CONDITIONAL([DBUS_WINCE], [test
"$dbus_wince" = yes])
m4trace:configure.ac:123: -1- AC_SUBST([DBUS_WINCE_TRUE])
m4trace:configure.ac:123: -1- AC_SUBST_TRACE([DBUS_WINCE_TRUE])
m4trace:configure.ac:123: -1- m4_pattern_allow([^DBUS_WINCE_TRUE$])
m4trace:configure.ac:123: -1- AC_SUBST([DBUS_WINCE_FALSE])
m4trace:configure.ac:123: -1- AC_SUBST_TRACE([DBUS_WINCE_FALSE])
m4trace:configure.ac:123: -1- m4_pattern_allow([^DBUS_WINCE_FALSE$])
m4trace:configure.ac:123: -1- _AM_SUBST_NOTMAKE([DBUS_WINCE_TRUE])
m4trace:configure.ac:123: -1- _AM_SUBST_NOTMAKE([DBUS_WINCE_FALSE])

```

```
m4trace:configure.ac:124: -1- AM_CONDITIONAL([DBUS_UNIX], [test
"$dbus_unix" = yes])
m4trace:configure.ac:124: -1- AC_SUBST([DBUS_UNIX_TRUE])
m4trace:configure.ac:124: -1- AC_SUBST_TRACE([DBUS_UNIX_TRUE])
m4trace:configure.ac:124: -1- m4_pattern_allow([DBUS_UNIX_TRUE$])
m4trace:configure.ac:124: -1- AC_SUBST([DBUS_UNIX_FALSE])
m4trace:configure.ac:124: -1- AC_SUBST_TRACE([DBUS_UNIX_FALSE])
m4trace:configure.ac:124: -1- m4_pattern_allow([DBUS_UNIX_FALSE$])
m4trace:configure.ac:124: -1- _AM_SUBST_NOTMAKE([DBUS_UNIX_TRUE])
m4trace:configure.ac:124: -1- _AM_SUBST_NOTMAKE([DBUS_UNIX_FALSE])
m4trace:configure.ac:125: -1- AM_CONDITIONAL([DBUS_CYGWIN], [test
"$dbus_cygwin" = yes])
m4trace:configure.ac:125: -1- AC_SUBST([DBUS_CYGWIN_TRUE])
m4trace:configure.ac:125: -1- AC_SUBST_TRACE([DBUS_CYGWIN_TRUE])
m4trace:configure.ac:125: -1- m4_pattern_allow([DBUS_CYGWIN_TRUE$])
m4trace:configure.ac:125: -1- AC_SUBST([DBUS_CYGWIN_FALSE])
m4trace:configure.ac:125: -1- AC_SUBST_TRACE([DBUS_CYGWIN_FALSE])
m4trace:configure.ac:125: -1- m4_pattern_allow([DBUS_CYGWIN_FALSE$])
m4trace:configure.ac:125: -1- _AM_SUBST_NOTMAKE([DBUS_CYGWIN_TRUE])
m4trace:configure.ac:125: -1- _AM_SUBST_NOTMAKE([DBUS_CYGWIN_FALSE])
m4trace:configure.ac:142: -1- AC_SUBST([DBUS_STATIC_BUILD_CPPFLAGS])
m4trace:configure.ac:142: -1-
AC_SUBST_TRACE([DBUS_STATIC_BUILD_CPPFLAGS])
m4trace:configure.ac:142: -1-
m4_pattern_allow([DBUS_STATIC_BUILD_CPPFLAGS$])
m4trace:configure.ac:200: -1- AM_CONDITIONAL([DBUS_BUILD_TESTS], [test
"x$enable_embedded_tests" = xyes])
m4trace:configure.ac:200: -1- AC_SUBST([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:200: -1- AC_SUBST_TRACE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:200: -1-
m4_pattern_allow([DBUS_BUILD_TESTS_TRUE$])
m4trace:configure.ac:200: -1- AC_SUBST([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:200: -1- AC_SUBST_TRACE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:200: -1-
m4_pattern_allow([DBUS_BUILD_TESTS_FALSE$])
m4trace:configure.ac:200: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_TRUE])
m4trace:configure.ac:200: -1-
_AM_SUBST_NOTMAKE([DBUS_BUILD_TESTS_FALSE])
m4trace:configure.ac:201: -1-
AM_CONDITIONAL([DBUS_ENABLE_EMBEDDED_TESTS], [test
"x$enable_embedded_tests" = xyes])
m4trace:configure.ac:201: -1-
AC_SUBST([DBUS_ENABLE_EMBEDDED_TESTS_TRUE])
m4trace:configure.ac:201: -1-
AC_SUBST_TRACE([DBUS_ENABLE_EMBEDDED_TESTS_TRUE])
m4trace:configure.ac:201: -1-
m4_pattern_allow([DBUS_ENABLE_EMBEDDED_TESTS_TRUE$])
m4trace:configure.ac:201: -1-
AC_SUBST([DBUS_ENABLE_EMBEDDED_TESTS_FALSE])
m4trace:configure.ac:201: -1-
AC_SUBST_TRACE([DBUS_ENABLE_EMBEDDED_TESTS_FALSE])
```

```
m4trace:configure.ac:201: -1-
m4_pattern_allow([DBUS_ENABLE_EMBEDDED_TESTS_FALSE$])
m4trace:configure.ac:201: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_EMBEDDED_TESTS_TRUE])
m4trace:configure.ac:201: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_EMBEDDED_TESTS_FALSE])
m4trace:configure.ac:204: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_EMBEDDED_TESTS])
m4trace:configure.ac:204: -1-
m4_pattern_allow([DBUS_ENABLE_EMBEDDED_TESTS$])
m4trace:configure.ac:204: -1- AH_OUTPUT([DBUS_ENABLE_EMBEDDED_TESTS],
[/* Define to build test code into the library and binaries */
@%:@undef DBUS_ENABLE_EMBEDDED_TESTS])
m4trace:configure.ac:206: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUILD_TESTS])
m4trace:configure.ac:206: -1- m4_pattern_allow([DBUS_BUILD_TESTS$])
m4trace:configure.ac:206: -1- AH_OUTPUT([DBUS_BUILD_TESTS], [/* Define
to build test code into the library and binaries */
@%:@undef DBUS_BUILD_TESTS])
m4trace:configure.ac:218: -1- AC_SUBST([GLIB_CFLAGS])
m4trace:configure.ac:218: -1- AC_SUBST_TRACE([GLIB_CFLAGS])
m4trace:configure.ac:218: -1- m4_pattern_allow([GLIB_CFLAGS$])
m4trace:configure.ac:218: -1- AC_SUBST([GLIB_LIBS])
m4trace:configure.ac:218: -1- AC_SUBST_TRACE([GLIB_LIBS])
m4trace:configure.ac:218: -1- m4_pattern_allow([GLIB_LIBS$])
m4trace:configure.ac:227: -1- AC_SUBST([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:227: -1- AC_SUBST_TRACE([DBUS_GLIB_CFLAGS])
m4trace:configure.ac:227: -1- m4_pattern_allow([DBUS_GLIB_CFLAGS$])
m4trace:configure.ac:227: -1- AC_SUBST([DBUS_GLIB_LIBS])
m4trace:configure.ac:227: -1- AC_SUBST_TRACE([DBUS_GLIB_LIBS])
m4trace:configure.ac:227: -1- m4_pattern_allow([DBUS_GLIB_LIBS$])
m4trace:configure.ac:237: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_MODULAR_TESTS])
m4trace:configure.ac:237: -1-
m4_pattern_allow([DBUS_ENABLE_MODULAR_TESTS$])
m4trace:configure.ac:237: -1- AH_OUTPUT([DBUS_ENABLE_MODULAR_TESTS],
[/* Define to build independent test binaries */
@%:@undef DBUS_ENABLE_MODULAR_TESTS])
m4trace:configure.ac:240: -1-
AM_CONDITIONAL([DBUS_ENABLE_MODULAR_TESTS], [test
"x$enable_modular_tests" != xno])
m4trace:configure.ac:240: -1-
AC_SUBST([DBUS_ENABLE_MODULAR_TESTS_TRUE])
m4trace:configure.ac:240: -1-
AC_SUBST_TRACE([DBUS_ENABLE_MODULAR_TESTS_TRUE])
m4trace:configure.ac:240: -1-
m4_pattern_allow([DBUS_ENABLE_MODULAR_TESTS_TRUE$])
m4trace:configure.ac:240: -1-
AC_SUBST([DBUS_ENABLE_MODULAR_TESTS_FALSE])
m4trace:configure.ac:240: -1-
AC_SUBST_TRACE([DBUS_ENABLE_MODULAR_TESTS_FALSE])
```

```
m4trace:configure.ac:240: -1-
m4_pattern_allow([^DBUS_ENABLE_MODULAR_TESTS_FALSE$])
m4trace:configure.ac:240: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_MODULAR_TESTS_TRUE])
m4trace:configure.ac:240: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_MODULAR_TESTS_FALSE])
m4trace:configure.ac:244: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_WITH_GLIB])
m4trace:configure.ac:244: -1- m4_pattern_allow([^DBUS_WITH_GLIB$])
m4trace:configure.ac:244: -1- AH_OUTPUT([DBUS_WITH_GLIB], [/* Define
if GLib, GObject, GIO are available */
@%:@undef DBUS_WITH_GLIB])
m4trace:configure.ac:247: -1- AM_CONDITIONAL([DBUS_WITH_GLIB], [test
"x$with_glib" != xno])
m4trace:configure.ac:247: -1- AC_SUBST([DBUS_WITH_GLIB_TRUE])
m4trace:configure.ac:247: -1- AC_SUBST_TRACE([DBUS_WITH_GLIB_TRUE])
m4trace:configure.ac:247: -1-
m4_pattern_allow([^DBUS_WITH_GLIB_TRUE$])
m4trace:configure.ac:247: -1- AC_SUBST([DBUS_WITH_GLIB_FALSE])
m4trace:configure.ac:247: -1- AC_SUBST_TRACE([DBUS_WITH_GLIB_FALSE])
m4trace:configure.ac:247: -1-
m4_pattern_allow([^DBUS_WITH_GLIB_FALSE$])
m4trace:configure.ac:247: -1- _AM_SUBST_NOTMAKE([DBUS_WITH_GLIB_TRUE])
m4trace:configure.ac:247: -1-
  _AM_SUBST_NOTMAKE([DBUS_WITH_GLIB_FALSE])
m4trace:configure.ac:253: -1-
AM_CONDITIONAL([DBUS_ENABLE_INSTALLED_TESTS], [test
"x$enable_installed_tests" = xyes])
m4trace:configure.ac:253: -1-
AC_SUBST([DBUS_ENABLE_INSTALLED_TESTS_TRUE])
m4trace:configure.ac:253: -1-
AC_SUBST_TRACE([DBUS_ENABLE_INSTALLED_TESTS_TRUE])
m4trace:configure.ac:253: -1-
m4_pattern_allow([^DBUS_ENABLE_INSTALLED_TESTS_TRUE$])
m4trace:configure.ac:253: -1-
AC_SUBST([DBUS_ENABLE_INSTALLED_TESTS_FALSE])
m4trace:configure.ac:253: -1-
AC_SUBST_TRACE([DBUS_ENABLE_INSTALLED_TESTS_FALSE])
m4trace:configure.ac:253: -1-
m4_pattern_allow([^DBUS_ENABLE_INSTALLED_TESTS_FALSE$])
m4trace:configure.ac:253: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_INSTALLED_TESTS_TRUE])
m4trace:configure.ac:253: -1-
  _AM_SUBST_NOTMAKE([DBUS_ENABLE_INSTALLED_TESTS_FALSE])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON])
m4trace:configure.ac:259: -1- m4_pattern_allow([^PYTHON$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_VERSION],
[$am_cv_python_version])
```

```
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_VERSION])
m4trace:configure.ac:259: -1- m4_pattern_allow([PYTHON_VERSION$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_PREFIX], ['${prefix}'])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_PREFIX])
m4trace:configure.ac:259: -1- m4_pattern_allow([PYTHON_PREFIX$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_LIB_PREFIX],
['${libdir}'])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_LIB_PREFIX])
m4trace:configure.ac:259: -1- m4_pattern_allow([PYTHON_LIB_PREFIX$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_EXEC_PREFIX],
['${exec_prefix}'])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_EXEC_PREFIX])
m4trace:configure.ac:259: -1- m4_pattern_allow([PYTHON_EXEC_PREFIX$])
m4trace:configure.ac:259: -1- AC_SUBST([PYTHON_PLATFORM],
[$am_cv_python_platform])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([PYTHON_PLATFORM])
m4trace:configure.ac:259: -1- m4_pattern_allow([PYTHON_PLATFORM$])
m4trace:configure.ac:259: -1- AC_SUBST([pythondir],
[$am_cv_python_pythondir])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([pythondir])
m4trace:configure.ac:259: -1- m4_pattern_allow([pythondir$])
m4trace:configure.ac:259: -1- AC_SUBST([pkgpythondir],
[\${pythondir}/$PACKAGE])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([pkgpythondir])
m4trace:configure.ac:259: -1- m4_pattern_allow([pkgpythondir$])
m4trace:configure.ac:259: -1- AC_SUBST([pyexecdir],
[$am_cv_python_pyexecdir])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([pyexecdir])
m4trace:configure.ac:259: -1- m4_pattern_allow([pyexecdir$])
m4trace:configure.ac:259: -1- AC_SUBST([pkgpyexecdir],
[\${pyexecdir}/$PACKAGE])
m4trace:configure.ac:259: -1- AC_SUBST_TRACE([pkgpyexecdir])
m4trace:configure.ac:259: -1- m4_pattern_allow([pkgpyexecdir$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON])
m4trace:configure.ac:269: -1- m4_pattern_allow([PYTHON$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON])
m4trace:configure.ac:269: -1- m4_pattern_allow([PYTHON$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_VERSION],
[$am_cv_python_version])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_VERSION])
m4trace:configure.ac:269: -1- m4_pattern_allow([PYTHON_VERSION$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_PREFIX], ['${prefix}'])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_PREFIX])
m4trace:configure.ac:269: -1- m4_pattern_allow([PYTHON_PREFIX$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_LIB_PREFIX],
['${libdir}'])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_LIB_PREFIX])
m4trace:configure.ac:269: -1- m4_pattern_allow([PYTHON_LIB_PREFIX$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_EXEC_PREFIX],
['${exec_prefix}'])
```

```

m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_EXEC_PREFIX])
m4trace:configure.ac:269: -1- m4_pattern_allow([PYTHON_EXEC_PREFIX$])
m4trace:configure.ac:269: -1- AC_SUBST([PYTHON_PLATFORM],
[$am_cv_python_platform])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([PYTHON_PLATFORM])
m4trace:configure.ac:269: -1- m4_pattern_allow([PYTHON_PLATFORM$])
m4trace:configure.ac:269: -1- AC_SUBST([pythondir],
[$am_cv_python_pythondir])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([pythondir])
m4trace:configure.ac:269: -1- m4_pattern_allow([pythondir$])
m4trace:configure.ac:269: -1- AC_SUBST([pkgpythondir],
[\${pythondir}/$PACKAGE])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([pkgpythondir])
m4trace:configure.ac:269: -1- m4_pattern_allow([pkgpythondir$])
m4trace:configure.ac:269: -1- AC_SUBST([pyexecdir],
[$am_cv_python_pyexecdir])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([pyexecdir])
m4trace:configure.ac:269: -1- m4_pattern_allow([pyexecdir$])
m4trace:configure.ac:269: -1- AC_SUBST([pkgpyexecdir],
[\${pyexecdir}/$PACKAGE])
m4trace:configure.ac:269: -1- AC_SUBST_TRACE([pkgpyexecdir])
m4trace:configure.ac:269: -1- m4_pattern_allow([pkgpyexecdir$])
m4trace:configure.ac:273: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:273: -1-
m4_pattern_allow([DBUS_ENABLE_VERBOSE_MODE$])
m4trace:configure.ac:273: -1- AH_OUTPUT([DBUS_ENABLE_VERBOSE_MODE],
[/* Support a verbose mode */
@%:@undef DBUS_ENABLE_VERBOSE_MODE])
m4trace:configure.ac:277: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DISABLE_ASSERT])
m4trace:configure.ac:277: -1-
m4_pattern_allow([DBUS_DISABLE_ASSERT$])
m4trace:configure.ac:277: -1- AH_OUTPUT([DBUS_DISABLE_ASSERT], [/*
Disable assertion checking */
@%:@undef DBUS_DISABLE_ASSERT])
m4trace:configure.ac:288: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUILT_R_DYNAMIC])
m4trace:configure.ac:288: -1-
m4_pattern_allow([DBUS_BUILT_R_DYNAMIC$])
m4trace:configure.ac:288: -1- AH_OUTPUT([DBUS_BUILT_R_DYNAMIC], [/*
whether -export-dynamic was passed to libtool */
@%:@undef DBUS_BUILT_R_DYNAMIC])
m4trace:configure.ac:291: -1- AC_SUBST([R_DYNAMIC_LDFLAG])
m4trace:configure.ac:291: -1- AC_SUBST_TRACE([R_DYNAMIC_LDFLAG])
m4trace:configure.ac:291: -1- m4_pattern_allow([R_DYNAMIC_LDFLAG$])
m4trace:configure.ac:294: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DISABLE_CHECKS])
m4trace:configure.ac:294: -1-
m4_pattern_allow([DBUS_DISABLE_CHECKS$])
m4trace:configure.ac:294: -1- AH_OUTPUT([DBUS_DISABLE_CHECKS], [/*
Disable public API sanity checking */

```



```

@%:@undef DBUS_DISABLE_CHECKS])
m4trace:configure.ac:295: -1-
AC_DEFINE_TRACE_LITERAL([G_DISABLE_CHECKS])
m4trace:configure.ac:295: -1- m4_pattern_allow([G_DISABLE_CHECKS$])
m4trace:configure.ac:295: -1- AH_OUTPUT([G_DISABLE_CHECKS], [/*
Disable GLib public API sanity checking */
@%:@undef G_DISABLE_CHECKS])
m4trace:configure.ac:300: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_USERDB_CACHE])
m4trace:configure.ac:300: -1-
m4_pattern_allow([DBUS_ENABLE_USERDB_CACHE$])
m4trace:configure.ac:300: -1- AH_OUTPUT([DBUS_ENABLE_USERDB_CACHE],
[/* Build with caching of user data */
@%:@undef DBUS_ENABLE_USERDB_CACHE])
m4trace:configure.ac:305: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_GCOV_ENABLED])
m4trace:configure.ac:305: -1- m4_pattern_allow([DBUS_GCOV_ENABLED$])
m4trace:configure.ac:305: -1- AH_OUTPUT([DBUS_GCOV_ENABLED], [/*
Defined if gcov is enabled to force a rebuild due to config.h changing
*/
@%:@undef DBUS_GCOV_ENABLED])
m4trace:configure.ac:335: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_CHAR])
m4trace:configure.ac:335: -1- m4_pattern_allow([SIZEOF_CHAR$])
m4trace:configure.ac:335: -1- AH_OUTPUT([SIZEOF_CHAR], [/* The size of
`char`, as computed by sizeof. */
@%:@undef SIZEOF_CHAR])
m4trace:configure.ac:336: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_SHORT])
m4trace:configure.ac:336: -1- m4_pattern_allow([SIZEOF_SHORT$])
m4trace:configure.ac:336: -1- AH_OUTPUT([SIZEOF_SHORT], [/* The size
of `short`, as computed by sizeof. */
@%:@undef SIZEOF_SHORT])
m4trace:configure.ac:337: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_LONG])
m4trace:configure.ac:337: -1- m4_pattern_allow([SIZEOF_LONG$])
m4trace:configure.ac:337: -1- AH_OUTPUT([SIZEOF_LONG], [/* The size of
`long`, as computed by sizeof. */
@%:@undef SIZEOF_LONG])
m4trace:configure.ac:338: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_INT])
m4trace:configure.ac:338: -1- m4_pattern_allow([SIZEOF_INT$])
m4trace:configure.ac:338: -1- AH_OUTPUT([SIZEOF_INT], [/* The size of
`int`, as computed by sizeof. */
@%:@undef SIZEOF_INT])
m4trace:configure.ac:339: -1- AC_DEFINE_TRACE_LITERAL([SIZEOF_VOID_P])
m4trace:configure.ac:339: -1- m4_pattern_allow([SIZEOF_VOID_P$])
m4trace:configure.ac:339: -1- AH_OUTPUT([SIZEOF_VOID_P], [/* The size
of `void *`, as computed by sizeof. */
@%:@undef SIZEOF_VOID_P])
m4trace:configure.ac:340: -1-
AC_DEFINE_TRACE_LITERAL([SIZEOF_LONG_LONG])
m4trace:configure.ac:340: -1- m4_pattern_allow([SIZEOF_LONG_LONG$])
m4trace:configure.ac:340: -1- AH_OUTPUT([SIZEOF_LONG_LONG], [/* The
size of `long long`, as computed by sizeof. */
@%:@undef SIZEOF_LONG_LONG])

```

```

m4trace:configure.ac:341: -1-
AC_DEFINE_TRACE_LITERAL([SIZEOF__INT64])
m4trace:configure.ac:341: -1- m4_pattern_allow([^SIZEOF__INT64$])
m4trace:configure.ac:341: -1- AH_OUTPUT([SIZEOF__INT64], [/* The size
of `__int64\' , as computed by sizeof. */
@%:@undef SIZEOF__INT64])
m4trace:configure.ac:386: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_INT64_PRINTF_MODIFIER])
m4trace:configure.ac:386: -1-
m4_pattern_allow([^DBUS_INT64_PRINTF_MODIFIER$])
m4trace:configure.ac:386: -1- AH_OUTPUT([DBUS_INT64_PRINTF_MODIFIER],
[/* Define to printf modifier for 64 bit integer type */
@%:@undef DBUS_INT64_PRINTF_MODIFIER])
m4trace:configure.ac:422: -1- AC_SUBST([DBUS_INT64_TYPE])
m4trace:configure.ac:422: -1- AC_SUBST_TRACE([DBUS_INT64_TYPE])
m4trace:configure.ac:422: -1- m4_pattern_allow([^DBUS_INT64_TYPE$])
m4trace:configure.ac:423: -1- AC_SUBST([DBUS_INT64_CONSTANT])
m4trace:configure.ac:423: -1- AC_SUBST_TRACE([DBUS_INT64_CONSTANT])
m4trace:configure.ac:423: -1-
m4_pattern_allow([^DBUS_INT64_CONSTANT$])
m4trace:configure.ac:424: -1- AC_SUBST([DBUS_UINT64_CONSTANT])
m4trace:configure.ac:424: -1- AC_SUBST_TRACE([DBUS_UINT64_CONSTANT])
m4trace:configure.ac:424: -1-
m4_pattern_allow([^DBUS_UINT64_CONSTANT$])
m4trace:configure.ac:425: -1- AC_SUBST([DBUS_HAVE_INT64])
m4trace:configure.ac:425: -1- AC_SUBST_TRACE([DBUS_HAVE_INT64])
m4trace:configure.ac:425: -1- m4_pattern_allow([^DBUS_HAVE_INT64$])
m4trace:configure.ac:450: -1- AC_SUBST([DBUS_INT32_TYPE])
m4trace:configure.ac:450: -1- AC_SUBST_TRACE([DBUS_INT32_TYPE])
m4trace:configure.ac:450: -1- m4_pattern_allow([^DBUS_INT32_TYPE$])
m4trace:configure.ac:472: -1- AC_SUBST([DBUS_INT16_TYPE])
m4trace:configure.ac:472: -1- AC_SUBST_TRACE([DBUS_INT16_TYPE])
m4trace:configure.ac:472: -1- m4_pattern_allow([^DBUS_INT16_TYPE$])
m4trace:configure.ac:479: -1- AH_OUTPUT([WORDS_BIGENDIAN_DARWIN], [
/* Use the compiler-provided endianness defines to
allow universal compiling. */
#if defined(__BIG_ENDIAN__)
#define WORDS_BIGENDIAN 1
#endif
])
m4trace:configure.ac:487: -1- AH_OUTPUT([WORDS_BIGENDIAN], [/* Define
WORDS_BIGENDIAN to 1 if your processor stores words with the most
significant byte first (like Motorola and SPARC, unlike Intel). */
#if defined AC_APPLE_UNIVERSAL_BUILD
# if defined __BIG_ENDIAN__
# define WORDS_BIGENDIAN 1
# endif
#else
# ifndef WORDS_BIGENDIAN
# undef WORDS_BIGENDIAN
# endif
#endif])

```

```

m4trace:configure.ac:487: -1-
AC_DEFINE_TRACE_LITERAL([WORDS_BIGENDIAN])
m4trace:configure.ac:487: -1- m4_pattern_allow([^WORDS_BIGENDIAN$])
m4trace:configure.ac:487: -1-
AC_DEFINE_TRACE_LITERAL([AC_APPLE_UNIVERSAL_BUILD])
m4trace:configure.ac:487: -1-
m4_pattern_allow([^AC_APPLE_UNIVERSAL_BUILD$])
m4trace:configure.ac:487: -1- AH_OUTPUT([AC_APPLE_UNIVERSAL_BUILD],
[/ * Define if building universal (internal helper macro) */
@%:@undef AC_APPLE_UNIVERSAL_BUILD])
m4trace:configure.ac:541: -1- AC_DEFINE_TRACE_LITERAL([DBUS_VA_COPY])
m4trace:configure.ac:541: -1- m4_pattern_allow([^DBUS_VA_COPY$])
m4trace:configure.ac:541: -1- AH_OUTPUT([DBUS_VA_COPY], [/ * A
\'va_copy\' style function */
@%:@undef DBUS_VA_COPY])
m4trace:configure.ac:573: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_VA_COPY_AS_ARRAY])
m4trace:configure.ac:573: -1-
m4_pattern_allow([^DBUS_VA_COPY_AS_ARRAY$])
m4trace:configure.ac:573: -1- AH_OUTPUT([DBUS_VA_COPY_AS_ARRAY], [/ *
\'va_lists\' cannot be copied as values */
@%:@undef DBUS_VA_COPY_AS_ARRAY])
m4trace:configure.ac:593: -1- AC_DEFINE_TRACE_LITERAL([DBUS_USE_SYNC])
m4trace:configure.ac:593: -1- m4_pattern_allow([^DBUS_USE_SYNC$])
m4trace:configure.ac:593: -1- AH_OUTPUT([DBUS_USE_SYNC], [/ * Use the
gcc __sync extension */
@%:@undef DBUS_USE_SYNC])
m4trace:configure.ac:597: -1- AH_OUTPUT([HAVE_LIBNSL], [/ * Define to 1
if you have the `nsl\' library (-lnsl). */
@%:@undef HAVE_LIBNSL])
m4trace:configure.ac:597: -1- AC_DEFINE_TRACE_LITERAL([HAVE_LIBNSL])
m4trace:configure.ac:597: -1- m4_pattern_allow([^HAVE_LIBNSL$])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_VSNPRINTF], [/ * Define
to 1 if you have the `vsnprintf\' function. */
@%:@undef HAVE_VSNPRINTF])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_VASPRINTF], [/ * Define
to 1 if you have the `vasprintf\' function. */
@%:@undef HAVE_VASPRINTF])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_NANOSLEEP], [/ * Define
to 1 if you have the `nanosleep\' function. */
@%:@undef HAVE_NANOSLEEP])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_USLEEP], [/ * Define to 1
if you have the `usleep\' function. */
@%:@undef HAVE_USLEEP])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_SETENV], [/ * Define to 1
if you have the `setenv\' function. */
@%:@undef HAVE_SETENV])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_CLEARENV], [/ * Define to
1 if you have the `clearenv\' function. */
@%:@undef HAVE_CLEARENV])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_UNSETENV], [/ * Define to
1 if you have the `unsetenv\' function. */

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@%:@undef HAVE_UNSETENV])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_SOCKETPAIR], [/* Define
to 1 if you have the `socketpair` function. */
@%:@undef HAVE_SOCKETPAIR])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_GETGROUPLIST], [/*
Define to 1 if you have the `getgrouplist` function. */
@%:@undef HAVE_GETGROUPLIST])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_FPATHCONF], [/* Define
to 1 if you have the `fpathconf` function. */
@%:@undef HAVE_FPATHCONF])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_SETRLIMIT], [/* Define
to 1 if you have the `setrlimit` function. */
@%:@undef HAVE_SETRLIMIT])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_POLL], [/* Define to 1
if you have the `poll` function. */
@%:@undef HAVE_POLL])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_SETLOCALE], [/* Define
to 1 if you have the `setlocale` function. */
@%:@undef HAVE_SETLOCALE])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_LOCALECONV], [/* Define
to 1 if you have the `localeconv` function. */
@%:@undef HAVE_LOCALECONV])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_STRTOULL], [/* Define to
1 if you have the `strtoll` function. */
@%:@undef HAVE_STRTOULL])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_STRTOLL], [/* Define to
1 if you have the `strtoll` function. */
@%:@undef HAVE_STRTOLL])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_STRTOULL], [/* Define to
1 if you have the `strtoull` function. */
@%:@undef HAVE_STRTOULL])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_ISSETUGID], [/* Define
to 1 if you have the `issetugid` function. */
@%:@undef HAVE_ISSETUGID])
m4trace:configure.ac:599: -1- AH_OUTPUT([HAVE_GETRESUID], [/* Define
to 1 if you have the `getresuid` function. */
@%:@undef HAVE_GETRESUID])
m4trace:configure.ac:601: -1- AH_OUTPUT([HAVE_SYSLOG_H], [/* Define to
1 if you have the <syslog.h> header file. */
@%:@undef HAVE_SYSLOG_H])
m4trace:configure.ac:601: -1- AC_DEFINE_TRACE_LITERAL([HAVE_SYSLOG_H])
m4trace:configure.ac:601: -1- m4_pattern_allow([HAVE_SYSLOG_H$])
m4trace:configure.ac:603: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_DECL_LOG_PERROR])
m4trace:configure.ac:603: -1-
m4_pattern_allow([HAVE_DECL_LOG_PERROR$])
m4trace:configure.ac:603: -1- AH_OUTPUT([HAVE_DECL_LOG_PERROR], [/*
Define to 1 if you have the declaration of `LOG_PERROR`, and to 0 if
you
don't. */
@%:@undef HAVE_DECL_LOG_PERROR])
m4trace:configure.ac:609: -1- AC_DEFINE_TRACE_LITERAL([BROKEN_POLL])
m4trace:configure.ac:609: -1- m4_pattern_allow([BROKEN_POLL$])
m4trace:configure.ac:609: -1- AH_OUTPUT([BROKEN_POLL], [/* poll
doesn't work on devices */

```

```

@%:@undef BROKEN_POLL])
m4trace:configure.ac:648: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DIRFD])
m4trace:configure.ac:648: -1- m4_pattern_allow([^HAVE_DIRFD$])
m4trace:configure.ac:648: -1- AH_OUTPUT([HAVE_DIRFD], [/* Have dirfd
function */
@%:@undef HAVE_DIRFD])
m4trace:configure.ac:665: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DDFD])
m4trace:configure.ac:665: -1- m4_pattern_allow([^HAVE_DDFD$])
m4trace:configure.ac:665: -1- AH_OUTPUT([HAVE_DDFD], [/* Have the ddfd
member of DIR */
@%:@undef HAVE_DDFD])
m4trace:configure.ac:669: -1- AH_OUTPUT([HAVE_SYS_RESOURCE_H], [/*
Define to 1 if you have the <sys/resource.h> header file. */
@%:@undef HAVE_SYS_RESOURCE_H])
m4trace:configure.ac:669: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SYS_RESOURCE_H])
m4trace:configure.ac:669: -1-
m4_pattern_allow([^HAVE_SYS_RESOURCE_H$])
m4trace:configure.ac:671: -1- AH_OUTPUT([HAVE_DIRENT_H], [/* Define to
1 if you have the <dirent.h> header file. */
@%:@undef HAVE_DIRENT_H])
m4trace:configure.ac:671: -1- AC_DEFINE_TRACE_LITERAL([HAVE_DIRENT_H])
m4trace:configure.ac:671: -1- m4_pattern_allow([^HAVE_DIRENT_H$])
m4trace:configure.ac:673: -1- AH_OUTPUT([HAVE_EXECINFO_H], [/* Define
to 1 if you have the <execinfo.h> header file. */
@%:@undef HAVE_EXECINFO_H])
m4trace:configure.ac:673: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_EXECINFO_H])
m4trace:configure.ac:673: -1- m4_pattern_allow([^HAVE_EXECINFO_H$])
m4trace:configure.ac:673: -1- AH_OUTPUT([HAVE_BACKTRACE], [/* Define
to 1 if you have the `backtrace` function. */
@%:@undef HAVE_BACKTRACE])
m4trace:configure.ac:673: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_BACKTRACE])
m4trace:configure.ac:673: -1- m4_pattern_allow([^HAVE_BACKTRACE$])
m4trace:configure.ac:675: -1- AH_OUTPUT([HAVE_ERRNO_H], [/* Define to
1 if you have the <errno.h> header file. */
@%:@undef HAVE_ERRNO_H])
m4trace:configure.ac:675: -1- AC_DEFINE_TRACE_LITERAL([HAVE_ERRNO_H])
m4trace:configure.ac:675: -1- m4_pattern_allow([^HAVE_ERRNO_H$])
m4trace:configure.ac:677: -1- AH_OUTPUT([HAVE_SIGNAL_H], [/* Define to
1 if you have the <signal.h> header file. */
@%:@undef HAVE_SIGNAL_H])
m4trace:configure.ac:677: -1- AC_DEFINE_TRACE_LITERAL([HAVE_SIGNAL_H])
m4trace:configure.ac:677: -1- m4_pattern_allow([^HAVE_SIGNAL_H$])
m4trace:configure.ac:679: -1- AH_OUTPUT([HAVE_LOCALE_H], [/* Define to
1 if you have the <locale.h> header file. */
@%:@undef HAVE_LOCALE_H])
m4trace:configure.ac:679: -1- AC_DEFINE_TRACE_LITERAL([HAVE_LOCALE_H])
m4trace:configure.ac:679: -1- m4_pattern_allow([^HAVE_LOCALE_H$])
m4trace:configure.ac:681: -1- AH_OUTPUT([HAVE_BYTESWAP_H], [/* Define
to 1 if you have the <byteswap.h> header file. */

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@%:@undef HAVE_BYTESWAP_H])
m4trace:configure.ac:681: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_BYTESWAP_H])
m4trace:configure.ac:681: -1- m4_pattern_allow([^HAVE_BYTESWAP_H$])
m4trace:configure.ac:683: -1- AH_OUTPUT([HAVE_UNISTD_H], [/* Define to
1 if you have the <unistd.h> header file. */
@%:@undef HAVE_UNISTD_H])
m4trace:configure.ac:683: -1- AC_DEFINE_TRACE_LITERAL([HAVE_UNISTD_H])
m4trace:configure.ac:683: -1- m4_pattern_allow([^HAVE_UNISTD_H$])
m4trace:configure.ac:685: -1- AH_OUTPUT([HAVE_WS2TCPIP_H], [/* Define
to 1 if you have the <ws2tcpip.h> header file. */
@%:@undef HAVE_WS2TCPIP_H])
m4trace:configure.ac:685: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_WS2TCPIP_H])
m4trace:configure.ac:685: -1- m4_pattern_allow([^HAVE_WS2TCPIP_H$])
m4trace:configure.ac:687: -1- AH_OUTPUT([HAVE_WSPIAPI_H], [/* Define
to 1 if you have the <wspiapi.h> header file. */
@%:@undef HAVE_WSPIAPI_H])
m4trace:configure.ac:687: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_WSPIAPI_H])
m4trace:configure.ac:687: -1- m4_pattern_allow([^HAVE_WSPIAPI_H$])
m4trace:configure.ac:726: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_POSIX_GETPWNAM_R])
m4trace:configure.ac:726: -1-
m4_pattern_allow([^HAVE_POSIX_GETPWNAM_R$])
m4trace:configure.ac:726: -1- AH_OUTPUT([HAVE_POSIX_GETPWNAM_R], [/*
Have POSIX function getpwnam_r */
@%:@undef HAVE_POSIX_GETPWNAM_R])
m4trace:configure.ac:738: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_NONPOSIX_GETPWNAM_R])
m4trace:configure.ac:738: -1-
m4_pattern_allow([^HAVE_NONPOSIX_GETPWNAM_R$])
m4trace:configure.ac:738: -1- AH_OUTPUT([HAVE_NONPOSIX_GETPWNAM_R],
[/* Have non-POSIX function getpwnam_r */
@%:@undef HAVE_NONPOSIX_GETPWNAM_R])
m4trace:configure.ac:758: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SOCKLEN_T])
m4trace:configure.ac:758: -1- m4_pattern_allow([^HAVE_SOCKLEN_T$])
m4trace:configure.ac:758: -1- AH_OUTPUT([HAVE_SOCKLEN_T], [/* Have
socklen_t type */
@%:@undef HAVE_SOCKLEN_T])
m4trace:configure.ac:763: -1- AH_OUTPUT([HAVE_SYS_UIO_H], [/* Define
to 1 if you have the <sys/uio.h> header file. */
@%:@undef HAVE_SYS_UIO_H])
m4trace:configure.ac:763: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SYS_UIO_H])
m4trace:configure.ac:763: -1- m4_pattern_allow([^HAVE_SYS_UIO_H$])
m4trace:configure.ac:763: -1- AH_OUTPUT([HAVE_WRITEV], [/* Define to 1
if you have the `writev` function. */
@%:@undef HAVE_WRITEV])
m4trace:configure.ac:763: -1- AC_DEFINE_TRACE_LITERAL([HAVE_WRITEV])
m4trace:configure.ac:763: -1- m4_pattern_allow([^HAVE_WRITEV$])

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m4trace:configure.ac:766: -1- AH_OUTPUT([HAVE_SYS_SYSLIMITS_H], [/*
Define to 1 if you have the <sys/syslimits.h> header file. */
@%:@undef HAVE_SYS_SYSLIMITS_H])
m4trace:configure.ac:766: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SYS_SYSLIMITS_H])
m4trace:configure.ac:766: -1-
m4_pattern_allow([^HAVE_SYS_SYSLIMITS_H$])
m4trace:configure.ac:769: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_DECL_MSG_NOSIGNAL])
m4trace:configure.ac:769: -1-
m4_pattern_allow([^HAVE_DECL_MSG_NOSIGNAL$])
m4trace:configure.ac:769: -1- AH_OUTPUT([HAVE_DECL_MSG_NOSIGNAL], [/*
Define to 1 if you have the declaration of `MSG_NOSIGNAL`, and to 0
if you
don't. */
@%:@undef HAVE_DECL_MSG_NOSIGNAL])
m4trace:configure.ac:795: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_ISO_VARARGS])
m4trace:configure.ac:795: -1- m4_pattern_allow([^HAVE_ISO_VARARGS$])
m4trace:configure.ac:795: -1- AH_OUTPUT([HAVE_ISO_VARARGS], [/* Have
ISO C99 varargs macros */
@%:@undef HAVE_ISO_VARARGS])
m4trace:configure.ac:798: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_GNUC_VARARGS])
m4trace:configure.ac:798: -1- m4_pattern_allow([^HAVE_GNUC_VARARGS$])
m4trace:configure.ac:798: -1- AH_OUTPUT([HAVE_GNUC_VARARGS], [/* Have
GNU-style varargs macros */
@%:@undef HAVE_GNUC_VARARGS])
m4trace:configure.ac:816: -1- AC_DEFINE_TRACE_LITERAL([HAVE_CMSGCRED])
m4trace:configure.ac:816: -1- m4_pattern_allow([^HAVE_CMSGCRED$])
m4trace:configure.ac:816: -1- AH_OUTPUT([HAVE_CMSGCRED], [/* Have
cmsgcred structure */
@%:@undef HAVE_CMSGCRED])
m4trace:configure.ac:819: -1- AH_OUTPUT([HAVE_GETPEERUCRED], [/*
Define to 1 if you have the `getpeerucrd` function. */
@%:@undef HAVE_GETPEERUCRED])
m4trace:configure.ac:819: -1- AH_OUTPUT([HAVE_GETPEEREID], [/* Define
to 1 if you have the `getpeereid` function. */
@%:@undef HAVE_GETPEEREID])
m4trace:configure.ac:821: -1- AH_OUTPUT([HAVE_PIPE2], [/* Define to 1
if you have the `pipe2` function. */
@%:@undef HAVE_PIPE2])
m4trace:configure.ac:821: -1- AH_OUTPUT([HAVE_ACCEPT4], [/* Define to
1 if you have the `accept4` function. */
@%:@undef HAVE_ACCEPT4])
m4trace:configure.ac:896: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_ABSTRACT_SOCKETS])
m4trace:configure.ac:896: -1-
m4_pattern_allow([^HAVE_ABSTRACT_SOCKETS$])
m4trace:configure.ac:896: -1- AH_OUTPUT([HAVE_ABSTRACT_SOCKETS], [/*
Have abstract socket namespace */
@%:@undef HAVE_ABSTRACT_SOCKETS])

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m4trace:configure.ac:903: -1- AC_SUBST([DBUS_PATH_OR_ABSTRACT])
m4trace:configure.ac:903: -1- AC_SUBST_TRACE([DBUS_PATH_OR_ABSTRACT])
m4trace:configure.ac:903: -1-
m4_pattern_allow([^DBUS_PATH_OR_ABSTRACT$])
m4trace:configure.ac:905: -1- m4_pattern_forbid([^_?PKG_[A-Z_]+$])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG(_PATH)?$])
m4trace:configure.ac:905: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:905: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:905: -1- AC_SUBST([PKG_CONFIG])
m4trace:configure.ac:905: -1- AC_SUBST_TRACE([PKG_CONFIG])
m4trace:configure.ac:905: -1- m4_pattern_allow([^PKG_CONFIG$])
m4trace:configure.ac:910: -1- AH_OUTPUT([HAVE_EXPAT_H], [/* Define to
1 if you have the <expat.h> header file. */
@%:@undef HAVE_EXPAT_H])
m4trace:configure.ac:910: -1- AC_DEFINE_TRACE_LITERAL([HAVE_EXPAT_H])
m4trace:configure.ac:910: -1- m4_pattern_allow([^HAVE_EXPAT_H$])
m4trace:configure.ac:923: -1- AC_SUBST([LIBXML_CFLAGS])
m4trace:configure.ac:923: -1- AC_SUBST_TRACE([LIBXML_CFLAGS])
m4trace:configure.ac:923: -1- m4_pattern_allow([^LIBXML_CFLAGS$])
m4trace:configure.ac:923: -1- AC_SUBST([LIBXML_LIBS])
m4trace:configure.ac:923: -1- AC_SUBST_TRACE([LIBXML_LIBS])
m4trace:configure.ac:923: -1- m4_pattern_allow([^LIBXML_LIBS$])
m4trace:configure.ac:941: -1- AM_CONDITIONAL([DBUS_USE_EXPAT],
[$dbus_use_expate])
m4trace:configure.ac:941: -1- AC_SUBST([DBUS_USE_EXPAT_TRUE])
m4trace:configure.ac:941: -1- AC_SUBST_TRACE([DBUS_USE_EXPAT_TRUE])
m4trace:configure.ac:941: -1-
m4_pattern_allow([^DBUS_USE_EXPAT_TRUE$])
m4trace:configure.ac:941: -1- AC_SUBST([DBUS_USE_EXPAT_FALSE])
m4trace:configure.ac:941: -1- AC_SUBST_TRACE([DBUS_USE_EXPAT_FALSE])
m4trace:configure.ac:941: -1-
m4_pattern_allow([^DBUS_USE_EXPAT_FALSE$])
m4trace:configure.ac:941: -1- _AM_SUBST_NOTMAKE([DBUS_USE_EXPAT_TRUE])
m4trace:configure.ac:941: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_EXPAT_FALSE])
m4trace:configure.ac:942: -1- AM_CONDITIONAL([DBUS_USE_LIBXML],
[$dbus_use_libxml])
m4trace:configure.ac:942: -1- AC_SUBST([DBUS_USE_LIBXML_TRUE])
m4trace:configure.ac:942: -1- AC_SUBST_TRACE([DBUS_USE_LIBXML_TRUE])
m4trace:configure.ac:942: -1-
m4_pattern_allow([^DBUS_USE_LIBXML_TRUE$])
m4trace:configure.ac:942: -1- AC_SUBST([DBUS_USE_LIBXML_FALSE])
m4trace:configure.ac:942: -1- AC_SUBST_TRACE([DBUS_USE_LIBXML_FALSE])
m4trace:configure.ac:942: -1-
m4_pattern_allow([^DBUS_USE_LIBXML_FALSE$])
m4trace:configure.ac:942: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_LIBXML_TRUE])
m4trace:configure.ac:942: -1-
_AM_SUBST_NOTMAKE([DBUS_USE_LIBXML_FALSE])
m4trace:configure.ac:952: -1- AC_SUBST([XML_CFLAGS])
m4trace:configure.ac:952: -1- AC_SUBST_TRACE([XML_CFLAGS])

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m4trace:configure.ac:952: -1- m4_pattern_allow([XML_CFLAGS$])
m4trace:configure.ac:953: -1- AC_SUBST([XML_LIBS])
m4trace:configure.ac:953: -1- AC_SUBST_TRACE([XML_LIBS])
m4trace:configure.ac:953: -1- m4_pattern_allow([XML_LIBS$])
m4trace:configure.ac:977: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_MONOTONIC_CLOCK])
m4trace:configure.ac:977: -1-
m4_pattern_allow([HAVE_MONOTONIC_CLOCK$])
m4trace:configure.ac:977: -1- AH_OUTPUT([HAVE_MONOTONIC_CLOCK], [/*
Define if we have CLOCK_MONOTONIC */
@%:@undef HAVE_MONOTONIC_CLOCK])
m4trace:configure.ac:984: -1- AC_SUBST([THREAD_LIBS])
m4trace:configure.ac:984: -1- AC_SUBST_TRACE([THREAD_LIBS])
m4trace:configure.ac:984: -1- m4_pattern_allow([THREAD_LIBS$])
m4trace:configure.ac:1018: -1- AM_CONDITIONAL([HAVE_SELINUX], [test
x$have_selinux = xyes])
m4trace:configure.ac:1018: -1- AC_SUBST([HAVE_SELINUX_TRUE])
m4trace:configure.ac:1018: -1- AC_SUBST_TRACE([HAVE_SELINUX_TRUE])
m4trace:configure.ac:1018: -1- m4_pattern_allow([HAVE_SELINUX_TRUE$])
m4trace:configure.ac:1018: -1- AC_SUBST([HAVE_SELINUX_FALSE])
m4trace:configure.ac:1018: -1- AC_SUBST_TRACE([HAVE_SELINUX_FALSE])
m4trace:configure.ac:1018: -1-
m4_pattern_allow([HAVE_SELINUX_FALSE$])
m4trace:configure.ac:1018: -1- _AM_SUBST_NOTMAKE([HAVE_SELINUX_TRUE])
m4trace:configure.ac:1018: -1- _AM_SUBST_NOTMAKE([HAVE_SELINUX_FALSE])
m4trace:configure.ac:1027: -1- AC_DEFINE_TRACE_LITERAL([HAVE_SELINUX])
m4trace:configure.ac:1027: -1- m4_pattern_allow([HAVE_SELINUX$])
m4trace:configure.ac:1027: -1- AH_OUTPUT([HAVE_SELINUX], [/* SELinux
support */
@%:@undef HAVE_SELINUX])
m4trace:configure.ac:1036: -1- AH_OUTPUT([HAVE_SYS_INOTIFY_H], [/*
Define to 1 if you have the <sys/inotify.h> header file. */
@%:@undef HAVE_SYS_INOTIFY_H])
m4trace:configure.ac:1036: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_SYS_INOTIFY_H])
m4trace:configure.ac:1036: -1-
m4_pattern_allow([HAVE_SYS_INOTIFY_H$])
m4trace:configure.ac:1041: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUS_ENABLE_INOTIFY])
m4trace:configure.ac:1041: -1-
m4_pattern_allow([DBUS_BUS_ENABLE_INOTIFY$])
m4trace:configure.ac:1041: -1- AH_OUTPUT([DBUS_BUS_ENABLE_INOTIFY],
[/* Use inotify */
@%:@undef DBUS_BUS_ENABLE_INOTIFY])
m4trace:configure.ac:1042: -1- AH_OUTPUT([HAVE_INOTIFY_INIT1], [/*
Define to 1 if you have the `inotify_init1` function. */
@%:@undef HAVE_INOTIFY_INIT1])
m4trace:configure.ac:1042: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_INOTIFY_INIT1])
m4trace:configure.ac:1042: -1-
m4_pattern_allow([HAVE_INOTIFY_INIT1$])

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m4trace:configure.ac:1045: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_INOTIFY], [test x$have_inotify =
xyes])
m4trace:configure.ac:1045: -1-
AC_SUBST([DBUS_BUS_ENABLE_INOTIFY_TRUE])
m4trace:configure.ac:1045: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_INOTIFY_TRUE])
m4trace:configure.ac:1045: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_INOTIFY_TRUE$])
m4trace:configure.ac:1045: -1-
AC_SUBST([DBUS_BUS_ENABLE_INOTIFY_FALSE])
m4trace:configure.ac:1045: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_INOTIFY_FALSE])
m4trace:configure.ac:1045: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_INOTIFY_FALSE$])
m4trace:configure.ac:1045: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_INOTIFY_TRUE])
m4trace:configure.ac:1045: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_INOTIFY_FALSE])
m4trace:configure.ac:1060: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX])
m4trace:configure.ac:1060: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX$])
m4trace:configure.ac:1060: -1-
AH_OUTPUT([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX], [/* Use dnotify on Linux
*/
@%:@undef DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX])
m4trace:configure.ac:1063: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX], [test
x$have_dnotify = xyes])
m4trace:configure.ac:1063: -1-
AC_SUBST([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE])
m4trace:configure.ac:1063: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE])
m4trace:configure.ac:1063: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE$])
m4trace:configure.ac:1063: -1-
AC_SUBST([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE])
m4trace:configure.ac:1063: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE])
m4trace:configure.ac:1063: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE$])
m4trace:configure.ac:1063: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_TRUE])
m4trace:configure.ac:1063: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_DNOTIFY_ON_LINUX_FALSE])
m4trace:configure.ac:1091: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_HAVE_LINUX_EPOLL])
m4trace:configure.ac:1091: -1-
m4_pattern_allow([^DBUS_HAVE_LINUX_EPOLL$])
m4trace:configure.ac:1091: -1- AH_OUTPUT([DBUS_HAVE_LINUX_EPOLL], [/*
Define to use epoll(4) on Linux */

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@%:@undef DBUS_HAVE_LINUX_EPOLL])
m4trace:configure.ac:1093: -1- AM_CONDITIONAL([HAVE_LINUX_EPOLL],
[test x$have_linux_epoll = xyes])
m4trace:configure.ac:1093: -1- AC_SUBST([HAVE_LINUX_EPOLL_TRUE])
m4trace:configure.ac:1093: -1- AC_SUBST_TRACE([HAVE_LINUX_EPOLL_TRUE])
m4trace:configure.ac:1093: -1-
m4_pattern_allow([^HAVE_LINUX_EPOLL_TRUE$])
m4trace:configure.ac:1093: -1- AC_SUBST([HAVE_LINUX_EPOLL_FALSE])
m4trace:configure.ac:1093: -1-
AC_SUBST_TRACE([HAVE_LINUX_EPOLL_FALSE])
m4trace:configure.ac:1093: -1-
m4_pattern_allow([^HAVE_LINUX_EPOLL_FALSE$])
m4trace:configure.ac:1093: -1-
_AM_SUBST_NOTMAKE([HAVE_LINUX_EPOLL_TRUE])
m4trace:configure.ac:1093: -1-
_AM_SUBST_NOTMAKE([HAVE_LINUX_EPOLL_FALSE])
m4trace:configure.ac:1110: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUS_ENABLE_KQUEUE])
m4trace:configure.ac:1110: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_KQUEUE$])
m4trace:configure.ac:1110: -1- AH_OUTPUT([DBUS_BUS_ENABLE_KQUEUE], [/*
Use kqueue */
@%:@undef DBUS_BUS_ENABLE_KQUEUE])
m4trace:configure.ac:1113: -1-
AM_CONDITIONAL([DBUS_BUS_ENABLE_KQUEUE], [test x$have_kqueue = xyes])
m4trace:configure.ac:1113: -1- AC_SUBST([DBUS_BUS_ENABLE_KQUEUE_TRUE])
m4trace:configure.ac:1113: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_KQUEUE_TRUE])
m4trace:configure.ac:1113: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_KQUEUE_TRUE$])
m4trace:configure.ac:1113: -1-
AC_SUBST([DBUS_BUS_ENABLE_KQUEUE_FALSE])
m4trace:configure.ac:1113: -1-
AC_SUBST_TRACE([DBUS_BUS_ENABLE_KQUEUE_FALSE])
m4trace:configure.ac:1113: -1-
m4_pattern_allow([^DBUS_BUS_ENABLE_KQUEUE_FALSE$])
m4trace:configure.ac:1113: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_KQUEUE_TRUE])
m4trace:configure.ac:1113: -1-
_AM_SUBST_NOTMAKE([DBUS_BUS_ENABLE_KQUEUE_FALSE])
m4trace:configure.ac:1121: -1- AC_SUBST([LAUNCHCTL])
m4trace:configure.ac:1121: -1- AC_SUBST_TRACE([LAUNCHCTL])
m4trace:configure.ac:1121: -1- m4_pattern_allow([^LAUNCHCTL$])
m4trace:configure.ac:1133: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_LAUNCHD])
m4trace:configure.ac:1133: -1-
m4_pattern_allow([^DBUS_ENABLE_LAUNCHD$])
m4trace:configure.ac:1133: -1- AH_OUTPUT([DBUS_ENABLE_LAUNCHD], [/*
Use launchd autolaunch */
@%:@undef DBUS_ENABLE_LAUNCHD])
m4trace:configure.ac:1136: -1- AM_CONDITIONAL([DBUS_ENABLE_LAUNCHD],
[test x$have_launchd = xyes])

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m4trace:configure.ac:1136: -1- AC_SUBST([DBUS_ENABLE_LAUNCHED_TRUE])
m4trace:configure.ac:1136: -1-
AC_SUBST_TRACE([DBUS_ENABLE_LAUNCHED_TRUE])
m4trace:configure.ac:1136: -1-
m4_pattern_allow([^DBUS_ENABLE_LAUNCHED_TRUE$])
m4trace:configure.ac:1136: -1- AC_SUBST([DBUS_ENABLE_LAUNCHED_FALSE])
m4trace:configure.ac:1136: -1-
AC_SUBST_TRACE([DBUS_ENABLE_LAUNCHED_FALSE])
m4trace:configure.ac:1136: -1-
m4_pattern_allow([^DBUS_ENABLE_LAUNCHED_FALSE$])
m4trace:configure.ac:1136: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_LAUNCHED_TRUE])
m4trace:configure.ac:1136: -1-
_AM_SUBST_NOTMAKE([DBUS_ENABLE_LAUNCHED_FALSE])
m4trace:configure.ac:1145: -1- AC_SUBST([LAUNCHED_AGENT_DIR])
m4trace:configure.ac:1145: -1- AC_SUBST_TRACE([LAUNCHED_AGENT_DIR])
m4trace:configure.ac:1145: -1- m4_pattern_allow([^LAUNCHED_AGENT_DIR$])
m4trace:configure.ac:1154: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1154: -1-
m4_pattern_allow([^HAVE_CONSOLE_OWNER_FILE$])
m4trace:configure.ac:1154: -1- AH_OUTPUT([HAVE_CONSOLE_OWNER_FILE],
[/ * Have console owner file */
@%:@undef HAVE_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1161: -1-
AM_CONDITIONAL([HAVE_CONSOLE_OWNER_FILE], [test
x$have_console_owner_file = xyes])
m4trace:configure.ac:1161: -1-
AC_SUBST([HAVE_CONSOLE_OWNER_FILE_TRUE])
m4trace:configure.ac:1161: -1-
AC_SUBST_TRACE([HAVE_CONSOLE_OWNER_FILE_TRUE])
m4trace:configure.ac:1161: -1-
m4_pattern_allow([^HAVE_CONSOLE_OWNER_FILE_TRUE$])
m4trace:configure.ac:1161: -1-
AC_SUBST([HAVE_CONSOLE_OWNER_FILE_FALSE])
m4trace:configure.ac:1161: -1-
AC_SUBST_TRACE([HAVE_CONSOLE_OWNER_FILE_FALSE])
m4trace:configure.ac:1161: -1-
m4_pattern_allow([^HAVE_CONSOLE_OWNER_FILE_FALSE$])
m4trace:configure.ac:1161: -1-
_AM_SUBST_NOTMAKE([HAVE_CONSOLE_OWNER_FILE_TRUE])
m4trace:configure.ac:1161: -1-
_AM_SUBST_NOTMAKE([HAVE_CONSOLE_OWNER_FILE_FALSE])
m4trace:configure.ac:1167: -1- AC_SUBST([SYSTEMD_CFLAGS])
m4trace:configure.ac:1167: -1- AC_SUBST_TRACE([SYSTEMD_CFLAGS])
m4trace:configure.ac:1167: -1- m4_pattern_allow([^SYSTEMD_CFLAGS$])
m4trace:configure.ac:1167: -1- AC_SUBST([SYSTEMD_LIBS])
m4trace:configure.ac:1167: -1- AC_SUBST_TRACE([SYSTEMD_LIBS])
m4trace:configure.ac:1167: -1- m4_pattern_allow([^SYSTEMD_LIBS$])
m4trace:configure.ac:1174: -1- AC_DEFINE_TRACE_LITERAL([HAVE_SYSTEMD])
m4trace:configure.ac:1174: -1- m4_pattern_allow([^HAVE_SYSTEMD$])
```

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m4trace:configure.ac:1174: -1- AH_OUTPUT([HAVE_SYSTEMD], [/* Have
systemd */
@%:@undef HAVE_SYSTEMD])
m4trace:configure.ac:1194: -1- AM_CONDITIONAL([HAVE_LIBAUDIT], [test
x$have_libaudit = xyes])
m4trace:configure.ac:1194: -1- AC_SUBST([HAVE_LIBAUDIT_TRUE])
m4trace:configure.ac:1194: -1- AC_SUBST_TRACE([HAVE_LIBAUDIT_TRUE])
m4trace:configure.ac:1194: -1-
m4_pattern_allow([^HAVE_LIBAUDIT_TRUE$])
m4trace:configure.ac:1194: -1- AC_SUBST([HAVE_LIBAUDIT_FALSE])
m4trace:configure.ac:1194: -1- AC_SUBST_TRACE([HAVE_LIBAUDIT_FALSE])
m4trace:configure.ac:1194: -1-
m4_pattern_allow([^HAVE_LIBAUDIT_FALSE$])
m4trace:configure.ac:1194: -1- _AM_SUBST_NOTMAKE([HAVE_LIBAUDIT_TRUE])
m4trace:configure.ac:1194: -1-
_AM_SUBST_NOTMAKE([HAVE_LIBAUDIT_FALSE])
m4trace:configure.ac:1198: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_LIBAUDIT])
m4trace:configure.ac:1198: -1- m4_pattern_allow([^HAVE_LIBAUDIT$])
m4trace:configure.ac:1198: -1- AH_OUTPUT([HAVE_LIBAUDIT], [/* audit
daemon SELinux support */
@%:@undef HAVE_LIBAUDIT])
m4trace:configure.ac:1201: -1- AC_SUBST([SELINUX_LIBS])
m4trace:configure.ac:1201: -1- AC_SUBST_TRACE([SELINUX_LIBS])
m4trace:configure.ac:1201: -1- m4_pattern_allow([^SELINUX_LIBS$])
m4trace:configure.ac:1212: -1- AC_DEFINE_TRACE_LITERAL([HAVE_ADT])
m4trace:configure.ac:1212: -1- m4_pattern_allow([^HAVE_ADT$])
m4trace:configure.ac:1212: -1- AH_OUTPUT([HAVE_ADT], [/* Adt audit API
*/
@%:@undef HAVE_ADT])
m4trace:configure.ac:1219: -1- AC_SUBST([ADT_LIBS])
m4trace:configure.ac:1219: -1- AC_SUBST_TRACE([ADT_LIBS])
m4trace:configure.ac:1219: -1- m4_pattern_allow([^ADT_LIBS$])
m4trace:configure.ac:1223: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_UNIX_FD_PASSING])
m4trace:configure.ac:1223: -1-
m4_pattern_allow([^HAVE_UNIX_FD_PASSING$])
m4trace:configure.ac:1223: -1- AH_OUTPUT([HAVE_UNIX_FD_PASSING], [/*
Supports sending UNIX file descriptors */
@%:@undef HAVE_UNIX_FD_PASSING])
m4trace:configure.ac:1242: -1- AC_SUBST([NETWORK_libs])
m4trace:configure.ac:1242: -1- AC_SUBST_TRACE([NETWORK_libs])
m4trace:configure.ac:1242: -1- m4_pattern_allow([^NETWORK_libs$])
m4trace:configure.ac:1251: -1- AC_SUBST([VALGRIND_CFLAGS])
m4trace:configure.ac:1251: -1- AC_SUBST_TRACE([VALGRIND_CFLAGS])
m4trace:configure.ac:1251: -1- m4_pattern_allow([^VALGRIND_CFLAGS$])
m4trace:configure.ac:1251: -1- AC_SUBST([VALGRIND_LIBS])
m4trace:configure.ac:1251: -1- AC_SUBST_TRACE([VALGRIND_LIBS])
m4trace:configure.ac:1251: -1- m4_pattern_allow([^VALGRIND_LIBS$])
m4trace:configure.ac:1252: -1-
AC_DEFINE_TRACE_LITERAL([WITH_VALGRIND])
m4trace:configure.ac:1252: -1- m4_pattern_allow([^WITH_VALGRIND$])

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m4trace:configure.ac:1252: -1- AH_OUTPUT([WITH_VALGRIND], [/* Define
to add Valgrind instrumentation */
@%:@undef WITH_VALGRIND])
m4trace:configure.ac:1257: -1- AC_SUBST([LIBDBUS_LIBS])
m4trace:configure.ac:1257: -1- AC_SUBST_TRACE([LIBDBUS_LIBS])
m4trace:configure.ac:1257: -1- m4_pattern_allow([^LIBDBUS_LIBS$])
m4trace:configure.ac:1275: -1-
AC_DEFINE_TRACE_LITERAL([X_DISPLAY_MISSING])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_DISPLAY_MISSING$])
m4trace:configure.ac:1275: -1- AH_OUTPUT([X_DISPLAY_MISSING], [/*
Define to 1 if the X Window System is missing or not being used. */
@%:@undef X_DISPLAY_MISSING])
m4trace:configure.ac:1275: -1- AC_SUBST([X_CFLAGS])
m4trace:configure.ac:1275: -1- AC_SUBST_TRACE([X_CFLAGS])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_CFLAGS$])
m4trace:configure.ac:1275: -1- AC_SUBST([X_PRE_LIBS])
m4trace:configure.ac:1275: -1- AC_SUBST_TRACE([X_PRE_LIBS])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_PRE_LIBS$])
m4trace:configure.ac:1275: -1- AC_SUBST([X_LIBS])
m4trace:configure.ac:1275: -1- AC_SUBST_TRACE([X_LIBS])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_LIBS$])
m4trace:configure.ac:1275: -1- AC_SUBST([X_EXTRA_LIBS])
m4trace:configure.ac:1275: -1- AC_SUBST_TRACE([X_EXTRA_LIBS])
m4trace:configure.ac:1275: -1- m4_pattern_allow([^X_EXTRA_LIBS$])
m4trace:configure.ac:1296: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_BUILD_X11])
m4trace:configure.ac:1296: -1- m4_pattern_allow([^DBUS_BUILD_X11$])
m4trace:configure.ac:1296: -1- AH_OUTPUT([DBUS_BUILD_X11], [/* Define
to build X11 functionality */
@%:@undef DBUS_BUILD_X11])
m4trace:configure.ac:1300: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_X11_AUTOLAUNCH])
m4trace:configure.ac:1300: -1-
m4_pattern_allow([^DBUS_ENABLE_X11_AUTOLAUNCH$])
m4trace:configure.ac:1300: -1- AH_OUTPUT([DBUS_ENABLE_X11_AUTOLAUNCH],
[/* Define to enable X11 auto-launch */
@%:@undef DBUS_ENABLE_X11_AUTOLAUNCH])
m4trace:configure.ac:1303: -1- AC_SUBST([DBUS_X_CFLAGS])
m4trace:configure.ac:1303: -1- AC_SUBST_TRACE([DBUS_X_CFLAGS])
m4trace:configure.ac:1303: -1- m4_pattern_allow([^DBUS_X_CFLAGS$])
m4trace:configure.ac:1304: -1- AC_SUBST([DBUS_X_LIBS])
m4trace:configure.ac:1304: -1- AC_SUBST_TRACE([DBUS_X_LIBS])
m4trace:configure.ac:1304: -1- m4_pattern_allow([^DBUS_X_LIBS$])
m4trace:configure.ac:1312: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
configure.ac:1312: the top level])
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_HELP_STRING' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:207:
AC_HELP_STRING is expanded from...

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aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level))
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level))
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level))
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level))
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level))
m4trace:configure.ac:1318: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level))
m4trace:configure.ac:1318: -2- _m4_warn([obsolete], [The macro
`AC_HELP_STRING' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:207:
AC_HELP_STRING is expanded from...
aclocal.m4:10243: TP_COMPILER_WARNINGS is expanded from...
configure.ac:1318: the top level))
m4trace:configure.ac:1363: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10231: TP_ADD_COMPILER_FLAG is expanded from...
configure.ac:1363: the top level))
m4trace:configure.ac:1366: -1- _m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
```

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You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10231: TP_ADD_COMPILER_FLAG is expanded from...
configure.ac:1366: the top level])
m4trace:configure.ac:1369: -1- m4_warn([obsolete], [The macro
`AC_TRY_COMPILE' is obsolete.
You should run autoupdate.], [../../lib/autoconf/general.m4:2608:
AC_TRY_COMPILE is expanded from...
aclocal.m4:10206: TP_COMPILER_FLAG is expanded from...
aclocal.m4:10231: TP_ADD_COMPILER_FLAG is expanded from...
configure.ac:1369: the top level])
m4trace:configure.ac:1393: -1- AC_SUBST([DOXYGEN])
m4trace:configure.ac:1393: -1- AC_SUBST_TRACE([DOXYGEN])
m4trace:configure.ac:1393: -1- m4_pattern_allow([DOXYGEN$])
m4trace:configure.ac:1417: -1-
AM_CONDITIONAL([DBUS_DOXYGEN_DOCS_ENABLED], [test
x$enable_doxygen_docs = xyes])
m4trace:configure.ac:1417: -1-
AC_SUBST([DBUS_DOXYGEN_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1417: -1-
AC_SUBST_TRACE([DBUS_DOXYGEN_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1417: -1-
m4_pattern_allow([DBUS_DOXYGEN_DOCS_ENABLED_TRUE$])
m4trace:configure.ac:1417: -1-
AC_SUBST([DBUS_DOXYGEN_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1417: -1-
AC_SUBST_TRACE([DBUS_DOXYGEN_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1417: -1-
m4_pattern_allow([DBUS_DOXYGEN_DOCS_ENABLED_FALSE$])
m4trace:configure.ac:1417: -1-
_AM_SUBST_NOTMAKE([DBUS_DOXYGEN_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1417: -1-
_AM_SUBST_NOTMAKE([DBUS_DOXYGEN_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1420: -1- AC_SUBST([XSLTPROC])
m4trace:configure.ac:1420: -1- AC_SUBST_TRACE([XSLTPROC])
m4trace:configure.ac:1420: -1- m4_pattern_allow([XSLTPROC$])
m4trace:configure.ac:1421: -1- AM_CONDITIONAL([DBUS_HAVE_XSLTPROC],
[test "x$XSLTPROC" != "x"])
m4trace:configure.ac:1421: -1- AC_SUBST([DBUS_HAVE_XSLTPROC_TRUE])
m4trace:configure.ac:1421: -1-
AC_SUBST_TRACE([DBUS_HAVE_XSLTPROC_TRUE])
m4trace:configure.ac:1421: -1-
m4_pattern_allow([DBUS_HAVE_XSLTPROC_TRUE$])
m4trace:configure.ac:1421: -1- AC_SUBST([DBUS_HAVE_XSLTPROC_FALSE])
m4trace:configure.ac:1421: -1-
AC_SUBST_TRACE([DBUS_HAVE_XSLTPROC_FALSE])
m4trace:configure.ac:1421: -1-
m4_pattern_allow([DBUS_HAVE_XSLTPROC_FALSE$])
m4trace:configure.ac:1421: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_XSLTPROC_TRUE])
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m4trace:configure.ac:1421: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_XSLTPROC_FALSE])
m4trace:configure.ac:1425: -1- AC_SUBST([XMLTO])
m4trace:configure.ac:1425: -1- AC_SUBST_TRACE([XMLTO])
m4trace:configure.ac:1425: -1- m4_pattern_allow([^\XMLTO$])
m4trace:configure.ac:1449: -1- AM_CONDITIONAL([DBUS_XML_DOCS_ENABLED],
[test x$enable_xml_docs = xyes])
m4trace:configure.ac:1449: -1- AC_SUBST([DBUS_XML_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1449: -1-
AC_SUBST_TRACE([DBUS_XML_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1449: -1-
m4_pattern_allow([^\DBUS_XML_DOCS_ENABLED_TRUE$])
m4trace:configure.ac:1449: -1- AC_SUBST([DBUS_XML_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1449: -1-
AC_SUBST_TRACE([DBUS_XML_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1449: -1-
m4_pattern_allow([^\DBUS_XML_DOCS_ENABLED_FALSE$])
m4trace:configure.ac:1449: -1-
_AM_SUBST_NOTMAKE([DBUS_XML_DOCS_ENABLED_TRUE])
m4trace:configure.ac:1449: -1-
_AM_SUBST_NOTMAKE([DBUS_XML_DOCS_ENABLED_FALSE])
m4trace:configure.ac:1452: -1- AC_SUBST([MAN2HTML])
m4trace:configure.ac:1452: -1- AC_SUBST_TRACE([MAN2HTML])
m4trace:configure.ac:1452: -1- m4_pattern_allow([^\MAN2HTML$])
m4trace:configure.ac:1453: -1- AC_SUBST([MAN2HTML])
m4trace:configure.ac:1453: -1- AC_SUBST_TRACE([MAN2HTML])
m4trace:configure.ac:1453: -1- m4_pattern_allow([^\MAN2HTML$])
m4trace:configure.ac:1454: -1- AM_CONDITIONAL([DBUS_HAVE_MAN2HTML],
[test x$MAN2HTML != x])
m4trace:configure.ac:1454: -1- AC_SUBST([DBUS_HAVE_MAN2HTML_TRUE])
m4trace:configure.ac:1454: -1-
AC_SUBST_TRACE([DBUS_HAVE_MAN2HTML_TRUE])
m4trace:configure.ac:1454: -1-
m4_pattern_allow([^\DBUS_HAVE_MAN2HTML_TRUE$])
m4trace:configure.ac:1454: -1- AC_SUBST([DBUS_HAVE_MAN2HTML_FALSE])
m4trace:configure.ac:1454: -1-
AC_SUBST_TRACE([DBUS_HAVE_MAN2HTML_FALSE])
m4trace:configure.ac:1454: -1-
m4_pattern_allow([^\DBUS_HAVE_MAN2HTML_FALSE$])
m4trace:configure.ac:1454: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_MAN2HTML_TRUE])
m4trace:configure.ac:1454: -1-
_AM_SUBST_NOTMAKE([DBUS_HAVE_MAN2HTML_FALSE])
m4trace:configure.ac:1456: -1- AM_CONDITIONAL([DBUS_CAN_UPLOAD_DOCS],
[test x$enable_doxygen_docs = xyes -a x$enable_xml_docs = xyes -a \
x$MAN2HTML != x])
m4trace:configure.ac:1456: -1- AC_SUBST([DBUS_CAN_UPLOAD_DOCS_TRUE])
m4trace:configure.ac:1456: -1-
AC_SUBST_TRACE([DBUS_CAN_UPLOAD_DOCS_TRUE])
m4trace:configure.ac:1456: -1-
m4_pattern_allow([^\DBUS_CAN_UPLOAD_DOCS_TRUE$])
m4trace:configure.ac:1456: -1- AC_SUBST([DBUS_CAN_UPLOAD_DOCS_FALSE])
```

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m4trace:configure.ac:1456: -1-
AC_SUBST_TRACE([DBUS_CAN_UPLOAD_DOCS_FALSE])
m4trace:configure.ac:1456: -1-
m4_pattern_allow([^DBUS_CAN_UPLOAD_DOCS_FALSE$])
m4trace:configure.ac:1456: -1-
_AM_SUBST_NOTMAKE([DBUS_CAN_UPLOAD_DOCS_TRUE])
m4trace:configure.ac:1456: -1-
_AM_SUBST_NOTMAKE([DBUS_CAN_UPLOAD_DOCS_FALSE])
m4trace:configure.ac:1465: -1- AC_SUBST([EXPANDED_PREFIX],
["$full_var"])
m4trace:configure.ac:1465: -1- AC_SUBST_TRACE([EXPANDED_PREFIX])
m4trace:configure.ac:1465: -1- m4_pattern_allow([^EXPANDED_PREFIX$])
m4trace:configure.ac:1466: -1- AC_SUBST([EXPANDED_LOCALSTATEDIR],
["$full_var"])
m4trace:configure.ac:1466: -1-
AC_SUBST_TRACE([EXPANDED_LOCALSTATEDIR])
m4trace:configure.ac:1466: -1-
m4_pattern_allow([^EXPANDED_LOCALSTATEDIR$])
m4trace:configure.ac:1467: -1- AC_SUBST([EXPANDED_SYSCONFDIR],
["$full_var"])
m4trace:configure.ac:1467: -1- AC_SUBST_TRACE([EXPANDED_SYSCONFDIR])
m4trace:configure.ac:1467: -1-
m4_pattern_allow([^EXPANDED_SYSCONFDIR$])
m4trace:configure.ac:1468: -1- AC_SUBST([EXPANDED_BINDIR],
["$full_var"])
m4trace:configure.ac:1468: -1- AC_SUBST_TRACE([EXPANDED_BINDIR])
m4trace:configure.ac:1468: -1- m4_pattern_allow([^EXPANDED_BINDIR$])
m4trace:configure.ac:1469: -1- AC_SUBST([EXPANDED_LIBDIR],
["$full_var"])
m4trace:configure.ac:1469: -1- AC_SUBST_TRACE([EXPANDED_LIBDIR])
m4trace:configure.ac:1469: -1- m4_pattern_allow([^EXPANDED_LIBDIR$])
m4trace:configure.ac:1470: -1- AC_SUBST([EXPANDED_LIBEXECDIR],
["$full_var"])
m4trace:configure.ac:1470: -1- AC_SUBST_TRACE([EXPANDED_LIBEXECDIR])
m4trace:configure.ac:1470: -1-
m4_pattern_allow([^EXPANDED_LIBEXECDIR$])
m4trace:configure.ac:1471: -1- AC_SUBST([EXPANDED_DATADIR],
["$full_var"])
m4trace:configure.ac:1471: -1- AC_SUBST_TRACE([EXPANDED_DATADIR])
m4trace:configure.ac:1471: -1- m4_pattern_allow([^EXPANDED_DATADIR$])
m4trace:configure.ac:1498: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_RED_HAT], [test x$with_init_scripts
= xredhat])
m4trace:configure.ac:1498: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_RED_HAT_TRUE])
m4trace:configure.ac:1498: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_RED_HAT_TRUE])
m4trace:configure.ac:1498: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_RED_HAT_TRUE$])
m4trace:configure.ac:1498: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_RED_HAT_FALSE])
```

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m4trace:configure.ac:1498: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_RED_HAT_FALSE])
m4trace:configure.ac:1498: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_RED_HAT_FALSE$])
m4trace:configure.ac:1498: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_RED_HAT_TRUE])
m4trace:configure.ac:1498: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_RED_HAT_FALSE])
m4trace:configure.ac:1499: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_SLACKWARE], [test
x$with_init_scripts = xslackware])
m4trace:configure.ac:1499: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_SLACKWARE_TRUE])
m4trace:configure.ac:1499: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_SLACKWARE_TRUE])
m4trace:configure.ac:1499: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_SLACKWARE_TRUE$])
m4trace:configure.ac:1499: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_SLACKWARE_FALSE])
m4trace:configure.ac:1499: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_SLACKWARE_FALSE])
m4trace:configure.ac:1499: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_SLACKWARE_FALSE$])
m4trace:configure.ac:1499: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_SLACKWARE_TRUE])
m4trace:configure.ac:1499: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_SLACKWARE_FALSE])
m4trace:configure.ac:1500: -1-
AM_CONDITIONAL([DBUS_INIT_SCRIPTS_CYGWIN], [test x$with_init_scripts =
xcygwin])
m4trace:configure.ac:1500: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_CYGWIN_TRUE])
m4trace:configure.ac:1500: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_CYGWIN_TRUE])
m4trace:configure.ac:1500: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_CYGWIN_TRUE$])
m4trace:configure.ac:1500: -1-
AC_SUBST([DBUS_INIT_SCRIPTS_CYGWIN_FALSE])
m4trace:configure.ac:1500: -1-
AC_SUBST_TRACE([DBUS_INIT_SCRIPTS_CYGWIN_FALSE])
m4trace:configure.ac:1500: -1-
m4_pattern_allow([^DBUS_INIT_SCRIPTS_CYGWIN_FALSE$])
m4trace:configure.ac:1500: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_CYGWIN_TRUE])
m4trace:configure.ac:1500: -1-
_AM_SUBST_NOTMAKE([DBUS_INIT_SCRIPTS_CYGWIN_FALSE])
m4trace:configure.ac:1512: -1- AC_SUBST([systemdsystemunitdir],
[$with_systemdsystemunitdir])
m4trace:configure.ac:1512: -1- AC_SUBST_TRACE([systemdsystemunitdir])
m4trace:configure.ac:1512: -1-
m4_pattern_allow([^systemdsystemunitdir$])
```

```

m4trace:configure.ac:1514: -1- AM_CONDITIONAL([HAVE_SYSTEMD], [test -n
"$with_systemdsystemunitdir" -a "x$with_systemdsystemunitdir" != xno
])
m4trace:configure.ac:1514: -1- AC_SUBST([HAVE_SYSTEMD_TRUE])
m4trace:configure.ac:1514: -1- AC_SUBST_TRACE([HAVE_SYSTEMD_TRUE])
m4trace:configure.ac:1514: -1- m4_pattern_allow([^HAVE_SYSTEMD_TRUE$])
m4trace:configure.ac:1514: -1- AC_SUBST([HAVE_SYSTEMD_FALSE])
m4trace:configure.ac:1514: -1- AC_SUBST_TRACE([HAVE_SYSTEMD_FALSE])
m4trace:configure.ac:1514: -1-
m4_pattern_allow([^HAVE_SYSTEMD_FALSE$])
m4trace:configure.ac:1514: -1- _AM_SUBST_NOTMAKE([HAVE_SYSTEMD_TRUE])
m4trace:configure.ac:1514: -1- _AM_SUBST_NOTMAKE([HAVE_SYSTEMD_FALSE])
m4trace:configure.ac:1523: -1- AC_SUBST([DBUS_SYSTEM_SOCKET])
m4trace:configure.ac:1523: -1- AC_SUBST_TRACE([DBUS_SYSTEM_SOCKET])
m4trace:configure.ac:1523: -1-
m4_pattern_allow([^DBUS_SYSTEM_SOCKET$])
m4trace:configure.ac:1524: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_SYSTEM_SOCKET])
m4trace:configure.ac:1524: -1-
m4_pattern_allow([^DBUS_SYSTEM_SOCKET$])
m4trace:configure.ac:1524: -1- AH_OUTPUT([DBUS_SYSTEM_SOCKET], [/* The
name of the socket the system bus listens on by default */
@%:@undef DBUS_SYSTEM_SOCKET])
m4trace:configure.ac:1529: -1-
AC_SUBST([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1529: -1-
AC_SUBST_TRACE([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1529: -1-
m4_pattern_allow([^DBUS_SYSTEM_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1530: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1530: -1-
m4_pattern_allow([^DBUS_SYSTEM_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1530: -1-
AH_OUTPUT([DBUS_SYSTEM_BUS_DEFAULT_ADDRESS], [/* The default D-Bus
address of the system bus */
@%:@undef DBUS_SYSTEM_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1541: -1- AC_SUBST([DBUS_SYSTEM_PID_FILE])
m4trace:configure.ac:1541: -1- AC_SUBST_TRACE([DBUS_SYSTEM_PID_FILE])
m4trace:configure.ac:1541: -1-
m4_pattern_allow([^DBUS_SYSTEM_PID_FILE$])
m4trace:configure.ac:1550: -1- AC_SUBST([DBUS_CONSOLE_AUTH_DIR])
m4trace:configure.ac:1550: -1- AC_SUBST_TRACE([DBUS_CONSOLE_AUTH_DIR])
m4trace:configure.ac:1550: -1-
m4_pattern_allow([^DBUS_CONSOLE_AUTH_DIR$])
m4trace:configure.ac:1551: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_CONSOLE_AUTH_DIR])
m4trace:configure.ac:1551: -1-
m4_pattern_allow([^DBUS_CONSOLE_AUTH_DIR$])
m4trace:configure.ac:1551: -1- AH_OUTPUT([DBUS_CONSOLE_AUTH_DIR], [/*
Directory to check for console ownership */
@%:@undef DBUS_CONSOLE_AUTH_DIR])

```

```
m4trace:configure.ac:1564: -1- AC_SUBST([DBUS_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1564: -1-
AC_SUBST_TRACE([DBUS_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1564: -1-
m4_pattern_allow([^DBUS_CONSOLE_OWNER_FILE$])
m4trace:configure.ac:1565: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1565: -1-
m4_pattern_allow([^DBUS_CONSOLE_OWNER_FILE$])
m4trace:configure.ac:1565: -1- AH_OUTPUT([DBUS_CONSOLE_OWNER_FILE],
[/* File to check for console ownership */
@%:@undef DBUS_CONSOLE_OWNER_FILE])
m4trace:configure.ac:1573: -1- AC_SUBST([DBUS_USER])
m4trace:configure.ac:1573: -1- AC_SUBST_TRACE([DBUS_USER])
m4trace:configure.ac:1573: -1- m4_pattern_allow([^DBUS_USER$])
m4trace:configure.ac:1574: -1- AC_DEFINE_TRACE_LITERAL([DBUS_USER])
m4trace:configure.ac:1574: -1- m4_pattern_allow([^DBUS_USER$])
m4trace:configure.ac:1574: -1- AH_OUTPUT([DBUS_USER], [/* User for
running the system BUS daemon */
@%:@undef DBUS_USER])
m4trace:configure.ac:1578: -1- AC_SUBST([DBUS_PREFIX])
m4trace:configure.ac:1578: -1- AC_SUBST_TRACE([DBUS_PREFIX])
m4trace:configure.ac:1578: -1- m4_pattern_allow([^DBUS_PREFIX$])
m4trace:configure.ac:1579: -1- AC_DEFINE_TRACE_LITERAL([DBUS_PREFIX])
m4trace:configure.ac:1579: -1- m4_pattern_allow([^DBUS_PREFIX$])
m4trace:configure.ac:1579: -1- AH_OUTPUT([DBUS_PREFIX], [/* Prefix for
installing DBUS */
@%:@undef DBUS_PREFIX])
m4trace:configure.ac:1583: -1- AC_SUBST([DBUS_DATADIR])
m4trace:configure.ac:1583: -1- AC_SUBST_TRACE([DBUS_DATADIR])
m4trace:configure.ac:1583: -1- m4_pattern_allow([^DBUS_DATADIR$])
m4trace:configure.ac:1584: -1- AC_DEFINE_TRACE_LITERAL([DBUS_DATADIR])
m4trace:configure.ac:1584: -1- m4_pattern_allow([^DBUS_DATADIR$])
m4trace:configure.ac:1584: -1- AH_OUTPUT([DBUS_DATADIR], [/* Directory
for installing DBUS data files */
@%:@undef DBUS_DATADIR])
m4trace:configure.ac:1592: -1- AC_SUBST([DBUS_DAEMONDIR])
m4trace:configure.ac:1592: -1- AC_SUBST_TRACE([DBUS_DAEMONDIR])
m4trace:configure.ac:1592: -1- m4_pattern_allow([^DBUS_DAEMONDIR$])
m4trace:configure.ac:1593: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_DAEMONDIR])
m4trace:configure.ac:1593: -1- m4_pattern_allow([^DBUS_DAEMONDIR$])
m4trace:configure.ac:1593: -1- AH_OUTPUT([DBUS_DAEMONDIR], [/*
Directory for installing the DBUS daemon */
@%:@undef DBUS_DAEMONDIR])
m4trace:configure.ac:1597: -1- AC_SUBST([DBUS_BINDIR])
m4trace:configure.ac:1597: -1- AC_SUBST_TRACE([DBUS_BINDIR])
m4trace:configure.ac:1597: -1- m4_pattern_allow([^DBUS_BINDIR$])
m4trace:configure.ac:1598: -1- AC_DEFINE_TRACE_LITERAL([DBUS_BINDIR])
m4trace:configure.ac:1598: -1- m4_pattern_allow([^DBUS_BINDIR$])
m4trace:configure.ac:1598: -1- AH_OUTPUT([DBUS_BINDIR], [/* Directory
for installing the binaries */
```

```
@%:@undef DBUS_BINDIR])
m4trace:configure.ac:1602: -1- AC_SUBST([DBUS_LIBEXECDIR])
m4trace:configure.ac:1602: -1- AC_SUBST_TRACE([DBUS_LIBEXECDIR])
m4trace:configure.ac:1602: -1- m4_pattern_allow([^DBUS_LIBEXECDIR$])
m4trace:configure.ac:1603: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_LIBEXECDIR])
m4trace:configure.ac:1603: -1- m4_pattern_allow([^DBUS_LIBEXECDIR$])
m4trace:configure.ac:1603: -1- AH_OUTPUT([DBUS_LIBEXECDIR], [/*
Directory for installing the libexec binaries */
@%:@undef DBUS_LIBEXECDIR])
m4trace:configure.ac:1615: -1- AC_SUBST([DBUS_TEST_DATA])
m4trace:configure.ac:1615: -1- AC_SUBST_TRACE([DBUS_TEST_DATA])
m4trace:configure.ac:1615: -1- m4_pattern_allow([^DBUS_TEST_DATA$])
m4trace:configure.ac:1616: -1- AC_SUBST([DBUS_TEST_EXEC])
m4trace:configure.ac:1616: -1- AC_SUBST_TRACE([DBUS_TEST_EXEC])
m4trace:configure.ac:1616: -1- m4_pattern_allow([^DBUS_TEST_EXEC$])
m4trace:configure.ac:1618: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_TEST_EXEC])
m4trace:configure.ac:1618: -1- m4_pattern_allow([^DBUS_TEST_EXEC$])
m4trace:configure.ac:1618: -1- AH_OUTPUT([DBUS_TEST_EXEC], [/* Full
path to the daemon in the builddir */
@%:@undef DBUS_TEST_EXEC])
m4trace:configure.ac:1620: -1- AC_DEFINE_TRACE_LITERAL([DBUS_EXEEXT])
m4trace:configure.ac:1620: -1- m4_pattern_allow([^DBUS_EXEEXT$])
m4trace:configure.ac:1620: -1- AH_OUTPUT([DBUS_EXEEXT], [/* Extension
for executables, typically empty or .exe */
@%:@undef DBUS_EXEEXT])
m4trace:configure.ac:1623: -1-
AC_DEFINE_TRACE_LITERAL([TEST_BUS_BINARY])
m4trace:configure.ac:1623: -1- m4_pattern_allow([^TEST_BUS_BINARY$])
m4trace:configure.ac:1623: -1- AH_OUTPUT([TEST_BUS_BINARY], [/* Full
path to the daemon in the builddir */
@%:@undef TEST_BUS_BINARY])
m4trace:configure.ac:1625: -1- AC_SUBST([TEST_BUS_BINARY])
m4trace:configure.ac:1625: -1- AC_SUBST_TRACE([TEST_BUS_BINARY])
m4trace:configure.ac:1625: -1- m4_pattern_allow([^TEST_BUS_BINARY$])
m4trace:configure.ac:1629: -1- AC_SUBST([TEST_LAUNCH_HELPER_BINARY])
m4trace:configure.ac:1629: -1-
AC_SUBST_TRACE([TEST_LAUNCH_HELPER_BINARY])
m4trace:configure.ac:1629: -1-
m4_pattern_allow([^TEST_LAUNCH_HELPER_BINARY$])
m4trace:configure.ac:1630: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_TEST_LAUNCH_HELPER_BINARY])
m4trace:configure.ac:1630: -1-
m4_pattern_allow([^DBUS_TEST_LAUNCH_HELPER_BINARY$])
m4trace:configure.ac:1630: -1-
AH_OUTPUT([DBUS_TEST_LAUNCH_HELPER_BINARY], [/* Full path to the
launch helper test program in the builddir */
@%:@undef DBUS_TEST_LAUNCH_HELPER_BINARY])
m4trace:configure.ac:1642: -1- AC_SUBST([TEST_SOCKET_DIR])
m4trace:configure.ac:1642: -1- AC_SUBST_TRACE([TEST_SOCKET_DIR])
m4trace:configure.ac:1642: -1- m4_pattern_allow([^TEST_SOCKET_DIR$])
```

```

m4trace:configure.ac:1643: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_TEST_SOCKET_DIR])
m4trace:configure.ac:1643: -1-
m4_pattern_allow([^DBUS_TEST_SOCKET_DIR$])
m4trace:configure.ac:1643: -1- AH_OUTPUT([DBUS_TEST_SOCKET_DIR], [/*
Where to put test sockets */
@%:@undef DBUS_TEST_SOCKET_DIR])
m4trace:configure.ac:1650: -1- AC_SUBST([TEST_LISTEN])
m4trace:configure.ac:1650: -1- AC_SUBST_TRACE([TEST_LISTEN])
m4trace:configure.ac:1650: -1- m4_pattern_allow([^TEST_LISTEN$])
m4trace:configure.ac:1651: -1- AC_DEFINE_TRACE_LITERAL([TEST_LISTEN])
m4trace:configure.ac:1651: -1- m4_pattern_allow([^TEST_LISTEN$])
m4trace:configure.ac:1651: -1- AH_OUTPUT([TEST_LISTEN], [/* Listening
address for regression tests */
@%:@undef TEST_LISTEN])
m4trace:configure.ac:1659: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_SESSION_SOCKET_DIR])
m4trace:configure.ac:1659: -1-
m4_pattern_allow([^DBUS_SESSION_SOCKET_DIR$])
m4trace:configure.ac:1659: -1- AH_OUTPUT([DBUS_SESSION_SOCKET_DIR],
[/* Where per-session bus puts its sockets */
@%:@undef DBUS_SESSION_SOCKET_DIR])
m4trace:configure.ac:1660: -1- AC_SUBST([DBUS_SESSION_SOCKET_DIR])
m4trace:configure.ac:1660: -1-
AC_SUBST_TRACE([DBUS_SESSION_SOCKET_DIR])
m4trace:configure.ac:1660: -1-
m4_pattern_allow([^DBUS_SESSION_SOCKET_DIR$])
m4trace:configure.ac:1669: -1-
AC_SUBST([DBUS_SESSION_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1669: -1-
AC_SUBST_TRACE([DBUS_SESSION_BUS_DEFAULT_ADDRESS])
m4trace:configure.ac:1669: -1-
m4_pattern_allow([^DBUS_SESSION_BUS_DEFAULT_ADDRESS$])
m4trace:configure.ac:1672: -1- AH_OUTPUT([HAVE_CRT_EXTERNS_H], [/*
Define to 1 if you have the < crt_extrns.h > header file. */
@%:@undef HAVE_CRT_EXTERNS_H])
m4trace:configure.ac:1672: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_CRT_EXTERNS_H])
m4trace:configure.ac:1672: -1-
m4_pattern_allow([^HAVE_CRT_EXTERNS_H$])
m4trace:configure.ac:1673: -1-
AC_DEFINE_TRACE_LITERAL([HAVE_NSGETENVIRON])
m4trace:configure.ac:1673: -1- m4_pattern_allow([^HAVE_NSGETENVIRON$])
m4trace:configure.ac:1673: -1- AH_OUTPUT([HAVE_NSGETENVIRON], [/*
Define if your system needs _NSGetEnviron to set up the environment */
@%:@undef HAVE_NSGETENVIRON])
m4trace:configure.ac:1674: -1- AH_OUTPUT([_DARWIN_ENVIRON], [
#if defined(HAVE_NSGETENVIRON) && defined(HAVE_CRT_EXTERNS_H)
# include <sys/time.h>
# include <crt_extrns.h>
# define environ (*_NSGetEnviron())
#endif

```

```
])
m4trace:configure.ac:1688: -1-
AC_DEFINE_TRACE_LITERAL([DBUS_ENABLE_STATS])
m4trace:configure.ac:1688: -1- m4_pattern_allow([DBUS_ENABLE_STATS])
m4trace:configure.ac:1688: -1- AH_OUTPUT([DBUS_ENABLE_STATS], [/*
Define to enable bus daemon usage statistics */
@%:@undef DBUS_ENABLE_STATS])
m4trace:configure.ac:1692: -1- AC_CONFIG_FILES([
Doxyfile
dbus/versioninfo.rc
dbus/dbus-arch-deps.h
bus/system.conf
bus/session.conf
bus/messagebus
bus/messagebus-config
bus/org.freedesktop.dbus-session.plist
bus/rc.messagebus
bus/dbus.service
bus/dbus.socket
Makefile
dbus/Makefile
bus/Makefile
tools/Makefile
test/Makefile
test/name-test/Makefile
doc/Makefile
doc/dbus-daemon.1
dbus-1.pc
dbus-1-uninstalled.pc
test/data/valid-config-files/debug-allow-all.conf
test/data/valid-config-files/debug-allow-all-sha1.conf
test/data/valid-config-files-system/debug-allow-all-pass.conf
test/data/valid-config-files-system/debug-allow-all-fail.conf
test/data/valid-service-
files/org.freedesktop.DBus.TestSuite.PrivServer.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteForkingEchoService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteSegfaultService.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
test/data/valid-service-
files/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteEchoService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteSegfaultService.service
test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceSuccess.service
```



```

test/data/valid-service-files-
system/org.freedesktop.DBus.TestSuiteShellEchoServiceFail.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoExec.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoUser.service
test/data/invalid-service-files-
system/org.freedesktop.DBus.TestSuiteNoService.service
])
m4trace:configure.ac:1732: -1- AC_SUBST([LIB@&t@OBS], [$ac_libobjs])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([LIB@&t@OBS])
m4trace:configure.ac:1732: -1- m4_pattern_allow([LIB@&t@OBS])
m4trace:configure.ac:1732: -1- AC_SUBST([LTLIBOBS], [$ac_ltlibobjs])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([LTLIBOBS])
m4trace:configure.ac:1732: -1- m4_pattern_allow([LTLIBOBS])
m4trace:configure.ac:1732: -1- AM_CONDITIONAL([am__EXEEXT], [test -n
"$EXEEXT"])
m4trace:configure.ac:1732: -1- AC_SUBST([am__EXEEXT_TRUE])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([am__EXEEXT_TRUE])
m4trace:configure.ac:1732: -1- m4_pattern_allow([am__EXEEXT_TRUE])
m4trace:configure.ac:1732: -1- AC_SUBST([am__EXEEXT_FALSE])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([am__EXEEXT_FALSE])
m4trace:configure.ac:1732: -1- m4_pattern_allow([am__EXEEXT_FALSE])
m4trace:configure.ac:1732: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_TRUE])
m4trace:configure.ac:1732: -1- _AM_SUBST_NOTMAKE([am__EXEEXT_FALSE])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([top_builddir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([top_build_prefix])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([srcdir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([abs_srcdir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([top_srcdir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([abs_top_srcdir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([builddir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([abs_builddir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([abs_top_builddir])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([INSTALL])
m4trace:configure.ac:1732: -1- AC_SUBST_TRACE([MKDIR_P])
m4trace:configure.ac:1732: -1- AC_REQUIRE_AUX_FILE([ltmain.sh])

```

File = truncated-file.conf

```

<!DOCTYPE busconfig PUBLIC "-//freedesktop//DTD D-BUS Bus
Configuration 1.0//EN"
"http://www.freedesktop.org/standards/dbus/1.0/busconfig.dtd">
<busconfig>
  <user>mybususer</user>
  <listen>unix:path=/foo/bar</listen>
  <listen>tcp:port=1234</listen>
  <includedir>basic.d</includedir>
  <servicedir>/usr/share/foo</servicedir>
  <include ignore_missing="y

```

File = unknown-header-field.message

message with a 'name' header field and unknown 'unkn' field

VALID_HEADER includes a LENGTH Header and LENGTH Body
VALID_HEADER method_call
REQUIRED_FIELDS

HEADER_FIELD UNKNOWN
TYPE Dict
LENGTH Dict
START_LENGTH Dict
STRING 'int32'
TYPE INT32
INT32 0x12345678
END_LENGTH Dict

ALIGN 8
END_LENGTH Header
START_LENGTH Body
END_LENGTH Body

File = up.png

%PNG

—

IHDR_____àw=ø_____bKGD_ÿ_ÿ_ÿ ½\$”_____ pHYs__

_____ÖÝ~ü_____tIME ò_____2.œE€Ù_____#IDATxœí”=JÄ@_F¿o%]

!+œ2...Ä_[ZÏ_<@_/á_<€□¥...XÛ

Ú□2□0v±³^□Ä...Ïj0»lpvV°öA`~


```
ø-•t*iù âHÒ~x□ R~'IUUÉ9ç#OÁ'my-
eJÓTeY+GvÉ @xαO #ß;2E>9²□|t$DĎ_9n nBäíÈjμò`BR_IsI^ë:Hîÿ8ŽU_...□æùèùP
ÖÚN™1fcsNî95Mä$-Éμα
_x æ□ÿØ_Æ1~,_pEòe_$iIž°_€Ç
î7nrDò_f!;_Ä□□`çÝ'_äy_kiî_I'øáûä²αsI_]ÿÇ_y-†_`_€ÅÀ^^I>O>Á;ø_-
$_²š?YB_____IEND@B` ,
```

File = util.c

```
/* Regression test utilities
 *
 * Copyright Â© 2009 Collabora Ltd. <http://www.collabora.co.uk/>
 * Copyright Â© 2009-2011 Nokia Corporation
 *
 * Licensed under the Academic Free License version 2.1
 *
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 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program; if not, write to the Free Software
 * Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA
 * 02110-1301 USA
 */
```

```
#include <config.h>
```

```
#include "util.h"
```

```
static void
destroy_cb (DBusGProxy *proxy G_GNUC_UNUSED,
           gpointer user_data)
{
    gboolean *disconnected = user_data;

    *disconnected = TRUE;
}

void
test_run_until_disconnected (DBusGConnection *connection,
                             GMainContext *context)
{
```

```

gboolean disconnected = FALSE;
DBusGProxy *proxy;

g_printerr ("Disconnecting... ");

dbus_connection_set_exit_on_disconnect
(dbus_g_connection_get_connection (connection),
                                     FALSE);

/* low-level tests might not have called this yet */
g_type_init ();

proxy = dbus_g_proxy_new_for_peer (connection, "/",
                                   "org.freedesktop.DBus.Peer");
g_signal_connect (G_OBJECT (proxy), "destroy", G_CALLBACK
(destroy_cb),
                  &disconnected);

dbus_connection_close (dbus_g_connection_get_connection
(connection));

while (!disconnected)
{
    g_printerr (".");
    g_main_context_iteration (context, TRUE);
}

g_signal_handlers_disconnect_by_func (proxy, destroy_cb,
&disconnected);
g_object_unref (proxy);

g_printerr (" disconnected\n");
}

```

File = util.h

```

/* Regression test utilities
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```

```

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* 02110-1301 USA
*/

#ifdef DBUS_GLIB_TEST_UTIL_H

#include <dbus/dbus-glib.h>
#include <dbus/dbus-glib-lowlevel.h>

void test_run_until_disconnected (DBusGConnection *connection,
                                  GMainContext *context);

#endif

File = utils.c

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* utils.c General utility functions
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02110-1301 USA
 *
 */

```

```

#include <config.h>
#include "utils.h"
#include <dbus/dbus-sysdeps.h>
#include <dbus/dbus-mainloop.h>

const char bus_no_memory_message[] = "Memory allocation failure in
message bus";

void
bus_connection_dispatch_all_messages (DBusConnection *connection)
{
    while (bus_connection_dispatch_one_message (connection))
        ;
}

dbus_bool_t
bus_connection_dispatch_one_message (DBusConnection *connection)
{
    DBusDispatchStatus status;

    while ((status = dbus_connection_dispatch (connection)) ==
    DBUS_DISPATCH_NEED_MEMORY)
        _dbus_wait_for_memory ();

    return status == DBUS_DISPATCH_DATA_REMAINS;
}

File = utils.h

/* -*- mode: C; c-file-style: "gnu"; indent-tabs-mode: nil; -*- */
/* utils.h  General utility functions
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```

```
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02110-1301 USA
*
*/
```

```
#ifndef BUS_UTILS_H
#define BUS_UTILS_H
```

```
#include <dbus/dbus.h>
```

```
extern const char bus_no_memory_message[];
#define BUS_SET_OOM(error) dbus_set_error_const ((error),
DBUS_ERROR_NO_MEMORY, bus_no_memory_message)
```

```
void bus_connection_dispatch_all_messages (DBusConnection
*connection);
dbus_bool_t bus_connection_dispatch_one_message (DBusConnection
*connection);
```

```
#endif /* BUS_UTILS_H */
```

```
File = valid-annotations.xml
```

```
<?xml version="1.0"?><!-- ex:set et ts=2: -->
<node name="/org/freedesktop/DBus/GLib/Test/Interfaces">
  <interface
name="org.freedesktop.DBus.GLib.Test.Interfaces.Annotated">
  <annotation name="org.freedesktop.DBus.GLib.CSymbol"
value="test_annotated"/>
  <annotation name="com.example.Annotatable" value="yes"/>

  <method name="DoThings">
    <annotation name="com.example.Annotatable" value="yeah"/>
    <arg name="message" type="s" direction="out">
      <annotation name="com.example.MaybeAnnotatable"
value="strictly speaking this isn't meant to be allowed"/>
    </arg>
  </method>

  <signal name="ThingsDone">
    <annotation name="com.example.Annotatable" value="fd.o#27598
says so"/>
    <arg name="message" type="s">
      <annotation name="com.example.MaybeAnnotatable"
value="strictly speaking this isn't meant to be allowed"/>
    </arg>
  </signal>

  <property name="Things" type="s" access="read">
```



```
        <annotation name="com.example.Annotatable" value="hopefully"/>
    </property>
</interface>
</node>
```

File = version.xml

0.100.2

File = version.xml.in

@VERSION@

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Files:

- openssl-0.9.8e.patch
- openssl-0.9.8g.patch
- openssl-0.9.8i.patch
- openssl-0.9.8n.patch
- openssl-0.9.8r.patch

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eep_nistp521.c
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- glib-2.0.m4
- glib-gettext.m4
- gsettings.m4
- gtk-doc.m4
- libxml.m4
- libxslt.m4
- ogg.m4
- pkg.m4
- README
- arm-oe-linux-gnueabi-libtool
- AUTHORS
- autogen.sh
- output.2
- output.3
- requests
- traces.2

traces.3
BUG-REPORTING
compile
config.guess
config.h
config.h.in
config.h.in~
config.status
config.sub
configure
configure.ac
COPYING
depcomp
ch01.html
ch02.html
home.png
index.html
index.sgml
left.png
liboil-liboilclass-unstable.html
liboil-liboilcpu.html
liboil-liboildebug.html
liboil-liboilfuncs-conv.html
liboil-liboilfuncs-copy.html
liboil-liboilfuncs-dct.html
liboil-liboilfuncs-doc.html
liboil-liboilfuncs-math.html
liboil-liboilfuncs-math8x8.html
liboil-liboilfuncs-pixel.html
liboil-liboilimpl-unstable.html
liboil-liboilinit-unstable.html
liboil-liboilinit.html
liboil-liboiljunk.html
liboil-liboilmacros.html
liboil-liboilparameter.html
liboil-liboilprofile.html
liboil-liboilprototype.html
liboil-liboilrandom.html
liboil-liboiltest.html
liboil-liboiltypes.html
liboil.devhelp
liboil.devhelp2
right.png

style.css
up.png
liboil-docs.sgml
liboil-overrides.txt
liboil-sections.txt
liboil.types
Makefile.am
liboil-unused.sgml
liboil.sgml
liboilclass-unstable.sgml
liboilcpu.sgml
liboildebug.sgml
liboilfuncs-conv.sgml
liboilfuncs-copy.sgml
liboilfuncs-dct.sgml
liboilfuncs-doc.sgml
liboilfuncs-math.sgml
liboilfuncs-math8x8.sgml
liboilfuncs-pixel.sgml
liboilfunction.sgml
liboilimpl-unstable.sgml
liboilinit-unstable.sgml
liboilinit.sgml
liboiljunk.sgml
liboilmacros.sgml
liboilparameter.sgml
liboilprofile.sgml
liboilprototype.sgml
liboilrandom.sgml
liboiltest.sgml
liboiltypes.sgml
api-index-0.3.0.xml
api-index-deprecated.xml
api-index-full.xml
liboilclass-unstable.xml
liboilcpu.xml
liboildebug.xml
liboilfuncs-conv.xml
liboilfuncs-copy.xml
liboilfuncs-dct.xml
liboilfuncs-doc.xml
liboilfuncs-math.xml
liboilfuncs-math8x8.xml

liboilfuncs-pixel.xml
liboilimpl-unstable.xml
liboilinit-unstable.xml
liboilinit.xml
liboiljunk.xml
liboilmacros.xml
liboilparameter.xml
liboilprofile.xml
liboilprototype.xml
liboilrandom.xml
liboiltest.xml
liboiltypes.xml
functable.c
functable.h
Makefile.am
resample.c
resample.h
test_functable1.c
example1.c
huffman.c
huffman.h
huffman_test.c
Makefile.am
jpeg.c
jpeg.h
jpeg_bits.c
jpeg_bits.h
jpeg_debug.h
jpeg_huffman.c
jpeg_huffman.h
jpeg_internal.h
jpeg_rgb_decoder.c
jpeg_rgb_decoder.h
jpeg_rgb_internal.h
jpeg_tables.c
Makefile.am
test.c
test_rgb.c
Makefile.am
Makefile.am
md5sum.c
memcpy-speed.c
oil-bugreport.c

oil-graph.c
oil-inspect.c
oil-mt19937.c
oil-random.c
oil-suggest.c
oil-test.c
printcpu.c
report.c
example1.c
Makefile.am
example.c
Makefile.am
uberopt.c
Makefile.am
vs_4tap.c
vs_4tap.h
vs_image.c
vs_image.h
vs_scanline.c
vs_scanline.h
Makefile.am
work.c
gtk-doc.make
HACKING
Makefile.am
Makefile.am
wavelet.c
Makefile.am
math_vfp.c
math_vfp_asm.S
build_class_decls.c
build_marshall.c
build_prototypes.c
build_prototypes_04.c
build_prototypes_doc.c
build_trampolines.c
ag_clamp.c
composite.c
copy.c
generate_clamp.pl
Makefile.am
swab.c
wavelet.c

composite.c
Makefile.am
conv.h
conv_bitstuff.c
conv_c.c
conv_misc.c
Makefile.am
copy.c
copy8x8.c
Makefile.am
splat_ref.c
trans8x8_c.c
dct.h
dct12_f32.c
dct36_f32.c
fdct8x8s_s16.c
fdct8x8theora.c
fdct8x8_f64.c
fdct8_f64.c
idct8x8theora_ref.c
idct8x8_c.c
idct8_f64.c
imdct32_f32.c
Makefile.am
abs.c
average2_u8.c
clip_ref.c
conv.c
Makefile.am
permute.c
scalaradd.c
scalarmult.c
tablelookup.c
vectoradd_f64.c
vectoradd_s.c
Makefile.am
abs_i386.c
argb_paint_i386.c
ayuv2argb_i386.c
composite_i386.c
conv_3dnow.c
conv_sse.c
copy8x8_i386.c

diff8x8_i386.c
error8x8_i386.c
Makefile.am
md5_i386.c
mult8x8_i386.c
recon8x8_i386.c
rowcolsad8x8_i386.c
sad8x8avg_i386.c
splat_i386.c
trans8x8_i386.c
wavelet.c
add2.c
addc.c
clamp.c
convert.c
copy.c
idct8x8_i386.c
Makefile.am
mas.c
math.c
mt19937.c
multiply_and_acc.c
resample.c
sad8x8.c
sum.c
swab.c
yuv.c
convert8x8_c.c
jpeg.h
jpeg_rgb_decoder.c
Makefile.am
quantize8x8_c.c
yuv2rgb_c.c
zigzag8x8_c.c
liboil-stdint.h
liboil.h
liboilclasses.h
liboilcolorspace.h
liboilcpu-arm.c
liboilcpu-misc.c
liboilcpu-powerpc.c
liboilcpu-x86.c
liboilcpu.c

liboilcpu.h
liboildebug.c
liboildebug.h
liboilfault.c
liboilfault.h
liboilfuncs.h
liboilfunction.c
liboilfunction.h
liboilgcc.h
liboilinternal.h
liboilmarshal.c
liboilparameter.h
liboilprofile.c
liboilprofile.h
liboilprototype.c
liboilprototype.h
liboilrandom.c
liboilrandom.h
liboiltest.c
liboiltest.h
liboiltmp.c
liboiltrampolines.c
liboiltypes.h
liboilutils.c
liboilutils.h
Makefile.am
ag_math.c
generate_math.pl
Makefile.am
math.c
Makefile.am
md5.c
md5.h
composite_mmx.c
copy_mmx.c
Makefile.am
recon8x8_mmx.c
splat_mmx.c
Makefile.am
motovec.c
README
null.c
abs.c

clip.c
conv.c
copy.c
Makefile.am
md5.c
mix.c
multsum.c
resample.c
rgb2bgr.c
rgb2rgba.c
sad8x8.c
splat.c
zigzag8x8.c
fdct8x8theora_altivec.c
Makefile.am
recon8x8_altivec.c
recon8x8_ppc.c
README
addc.c
argb_paint.c
ayuv2argb.c
clamp.c
composite.c
convert.c
copy.c
copy8x8.c
diff8x8.c
diffsquaresum_f32.c
diffsquaresum_f64.c
error8x8.c
Makefile.am
mas.c
math.c
mix_u8.c
mult8x8_s16.c
multsum.c
recon8x8.c
resample.c
rgb.c
rowcolsad8x8.c
sad8x8.c
sad8x8avg.c
sad8x8_broken.c

sincos_f64.c
splat.c
squaresum_f32.c
squaresum_f64.c
sum.c
sum_f64.c
swab.c
trans8x8.c
wavelet.c
yuv.c
abs_misc.c
average2_u8.c
clip_fast.c
diffsquaresum_f64.c
Makefile.am
mix_u8.c
multsum.c
scalaradd.c
scalarmult.c
simdpack.h
sincos_f64.c
squaresum_f64.c
sum_f64.c
clamp_sse.c
composite_sse.c
composite_sse_2pix.c
composite_sse_4pix.c
copy_sse.c
Makefile.am
math_sse.c
math_sse_unroll2.c
multsum_sse.c
sad8x8_sse.c
splat_sse.c
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Files:

nologin.c